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DIVERSIFICATION STRATEGY OF JAPANESE SHIPPING INDUSTRY

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ABSTRACT

Recently, the world shipping industry has been facing fierce competition in the globalized market. Under this circumstance, Japanese shipping industry is very unique in that it still has three major shipping companies among the high GDP countries. World shipping business is highly specialized and mainly classified into liner shipping and bulk shipping. However, major Japanese shipping companies have a diversified framework which consists of shipping business as a corporate strategy.

This paper aims to pursue the reasons of the diversification strategy in the Japanese shipping industry from the viewpoints of governmental policy and environmental factors. The intensive merger of the Japanese shipping industry by governmental policy in mid 1960s and Mergers and Acquisitions as a corporate strategy in 1990s have improved Japanese shipping companies by ensuring their diversified structure while economic growth has provided a favorable business environment and opportunities.

Although each Japanese shipping company has implemented diversification strategies in the same way, the recent state of these companies indicates a policy change on business strategy. NYK has been transforming its business interest from shipping carriers to logistics providers as a core business. On the other hand, MOL is still focusing on liner and bulk businesses while K-Line will expand heavy lifter and offshore support vessel services. The challenge of Japanese major companies is an interesting topic to elicit lessons learnt in shipping business practice.

Keywords: Japanese Shipping Industry, Diversification Strategies, Logistics

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INTRODUCTION

The Japanese shipping industry is composed of two types of shipping companies. One is NYK, operating both liner shipping and bulk shipping business; the other is Daiichi Chuo Kisen Kaisha, operating a bulk shipping business only. Other specialized liner shipping companies do not exist in Japan.

Before World War Ⅱ, the Japanese shipping industry was distinguished by subsidized liner shipping companies and independent bulk shipping companies. After the war, it featured importing industrial raw materials and exporting manufacture products, and developed at a high growth speed. The Japanese shipping industry, especially in the bulk shipping market, faced a lot of demands. Deciding to change the industrial structure, the Japanese government issued extensive consolidated policies in the mid 1960s in order to not only strengthen the liner shipping sector but also encourage more the bulk shipping sector. Then six major shipping companies were established and became able to operate both liner shipping and bulk shipping. Medium or minor shipping companies were limited to the bulk shipping sector.

Under this diversification policy, major Japanese shipping companies developed in the high economic growth ages of 1960s. The strategy resulted in corporate growth and world competitiveness. Bulk shipping companies also developed equally. In this period, the Japanese maritime cluster "Trinity Industrial Structure" was built up, composed of the shipping industry, shipbuilding industry and steel or oil manufacture industry, centering on a main bank. The cluster was basically formed by pursuing the inter-industrial external economies or the advantages of transaction cost-based demands and long-term contracts. Japanese shipping companies achieved worldwide competitiveness and realized corporate growth in this way.

There are two types of diversification: horizontal diversification and vertical diversification. Japanese shipping companies deployed the horizontal type post World War Ⅱ and begun the vertical type in the liner sector after the appearance of containerization. Vertical diversification means logistics business enabled by intermodal transportations due to the development of containerization. Also the diversification is a differentiation strategy for the liner shipping by the enlargement of products concept from shipping services to logistics services including warehouse, inventory control and delivery services etc.

In the shipping industry, it is not easy for shipping companies to diversify their business, because of peculiar differences between the liner business and bulk business. Typical main differences are based on the market structure and capital intensity. The liner business does not face highly volatile freight fluctuations and does not charter in and out or buy and sell ships in accordance with the fluctuation. On the other hand, bulk business can be operated by a ship basis, not by fleet, and does not have cargo soliciting and ship husband functions etc. at each port in the world. Many shipping companies in the world are highly specialized to transport specific cargoes or to produce only containership services or bulk carrier services. Japanese shipping companies are rare cases in the world shipping industry.

