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A. Trends in consolidation.......................

B. Impacts of consolidation on markets...

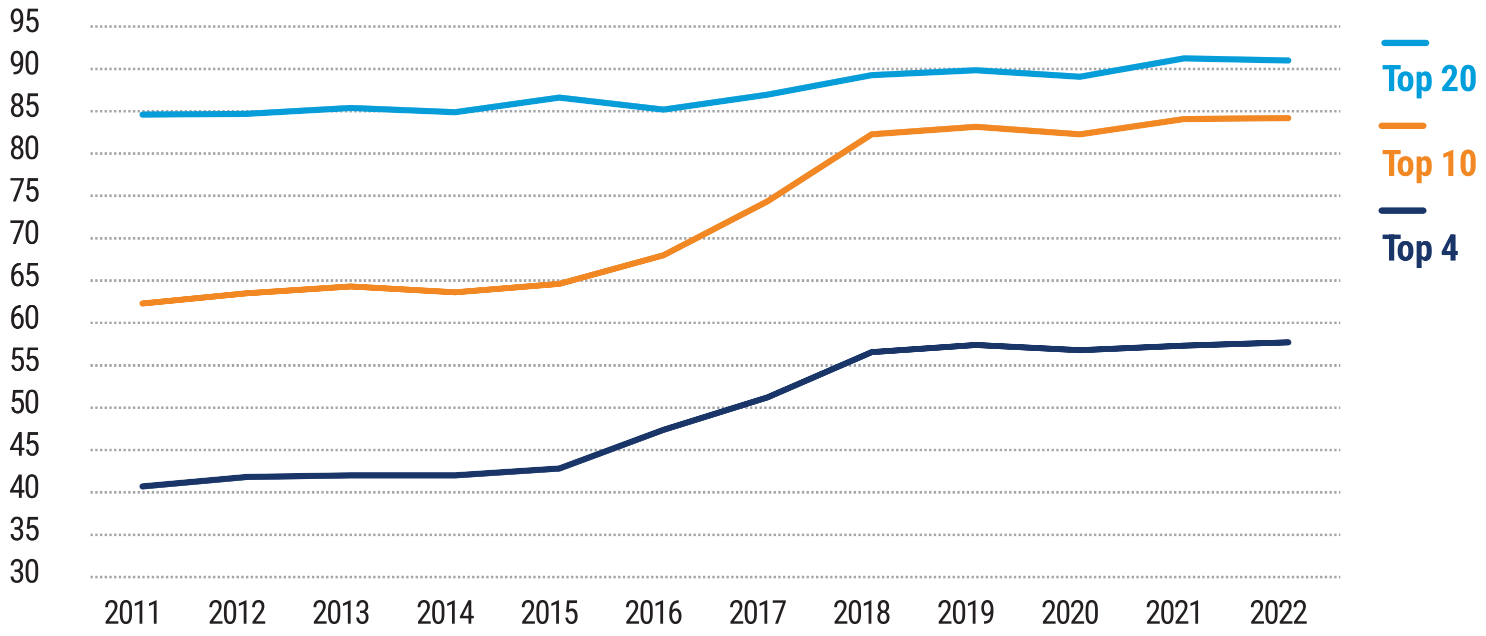
C. Policy considerations ....

1. Horizontal consolidation

Often in response to capacity oversupply, container shipping lines have long been consolidating horizontally through mergers, acquisitions, and at times because of bankruptcies. As a result, between 1996 and 2022, the share of the top 20 carriers in container carrying capacity went up from 48 to 91 per cent.[2]

