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CONCENTRATION IN LINER SHIPPING

Containerization, telecommunication, globalization and privatization are among the most important recent trends that have affected shipping. Concentration is another trend which is expected to have a major impact. This refers to the increasing control in the hands of a small number of companies who hold an increasing market share. Although at first this process may be associated with dominant positions and abuse of monopoly power, in reality, the advantages for the economies of Latin America and the Caribbean should by far outweigh the disadvantages.

This edition of the FAL Bulletin presents some of the findings of a recent study prepared by the ECLAC Transport Unit, entitled, Concentration in liner shipping - its causes and impacts for ports and shipping services in developing regions, LC/G.2027, August 1998 (for a copy of this document, write to Bárbara Donoso, e-mail: bdonoso@eclac.cl). This edition also presents reflections on the increasingly intense competition in shipping and port services and proposes some measures for addressing these changes.

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Recent development

The process of concentration in ports and shipping has gained force in recent years. Regular liner shipping companies are merging, alliances being formed and container ship sizes are increasing substantially. Private international port operators have established themselves and are acquiring a growing market share as a result of privatizations and the growing volume of trade. Hub ports are experiencing strong growth based on the increase in container transshipment. The latter is linked to the development of global service networks by shipping lines and the increasing difference in size between large and medium-sized vessels, which makes it economically viable for freight to be transferred from a feeder to a larger vessel for the greater part of the journey.

The following two figures illustrate these trends. Figure 1 shows the capacity of large container vessels. The maximum capacity of such vessels is now approximately 8,700 TEU (Twenty foot Equivalent Units), including empty boxes. It should be pointed out that the growth observed towards the end of the 1990s is attributable mainly to the construction of the so-called post-Panamax ships (vessels that exceed the maximum dimensions that can pass through the Panama Canal, that is, 950 ft x 106 ft. or 31.17 m x 3.48 m).

Figure 1: The Capacity of Large Container Vessels

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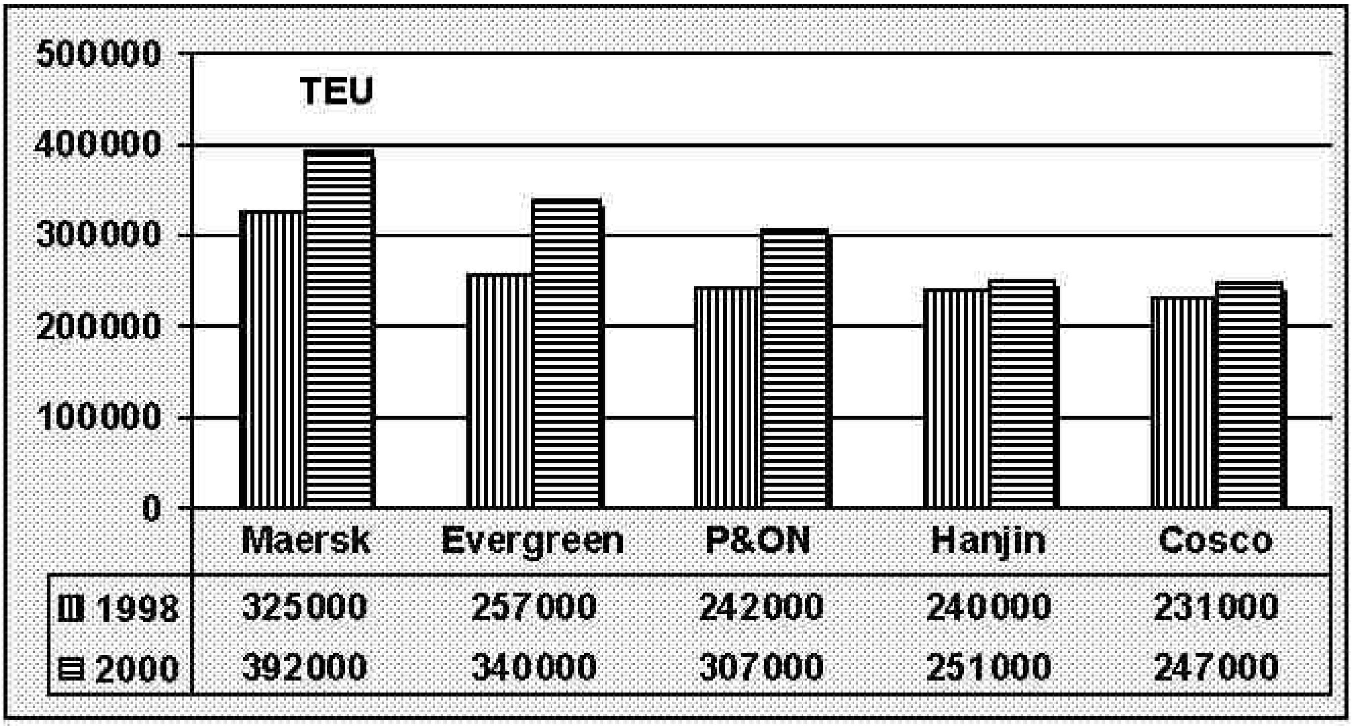
Source: Drewry Shipping Consultants and ECLAC (forecast for the year 2000).

