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WORLD MARITIME UNIVERSITY

Shanghai, China

**RESEARCH ON DEVELOPMENT STRATEGY
OF NEW ORIENTAL BASED ON
COOPERATION BETWEEN LIANYUNGANG
PORT AND CHINA SHIPPING**

By

Wei Yizhou

China

A research paper submitted to the World Maritime University in partial
fulfillment of the requirements for the award of the degree of

MASTER OF SCIENCE

(International Transportation and Logistics)

2007

DECLARATION

I certify that all the material in this research paper that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this research paper reflect my own personal views, and are not necessarily endorsed by the University.

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ABSTRACT

Title of Dissertation: **Research on Development Strategy of New Oriental based on Cooperation between Lianyungang Port and China Shipping**

Degree: **Master of Science in International Transportation and Logistics**

With the speedy growth of China's economy, container port industry has been developing rapidly. Meantime, in order to better deal with increasingly fierce competition, more and more container terminal companies are cooperating with large liner shipping companies while more and more large liner shipping companies are stepping into container port industry. Lianyungang New Oriental Container Terminal Co., Ltd is the result of such cooperation between Lianyungang Port (Group) Co., Ltd and China Shipping (Group) Company. With the 7 years cooperation between the two sides, container throughput at Lianyungang Port has been increasing at an average rate of 50.78% per year and reached 1,302,300 TEU and ranked among the top ten coastal container port in china.

After summarizing domestic and international study, this paper first introduces background of cooperation between Lianyungang Port and China Shipping, analyzes the advantages and benefits brought by such cooperation, conducts qualitative and quantitative SWOT analysis of New Oriental, analyzes disadvantages brought by such cooperation by using questionnaire and interview survey, and proposes diversified cooperation development strategy with a view to providing useful references for management staff of New Oriental to formulate future development strategy and for cooperation between domestic container terminal companies and liner shipping companies.

KEYWORDS : Container terminal company, cooperation, development strategy

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LIST OF ABBREVIATIONS

New Oriental	Lianyungang New Oriental Container Terminal Co., Ltd
Lianyungang Port	Lianyungang Port (Group) Co., Ltd
China Shipping	China Shipping (Group) Company
SWOT	Strength, Weakness, Opportunity and Threat
AHP	Analytic Hierarchy Process model
COSCO	China Ocean Shipping (Group) Company
TEU	Twenty-foot Equivalent Unit
CMA-CGM	Companie Maritime D'affertment' - Companie General Maritime

1. Introduction

1.1 Background

As the eastern bridgehead of New Euro-Asia Continental Bridge, Lianyungang port is one of the most important international trade ports in China, without freeze and silting all the year, in natural deep-water. New Oriental is the only container terminal company of Lianyungang. With an annual average growth rate of 50.78% over the past seven years since it founded, the growth rate of container throughput at Lianyungang port ranked the third among China's ports.¹

In 2006, New Oriental's container throughput reached 1,302,300 TEU and was nearly twelve times as much as that of 1999. New Oriental has achieved rapid development, owing not only to its own favorable condition, but also to cooperation between Lianyungang Port and China Shipping in recent years. In past 7 years, through cooperation between the two sides, New Oriental has made great efforts to construct terminal infrastructure, develop new sea routes and shipping schedules, and develop hinterland cargo sources, and has realized high growth of container throughput. While bringing advantages and benefits to two parties, Cooperation has also caused some problems and potential instability for the development of New Oriental.

In the fierce competition among container terminals, in order to find a solution to problems existing in the cooperation between the two sides and avoid potential risks, New Oriental must adjust development strategy. Through analysis of and study on

¹ *Lianyungang port Statistical Yearbook, 2006*

such cooperation, this paper summarizes advantages and disadvantages brought by such cooperation, and formulate a cooperation-based development strategy for New Oriental on the basis of analyzing the reasons leading to disadvantages.

1.2 Study Objective

Through analysis of advantages and disadvantages brought by the cooperation between the two sides as well as reasons leading to disadvantages, this paper is intended to formulate a scientific development strategy for New Oriental with a view to providing useful references for management staff of New Oriental to formulate future development strategy and for cooperation between domestic container terminals and liner shipping companies.

1.3 Research Content

Chapter 1 summarizes the background, objective and contents of this study. Chapter 2 sums up related domestic and foreign documents. Chapter 3 introduces historic development of Lianyungang port container terminal and the course of cooperation between the two sides, and analyzes advantages and benefits brought by such cooperation. Chapter 4 analyzes New Oriental' development by conducts qualitative and quantitative SWOT method .Chapter 5 analyzes disadvantages brought by such cooperation by using questionnaire and face to face interview survey method. Chapter 6 proposes diversified cooperative development strategy.

2. Literature Review

2.1 Foreign Literature Review

Regard on international cooperation between ports includes following issues. Evangelista.(1999) pointed that the cooperation between ports and shipping company can greatly facilitate effective, reliable logistic service, it is not only reduce cost, but also make transportation service more flexible. Heaver(2000)、Cariou P (2002) considered that the port service as the most influence factors in sea freight cost. The ports adapt to the emergent market can greatly influence the supply chain. Heaver (2000) considered that the cooperation between the transportation and port enterprise can greatly manage the logistic chain is a trend. Avery (2000) suggested that strategic alliance can greatly improve the survival the competition world between neighboring container ports. Marlow (2003) has proposed the concept of lean port. A lean port is one that as a business unit makes the best use of its available tangible and intangible resources and, eliminates all sorts of waste in the physical and documentary/information processes related to the cargo and services. He believes that a lean port itself is not able to make the best use of these achievements. “A lean port network” composed of a number of lean ports will be more efficient and can deliver better customer service and share information.

2.2 Domestic Literature Review

2.2.1 Study related to cooperation among ports

Gu Quanlin (2000) proposed four modes of strategic alliance of ports: technical alliance, marketing alliance, regional economic development alliance, and merger

and acquisition alliance. Wang Yunxia (2003) used co-competition theory to probe into realization form of co-competition of large-scale port enterprises. Si Yizhan and Liu Ruancheng (2004) analyzed benefits brought to Rizhao port through cooperation among ports. Yu Kehui and Gu Yazhu (2005) probed into coexisting marketing strategy of China ' s shipping market and suggested that shipping enterprises can develop cooperation with container terminal companies by sharing resources, implementing mutual promotion, introducing new sea routes and establishing a joint venture. He Min (2006) employed strategic alliance theory and SWOT analysis method to study how to select strategic alliance partners of Xiamen port, and how to integrate resources of Xiamen port, Zhangzhou port and Quanzhou port. Through comparative analysis of development strategy of Lianyungang port and Rizhao port, Chen Zhenchun and Xu Changxin (2006) suggested great similarity in development between Lianyungang port and Rizhao port, and believed that vicious competition would lead to an enormous waste of resources, and influence competitiveness of ports, and impede rapid economic growth of hinterland, and that cooperation among ports should be strengthened.