Why and how Japanese shipping companies turned to operate both liner shipping and bulk shipping will be discussed in this paper. Chapter 1 serves as an overview of Japanese shipping companies and discusses the government policy and environmental factors influencing corporate strategies. Japanese shipping companies have implemented diversification strategies since the 1950s and became different from worldwide competitors. In chapter 2 the diversification strategies of Japanese shipping companies are introduced, and NYK's logistics business as a corporate strategy and its differences from other Japanese shipping companies are researched in Chapter 3. The conclusion comes in the final part.

1. AN OVERVIEW OF JAPANESE SHIPPING COMPANIES

1.1 Japanese Shipping Companies in the World

The world shipping market is growing rapidly and becoming more competitive in the global economy era. Shipping companies have to realize both growth strategies and competition strategies in order to compete in the current situation.

The rise of Asian shipping and the enactment of the 1984 US Shipping Act have brought about the collapse of freight conferences and caused severe competition in the world liner shipping market. Many shipping companies in developed countries have been losing their positions. As typical examples, APL, which was an American shipping company, merged with NOL, a Singaporean company, while other US Lines filed for bankruptcy. At present, only a few of the big shipping companies survive in the USA.

Despite their decline, major shipping companies still exist in developed countries. Table 1 shows the number of major shipping companies in the top 15 GDP ranked countries in the world. Among these countries, Japan is a unique country in that it has 3 major shipping companies in the top 20 operators in container, dry bulk and PCC (pure car carrier) shipping markets. With the impressive growth of the seaborne trade, major Japanese shipping companies have been implementing diversification strategies as a corporate strategy. NYK, MOL and K Line are operating not only bulk and container businesses, but also logistics businesses and so on.

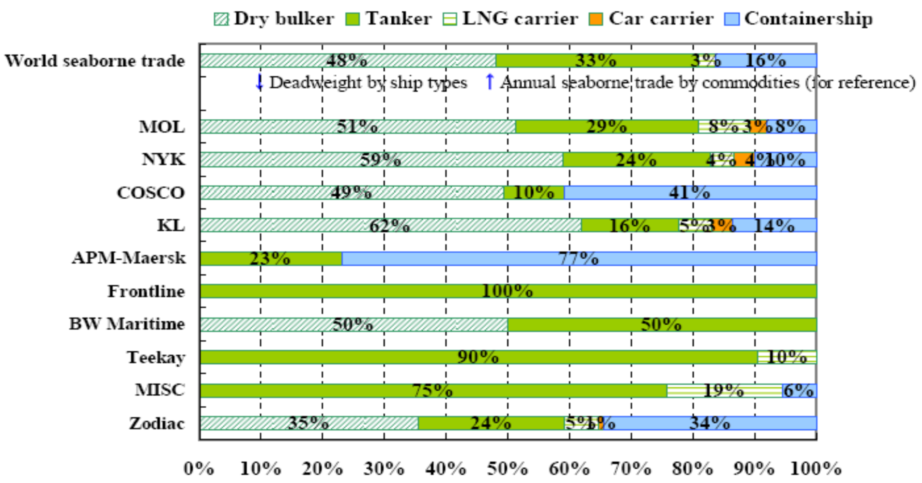
Table 1 Number of major shipping companies in the world Top 15 countries of GDP

GDP Ranking	Country	GDP (Billions U.S. dollars)	Number of Major Shipping Company
1	The United States	14657.8	0
2	China	5878.3	2
3	Japan	5458.9	3
4	Germany	3315.6	2
5	France	2582.5	1
6	United Kingdom	2247.5	1
7	Brazil	2090.3	0
8	Italy	2055.1	0
9	Canada	1574.1	1
10	India	1538	0
11	Russia	1465.1	0
12	Spain	1409.9	0
13	Australia]	1235.5	0
14	Mexico	1039.1	0
15	Korean	1007.1	2

Source: International Monetary Fund, World Economic Outlook Database (April 2011 edition)

1.2 Diversification strategies of Japanese shipping companies

We can observe the diversification strategies of Japanese shipping companies by looking at their fleet compositions and revenue portfolios. Fig. 1 shows the fleet composition of shipping companies in the world. Japanese shipping companies have different types of ships. Although dry bulk carriers and tankers are the most common type of ships in the fleet composition, they also have containers, PCCs, and other types of ships. The most important thing is that the ratio of cargo type basis of the world seaborne trade is very similar to the ratio of ship types that comprise the basic fleet composition of the 3 Japanese companies. But other companies are different from Japanese companies.