Figure 2 shows the capacity of the major shipping lines. Each of the five leading lines already has an accumulated carrying capacity in excess of 200,000 TEU. The forecast for the year 2000 is based on effective vessel orders received by shipyards worldwide, and further expansion plans announced by their respective shipping lines. Moreover, of the five major lines, the three leading companies are those with the highest growth forecast

Figure 2: The leading shipping liness



Source: Lloyd’s Shipping Economist.

Since the early 1990s, the largest shipping lines, which originally only operated on the east-west route (linking the United States, Europe and Asia) began to establish and strengthen global service networks encompassing practically all markets. This implies transshipment, the use of large container ships and cooperation through global alliances. These trends have led to acquisitions of small lines by major companies and to a series of mergers between lines that were already among the top 20 shipping companies in the world.

Concentration is not limited to shipping lines and ports. In other sectors of the maritime industry, major companies and countries are also expanding their market share. This process can be observed in the following areas:

- **Shipbuilding:** at present, two countries (Korea and Japan) account for 75% of tonnage (dwt - dead-weight tons) on order with shipyards of the world. At the beginning of the decade, they accounted for only 60% of orders.
- **Flag registries:** four open registries (Bahamas, Cyprus, Liberia and Panama) provide flags to 40% of the world’s fleets (dwt). Their share 15 years ago was 28%.
- **Seafaring personnel:** four countries (China, Philippines, Indonesia and Turkey) provide approximately 40% of the world’s seafarers. This is expected to increase to 48% by the year 2005.
- **Container leasing:** two companies (Genstar and Transamerican) control approximately 50% of the market.
- **Cargo or forwarding agents:** at present, 24 companies offer services worldwide. Over the next 10 years, their numbers should be down by half.

This trend towards concentration is by no means limited to the maritime and port industry. In 1997, mergers in the United States totalled one thousand billion dollars (US$ 1,000,000,000,000) or 12% of gross domestic product (GDP). At the global level, at least two countries took part in mergers and acquisitions to the tune of US$ 341 billion.

Causes of concentration

Growth in trade and globalization are attributable to technological advances and deregulation. These are the factors that have contributed to mergers, alliances and increases in vessel size and the increased use of transshipment facilities. Figure 3 illustrates this relationship:

Figure 3: Causes of concentration

Growth of trade and globalization are leading to a change in approach by Governments and regional organizations. Whereas in the past, certain mergers would not have been approved for fear of the development of national monopolies, Governments now recognize that their national companies must compete internationally; as a result, anti-trust commissions have adopted a more favourable attitude to mergers and alliances. Moreover, there is a positive relationship between deregulation and technological advances. Regulators are conscious of the possibilities of cutting costs with new technologies, larger physical units (ships, cranes) and commercial entities (companies, alliances). They encourage it despite the fact that it can mean fewer companies in a given market.

An expanded market also fosters the development of new technologies and higher initial investments for realizing economies of scale. The prospect of achieving economies of scale is the rationale for concentration.

Economies of scale imply that a given increase in production leads to a decrease in unit costs - up to a certain limit considered to be the optimum volume, where average unit costs amount to the minimum possible with current technology and prices. This optimum volume (per company or per ship) has increased. In any given market, a greater volume for each company implies that there is only room for a limited number of companies.