2.2.2 Study related to cooperation between ports and shipping companies

Sun Guangqi and Min Dequan (2000) suggested that cooperation between ports and shipping companies can be all-round cooperation between ports and shipping companies or partial business cooperation, and can be close cooperation or loose cooperation; ports and shipping companies can cooperate by establishing a solely-funded company or a holding company, or a joint venture or a cooperative enterprise; one party can become involved in business of the other party; two parties can join hands in stepping into new industry. Sun Guangqi and Min Dequan (2000) suggested that there were the following kinds of strategies of cooperation among ports and shipping companies: firstly, shipping companies can solely operate terminals by developing or acquiring terminals; secondly, port and shipping companies can develop and operate terminals by establishing a joint venture; thirdly,

shipping companies solely acquire and operate existing terminals; fourthly, shipping companies lease and operate existing terminals by establishing a solely-funded enterprise or a joint venture. Zhao Linying and Zhang Jiguang (2002) conducted qualitative analysis of strategic value and pattern of port cooperation and believed that ports can develop cooperation with shippers, shipping companies, warehouses and terminals, or develop mixed cooperation. Zheng Xun (2004) suggested that, from the angle of investment operation, cooperation between shipping companies and ports can be pure-investment cooperation or investment operation cooperation; from the angle of business cooperation, cooperation between shipping companies and ports can be terminal business cooperation, agent business cooperation, logistics business cooperation. Ma Gaoliang (2003) probed into how shipping companies should invest in ports from the angle of shipping companies. Through analysis of internal and external environment of shipping companies, Zhou Jiongfeng (2003) explained the reason why it is necessary and feasible for shipping companies to invest in ports and how to select terminal investment strategy, and analyzed how shipping companies should select terminal investment strategy through a case study, and believed that shipping companies can cooperate with investment companies or other shipping companies, or operate terminals by solely developing or acquiring terminals, or operate terminals by establishing a joint venture with ports, or directly purchase stocks of terminals, or lease terminals and invest in operation facilities.

2.2.3 Study related to cooperation between ports and hinterlands

In view of new situation that competition among ports for hinterland and cargo sources is becoming increasingly fierce, Xiao Qing (2003) proposed competitive strategy that port companies should adopt. Cheng Xueliang (2004) analyzed the reason why development of container shipping of Lianyungang port has been lagging behind and proposed measures for improvement. Ping Haosheng and Yang Ting (2004) analyzed basic conditions of Lianyungang port, and proposed many measures for accelerating development of container shipping. On the basis of summarizing

co-competition theory, Yang Fei (2005) proposed co-competition pattern for development of container business of Shanghai port, i.e. third-party holding company, joint construction of logistic park, and construction of joint venture.

According to development trend of modern port, Tong Yongbin (2005) suggested that container port should prevent excessive competition, construct transportation system, intensify links between ports and cities, and strengthen port planning. Chen Jianmin and Xu Yongjiu (2005) made a brief introduction to cooperative means and benefits of Lianyungang port. Li Guangfeng (2005) proposed suggestion on organization of cargo sources by analyzing related data. Shen Yidong and Wu Yijian (2005) analyzed problems existing in distribution system and proposed suggestion on cooperation between ports and hinterlands. In view of developing industrial belt along east Longhai, Zhu Qinhu (2006) proposed suggestion on intensifying cooperation between ports and hinterlands and improving functions of Lianyungang port. In view of developing industry near Lianyungang port, Feng Weiqin (2006) proposed strategy for enhancing functions of Lianyungang port and coordinating relationship between Lianyungang port and city. In view of economic links among regions, Zhao Chunlong, Jin Qiao and Li Genzhu (2007) employed qualitative and quantitative method to analyze the development requirements of Lianyungang port based on cooperation between ports and hinterlands.

3. Analysis of Background of Cooperation between Lianyungang Port and China Shipping

3.1 Historic Development of Container Business of Lianyungang Port

Lianyungang port began running its container business in December 1987 and has experienced three stages of “start”, “speedy growth” and “lingering” before cooperation with China Shipping.

“Start” stage was between 1987 and 1995. Lianyungang port officially began running container business in 1992, with annual average increment of more than 10,000 TEU. Container throughput amounted to 65,492 TEU by 1995, during which Lianyungang had become feeder port of Qingdao port. “Speedy growth” stage was from 1996 to 1997, during which speedy growth of Lianyungang port had been dependent on rapid growth of transportation volume of Eurasian Continental Bridge. Container throughput amounted to 12,000 TEU in 1997 and reached the peak of production. For container throughput between 1995 and 2000, please see the following table3-1.

Table3-1: Container Throughput of Lianyungang Port from 1995 to 2000

(Unit: ten thousand TEU)

year	1995	1996	1997	1998	1999	2000	Annual average growth rate
Container throughput	7.00	9.20	12.00	9.16	11.05	12.50	10.4%

Source: Lianyungang Port Statistical Yearbook

Container terminal of Lianyungang port has got two near-sea shipping lines to Japan

and Korea and domestic feeder service to Shanghai and Qingdao. Due to lack of ocean-going shipping line, development of Lianyungang port was limited by Qingdao port; furthermore, shipping price of Lianyungang port is quite high. Near-sea shipping price of Lianyungang port was 50 to 100 USD/TEU higher than that of Qingdao port while ocean-going shipping price of Lianyungang port was 250 to 300 USD/TEU higher than that of Qingdao port².

“Lingering stage” was from 1998 to 1999. Container throughput reached 90,123 TEU and 110,528 TEU respectively in 1998 and 1999. The reasons for this are as follows: firstly, shipping price was quite high and there was a small number of shipping lines, and Lianyungang port only covered a small number of countries and regions. Secondly, development of hinterland market was made on a small scale, and collection, distribution and transportation condition was backward. Thirdly, great changes have taken place in international economic situation, and transportation by land or sea was not as important as it had been. Meanwhile, many coastal ports including Dalian port and Qingdao port have gained a strong competitive edge, which has forcefully promoted rapid development of container transportation.

3.2 Basic Information about Cooperation between Lianyungang Port and China Shipping

China Shipping has total assets of 60 billion RMB and is the second largest shipping company of China. It has developed ocean-going shipping lines and dense near-sea shipping lines as well as internal trade shipping lines in major coastal ports. Since 1999, China Shipping has cooperated with Dalian port, Zhanjiang port and Shanghai port in establishing container terminal companies and has achieved remarkable success. In the second half of 1999, Lianyungang port in search of shipping companies as partners and China Shipping in search of internal trade transshipping port met together for of common interest. The two parties spent ten months in

² *Lianyungang port Statistical Yearbook, 2000*

negotiation and finally reached an agreement on annual rent of existing container terminal facilities and equipment, cooperation period, liner shipping lines, number of employees, and port positioning, and signed cooperation contract on April 1 2000. Both parties were once unable to reach an agreement on right to control the joint venture and the negotiation reached an impasse. The agreement was finally reached when Lianyungang port agreed to China Shipping give up the control to the joint venture. Lianyungang China Shipping Container Terminal Co., Ltd (later renamed New Oriental Container Terminal Co., Ltd) is a joint venture by China Shipping and Lianyungang port. China Shipping possessed 51 percent of the shares while Lianyungang port possessed 49 percent of the shares. According to development requirements of container throughput, board of directors decided to increase capital in construction of No.30 berth and capital of the joint venture reached 0.165 billion Yuan in March 2003. After adjusting the number of shares, China Shipping possessed 55 percent of the shares while Lianyungang port possessed 45 percent of the shares. New Oriental is mainly engaged in handling containers. New Oriental now has 305 registered employees, among whom 15 employees were dispatched to other companies and 8 employees came from the shareholder party. Lianyungang China Shipping Container Terminal Co., Ltd (later renamed New Oriental Container Terminal Co., Ltd) began running business in May 1 2000.

