



Reefer Analysis 2022

Conventional, Containers, Markets, Fleets



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1 INTRODUCTION

After struggling for many years and after a relatively prosperous 2021, in 2022, container carriers and conventional reefer operators hit the jackpot. With the container shipping sector in full swing and much capacity absorbed by congestion, box vessels could not provide enough space to carry all the cargoes they were offered. Containers were regularly rolled over onto the next sailing, got stuck in terminals or spent lots of precious time floating in front of their destination port where all the quays were occupied and waiting until they could finally be unloaded.

Freight rates went sky high. Interestingly, the prices for carrying reefer containers did not go up as much as those for dry boxes, so with plenty of cargoes to choose from, containership operators sometimes preferred lifting dry boxes rather than reefer containers. The latter are much more elaborate to handle, and reefer equipment is much more expensive. For conventional reefer operators, the opposite was the case. Due to a lack of container space, shippers were desperate for shipboard capacity and turned to the reefer specialists, who were happy to carry their boxes on deck or their breakbulk cargoes in their holds, at a premium of course.

However, the party is over. Reaching the end of 2022, container freight rates have entered freefall, and by the end of the year, they are likely to have returned to the level of early 2020, before the outbreak of the coronavirus. Rates for conventional reefer ships are also softening, although their descent seems to be more modest. Dark grey clouds seem to lay ahead.

Where conventional reefer operators used the money earned to fill their piggy banks, container carriers spend big. Some bought logistics companies, terminals or terminal chains, aeroplanes and ships, many, many ships. Apart from a raft of newbuilding orders, MSC sucked in more than 250 ships from the second-hand market, as buying them turned out to be cheaper than chartering. Others, such as HMM, PIL, Yang Ming and ZIM, used the profits to recover the massive losses sustained since the 2008 economic downturn and their spendings were at a substantially lower level. The question for those less efficient companies however, is whether they managed to prepare their businesses for the future or whether they will become lossmaking once again and burn through the money they earned in the good times during the bad times.

On the demand side, the war in Ukraine with subsequent high energy prices and high inflation has tempered people's desire or ability to buy more stuff. Also, the coronavirus still plays a role. Where China still sticks to its zero-covid policy so that production is regularly downsized or halted because of lockdowns, in other countries people started spending their money on intangibles, such as diners, entertainment, travel or other things you cannot put into boxes. In the first three quarters of 2022, container trade reduced by almost 2.5%, with recent months showing higher declines than those at the start of the year.

On the supply side, it is the end of congestion, in combination with lower demand, that causes the shortage of ships to dwindle. Where at the peak some 12% of vessel capacity was caught in congestion, in November 2022, the laid-up fleet was approaching 500,000 TEU, which is four times as high as in the first two months of that year. For 2023, yards are expected to deliver 330 ships with a massive 2.3 million TEU capacity and for 2024, 390 ships with space for 3.0 million TEU are in the pipeline. Slippage or cancellation of orders is likely to reduce the actual deliveries, but still at 20% of the current fleet, the influx of new tonnage is set to severely disrupt the container shipping market.

Up to some extent, the saviour may come from an unexpected side, the Carbon Intensity Indicator (CII) regulation, imposed by the International Maritime Organization, which enters into force in January 2023. The aim is to reduce the emission of greenhouse gasses and it poses demands on vessel's maximum fuel consumption. Whilst the requirements are relatively modest in the first year, they will become tighter in



the years thereafter. This regulation will force many older ships to sail at slower speeds or even force them out of the market as it will be no longer economically feasible to operate them.

Conventional reefer ships will be even more affected by the new CII regulation. Generally, they are old and fuel hungry and many of them will be forced to sail at lower speeds than the market requires. Their competitive advantage of being able to provide faster transit times with their direct sailings than containership operators with their liner services and hub and spoke format will be lost. Already, demolition is at a relatively high level and it is likely to rise even further. Only a small part of the lost capacity will be compensated by newbuilding. The order book is small and recent newbuilding orders are limited to a set of ships understood to be for Africa Express Lines and an order for two vessels of the biggest category for a non-operating owner and which are likely to go on charter to Baltic Reefers. Those will not be enough to stop the decline of the fleet, but they prove that there are still operators who believe in a future for conventional reefer shipping. Time will tell!

Dynamar is proud to present its twelfth consecutive, annual, extensive specialist report:

REEFER Analysis 2022 - Market Structure, Conventional, Containers

This publication builds upon the analysis of the previous years. The study comprises three parts: two separate sections on the different and container reefer trades, based on an extensive write up and one section analysing the structure of the market conventional.

Part 1 - Reefer market structure(s)

After a historical overview on the background and development of reefer shipping, this chapter provides extensive summaries, statistics and concise descriptions of:

- The world perishable trades: volumes by main produce and export regions;
- Transport modes and characteristics: transport conditions - modern techniques;
- The world's main import regions: United States, European Union, Russia, China and Japan;
- Trading patterns: conventional ships versus container vessels - main export areas - exports by product and individual country;
- Major reefer ports: perishable exports by country - description of relevant reefer handling facilities by mode of transportation - port throughput statistics.

Part 2 - Conventional reefer shipping

This section opens with a review of recent developments in the conventional reefer sector (including those affecting reefer container transports), covering three years (2019-2021), including statistics and graphs of relevant time charter equivalents, as well as:

- Extensive conventional reefer ship overviews and statistics (existing IMO-registered fleet, orderbook, age profile, demolition, future development);
- Structured profiles of the world's 15 largest conventional reefer ship operators, including markets/trade lanes served and their operated fleet (whether owned or chartered).

Part 3 - Container reefer shipping

This section provides insight into the main containerised reefer routes and services, invariably part of the South-North trade structure. Compared to previous versions of this publication, coverage has been expanded by even more trading areas. Furthermore, this section comprises:

- Extensive overviews and statistics on the composition and development of the container vessel fleet and orderbook, reefer TEU capacity, plugs/capacity ratios by size category;
- Refrigerated container box fleet, size categories, production data, capacity by carrier;
- Structured profiles of the world's 10 largest reefer container carriers.



This publication uses the most recent trade statistics (up to 2021) on reefer commodities by country and area, supplemented with up-to-date port, vessel, box and carrier fleet statistics and gives a profound insight into the background, characteristics, developments and present status of the worldwide shipping market of perishables and the relevant players.

All information for the report has been collected, researched and processed in the third and fourth quarters of 2022. As sources often differ on the same topics, we have endeavoured to provide the reader with the most accurate estimates. Analyses are based on the best available professional databases and media, complete with data originating from carriers, operators, port authorities and a great many other industry players.

Alkmaar/the Netherlands
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