Market shares of top four, top ten and top twenty carriers, 2011–2022

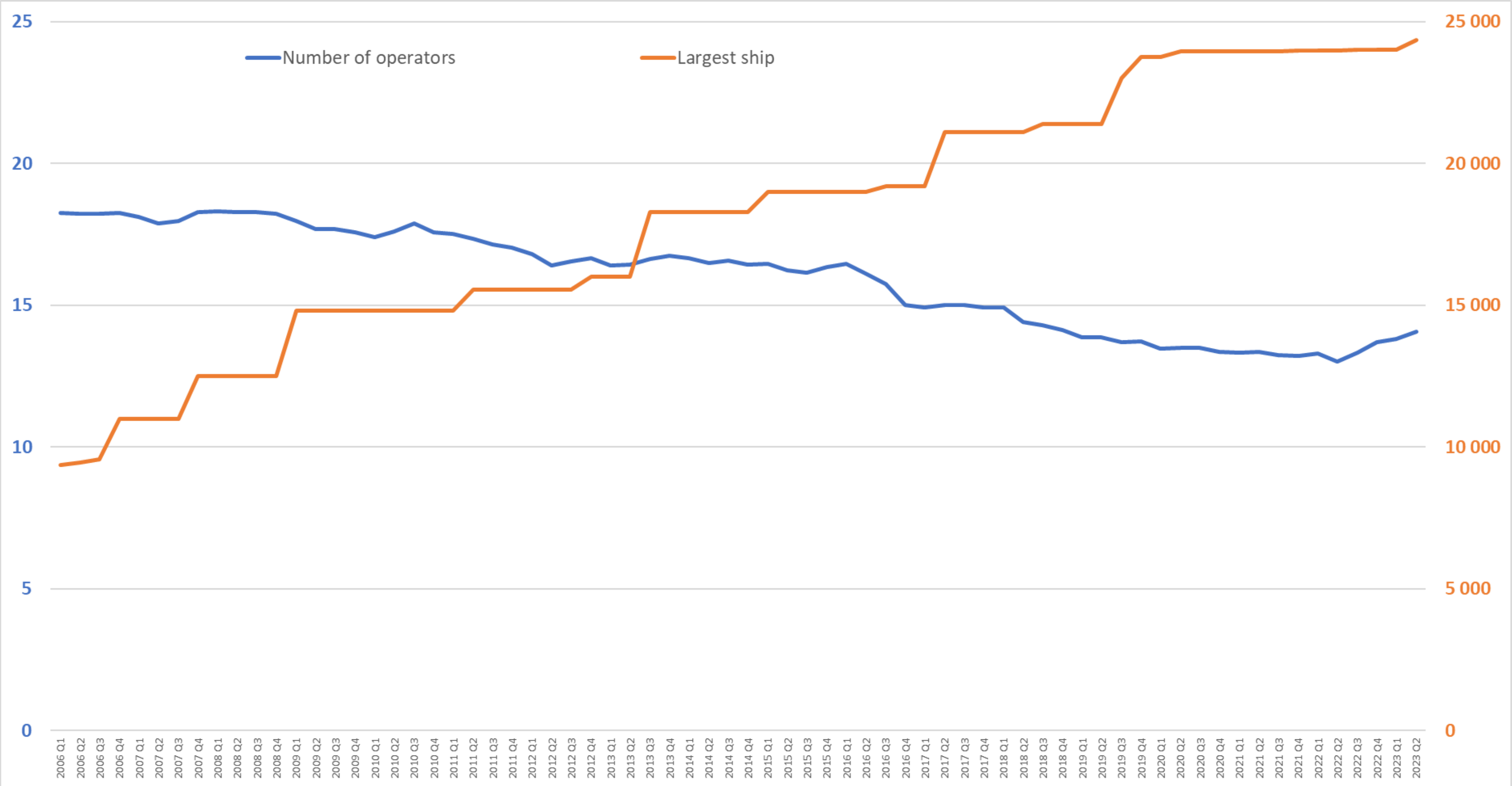
(percentage)



Source: UNCTAD, based on data provided by Alphaliner, https://public.alphaliner.com.

1. Horizontal consolidation

Average number of companies providing services per country, and size of the largest ship, Q1 2006–Q2 2023



Source: UNCTAD, based on data provided by MDS Transmodal, https://www.mdst.co.uk.

2. Vertical integration

Over recent years, container shipping lines have also been integrating vertically. They have extended their operations to:

Terminals – The four largest carriers are now among the top ten terminal operators, competing with port companies such as PSA, Hutchison and Dubai Ports. The two largest container terminal operators are associated with major shipping lines. In 2021 China COSCO Shipping had 13 per cent of global throughput, and APM Terminals, associated with Maersk had 11 per cent. Also among the top 10 terminal operators are Mediterranean Shipping Company (MSC), via a subsidiary Terminal Investment Limited, and CMA CGM.[6]

Logistics – In addition to operating ports and terminals, shipping companies have been buying warehouses and freight-forwarding and other logistics companies. In 2021, MSC expanded its logistics arm MedLog by buying the Brazilian company Log-In Logística Intermodal, as well as Bolloré Group Africa division. CMA CGM bought back Fenix Marine Services, a Los Angeles terminal it had sold four years earlier, while Hapag-Lloyd bought a 30 per cent stake in the German deep-water port Wilhelmshaven. A.P. Moller-Maersk has acquired B2C Europe as well as Visible Supply Chain Management, a leading US-based B2C/e-commerce logistics and parcel delivery company. Vertical integration enables shipping companies to provide customers with last-mile delivery. Maersk, for example, has started to manage all logistics operations for the consumer goods multinational Unilever.