3.3 Advantages and Benefits Brought to Lianyungang Port by Cooperation

Lianyungang Port has cooperated with China Shipping in New Oriental for seven years, when container transportation has been developing rapidly. Development of container transportation is mainly manifested in the following aspects.

3.3.1 Container throughput and economic results has improved greatly

As seen in the following table 3-2, The number of container throughput in 2005 exceeded 1 million TEU, with growth rate ranking among China's top 10 container ports and the world's top 100 container ports. The number of containers throughput in 2006 was up to 1.3 million TEU and 12 times as much as the highest throughput

ever recorded in the company's history before cooperation. In view of economic results, loss of the company before cooperation reached 680,000 Yuan and profits of New Oriental in 2005 reached 34,100,000 Yuan.

Table 3-2 List of Throughput and Profits of New Oriental in Recent Years

(Unit: ten thousand TEU ten thousand yuan)

year	1999	2003	2004	2005
Throughput	11.05	30.11	50.22	100.52
Total profits	-68	1962.28	2623.4	3409.98
An increase in profits over the previous year		86.88%	33.7%	30.0%

Source: Lianyungang New Oriental Container Terminal Co., Ltd Statistical Yearbook

3.3.2 Internal management and operation mechanism has been remarkably optimized

Since its founding, New Oriental has been operating in following market rules. Operation mechanism including staffing, organization structure, employment system, distribution system and human resources system has become integrated into market, which has thoroughly changed ideas of employees and broken through their thinking set. New Oriental relates economic results closely to income of employees. Before cooperation, the company had 520 employees; after cooperation, the company has employees of more than 300. Employees decreased by 40%, and the remaining employees assume more tasks. Employees are increasingly aware that they are owners of the company.

3.3.3 Shipping lines have been developing rapidly

In February 2004, China Shipping's "New York Express" container ship carrying 368 TEU directly sailed to America from Lianyungang container terminal and moved into a new era when container liner shipping line from Lianyungang to America was introduced. Introduction of this shipping line put an end to the history that only near-sea shipping line from Lianyungang to America is available. Cargoes were

originally transshipped in Shanghai or Busan , but now can be directly shipped from Lianyungang to America. Cargo transportation time and cost was thus reduced and shipping line layout was thus improved. By February 2007, Lianyungang port had developed 30 near-sea and ocean-going shipping lines, with monthly scheduled liners of 220, which has effectively enhanced Lianyungang port container terminal's comprehensive competitiveness.

3.3.4 Infrastructure has been improved rapidly

China Shipping and Lianyungang Port jointly invested 3.47 billion Yuan in constructing the third-stage Miaoling Jetty Container Wharf in September 2006. This is the largest wharf cooperation project ever seen in Lianyungang. This project involves construction of five container berths including one 100,000 DWT berth, three 70,000 DWT berths and one 20,000 DWT berth as well as corresponding facilities. Total quay length will be around 1,700m. After the completion of the construction, the annual handling capacity is designed to increase by 2,000,000 TEU. Construction of third-stage Miaoling Jetty Container Wharf will make Lianyungang port the one with the fifth and sixth generation of container berth as the main body and the one that container liner carrying 10,000 TEU can berth here. Annual handling capacity of Lianyungang port is designed to reach 3,000,000 TEU by 2008, and Lianyungang port will become a container port with the largest scale and the deepest draught.

3.3.5 Economic hinterland has been strengthened and expanded

New Oriental has made great efforts to implement logistics strategy serving “the full-scale development program for the western regions”, cooperated with customs and railway authority in customs clearance of container cargoes exported from and imported to Lianyungang, and operated “five scheduled railway container transit trains” including one train from Lianyungang to Mianyang, one train from Lianyungang to Xi'an to Zhengzhou, one train from Lianyungang to Chengdu and

one train from Lianyungang to Almaty (capital of Kazakhstan), which has enhanced attractiveness and competitiveness of Lianyungang port in inland regions³.

3.3.6 Shipping market has been developing

China Shipping has attached great importance to development of New Oriental, and adjusted ocean freight of cargoes shipped from Lianyungang port so that the ocean freight was the same with that of Qingdao port and Shanghai port. Before cooperation, cargoes shipped by China Shipping in 1999 only accounted for 20% of container throughput and reached around 22,000 TEU; after cooperation, the cargoes shipped by China Shipping in 2005 accounted for 59% of container throughput and reached 597,400 TEU, an increase of 26 times higher than that of 1999. Besides, China Shipping has seized the opportunity for competition among terminal companies, achieved great success in development of shipping market. After years of operation, container terminal of Lianyungang port is becoming a modernized container port with strong competitiveness and vitality and has completely gotten away from a bad situation of container transportation.

3.4 Advantages and Benefits Brought to China Shipping by Cooperation

3.4.1 Improve operation efficiency of container liner of China Shipping

In recent years, world's shipping market has been developing rapidly towards marketing integration, larger-scale trend of ships, arterial trend of shipping lines and hub trend of ports. Under greater market pressure, in order to strive for survival and development, reduce cost and risks as much as possible, increase profits and enhance competitiveness in domestic and foreign shipping market, China Shipping cooperated with Lianyungang port. Through cooperation with Lianyungang port, China Shipping secured its liner service, reduced unit transportation cost of cargoes, and ensured that large-scale ships of China Shipping efficiently berth at container terminal of Lianyungang port and finished cargo-handling tasks.

³ Huang Weihong.(2006). *Countermeasures for Development of Lianyungang Port Container Transport*, *Journal of Chongqing communications g*, 7,21-23

3.4.2 Make use of port logistics system to secure cargo sources

On one hand, cooperation between China Shipping and Lianyungang port can ensure that conveyor chain and logistics chain of China Shipping won't be hindered, and that China Shipping has right of priority to use and control the terminal and can successfully ship cargoes; on the other hand, China shipping can make use of Lianyungang port logistics system to attract cargo sources and secure sufficient supply of cargo sources, increase revenues and achieve win-win situation.

3.4.3 Promote functional shift by extending supply chain

Cooperation between China Shipping and Lianyungang port can improve service standard, integrate service links and reduce cost of logistics system. China Shipping and Lianyungang port are two nodes in the supply chain and their end users are cargo owners. Sufficient cooperation between both parties can help deliver cargoes in a faster, more reliable and flexible manner, and raise service level, and organically integrate handling, storage and transshipping services, and optimize supply chain, and promote transformation of China Shipping from a single shipping company into a modern logistics service provider.

3.4.4 Diversify operation risks and enhance comprehensive competitiveness

With the larger-scale trend of container ships, contradiction between supply and demand in shipping market is becoming increasingly acute, which increases operation risks of liner shipping companies. Port industry is stepping into new rising cycle and is featured by steady growth, strong profitability and good cash flow. By involving in operation of Lianyungang container terminal, China Shipping has shared revenue from operation of Lianyungang port, realized capital expansion and obtained stable cash flow and revenues, withstood freight fluctuation risks existing in shipping market, increased coefficient of stability of operation, and enhanced its comprehensive competitiveness.