Economies of scale are to a large extent attributable to a change in the fixed costs/variable costs ratio. In order to be in a position to offer shipping and port services, additional capital outlays in the form of larger vessels and cranes, computerized and information systems, containers and training. On the other hand, variable costs have been declining steadily. For example, telephone calls are becoming cheaper and cheaper. Technological improvements mean that the fuel consumption involved in transporting each additional container is lower while oil prices have reached historic lows. In this context, there is no point in making a distinction between short or long-term fixed costs or knowing whether the fixed costs/variable costs ratio is 50:50 or 70:30. What is important is that an increase in the ratio necessarily implies an increase in the optimum size per company. [(1)]

Fewer companies yet more competition

The effects of concentration are for the most part positive ones. Although, at first there may be fears of abuse of monopoly power, surprisingly enough, the reduction in the number of companies on the market implies an increase in the intensity of competition. This does not mean that concentration is the cause of the increase in competition but rather that the two trends are linked to the same global developments, as illustrated by the following ten points:

(1) While it is true that, owing to mergers and acquisitions, there is an overall decline in the number of shipping lines in operation, it is also true that on most routes the number of companies has grown, mainly as a result of the expansion of east-west lines to regional and north-south markets.

(2) Each exporter has a greater number of options for transporting their merchandise given the possibility of including one transshipment and thereby connecting a north-south service with an east-west service.

(3) Since containerization is now commonplace, services offered by shipping companies are increasingly homogeneous. With respect to demand, the market can no longer be termed "monopolistic competition" but rather almost perfect competition.

(4) In terms of supply, since fixed costs are relatively high, it is proving increasingly expensive to not use existing capacity. Since variable costs are lower, there is a strong pressure to reduce freight rates in order to maintain or increase market share and thus, to cover at least part of one's fixed costs.

(5) In order to achieve economies of scale and establish itself as a global service, a company must increase its capacity. To use this capacity, it must increase sales, even if, in the short term, this means selling at cost.

(6) Clients are increasingly well-informed whether through e-mail, the Internet, fax or telephone. An exporter is now better able to compare different transport options.

(7) Traditional shipping "conferences" have lost much of their influence. This is both cause and effect of the increasingly intense competition which has meant that shipping lines are less inclined to subject themselves to the discipline of the conferences.

(8) Exporters and importers that use shipping services group together to form user councils. In this way, they act as a counterweight to the traditional power of the conferences.

(9) In the globalized economy, not only the shipping services but the transported goods themselves are competing. Competition for these products is intensifying since elasticity of demand for shipping services is also increasing.

(10) Liberalization and current economic policies reduce the protectionist tendency of Governments with respect to national shipping lines. Despite the fact that some anachronisms such as the Jones Act in the United States remain in force, overall, it is becoming easier for new providers of shipping services to penetrate national markets.

Who are the winners and who are the losers?

Concentration is not a "zero sum game", in which some win while others lose. Cost reductions, the establishment of global networks, wider transport options and more intense competition mean that it provides benefits to the world economy.

- Importers and exporters gain since shipping costs are lower and options wider.
- The east-west shipping lines gain since they manage to cut costs and expand their market.
- Private port operators benefit since transshipment traffic means that port container throughput generally is growing faster than maritime trade.
- The countries where transshipment takes place benefit because not only can they establish transshipment centres which generate jobs and income, but also they obtain additional transport options for their exports and imports.
- The regional north-south shipping lines stand to lose. On the one hand, given existing transshipment options, they stand to lose business on the east-west segment of their route.

Moreover, they run the risk of losing a portion of their market on account of the expansion of the major east-west lines. Nevertheless, expansion of the market and the option of cooperating with other lines also provides them with a potential benefit from the process of concentration.

How should be the response to these changes?

The answer to this question is linked to the specific objectives of the relevant maritime and port policy. These may be threefold:

(1) To create employment and generate income in maritime industries. This could mean protecting the national shipping lines against international competition and preventing major shipping companies from continuing their expansion into the regional and north-south markets. It could also mean placing constraints on international port operators by restricting their share of business to no more than 50% of a national port.