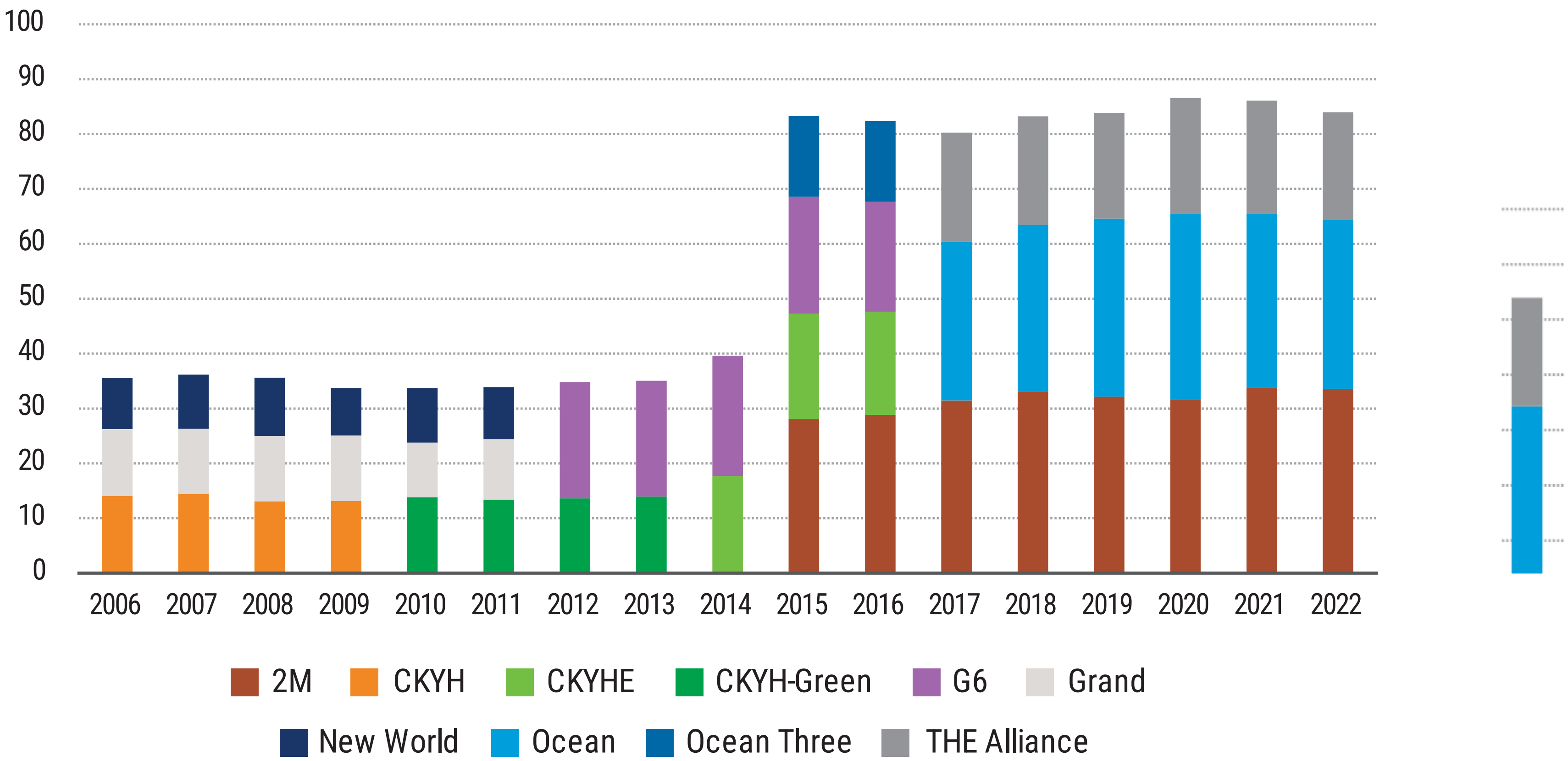
Air freight – In 2021, Maersk acquired the freight forwarder Senator International and ordered five freight airplanes. CMA CGM ordered six air freighters for the launch of its airline. MSC has started developing a new MSC Air Cargo solution, to be available from early 2023, following the delivery of the first of four aircraft that will be operated by Atlas Air.[7]