4. SWOT Analysis of Development of New Oriental

4.1 Study on Application of SWOT Model

4.1.1 Qualitative SWOT analysis

SWOT analysis is one of analytical tools to analyze external environment and internal situation of a company and find out the most feasible strategic combination of internal situation and external environment. SWOT represents Strengths, Weaknesses, Opportunities and Threats. Strengths are internal factors or characteristics that give a company certain strategic advantages and help the company to compete effectively and achieve its goals. Weaknesses are negative factors or internal impossibilities that give a company certain disadvantage and hinder achievement of its goals. Opportunities are external factors and situations that can constantly help a company to achieve its goal or overfulfill its goal. Threats are external factors that give a company certain disadvantages and hinder achievement of its goals, and are main obstacles that may influence current position or future position of a company.

The aim of SWOT analysis is to identify strengths and weaknesses of an organization through an evaluation of internal factors of this organization, and identify opportunities and threats through an evaluation of external environment of this organization, and systematically analyze these seemingly independent factors, create strategic combination, and formulate and adopt corresponding operation strategy in accordance with different situations during different period. Steps are as follows:

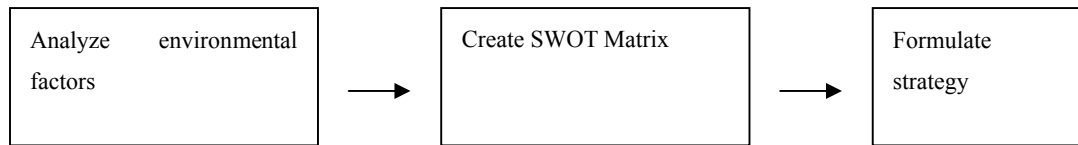


Figure 4-1 SWOT Analysis Steps

Firstly, analyze strengths and weaknesses inside a company; strengths and weaknesses respectively refer to positive and negative factors that exist inside the company. Secondly, analyze opportunities and threats that exist in external environment of a company; opportunities and threats respectively refer to favorable and unfavorable factors that influence the development of the company. Thirdly, fill strengths, weaknesses, opportunities and threats in a form. Finally, after finishing analysis of environmental factors and creation of SWOT matrix, match various kinds of environmental factors and develop a series of strategy options for future development.

Table 4-1 SWOT Matrix

internal strengths 1. 2. ...	internal weaknesses 1. 2
external opportunities 1. 2. ...	external threats 1 . 2. ...

4.1.2 Quantitative SWOT analytical model

Wheelen&Hunger (1995) summarized external factors as Synthesis of External Factors, and internal factors as Synthesis of Internal Factors, and suggested that internal and external factors should be weighted and graded. In addition to weighting and grading each SWOT factor, Hemmi suggested that the four SWOT factors should be weighted and combined with each SWOT factor, and importance of each SWOT factor should be assessed. However, no one proposed a systematic technology for

calculating importance of each factor. In an article named *Application of Analytic Hierarchy Process Method in SWOT Analysis*, Mikko (2000) proposed a solution to the abovementioned problems. They introduced Analytic Hierarchy Process method, employed traditional SWOT analytical method, differentiate strategic factors in order of importance and urgency, and match factors and optional strategy in a scientific manner.

In view of the fact that traditional model lacks quantitative study, Wang Bingan (1995) introduced the concept of force and intensity, build an analysis system by collecting expert opinion and building a four-quadrant plane coordinate system and polar coordinate system, and systematize and quantify such analysis with a view to helping decision-makers to decide on which quadrant they should make decisions. After synthesizing study achievements of predecessors, Mikko (2000) and Zhang Yuanyuan (2006) suggested that quantitative SWOT analytical method should be employed to analyze strategy of a company, and built quantitative SWOT analytical model. The basic idea is to use DELPHI method to recognize the value of expert opinion, employ mathematical tools and introduce the concept of force and intensity so as to calculate strengths, weaknesses, opportunities and threats of marketing, build an analysis system, and systematize and quantify such an analysis with a view to helping decision-makers to decide on which quadrant they should make decisions⁴. The steps are as follows:

⁴ Mikko Kuritila, (2000) Utilizing the analytic hierarchy process (AHP) in SWOT analysis- a hybrid method and its application to a forest-certification case. *Forest Policy and Economics*, 1:41-52.

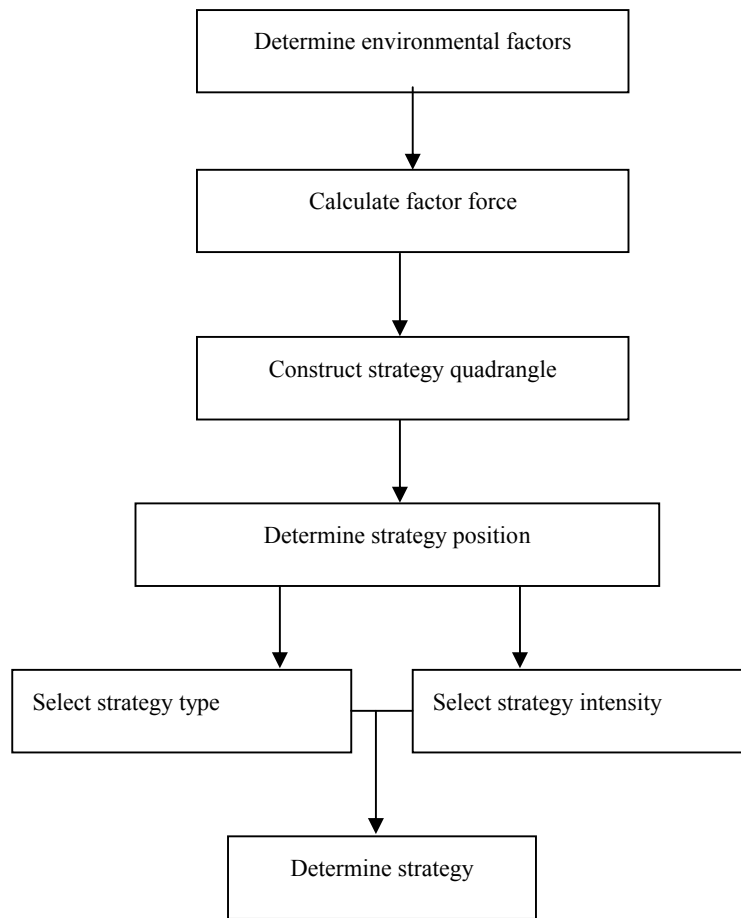


Figure4-2 Flow Chart of Quantitative SWOT Analytical Model

4.1.2.1 Definition of Force

Mikko (2000) and Zhang Yuanyuan (2006) believed that opportunities and threats are a kind of trend that is happening or going to happen, and influence of opportunities and threats on a company depends on their estimated occurrent intensity and relative importance; they defined this kind of influence as force.

Opportunities/threats force=estimated intensity \times relative importance

Strengths/weakness force=estimated intensity \times relative importance

4.1.2.2 Estimated Intensity

This paper employs DELPHI method and determines value of each factor intensity through repeated discussion and study. Positive values indicate strengths and opportunities while negative values indicate weaknesses and threats. The greater the absolute value is, the greater the intensity is.

4.1.2.3 Relative Importance

This paper uses Mikko ' s method as reference, introduces analytic hierarchy process method, and employs DELPHI method to determine relative importance of each key strategic factor, i.e. determination of weight coefficient. Steps are as follows:

4.1.2.3.1 Construct Analytic Hierarchy Process Model

4.1.2.3.2 Construct Judgment Matrix

Judge relative importance of element i over element j . Represent judgment results in judgment matrix. Use a 9-point pairwise comparison scale to indicate the relative importance, apply expert scoring method, and construct judgment matrix. 9-point pairwise comparison scale is to make a pairwise comparison of goals. C_{ij} implies the relative importance of goal i over goal j . C_{ij} is valued in accordance with provisions of Table4-2.