Source: World seaborne trade = MOL estimates based on Clarkson Research Services Autumn 2010 and others.
Fleet composition = MOL calculates based on each company's HP and Clarkson /MDS data. Excluding Passenger ships /ferries.

Fig. 1 World major carriers' fleet composition (2010)

Of the revenue portfolio segments of MOL, the dry bulker accounts for 52% of the ships, while containerships account for 38%, and the remaining 10% of other businesses. Japanese companies have a balance between the liner sector and the bulk carrier sector. Based on Fig. 2, the world major shipping companies are grouped as follows:

a) Diversified business: MOL, NYK, “K”LINE
b) Container business oriented: AP Moller-Maersk, Evergeen, NOL, Hanjin, OOIL
c) Bulk business oriented: MISC, Frontline, Teekay, OSG, Paclflc Basln, Golar LNG

There are few companies operating in many sectors like Japanese shipping companies.

Source: MOL calculations based on each company’s financial statement (FY2010)
MOL’s containerships & related business includes revenues from Containerships/Terminal/Logistics etc
NYK’s containerships & related business includes revenues from Containerships/Terminal/Logistics/Air freighters.

Fig. 2 World major carriers’ revenue portfolios by segments (2010)

There is a problem with how Japanese shipping companies deploy their diversification strategies. We will approach the problem from the viewpoints of governmental policy and environmental factors in the next chapter.

2. DIVERSIFICATION STRATEGIES OF JAPANESE SHIPPING COMPANIES

2.1 Backgrounds of Diversification

(1) Government Shipping Policy and M&A

First, we will take a look at Japanese maritime history. The three major shipping companies in Japan have a long history. Both NYK and MOL were founded before the 1900s and K Line was founded in 1919.

After the “Suez Boom” ended in 1958, the bulk shipping market rapidly cooled. When the new ships ordered during the booming years were completed, the market conditions deteriorated further. Some shipping lines fell into arrears on their debt payments. The Japanese government responded by revising its sweeping shipbuilding promotion policy and passed two new laws as radical measures to strengthen the industry. The first law was the Provision Measures Law Concerning Reorganization of Shipping Lines, which promoted consolidation of the industry. The second was a partial amendment to the Interest Subsidy Law. In the 1960s, the Japanese government went into action, and the shipping industry underwent a major consolidation, and 6 companies were created in mergers.

This consolidation aimed to focus and strengthen the shipping business in support of trade, enhance the world competitiveness of shipping, and aggressively expand the tonnage. The objective of improving the shipping lines' operations was to eliminate their shortfall in depreciation expenses within five years.

Fig. 3 shows the shipping companies that were consolidated into NYK, MOL and K Line. The consolidation policy brought many advantages to the companies. NYK and MOL consolidated shipping companies operating mainly in bulk business. In this consolidation, the diversified management was promoted and the economies of scope were expected.

Another merge period in Japan was the 1990s. Faced with the rapid appreciation of yen after the Plaza Accord, many Japanese companies were losing international competitiveness. Japanese manufacturing companies shifted their factories to Asia. Japanese shipping companies suffered from high dollar costs and a low demand for sea transportation. Then they increased FOC (Flag of Convenience) ships and decreased Japanese flag ships. Some shipping companies like Showa Shipping and Navix Line fell into difficulties and then merged with NYK and MOL.

