

CHANGING TRADE STRUCTURE OF MAJOR SHIPPING ROUTES

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海上主幹輸送ルートの構造変化

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1. Introduction

Container shipping routes can be divided into three main groups: (1) East-West trades, which circle the globe in the Northern Hemisphere linking the major industrial centers of North America, Western Europe and Asia; (2) North-South trades articulating around major production and consumption centers of Europe, Asia and North America, and linking these centers with developing countries in the Southern Hemisphere; and (3) intraregional trades operating in shorter hauls and with smaller ships. This report describes changing trade structure of major shipping routes and also shows intraregional trade growth(2002-2005) estimated by the MPPM study.

2. Asia - North America

The biggest deep sea liner route is the trans-Pacific trade between Asia and North America, representing 14.7 million TEU in 2002, equivalent to 39 per cent of the total East-West

trade and 28 per cent of the world total. These services operate between the North American ports on the East Coast, the Gulf and the West Coast and the industrial centers of Asian countries, with some services extending to the Middle East.

As shown in Figure 1, it is expected that the trans-Pacific trade will show an annual growth rate of 6.8 per cent per annum. The trans-Pacific trade is expected to remain the largest of the East-West trades (namely, Asia-North America, Asia-Europe, and North America-Europe) throughout the forecast period, growing to a volume reaching 35.3 million TEU in 2015.

Since the Asian crisis the trans-Pacific trade growth has been very unbalanced, with strong growth in the eastbound trade coinciding with a deep and protracted slump in westbound volumes. Container flows on the dominant leg, Asia to North America, reached 9.1 million TEU in 2002, while in the opposite westbound direction the flow stood at 5.7 million TEU.

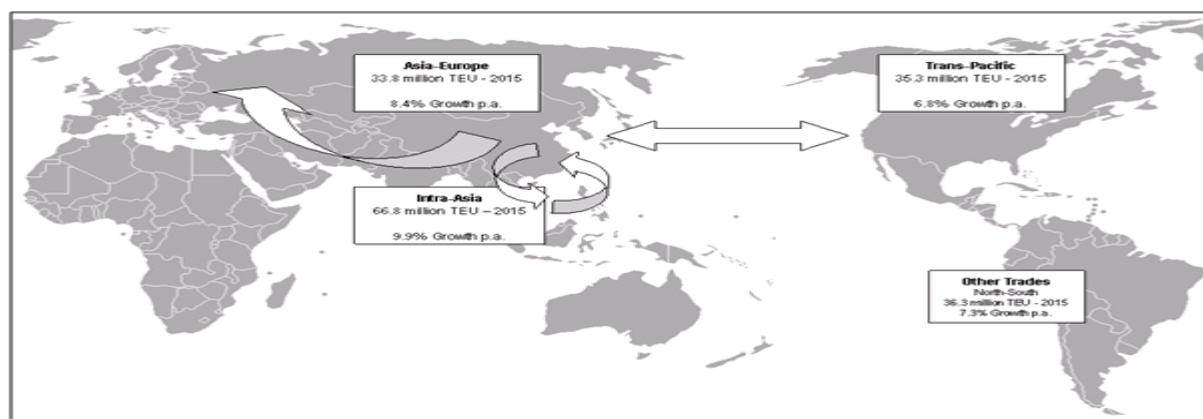


Figure 1 Trade Lane Growth (2002-2015)

Source: Study estimates¹

The study forecasts suggest that the current trade imbalance is likely to be deepened in the long-term, as shown in Figure 2. An average growth rate of 6.1 per cent per annum until 2015 is forecast for the westbound trade, compared with a growth rate of 7.2 per cent per annum in the eastbound trade. It is expected that in 2015 the container volume of westbound trade on the trans-Pacific route will be around 12.4 million TEU, which is a little greater than half of the eastbound trade, 22.9 million TEU. As the imbalance of container flows is expected to continue, repositioning of empty containers will remain a major concern for carriers, in particular those operating on the trans-Pacific trade route.

3. Asia – Europe

The study estimates show that container trade volume on the Asia-Europe route reached 11.9 million TEU in 2002. The prospects for the growth of Asia-Europe trade appear stronger than trans-Pacific trade, growing at an average rate of 8.4 per cent per annum until 2015 (Figure 1). It should be noted however that this growth rate covers the whole of the Asia-Europe trade, including some very mature markets such as Northern Europe–Japan, which are expected to

grow only slowly. Some other components — for instance, trade between East Asia and the Mediterranean, and between India and all parts of Europe, are expected to grow more rapidly than the rate quoted above.