Table4-2. Judgment of Relative Importance

Relative importance C_{ij}	Meaning
1	A comparison of two goals shows that the former and the latter is equally important.
3	A comparison of two goals shows that the former is moderately more important than the latter
5	A comparison of two goals shows that the former is strongly more important than the latter
7	A comparison of two goals shows that the former is very strongly more important than the latter
9	A comparison of two goals shows that the former is extremely more important than the latter
2,4,6,8	Intermediate values between the above adjacent values
Reciprocal	If C_{ij} implies relative importance of element i over

	<p>element j, then relative importance of element j over element i is as follows:</p> $c_{ji} = 1/c_{ij}$
--	--

Pairwise comparison matrix $T = \begin{bmatrix} c_{11} & c_{12} & \cdots & c_{1n} \\ c_{21} & c_{22} & \cdots & c_{2n} \\ \cdots & \cdots & \cdots & \cdots \\ c_{n1} & c_{n2} & \cdots & c_{nn} \end{bmatrix}$

4.1.2.3.3 Judge order of matrix

i.e. calculate relative weight of element i over element j . After making a pairwise comparison and constructing matrix T , decision-makers can calculate priority vector

for each pairwise comparison matrix.
$$a_i = \frac{(\prod_{j=1}^n c_{ij})^{1/n}}{\sum_{k=1}^n (\prod_{j=1}^n c_{kj})^{1/n}} \quad i=1, 2, \dots, n$$

4.1.2.3.4 Check the Consistency

In the process of evaluation, it is impossible for people to be consistent in making judgment when making pairwise comparison of various kinds of factors. This is due to complexity of objective things and the fact that people see objective things differently. However, acceptable consistency is required. Therefore, after obtaining the largest eigenvalue of pairwise comparison matrix, we need to check consistency. To check the consistency in pairwise comparison judgment, the consistency index is calculated. $CI = \frac{\lambda_{MAX} - n}{n-1}$ N is the number of elements being compared, i.e. the rank of the matrix.

When pairwise comparison matrix is totally consistent, CI has a value of zero. Different pairwise comparison matrix with different rank of the matrix has different value of CI. Generally speaking, the greater the rank of the matrix is, the greater of CI is. Therefore, we should relax requirements of consistency of pairwise

comparison matrix. In order to measure whether pairwise comparison matrix with different ranks is consistent and acceptable, mean random consistency index RI is introduced. For a 9-point pairwise comparison matrix, the value of RI:

Table4-3 the value of RI

n	1	2	3	4	5	6	7	8	9
RI	0	0	0.58	0.9	1.12	1.24	1.32	1.41	1.45

If the value of CR is less than 0.1, then the judgment is considered to be consistent and acceptable.

4.1.2.3.5 Calculation of Total Strengths, Total Weaknesses, Total Opportunities and Total Threats

Total strengths are determined by combination of all strengths. This also applies to total weaknesses, total opportunities and total threats. Therefore, total strengths s, total weaknesses w, total opportunities o and total threats t can be calculated using the following formula:

$$S = \sum S_i, \quad i=1 \dots n$$

$$W = \sum W_j, \quad j=1 \dots n$$

$$O = \sum O_{k_i}, \quad k=1 \dots n$$

$$T = \sum T_l, \quad l=1 \dots n$$

4.1.2.4 Construct Strategic Quadrangle

Take total strengths s, total weaknesses w, total opportunities o and total threats t as half axis, constituting four-quadrant coordinate system. According to the abovementioned formula, calculate the value of these four variables and obtain strategic quadrangle in corresponding half axis in a coordinate system.

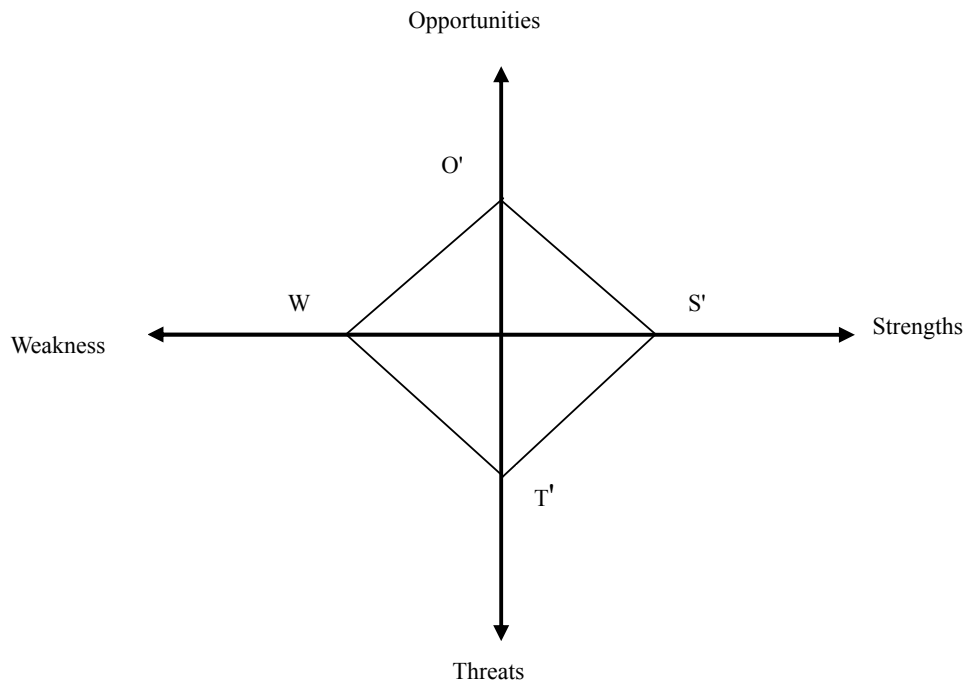


Figure 4-3 Strategic Quadrangle

4.1.2.5 Select Strategy Type

In a four-quadrant plane coordinate system, barycenter of strategic quadrangle S'W'O'T' is the basis on which a company selects its strategy, i.e. to determine strategy type in accordance with quadrant where barycentric coordinate of strategic quadrangle is located. Barycentric coordinate of strategic quadrangle S'W'O'T' is $P(x, y) = p(\sum x_i / 4, \sum y_i / 4)$. In order to facilitate discussion, azimuth angle θ , $\tan \theta = Y/X$ is introduced. We can select strategy type in accordance with the degree of θ . The first quadrant in a four-quadrant coordinate system indicates that a company has great internal strengths and many external opportunities and should adopt growth-extension strategies, and bring its strength into full play, and vigorously seize opportunities for development. The second quadrant in a four-quadrant coordinate system indicates that a company has many external opportunities but is limited by internal weaknesses, and should adopt transformation strategy. The third quadrant in a four-quadrant coordinate system indicates that a

company has internal weaknesses and faces enormous threats, and should adopt defender strategy. The fourth quadrant in a four-quadrant coordinate system indicates that a company has certain internal strengths and faces external threats, and should adopt diversified cooperation operation strategy. Please see Table 4-4.

