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# CONCENTRATION IN LINER SHIPPING

ITS CAUSES AND IMPACTS FOR  
PORTS AND SHIPPING SERVICES  
IN DEVELOPING REGIONS

## **ABSTRACT**

Concentration in liner shipping means that relatively larger shipping companies are increasing their market share at the expense of the remaining smaller players. Although this process is not new, it has gained strength and is particularly affecting ports and shipping services in developing regions.

Because trade is growing as a proportion of world GDP, governments and international organizations attach an increasing priority to improving ports and shipping services. This leads to deregulation, which, together with technological advances, increases the incentives for shipping companies to form alliances and to merge. Another cause of the process of concentration is technological change, which has led to an increase of fixed costs as a proportion of total average costs. This leads to larger optimum unit sizes of vessels, ports, and companies, which in turn reduces the number of participants in the long-term market equilibrium.

To analyse the impacts of these trends, the document examines the following issues: the extent to which economies of scale are being realized; possible declines in liner shipping companies' profits; the danger of overcapacity; fluctuations in freight-rates; the strength of alliances; the expansion of east-west carriers into north-south markets; the increasing proportion of trans-shipped containers; ports as trans-shipment centres; options for small liner operators; benefits for importers, exporters and consumers; and the implications for regulatory bodies.

The document presents a generally positive picture. The word concentration might initially raise the issues of abuse of market power and monopoly rents, but importers, exporters, consumers, ports, and major east-west carriers are all likely to gain from the described process. The ones that are most likely to lose are traditional north-south liner shipping companies. It would, however, be a costly misconception of competition if the public sector tried to protect smaller players from its consequences.



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# EXECUTIVE SUMMARY

## Concentration in ports and shipping

Concentration in the field of maritime transport means that relatively larger ports, shipping companies and their alliances are increasing their market share at the expense of the remaining smaller players. Although this process is not new, it has gained strength in recent years. The following figures describe this trend:

- The size of the largest container ships has almost tripled within the last two decades.
- Recent mergers and acquisitions have resulted in some very large liner shipping companies. The top 20 carriers now control more than half of the world's container slot capacity.
- Since the beginning of the 1990s, liner companies have begun to form global alliances. The largest ten groupings now control about two thirds of the world's container slot capacity.
- Containers are increasingly trans-shipped. Ports that provide trans-shipment services have experienced particularly high growth rates.
- In practically all other maritime industries, such as shipbuilding, open registries, seafaring personnel and container leasing, the market share of the largest suppliers has also increased.

## Causes

Maritime transport is not the only industry undergoing a process of concentration. The two main motives for companies to merge and to form alliances are the desire to reduce unit costs (i.e., to achieve economies of scale) and to increase income (i.e., to gain greater market power). This is only possible up to a certain limit, and this limit has shifted toward fewer but larger commercial units. This document examines the possible causes for this shift from the following three perspectives:

- Economic background. Trade is growing faster than world GDP, and in spite of a reduction of transport costs per ton, the share of transport costs within the total costs of merchandise goods has gone up. Increasing demand and containerization have led to high growth rates for liner shipping. In itself, this is not a cause for mergers and alliances. However, this economic background has encouraged the development and use of new technologies, and it has caused many governments and regional organizations to change their attitude toward deregulation.
- Government regulation. Governments and regional organizations are attaching a greater priority to the promotion of trade through improved, less expensive transport services. They are also increasingly hesitant to protect national maritime industries. The attitude of governments and

their national cartel offices toward mergers and acquisitions has become less adverse because national players have to compete globally.

- Technologies. Under given factor prices, such as wages and interest rates, new technologies lead to a changing cost function. In ports and shipping, these changes include an increased proportion of fixed costs as compared to variable costs. This shift of the relation fixed costs/variable costs leads to increased scale economies. This, in turn, implies larger optimum company sizes and thus leads to a reduction of the number of players in the long-term market equilibrium.

## Impacts

Concentration in ports and shipping largely results from the desire to achieve scale economies. Although this leads to fewer global players, competition on individual routes is actually increasing. Together, scale economies and increased competition have the following main impacts:

- Unit costs. Individual ports and shipping companies are able to reduce unit costs through economies of scale. However, this is achieved at the expense of overall lower freight-rates.
- Profits. In absolute terms, liner shipping companies' profits are increasing because of the growing market. In relative terms (i.e., return on investment), profits have been declining. Competition obliges carriers to pass on cost reductions to the shipper. If compared to the historically low interest rates, the return on investment is not as bad as some representatives of liner companies may think.
- Overcapacity. High fixed costs and weaker liner shipping conferences have led to a strong perception of overcapacity among many liner executives. Globally, such overcapacity does not exist. It may occur in the future if liner shipping companies continue to expand their capacity to reduce unit costs. The introduction of larger container carriers on the main east-west routes creates particular pressure in secondary markets because of the redeployment of medium-sized vessels.

Freight rate fluctuations. High fixed costs and the desire to gain and hold

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