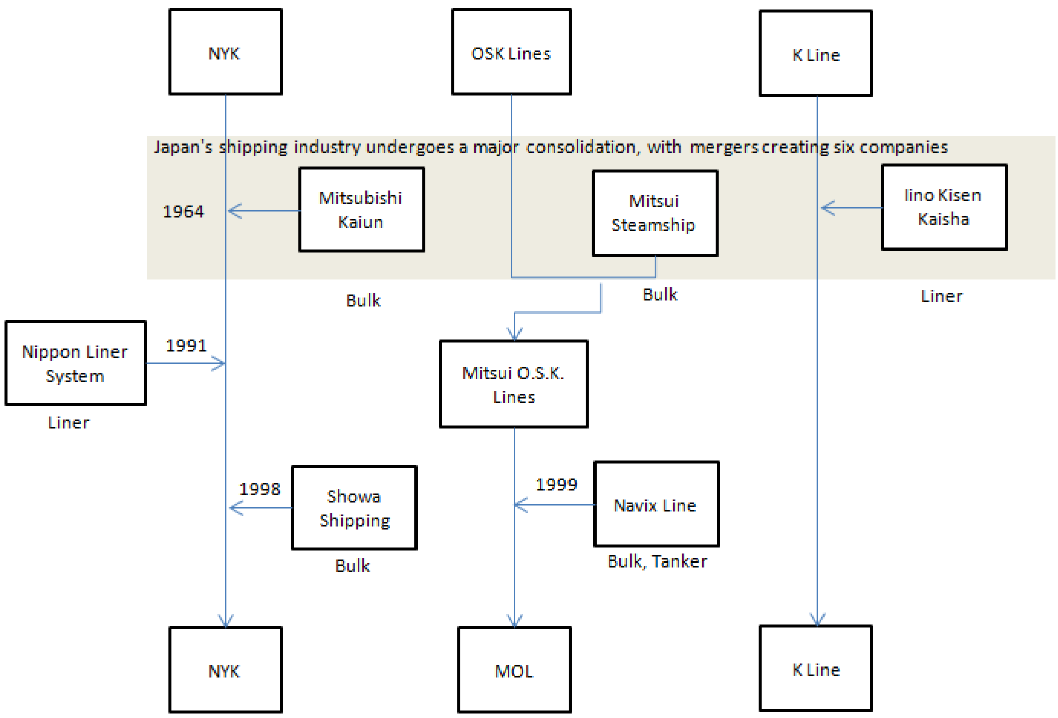


Fig. 3 Japanese shipping companies' consolidate and merge history

During this process, Japanese shipping companies did not consolidate or merge the same type of shipping companies. So the diversified business was strengthened.

(2) Environmental Factors

Our investigation found that the Japanese shipping companies' business was diversified by government policy and has expanded via mergers. On the other hand, domestic environmental factors influenced shipping companies to diversify their business too. The environment provided the motive for diversification strategies to Japanese shipping companies based on the huge shipping needs brought by the robust economic growth in Japan as well as Asia.

The summary of Japanese shipping history is as follows.

I. The Golden Sixties：1960～1975

The period of rapid economic growth between 1955 and 1961 paved the way for the "Golden Sixties," the second decades generally associated with the Japanese economic miracle. With the rapid development of the Japanese economy, the manufacture industry developed. International trade increased, cargo movements shifted significantly from general cargo to crude oil and other energy and natural resources.

II. The period of low growth in Japanese economy: 1975~1985

Under the circumstance of the low growth of the Japanese economy and the stagnation of the maritime cargo movement, shipping companies transited the Japanese flag to FOC in order to ensure the world competitiveness of Japanese merchant fleet.