Table4-4 Strategy Type

The first quadrant	The second quadrant	The third quadrant	The fourth quadrant
Growth-extension strategies	Transformation strategy	Defender strategy	Diversified cooperation operation strategy

After selecting a strategy in accordance with the degree of azimuth angle θ , we should determine implementation intensity of strategy. This means which attitude a company should hold towards the same strategy: an active attitude or conservative attitude? In order to facilitate discussion, the concept of positive intensity and negative intensity of strategy is introduced. Positive intensity of strategy is the result of joint action of opportunities and strengths; the formula of positive intensity of strategy is $U=O' \times S'$. Negative intensity of strategy is the result of joint action of threats and weaknesses; the formula of negative intensity of strategy is $V=T' \times W'^5$.

As to which strategy a company should adopt and which intensity of strategy a company should select, the company should analyze positive intensity and negative intensity of strategy. Intensity coefficient of strategy is introduced as the basis on which a company selects a strategy. Formula of intensity coefficient of strategy is $\rho = U/(U + V)$, $\rho \in [0,1]$. As seen from the formula, with increase in the value of U , intensity coefficient of strategy is increasing, which indicates that strategy intensity of the company is increasing. With increase in the value of V , intensity coefficient of strategy is decreasing, which indicates that strategy intensity of the company is decreasing.

4.1.2.6 Determine Strategy

⁵ Zhang Yuanyuan(2006), The Application of SWOT Quantification Model in the Strategic Planning of Steel Structure Enterprises, Unpublished master's thesis, Hefei University of Technology, Hefei, China

To summarize, we employ azimuth angle θ to identify strategy type of a company and employ strategy intensity ρ to judge implementation intensity of strategy. In a coordinate system composed of strategy type and intensity, coordinate (ρ, θ) forms strategy vector. Through strategy vector, we can identify and judge strategy type and intensity of a company, and then determine strategy of the company.

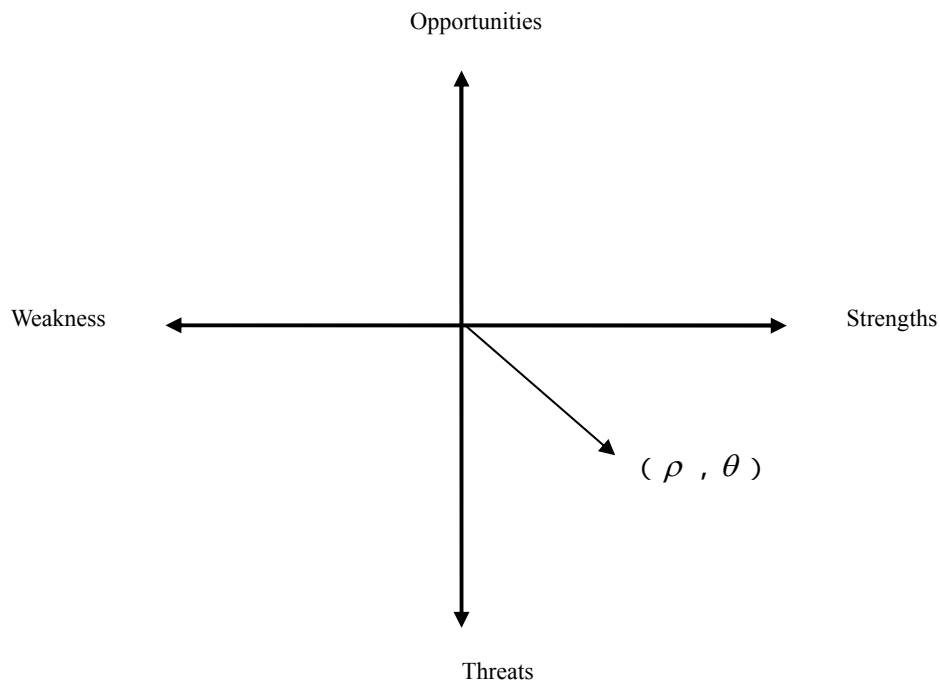


Figure4-4 strategy vector

As shown in this figure4-4, polar coordinate system is combined with a four-quadrant coordinate system. Coordinate axis and angle bisector of various quadrants divides plane into sectors. Sectors can determine strategy type of a company. Sector where azimuth angle is located can identify the strategy that a company should select. With ρ increasing, strategy intensity of a company is increasing and the company should adopt a more active growth-extension strategy. With ρ decreasing, strategy intensity of a company is decreasing, and the company should adopt a more conservative strategy.

4.2 Qualitative SWOT Analysis of Development of New Oriental

4.2.1 Analysis of internal strengths of New Oriental

4.2.1.1 Remarkable regional strengths

Geographic condition of New Oriental refers to the sum of many geographic and space factors that influence survival and development of the port, including Lianyungang's position in integrated traffic system and convenience of traffic between Lianyungang and the surrounding regions. As the eastern gate of new economic belt along Longhai and Lanxin and the eastern bridgehead of new Eurasian Continental Bridge, Lianyungang has unique geographic location and good regional strengths. Situated in the southwest bank of Haizhou Bay of Yellow Sea and navel position of south-north coastline, Lianyungang is the only one that traverses Longhai-Lanxin railway in east, central and west zone, and is where Lianyungang-Huoguoosi national expressway and Tongjiang-Sanya national expressway meets. Lianyungang is main channel by waterway of China, important node of main framework of expressway and one of main coastal ports, and is the most convenient outlet to the sea for foreign trade of eleven provinces and regions. In terms of transportation distance, if cargoes come from Zhengzhou west, then Lianyungang where cargoes are imported and exported is 370 kilometers shorter than Tianjin, and 537 kilometers shorter than Qingdao, and 309 kilometers shorter than Rizhao, and 482 kilometers shorter than Shanghai⁶. If cargoes come from Korea, Japan and Taiwan and pass through Eurasian Continental Bridge, then a comparison of transport mileage is as follows:

Table 4-5 A Comparison of Transport Mileage (Unit: Sea Mile)

Port Where cargoes come from	To New Oriental (1)	To Dalian port (2)	To Tianjin port (3)	To Qingdao port (4)	To Rizhao port (5)	To Shanghai port (6)	Port with the shortest path
KOBE Japan	823	853	1010	918	846	1050	(1)

⁶ Feng Weiqin. (2006). *Develop Close-to-port Industry, and Develop Lianyungang Port, Port Economy*, 1, 29-30

Mokpo Korea	355	442	614	385	378	420	(1)
Kaohsiung Taiwan province	897	1051	1156	992	920	567	(1) Except (6)

As seen in the above table4-5, New Oriental boasts better geographic strengths in attracting cargoes passing through Eurasian Continental Bridge than Dalian port, Tianjin port, Qingdao port, Rizhao port and Shanghai port.