Rail – To cater for fast-changing customer needs, strengthen supply chains and offer alternatives to ocean and air services, A.P. Moller-Maersk has launched a rail-sea Asian-Europe service connecting China to Romania through Kazakhstan, Azerbaijan and Georgia.[8]

3. Alliances

The most common form of collaboration between the major shipping lines for container transport services is strategic alliances. Since 2015, the proportion of global capacity controlled by such alliances has increased to more than 80 per cent. Today, the top nine container operators organize their East-West services through three strategic alliances: Ocean, 2M, and THE Alliance.[9] During the pandemic, this proportion fell slightly as non-alliance members entered the profitable Asia-North America route, but the three main alliances continued to control 84 per cent of the market (figure 6.3). These alliances do not include small carriers.

Global alliances in deep-sea container shipping, market share, percentage



Source: UNCTAD, based on data provided by MDS Transmodal.
Notes: Based on Q2 data. Not all services of alliance members are joint services with alliance partners.

4. Causes of consolidation

An underlying driver of consolidation is technological development. In the mid-1990s, the first post-Panamax container ships had capacities of 6,000 TEU. Today's largest container ships are four times that size. The newer, bigger ships are more costly to build but are more fuel-efficient and incur lower operations and communication costs.

As ships get larger, a higher proportion of costs are fixed rather than variable. Whether it carries 6,000 or 24,000 TEU, a container ship has a crew of 20 to 30. Over recent decades, while the market has grown, the ship sizes and fixed costs needed to maintain a global network have increased even faster, which tends to reduce the number of companies in the long-term market equilibrium.[13]

Technological development has been accompanied by deregulation. Since the early-2000s there have been reforms in port regulations, as well as changes in competition law that removed national cargo reservation regimes and legal price-setting exemptions. This has made it easier for carriers to expand into new markets through mergers and acquisitions, alliances, and vertical integration.

This process of deregulation and port privatization initially produced fiercer competition – which in turn drove down both freight rates and profits. Though carriers were investing in ever-bigger ships, they did not scrap older and smaller one but sold them or kept this in the market, resulting in overcapacity. But this may now be coming to an end. Container ship sizes seem to have reached a maximum and further mergers and acquisitions are constrained by regulatory limitations.

