## **Chartering Strategy in Liner Shipping Companies**

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## Introduction

Liner shipping is a capital intensive industry. Liner Shipping Companies (LSCs) need to invest substantial amounts of capital in their vessels, containers and equipment, as well as bear high operating cost including insurance, maintenance & repair, stores & consumables and manning. Additionally, liner operators need a minimum number of ships to operate, and cargo volumes are determined by macro-environments. Thus, it is easy for LSCs to suffer losses due to the high risk of operations.

From an economic perspective, liner shipping is classified as an oligopolistic market structure which is characterized by the existence of a few sellers and inter-firm rivalry. Other characteristics of the oligopolistic liner shipping industry include (1) high entry barriers to new comers due to large capital investments; (2) little difference in service; and (3) a few carriers that account for the majority of the total supply.

There are two contemporary issues that need to be explored in the liner shipping area. One issue is that LSCs face intense competition in the globalized liner shipping market. The other one is over-capacity. Over-capacity leads to lower freight rates. As a result, liner shipping is characterized by low profit margins due to over-capacity. The level of capacity utilization depends on the growth of containerized cargo, the speed with which existing operators introduce new and larger vessels into liner shipping services, and the level of exits of operators from the market.

An economy-sensitive industry like container shipping, of course, has witnessed overwhelming volatility in the market. Emerging economies such as in Asia have experienced a tremendous expansion in container trade. The container export volume in Asia, on average between 2007 and 2011, is almost 2.6 times than that of Europe and North America. Hence, Asia is turning into another major shipping centre. On the other side, although the import volume is much weaker in Europe, it maintained a steady growth pattern during this period.

Most LSCs have implemented different strategies to cope with the unpredictable and challenging business environment. LSCs generate the profitability and hedge the risk through the appropriate chartering strategy at the right time.

## **Case Investigation**

In this paper, we have selected CMA CGM as our case study. CMA CGM is the world's

third largest container shipping group and number one in France. By now, CMA CGM is operating over 170 shipping lines, 650 offices and agencies in more than 150 countries. The business network of CMA CGM is truly global with core focus on Europe – Far East, Africa, Far East – North America and Latin America trades.

	CMA CGM remains fleet size	CMA CGM increases fleet size
The rest of LSCs remain fleet size	Freight rate and market share remain (R)	CMA CGM market share increase (T) Rest LSCs market share lost (S)
The rest of LSCs increase fleet size	CMA CGM market share decrease (S) Rest LSCs market share increase (T)	Supply increase / Freight rate decrease (P)

The following table shows the competition relationships in LSCs.

In our study, we assume T or S represent the possibility of the increase or decrease on the value of the chosen strategy, it either will be positive (T) or negative (S). The above decision matrix provides the possible consequence of CMA CGM's chartering decision and other LSCs' chartering decision.

If CMA CGM increases its fleet size (both chartering in and new building), and the rest of LSCs (here we define the market's aggregate net increase in percentage of TEUs capacity) go in the same way, the market freight will fall due to the oversupply of capacity.

This phenomenon can be reflected from the circumstance that LSCs order new vessels 2 years in advance on the prediction that there will be significant increase in cargo volume. Thus, LSCs placed a large number of vessel orders so as to grasp the opportunity of increased business. However, the rate of increasing cargo volume is actually lower than LSC's expectations. As a result, supply has increased while freight rate has decreased. This consequence (P) leads to a lose-lose situation for both parties as costs have to be incurred for the additional capacity, as well as decreased freight rates. This would be considered to be the worse combination resulting in a loss of profits.

We conclude that CMA CGM's operation a large number of vessels results in two kinds of benefits, one is to gain from economies of scale when the market is good, another is to hedge risks when the market is in a down turn and there is a need to charter out vessels.