4.2.1.2 Infrastructure has been improved greatly

Infrastructure of a port embodies its basic production capacity. Under the market condition of larger-scale ships, more arterial shipping lines and more operation alliance, the basic criteria to measure infrastructure of a port mainly include number and scale of deep-water berth, water depth of sea-route that enters and leaves port and other infrastructure. New Oriental now possesses four berths specially designed for containers, with water depth of wharf apron of 10 m to 15 m, the maximum berthing capacity of 70,000 tons and area of land area of 650,000 m². There are five berths under construction, with water depth of wharf apron of 11.5m to 15.5m, the maximum berthing capacity of 100,000 tons, and area of land area of 814,000 m². New Oriental can basically satisfy needs of container transportation of Lianyungang port in 2010 and receive container ship carrying 10,000 TEU. Take New Oriental, Rizhao port and Qingdao port as the example. Please see the following Table 4-6:

Table 4-6 A Comparison of Infrastructure Scale among Ports

	New Oriental,	Rizhao port	Qingdao port
Number of berth	4	2	10
water Depth of wharf apron of port	-11~-15m	-16~-17m	-14- ~ 17m
Length of wharf	1184m	884m	3400m
Berthing capacity	Can receive container ship carrying 10,000 TEU in 2008	Can receive container ship carrying 4,500 TEU in 2008	Can receive container ship carrying 10,000 TEU

Throughput (2006) (Unit: ten thousand TEU)	130	25	770
Number of bridge crane	13	4	34
Water depth of sea-route that enters and leaves port	-13.5 m	-18 m	-14.6m

Source: <http://www.qdport.com/>, <http://www.lnoct.com/>, <http://www.rzport.com/>

As seen in the above table, New Oriental gains an infrastructure edge over Rizhao port. However, its infrastructure is inferior to that of Qingdao port, which is mainly manifested in water depth of sea-route that enters and leaves port and number of berths. We can expect that, after the completion of five berths and opening of 150,000-ton sea-route in 2009, gap between New Oriental and Qingdao port will be gradually narrowed.

4.2.1.3 System and mechanism of New Oriental has been optimizing and its operation level has been raising

After cooperation, New Oriental has integrated and simplified internal management system and mechanism, and optimized management system and mechanism, and rapidly improved operating efficiency of port. Lianyungang port won the title of “China’s five-star service port” in 2005. Besides, cooperation has resulted in closer communication among the port, China Shipping and its ships, faster information flow, more coherent dynamic links, closer relationship among wharf, company and ships, faster turnover and higher operation level.

4.2.1.4 Hinterland has a bright prospect for economic growth

Lianyungang is the direct economic hinterland of New Oriental. social and economic growth level of direct economic hinterland is the basis on which port industry develops and is mainly composed of basic factors including GDP and total value of imports and exports. GDP of a city where the port is located can embody the size of a port that cargo transportation volume needs and functional and structure situation of

port industry, and is one of important indicators reflecting size and functions of a port. Total level of economic growth of Lianyungang is lower than that of coastal developed regions including southern regions of Jiangsu province, Pearl River Delta and regions around Bohai Sea, but Lianyungang has a bright prospect for economic growth.

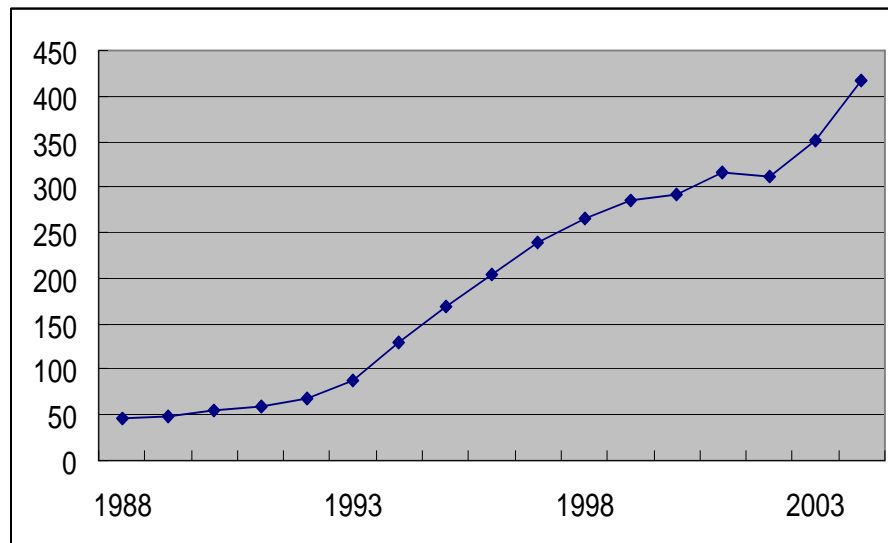


Figure4-5 GDP of Lianyungang over the Past Years (Unit: 100 million Yuan)

Source: Lianyungang Statistical Yearbook

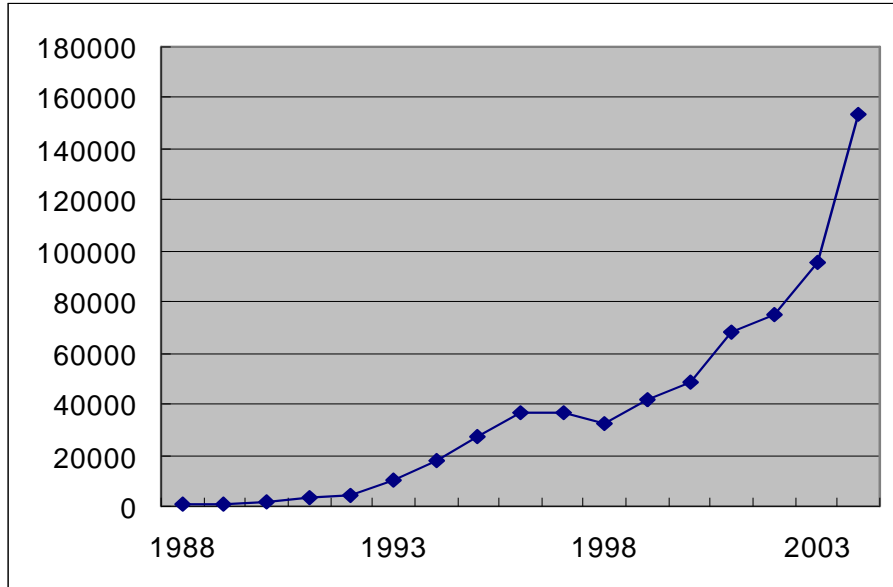


Figure4-6 Total Value of Imports and Exports of Lianyungang over the Past Years (Unit: 10,000 US dollars)
Source: Lianyungang Statistical Yearbook

Northern regions of Jiangsu province are the direct hinterland of Lianyungang and were where economy was at a low ebb. In recent years, with the implementation of the strategy of “rejuvenating northern regions of Jiangsu province”, economy and foreign trader there has been developing rapidly, with an annual average growth rate being higher than that of Jiangsu province and even China. For economic growth of northern regions of Jiangsu province, please see the following table:

Table4-7 Economic Growth of Northern Regions of Jiangsu Province between 2003 and 2006
(unit :%)

Year	2003	2004	2005	2006	Compared with annual average growth rate of China
Annual average GDP growth rate of northern regions of Jiangsu province	13.2	14.1	14.3	15	.4.5 percent higher than the annual average GDP of China

Source: Jiangsu Statistical Yearbook

As seen from the table, in recent years, economy of northern regions of Jiangsu province has been developing rapidly, with annual average growth rate being higher than that of China.

Regions along New Eurasian Continental Bridge are indirect hinterlands of Lianyungang. With the implementation of strategy of “Rising of the central regions” and “the development campaign of the western regions”, economy of these regions has been developing rapidly. For economic growth of these regions, please see the following. Economic growth rate of central and western regions of China in 2000 was 8.8% and 8.6% respectively; economic growth rate of central and western regions of China was higher than that of 1999, but lower than the economic growth rate of 10.2% of eastern regions of China in 2000. Economic growth rate of central and western regions in 2005 reached 15.45% and 12% respectively, 5 percent and 2 percent higher than average economic growth rate of China in 2005 respectively⁷; growth rate of foreign trade of central Asian countries in 2005 was 41.3%; economic growth rate of Kazakhstan in 2003 was 9.5%; volume of cargoes passing through Alashan Mountain of Sinkiang in 2004 increased by 25%.