III. The period of rapid Asian economic growth (1): 1985~2000

Due to the rapid strengthening of Japanese yen following the Plaza Accord in 1985, Japanese manufacturing industries lost their cost-competitiveness to Korea and Taiwan which benefited from cheap labor resources, and subsequently to ASEAN countries and China. Japanese manufacturing industries shifted their business to Asian countries, while Japanese shipping companies ensured competitiveness by FOC and started to export liner services to Asian countries for Japanese shippers.

IV. The period of rapid Asian economic growth (2): 2000 ~ Current

With the growth of Asian economies, the demands of crude oil, energy and natural resources increased. To get and ensure the cargo from Asian shippers, Japanese shipping companies turned to export their bulk services.

As mentioned above, in the "Golden Sixties", three major Japanese shipping companies had to diversify their businesses in order to meet the needs of economic development. Major Japanese shipping companies developed during this period were characterized by a lot of demands of importing natural resources and exporting manufactured goods. The rapid growth of Asian economies and the transferring of Japanese manufacturing industries to Asian countries in the 1980s gave Japanese shipping companies liner and bulk business chances with low transaction costs due to geographical merits or closed relationship with Japanese shippers. The environmental factors were important for Japanese shipping companies to diversify business.

2.2 Features of Diversification

Bulk shipping played an important role for the diversification strategy of Japanese shipping. Japanese bulk shipping had two features; One was shipping was not aimed at gaining big profits but to transport material cargo for the manufacturing industries. So, Japanese shipping companies played not in the free and shot-run markets but in the fixed and long-run markets, which spurred world competitiveness due to the reduced shipping costs and the advantages of transaction costs as the internal organization theory was clarified. The advantages came from the “Trinity Industrial Structure” in the golden ages of Japan. The structure was broken, but the long-term contracts continued with Asia, with mainly Chinese shippers having a lot of ore and oil cargoes.

Professor Habara (2011) makes the structure clear as follows (Fig. 4).

“Japanese maritime business in the maritime cluster is comprised of 3 principal groups of shipping companies (operators and charterers) together with ship owners, shipbuilding and ship machinery companies, and shippers (manufacturers). The Japanese maritime business structure is very unique, having fostered a close relationship with industries within Japan, forming what is called a self contained cooperative system.