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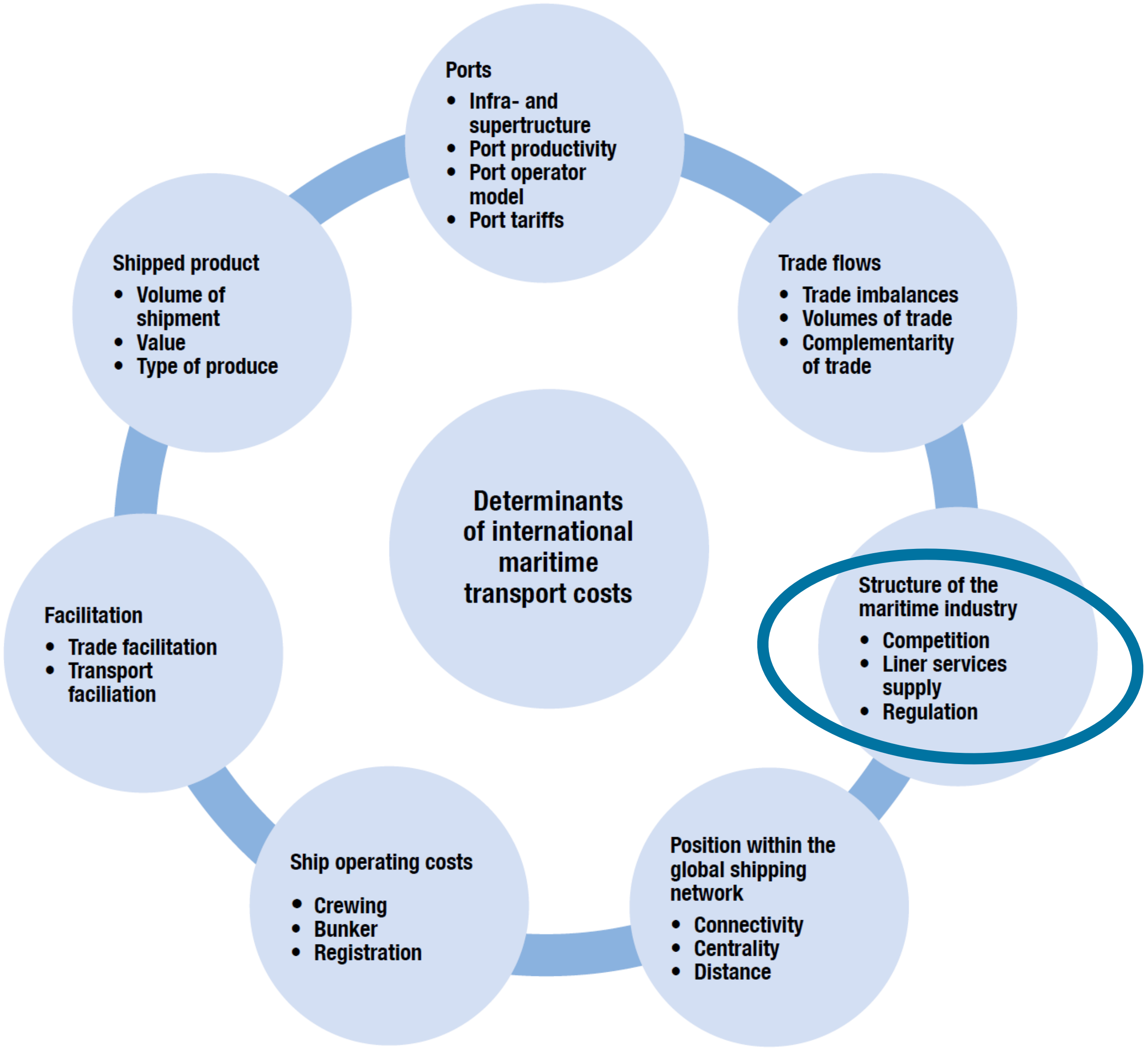
1. Determinants of maritime freight rates and charges

Figure 3.1. Determinants of maritime transport costs



Source: UNCTAD secretariat, based on Wilmsmeier, 2014.