Like the trans-Pacific trade, this Asia-Europe trade has also become unbalanced since the 1997 Asian currency crises. In the early 1990s, the volume of cargo carried in each direction in this trade lane was relatively even: although westbound TEU numbers exceeded eastbound by around 10 per cent, this was offset by the fact that eastbound containers were, on average, significantly heavier.

By 2002, this had changed greatly, particularly with respect to Asian trade with Northern Europe. According to the study forecasts, the trade imbalance on the Asia-Europe route will decline to around 17 per cent in 2015. Westbound volumes are expected to increase from 6.6 million TEU to 18.4 million TEU at an average of 8.3 per cent per annum over the forecast period, compared to the estimated rate of growth of 8.5 per cent for eastbound volumes from 5.3 million TEU to 15.4 million TEU during the same period.

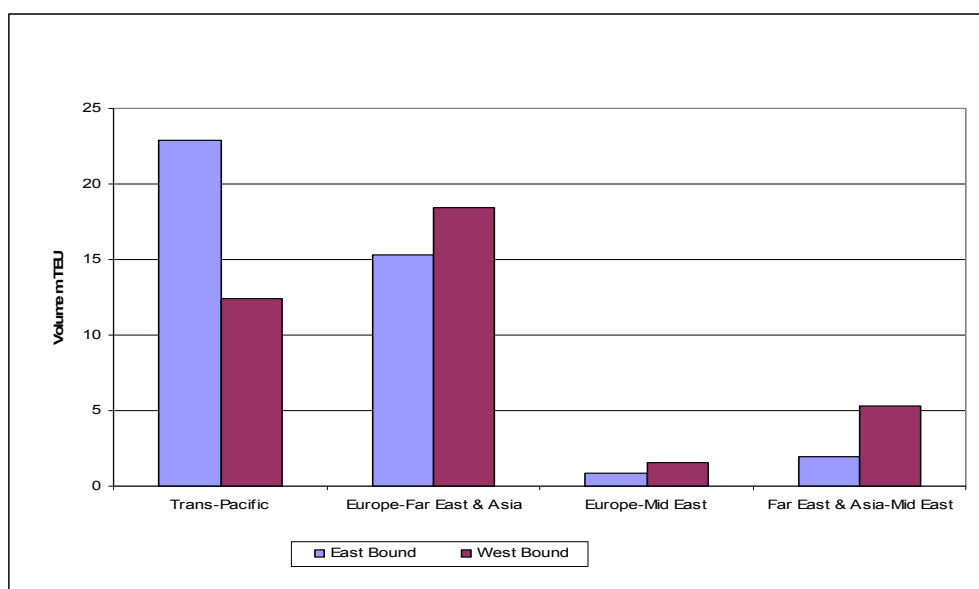


Figure 2 Trade Imbalance on East-West Routes – 2015

Source: Study estimates

4. Intra-Asia

In the growth model for almost all of the principal Asian economies trade, and particularly exports, plays a pivotal role. Trade growth has occurred at the same time as a burgeoning of FDI by the more wealthy Asian economies, initially Japan, but subsequently the Republic of Korea; Chinese Taipei; Hong Kong; and Singapore, in manufacturing plants located in lower labor cost countries. This, together with trends in manufacturing processes that have favored the two-way trade in components and sub-assemblies, led to spectacular levels of growth in the intra-Asian container trades during the early and mid-1990s, until the Asian economies were hit by the 1997 crisis.

It is a difficult task to draw a comprehensive picture of the long-term growth of the intra-Asian trade, although there have been some attempts to quantify the intra-Asian container flows based on statistics available on container lifting's of major shipping lines. In 1991, K-Line quantified the intra-Asian cargo flows between nine major Asian economies: Hong Kong, China; Indonesia; Japan; Malaysia; the Philippines; Republic of Korea; Singapore; Chinese Taipei and Thailand. Total cargo carried between countries/economies of the group at that time was estimated at 2.98 million TEU. In April 1997, an attempt was made by DRI/Mercer World Sea Trade Service to quantify the level of trade between these same nine economies. The estimated total for 1996 was 5.5 million TEU, a little short of double the 1991 total. This translates to a growth rate of 13 per cent per annum, compared to a growth in global container trade over the same period of around 8 per cent per annum.