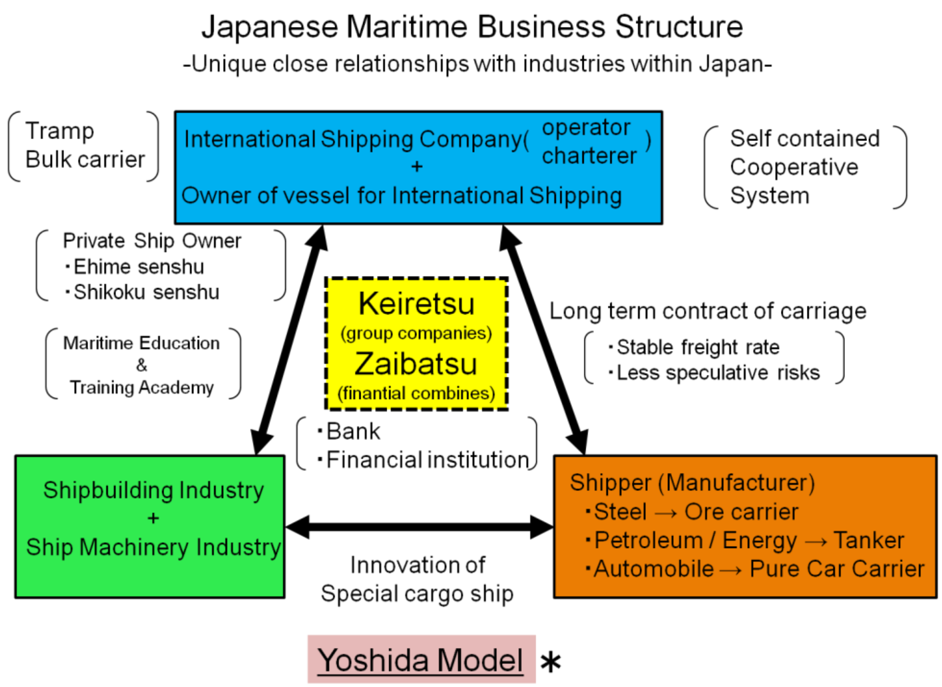


Fig. 4 Japanese Maritime Business Structure

International shipping operators and charters have been concluding the long term contracts of the carriage of particular cargoes with stable freight rates at lower speculative risks, which leads to a secure position of freight rates with less volatile and stable revenues over the long term. The reason why this characteristic maritime business model has been working well is that Japanese traditional trading background system of Keiretsu (group companies) and Zaibatsu (financial combines) enable shipping companies to forge reliable relationships with shippers and shipbuilders based on financial support provided by banks. Therefore, when shippers establish manufacturing plants in foreign countries, shipping companies provide shippers with the necessary transport services.

Ship operators/owners, shipbuilders, and shippers are definitely critical and essential parts of the maritime industry. In Japan, these three primary industries all get established independently and maintained successfully, which is characteristic of Japanese maritime business that cannot be seen in other maritime nations. Japan is an island country almost devoid of mineral and energy resources. The need to secure sources of raw materials in order to support its growing industries and secure markets for its manufactured products has become increasingly imperative as Asian economic activities develop."

Here we can sum up that the stability of bulk shipping made possible the cross subsidies and support for liner shipping within a Japanese company. What kind of roles did liner shipping have for Japanese diversification strategies?

At the beginning, Japanese liner shipping was supported by the government policy before World War Ⅱ. In the post war period, the industrial policy was reflected in the shipping policy from the introduction of the consolidation period to the start of deregulation period in 1985. Japanese liner shipping was protected and supported by subsidies in order to maintain shipping. Keeping the balance of trade payments was a goal of the shipping policy in 1960s, and Japanese liner shipping was compelled to transport 50% of trade cargoes. To perform the goal, Japanese liner shipping companies got big subsidies to build their fleets. At that time, Japan developed into an export-oriented economy, and industry products were exported by liner shipping at low freight costs. So it is said that the Japanese economy needed competitive liner shipping.

In the period of deregulation since the mid 1980s, Japanese bulk shipping faced a slump due to the stagnation of the Japanese economy. On the other side, the world container market began to develop at high growth rate. This fast growth was dependent on new international specialization, and the labor division of the intra-industry in Asia, which produced big volumes of semi-final products in the world liner shipping market. Liner shipping became the fastest growing shipping business. Naturally, Japanese shipping companies were inclined to strengthen the liner shipping sector.

The three major companies of Japan, Japan Line, Show Kaiun and Yamashita Kisen faced the stagnation of bulk shipping in 1980s, and the fierce competition of liner shipping in 1990s. As mentioned before, they were in bankruptcy or merged by NYK and MOL, who could make both shipping sectors expand as diversification strategies. Bulk shipping provided the stability and liner shipping provided the growth to Japanese companies.

3. LOGISTICS STRATEGY OF JAPANESE SHIPPING COMPANIES

The horizontal diversification strategy of both liner and bulk shipping sectors shows the uniqueness of Japanese shipping companies in the world. But the logistics business is not necessarily restricted to Japanese shipping companies. The deployment of logistics business by liner shipping companies is a natural conclusion that resulted from the way that liner shipping developed intermodal transportation after the container revolution. Every liner company in the world has been deploying logistics business to several different extents. Here if there is a reason to discuss the logistics strategy of Japanese shipping companies, we can see a typical example of organizational relationship between liner and logistics businesses in Japanese shipping companies, that is, it is exactly because Japanese shipping companies show a relationship between the two businesses.