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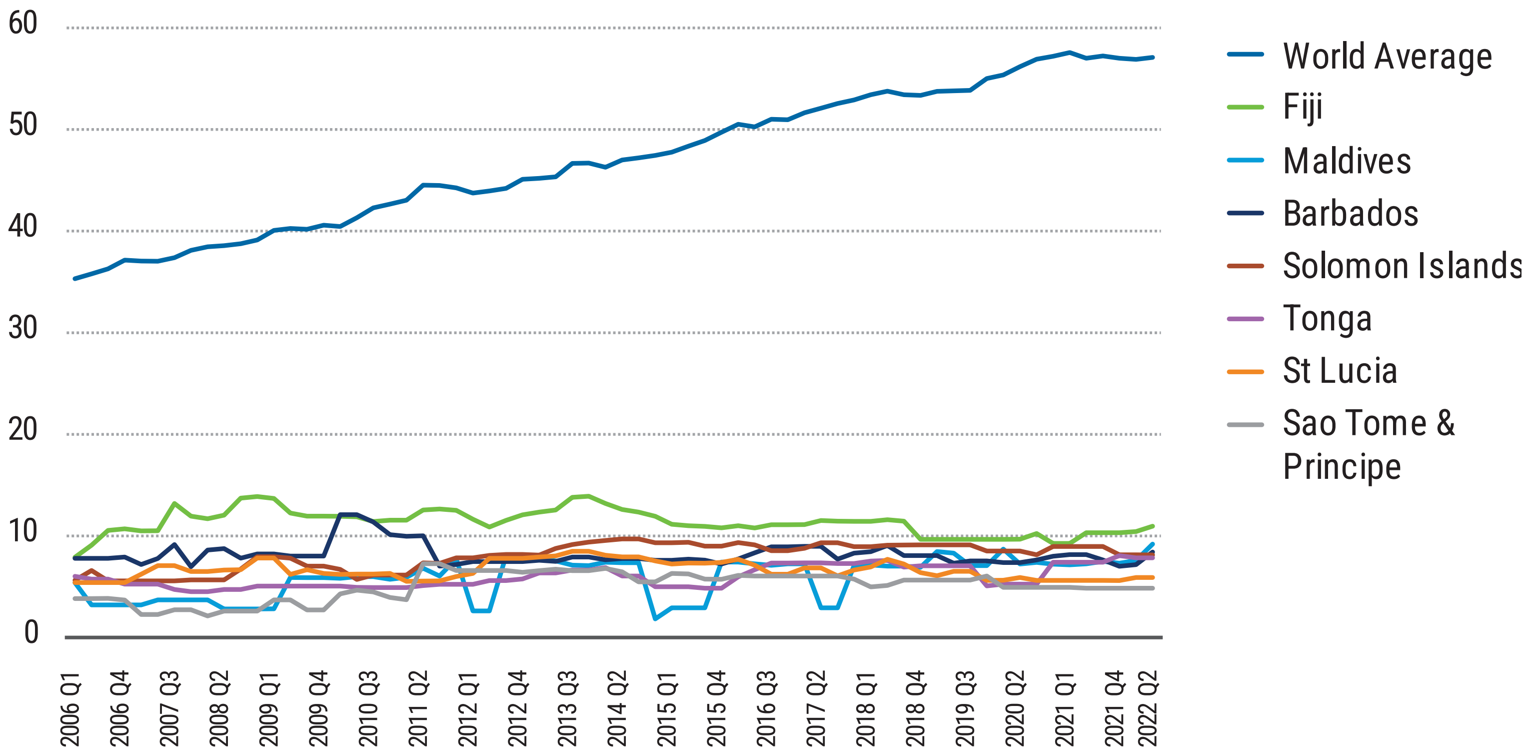
UNCTAD liner shipping connectivity index, 2006 to 2022, world average and selected small island developing States