Although there is no question that this trade was hit particularly hard by the Asian crisis, it is difficult to obtain definitive estimates of the impact. Based on Standard and Poor's World Sea Trade Service data, it would appear that the trade was effectively stagnant over the period 1996 to 1998. However, it appears that the intra-Asian trade witnessed a return to solid growth during the late 1990's and early 2000's, although at levels somewhat lower than those of the early 1990s.

Drewry Shipping Consultant Ltd. (Drewry,

2003) made an attempt to compile a series of detailed intra-Asian trade matrices for the period 1999 to 2001, covering country-to-country container cargo exchanges among 13 Asian economies including China (with Hong Kong and Chinese Taipei, separately), Indonesia, Japan, Malaysia, Myanmar, Philippines, Republic of Korea, Singapore, Thailand and Viet Nam. It was estimated that the total trade between Asian countries increased from 12.8 million TEU in 1999 to 15.9 million TEU in 2001, with an annual average growth rate of 12 per cent. However, it should be noted that this includes around 3 million TEU of domestic traffic, mainly in China, Indonesia, Japan and Philippines. The Drewry analysis also excludes the South Asian market which has recently been growing rapidly.

The MPPM² study attempts to provide a comprehensive picture of the intra-Asian container trade covering the whole ESCAP region, including those nations in ESCAP, which was estimated to have reached 19.6 million TEU in 2002.

A number of factors suggest that long-term growth prospects for the intra-Asian trade remain strong:

- Sound medium to long term growth prospects for most Asian economies;
- Close proximity of a number of economies at very different levels of economic development;
- The continued importance of more economically advanced Asian economies as sources of FDI for the less developed economies of the region;
- Regional free trade agreements such as ASEAN's Common Effective Preferential Tariff Scheme (CEPT).

Model estimates in this study suggest that the intra-Asian trades are set for sustained solid growth, with a compound average growth rate of 9.9 per cent per annum over the period 2002-2015. This can be compared with merely 2.3 per cent, the average growth rate for other intraregional trade (Figure 3).

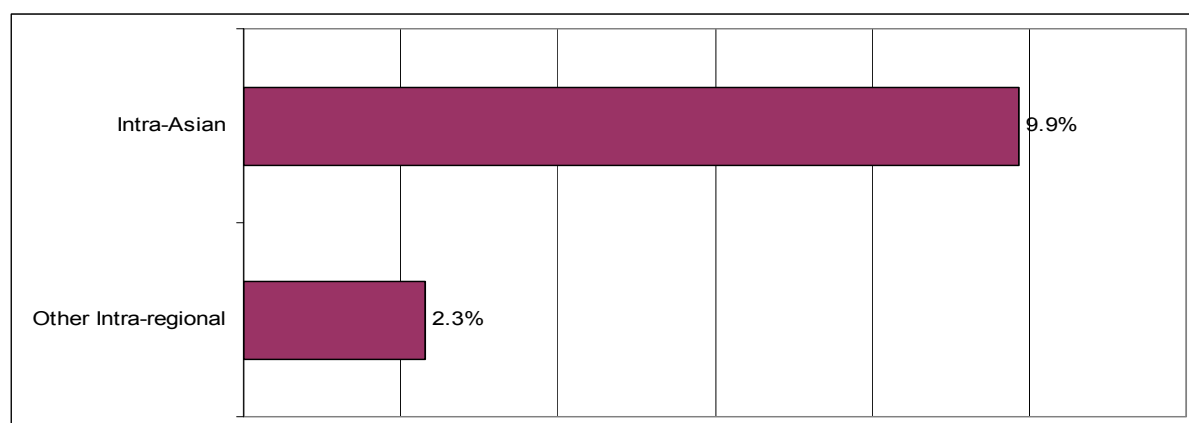


Figure 3: Intraregional Trade Growth (2002 - 2015)

Source: Study estimates

Within the intra-Asian trades, growth of trade to and from East Asia and South Asia hold out great promise for the future. China, including Hong Kong, China and Chinese Taipei, will continue to dominate intra-Asian trade with an expected growth rate of 10.8 per cent per annum from 2002 to 2015.

Endnotes

- 1 KMI(Korea Maritime Institute) and Meyrick and Associate jointly studied to forecast container traffic in 2015.
- 2 MPPM(Maritime Policy Planning Model) is the computer based forecasting model which is developed by UN ESCAP. MPPM will be upgraded as ITPM(Integrated Transportation Planning Model) within 2007.