3.1 Differences of logistics business among Japanese shipping companies

Logistics strategies by major Japanese shipping companies developed distinctly (Table 2). NYK focuses on logistics business and has the biggest scale of logistics in Japanese shipping companies. MOL has logistics sectors but still prioritizes the bulk and liner shipping as the parts of its main business. Concerning customers' logistics needs, MOL uses their own logistics sectors or KWE (Kintetsu World Express, Inc.) which has cooperated with MOL. K Line plans to upgrade the logistics business and focus on Asian markets. K Line does not have a logistics network as big as NYK.

Table 2 The revenue of logistics sector of three companies

(04/01/2009 - 03/31/2010) (Unit: 1Million Yen)

	Consolidated Profit	Operating Revenue	Number of Employees
NYK	3,417	11	16,180
MOL(1)	326	2.4	1,732
K Line	879	47	5294(3)

Source: NYK, MOL K Line's consolidated financial statement.

(1) The date used Consolidated Financial Statement for 2009 of MOL Logistics (Japan) Co., Ltd.

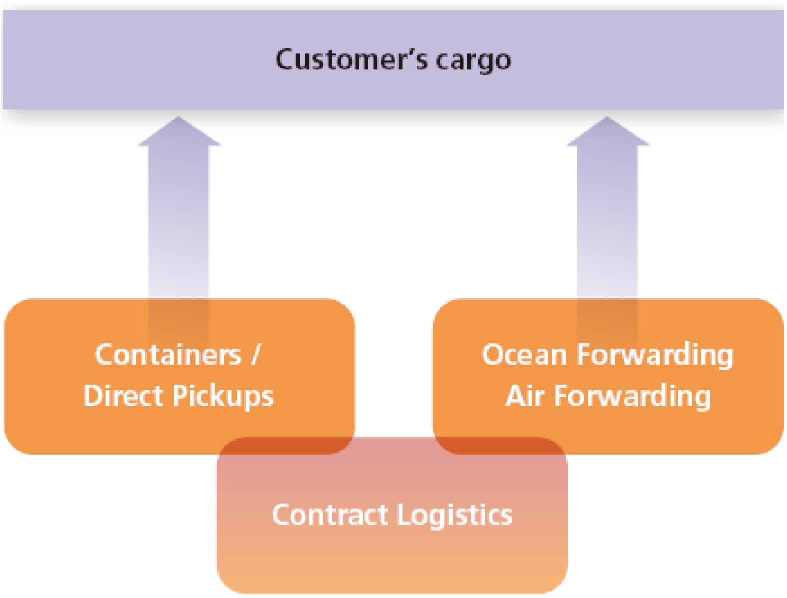
(2) K Line inculdes revenue from Terminal business.

(3) Number of Employees in "K" LINE LOGISTICS, LTD.

Why do such differences exist? Before considering it, we will see more of the logistics strategy of NYK, although this problem can be approached from the internal organization theory.