Box 7.1 Concentration and cooperation in competition law

A key distinction for competition policy is between a concentration operation and a cooperation agreement. Both may restrict competition, but they are treated differently by competition law.

In a concentration operation, two or more companies merge to create a single new legal entity, thus reducing the number of players in the market. Regulatory authorities will examine such a proposal to determine its effects. For this purpose, they can use indicators such as the Herfindahl-Hirschman index (HHI). In addition, they will analyse the entry barriers, the static or dynamic nature of the market and the characteristics of the product or service at stake. They will then decide to approve, conditionally approve, or prohibit the operation.

In a cooperation agreement, independent companies and competitors in the same market agree to cooperate, but each company remains independent. In principle this is anti-competitive, but the negative effects may be outweighed by the benefits such as improving operations and efficiency and making optimal use of available resources. Given the experience of the past two years, with high freight rates and poor service this may no longer be true.

When making agreements, competing shipping companies must adapt to a regulatory framework, as in the European Union with the EU Consortia Block Exemption Regulation. If they do not do so, they can be sanctioned.

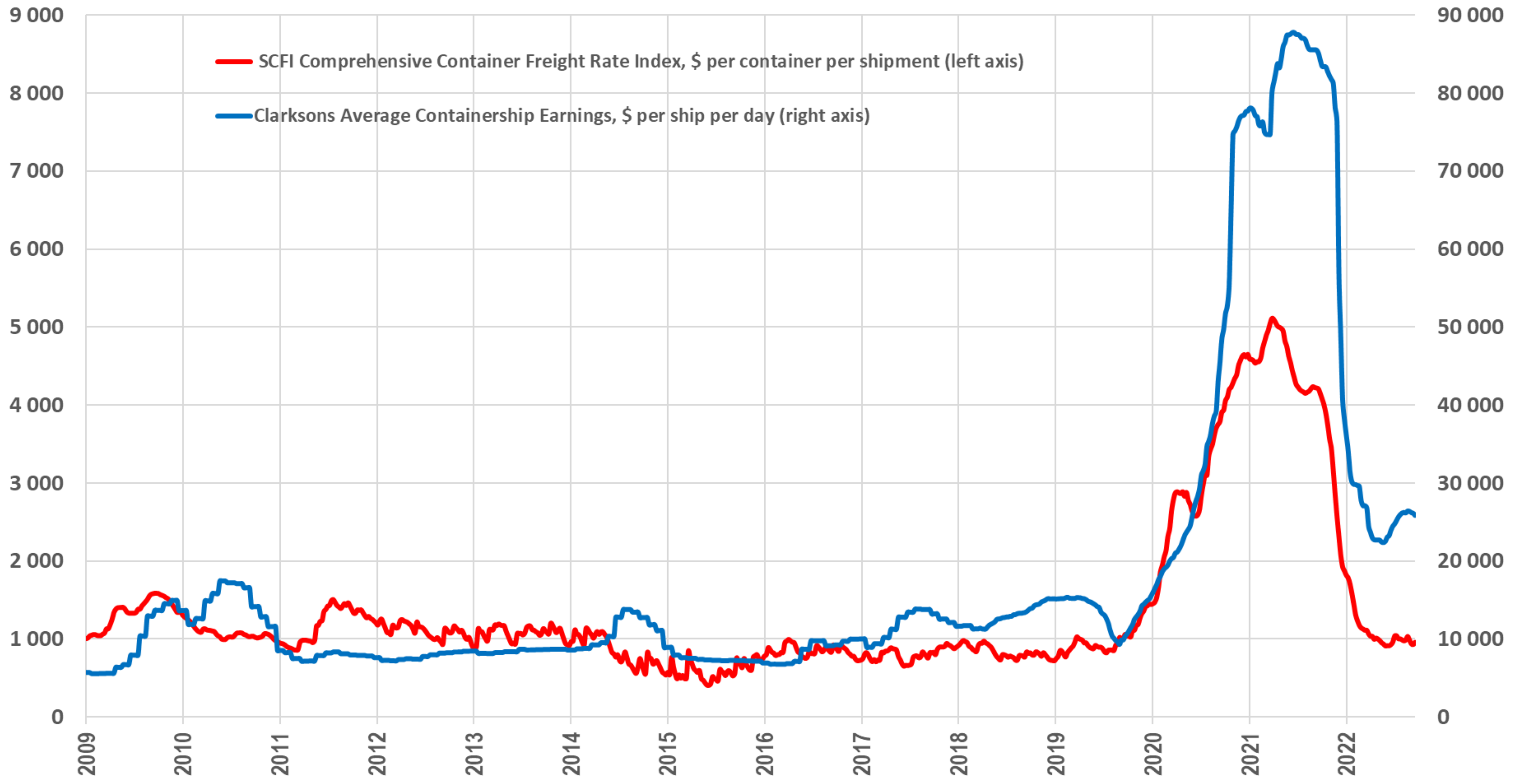
In many jurisdictions in developing countries the authorities may not take the appropriate action because they do not have the resources or lack the skilled personnel. They may therefore not act decisively or may approve an operation that is anti-competitive.

4. Carriers as clients in an oligopsony

Carriers may also be strengthening their positions as port users. Over recent decades, the negotiating position of the carriers vis-à-vis the port authorities has been strengthened in four ways:

- Individual carriers have been able to increase their market shares.
- Carriers have a greater choice of ports, to reach the same inland transport markets or, as a result of better trade facilitation, improved transit, and common transport markets in neighbouring countries.
- Through vertical integration, major carriers have become both clients and tenants and acquired greater negotiating power.
- As members of alliances, shipping lines have been able to create concentrated buyers' markets –oligopsonies.

5. Consolidation and the supply-chain crisis



Source: UNCTAD, based on data from Clarksons Shipping Intelligence Network, up to 30 June 2023

5. Consolidation and the supply-chain crisis

Over the past two years, shippers have been faced with historically high freight rates, congested ports, significant delays and unreliable services.[31] Finding it difficult to collect and return containers on time they have often had to pay costly demurrage and detention charges, further exacerbating problems for many importers and exporters.[32] Meanwhile, carriers have recorded record profits, leaving clients understandably unhappy and suspecting that the crisis may be a consequence of oligopolistic markets.

Shrinking competition will have contributed to high prices, but the supply chain crisis and congestion have had a mixture of causes. One is the pandemic. UNCTAD data show that at the end of 2021 compared to pre-COVID times, container ships spent on average about 20 per cent longer in port, thus reducing the available shipping capacity.[33] Another cause is the surge in consumer demand. The United States Federal Maritime Commission concluded that the supply chain crisis was the result of a surge in consumer spending leading to record congestion.[34]

These and other factors have contributed to record prices, even in markets without alliances and where there is much less market concentration. The highest increases since 2019 include the following.[35]

- Baltic Dry Index –up 14-fold between May 2020 and October 2021.
- LNG charter rates – up 11-fold between January 2019 and December 2021.
- Daily oil tanker earnings – up ten-fold between July 2019 and April 2020.
- Container ship charter rates – up nine-fold between June 2020 and March 2022.
- Container spot freight rate index – up seven-fold between October 2019 and January 2022.