3.2 Logistics strategy of NYK

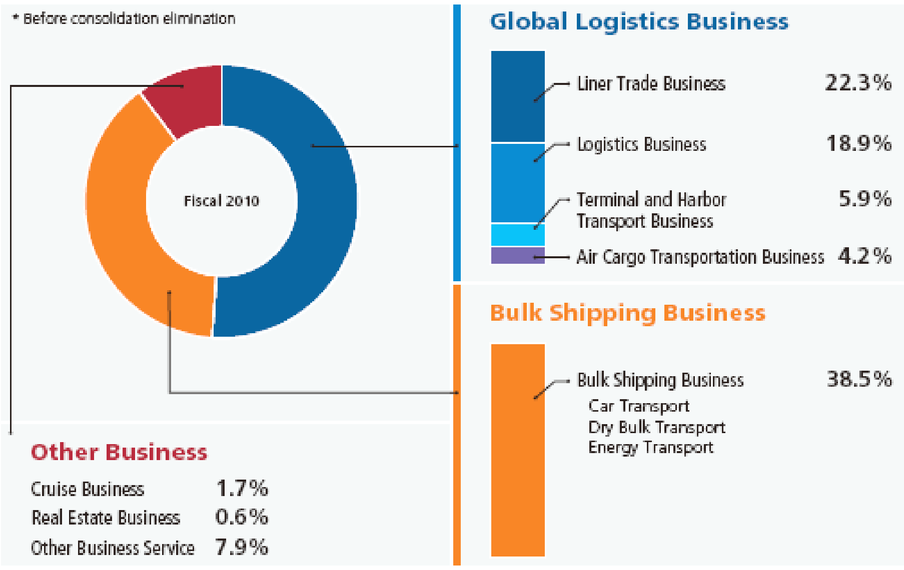
Economic globalization disperses purchasing, manufacturing and marketing functions of corporations across the world. Manufacture industries have shifted factories to China or other Asian countries and distributed intermediate and final goods to/from the world. As a result, logistics systems become more advanced and complex. Corresponding to this, many companies are pursuing outsourcing and optimizing their logistics operations. Under the circumstance, NYK tried to provide the optimal logistics services to meet this demand, and also put the logistics on a high objective. In order to realize the strategy, NYK reshaped itself to be more than a shipping company and emphasize on the functions of the third party logistics or contract logistics (see Fig.5).



Source: NYK Annual Report 2011

Fig. 5 Contract Logistics of NYK

In NYK, the logistics business does not mean a section of liner business. The business sector provides not only logistics services, but also forwarding and management services. To conquer limits and increase handling cargo volumes, NYK uses its own fleet to carry cargo and also uses their own freight forwarders to satisfy their customer needs.



Source: NYK Annual Report 2011

Fig. 6 Revenues of NYK (2010)

NYK started this logistics strategy during the 1980s. Now, the logistics business of NYK is growing and occupies 18.9% of group revenues, after the bulk and liner businesses (see Fig. 6). In recent years, NYK integrated the logistics section. In order to execute the logistics strategy plan for the expansion of logistics business, NYK established NYK Logistics (Europe) Limited on January 1st, 2003. In 2010 NYK integrated the two former companies NYK Logistics Co. Ltd. and Yusen Air & Sea Service Co. Ltd. (YAS) to establish Yusen Logistics Co. Ltd. as a new group company dovetailing the strengths of the former companies and offering a varied menu of services. They aim to become a total logistics provider operating globally with world-class scale and quality.

According to our study (2007) that applied the internal organization theory, the relationship between the liner business and logistics business has to focus not only on organization transactions but market transactions as well. It can be said that any liner companies cannot but undertake the logistics business in another organizations. AP Moller-Maersk and NYK are performing business deployments to logistics. MOL and K Line differ from NYK. MOL is deploying the business which puts specific gravity on the liner business, and K line is aiming at business deployment in the niche fields of other shipping businesses.

CONCLUSION

Japan is a unique country in the world among developed countries in that its maritime industry still has three major shipping companies. These companies are among the TOP 20 operators in container, dry bulk and car carrier markets. Unlike the other shipping companies in the world, Japanese shipping companies have been deploying diversification strategies. Major consolidation of the shipping industry by the Japanese government and the needs of trade development caused Japanese shipping companies to diversify their businesses. Before the 1980s there was almost no difference in the businesses among the Japanese liner shipping companies. After the 1980s, NYK started to transform from a shipping company to a logistics provider and consequently has the biggest logistics sector of all of the Japanese shipping companies. In regards to liner shipping, Japanese shipping companies have declined in recent years. There are no Japanese shipping companies in the top 10 container companies. Furthermore, NYK has reduced fleet capacities and eliminated investment in containerships. But MOL tries to reinforce their liner business. NYK emphasizes the logistics business, while MOL is still going to play an active role in the shipping sector. K Line will expand heavy lifter services and offshore support vessel services. It is hard to say which company's diversification strategy is the best. We can find only that Japanese shipping companies have begun to take a different business perspective in regards to their diversification strategies.

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