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1

Support smaller and vulnerable economies

Small island developing States and the least developed countries in particular, need support in capacity building for national regulators, and competition and port authorities. Their importers and exporters would benefit from more transparency and available indices for freight costs and surcharges, similar to those available for the main shipping routes.

2

Include alliances and consortia in competition assessments

Competition authorities should clarify what alliances and consortia can legally do, such as negotiating jointly with other supply chain partners. They could then fully analyse the impact on competition, service quality and efficiency, and impose appropriately designed remedies. Another option would be to impose reporting requirements. In analysing cooperation agreements, competition authorities need to look at price-related effects, as well as at the variety and quality of services provided to shippers, and the coordinated management of capacity deployment.[39]

3

Keep ports competitive

Vertical integration of carriers can contribute to modernizing facilities, improving services, and increasing the number of competitors and users in the ports, but they can also create problems of access or discriminatory treatment for competing users of port facilities. Terminals or entire ports are usually put out for tender through concessions by port authorities and operated by the winning firms for a period of two decades or more. When considering concessions, sectorial regulators, and competition and port authorities should work together to address competition concerns that may arise, ensure fair competition, and enhance the competitiveness of this segment of the supply chain.[40]

4

Seize opportunities for international cooperation

Shippers in developing countries are deeply frustrated at the apparent indifference of regulators and governments in developed regions to their collective experiences, and the perceived anti-competitive practices of the container shipping industry. Their governments may not have much influence over major shipping companies that are domiciled in third countries where decisions on regulations do not consider the effects on developing countries.

Dealing with cross-border anti-competitive practices requires international cooperation for which the appropriate mechanism is the United Nations Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices (UN Set of Competition Rules and Principles).[41]

Responsibility for ensuring the implementation of the UN Set of Competition Rules and Principles lies with UNCTAD which is most appropriate forum for cooperation between competition authorities and regulators in the maritime sector. At the next meeting of the Intergovernmental Group of Experts on Competition Law and Policy in 2023, member States could request the establishment of a joint specific forum or informal working group to facilitate the exchange of information between authorities and regulators. This would strengthen the monitoring and publication of data and facilitate research and transparency for users and providers of container shipping services. It would also promote international cooperation for more consistent and uniform measures. Member States could then address problems detected in structural ways and strengthen their monitoring and interventions. A more homogenous global regulatory framework would have the additional benefit of reducing compliance costs for carriers.

Intergovernmental Group of Experts on Competition Law and Policy, 21st Session

Side event: Competition in maritime transport

Thursday, 6 July 2023 (14:00 - 14:45)
Palais des Nations, Room XXVI (First Floor), Geneva, Switzerland

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The container shipping sector has over the last decades seen a process of consolidation, including through mergers and acquisitions. In addition, many carriers collaborate through consortia and alliances. One-quarter of countries, including many small island developing states, are today serviced by four or fewer container carriers.

In order to support and encourage competition among carriers, UNCTAD in its latest Review of Maritime Transport 2022 recommended that smaller and vulnerable economies be supported through capacity building for national regulators, and competition and port authorities. Alliances and consortia should be included in competition assessments; competition authorities should clarify what alliances and consortia can legally do. Vertical integration of carriers can contribute to modernizing facilities and improving services, but they can also potentially create problems of access or discriminatory treatment for competing users of port facilities. Dealing with cross-border anti-competitive practices requires international cooperation for which the appropriate mechanism is the United Nations Set of Principles and Rules on Competition (https://unctad.org/topic/competition-and-consumer-protection/the-united-nations-set-of-principles-on-competition).

Source: UNCTAD Review of Maritime Transport 2022, http://unctad.org/RMT

WORK PROGRAMME

14:00 - 14:30 **Moderator**

- Mr. Jan Hoffmann, Head, Trade Logistics Branch, Division on Technology and Logistics, UNCTAD

Speakers

- Mr. Djallal Benkhelifa, Rapporteur, Algerian Competition Council
- Mr. Sean van Dort, Chairman, Global Shippers' Forum
- Mr. John Butler, President and CEO, World Shipping Council
- Ms. Andrea Tang, International Federation of Freight Forwarders Associations (FIATA)

14:30 - 14:45 **Questions and comments from the floor**

Delegates wishing to speak during the session are invited to inform the UNCTAD secretariat accordingly by contacting Jan.Hoffmann@UNCTAD.org.

1


Global Supply Chain
Forum
Barbados
21–24 May 2024
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