4.2.1.5 Developed system of collection, distribution and transportation

System of collection, distribution and transportation is the transportation guarantee for improving cargo transportation efficiency and realizing logistics functions of a port. In an economic globalization era featured by international container transportation, system of collection, distribution and transportation connecting ports is especially important. System of collection, distribution and transportation of a port mainly includes structural throughput capacity and safety as well as convenience degree of many transportation means such as railways and highways connecting ports and economic hinterlands. Means of collection, distribution and transportation means of New Oriental mainly include railways and highways. In order to satisfy the transportation needs of Eurasian Continental Bridge, Lianyungang port brought construction of railway in port area into the orbit of construction of wharfs in 1983 and is one of a few ports with railways directly leading to hinterland. At present, New Oriental has opened “Five Sets” scheduled railway container transit trains to Mianyang, Zhengzhou, Xi’an, Chengdu and Almaty, Kazakhstan. Under the situation

⁷ *China statistical yearbook, China statistical L press publishing (2006)*

that competition among ports is becoming increasingly fierce, this move has stabilized merchants of central and western regions of China and promoted steady rise in container throughput of New Oriental.

In terms of expressway, mileage of expressway of Jiangsu province ranks the third in China; average expressway density of Jiangsu province is 3 kilometers per 100 square kilometers and ranked the first in China. Mileage of expressway of northern regions of Jiangsu province by the end of 2005 had been 1,074 kilometers; average expressway density of Jiangsu province by the end of 2005 had been 2.05 kilometers 100 per square kilometers and higher than average expressway density of 0.43 kilometers per 100 square kilometers of China and average expressway density of 0.5 kilometers per 100 square kilometers of Shandong province. Coastal expressway and Yancheng-Xuzhou expressway was put into operation in December 2006, which indicates that main framework of expressway network of northern regions of Jiangsu province has been completed ahead of schedule. Expressway from Lianyungang to Lanzhou is 1,913 kilometers long, which provides convenience for collection, distribution and transportation of containers.

4.2.2 Analysis of internal development weakness of New Oriental

4.2.2.1 Lack of fund for development, and singular fund source

To construct container port, problems of construction fund source need solving. Due to many factors, Lianyungang was burdened with huge debts during the period of “the Seventh Five-Year Plan” and “the Ninth Five-Year Plan”. By the end of 2000, debts amounted to 2.478 billion Yuan, with ratio of debts to assets of over 80%⁸. Huge debts had significantly weakened financing capacity of the port and reduced its economic operation quality, and resulted in insufficient expanded reproduction capacity. Before cooperation with China Shipping, Lianyungang port has no fund for construction of wharf and had failed to construct wharf for nearly ten years.

⁸ *Lianyungang statistical yearbook, 2001*

Economy of Lianyungang in recent years has been developing quickly, but its GDP has been quite low. Its GDP in 2006 was 52.7 billion Yuan, accounting for 2.5% of GDP of Jiangsu province; its fiscal revenues in 2006 was 3 billion Yuan and was spent on operation of governments; governments have no fund for supporting construction of the port. GDP of Qingdao in 2006 was 320.6 billion Yuan and was 6 times as much as that of Lianyungang; Qingdao's fiscal revenue in 2006 reached 22.577 billion Yuan and was 7 times as much as that of Lianyungang.

4.2.2.2 Insufficient amount of shipping lines and low density of liners along main lines

Amount of shipping line of a port indicates degree of correlation between this port and the world market. Density of liners along main lines indicates total needs of international cargo transportation. Amount of shipping line and density of liner along main lines are important marker to measure functional positioning of a port in international shipping market. With the development of larger-scale ships and main shipping lines, in order to increase economic results, shipping companies often reduce ports where they call at and increase container capacity. Therefore, number of shipping lines and density of liners along main lines are quite important for the development of a port. The following table is a comparison of amount of shipping lines and density of liners along main lines among New Oriental, Qingdao port, Rizhao port and Shanghai port in 2004:

Table4-8 Amount of Shipping Lines and Density of Liners along Main Lines

	New Oriental	Qingdao port	Rizhao port	Shanghai port
amount of ocean-gong shipping line	2 (to western America、Europe)	6	0	7
amount of near-sea shipping line	4	5	1	6
amount of monthly scheduled flight	220	640	80	720
amount of monthly	7	142	0	978

international scheduled				
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Source: <http://www.qdport.com/>, <http://www.lnoct.com/>, <http://www.rzport.com/>

Shanghai port Statistical Yearbook, Lianyungang port Statistical Yearbook, Rizhao port Statistical Yearbook, Qingdao port Statistical Yearbook

As seen from the above Table4-8, New Oriental now has only two ocean-going shipping lines to Western America and Europe and four near-sea shipping lines to Southeast Asia, Korea, Japan and Taiwan province. Shanghai port has seven ocean-going shipping lines to North America, Europe, Mediterranean Sea, Persia Bay—Red Sea, Australia, South America-South Africa, and Africa, and six near-sea shipping lines to Southeast Asia, Korea, Japan, Russia, Hong Kong SAR and Taiwan province, with monthly international scheduled of 978. A comparison shows that there is a big difference between New Oriental and Shanghai port.

4.2.3 Analysis of external development opportunities of New Oriental

4.2.3.1 Rejuvenating northern regions of Jiangsu province has promoted economic growth of direct hinterland

Northern regions of Jiangsu province is the direct hinterland for container transportation of New Oriental and is situated in economic circle of the Yangtze River Delta. This economic circle centers on Shanghai and includes Zhejiang province and Jiangsu province, and covers 1% of land area of China, 6% of population of China, and 17% of GDP of China, and 21% of tax revenue of China. At present, this circle is in a middle and late stage of industrialization and will probably become one of important base for world's manufacturing industry and products in the following ten years, and become important regional economic growth polar and one of developed Asia-Pacific regions, and export-oriented economic demonstration regions with stronger international competitiveness. Northern regions of Jiangsu province are situated in this economic circle and it is easy for northern regions of Jiangsu province to make use of economic radiation role of Shanghai and accelerate their economic growth. These advantages contribute to increase of integrated

strengths of these regions and have laid solid foundation for sustained development of container transportation of New Oriental. Growth rate of GDP of northern regions of Jiangsu province in 2005 and 2006 was 5 percent higher than annual average GDP growth rate of China, and was also higher than annual average GDP growth rate of Jiangsu province

4.2.3.2 The development campaign of western regions has increased potential for economic growth of indirect hinterland

To implement the strategy of “the Development Campaign of the Western Regions”, priority must be given to the development of traffic, especially traffic between the eastern and western regions. This strategy also provides rare historical opportunity for the development of New Oriental. Firstly, favorable geographic location and unique regional advantages provides conditions for New Oriental to participate in the development of the western regions. Lianyungang is the eastern terminus of Longhai railway. Indirect economic hinterland of New Oriental covers 11 provinces in eastern and northwest regions of China. Secondly, development campaign of the western regions requires greater cargo circulation and greater exchange in fund, technology and information, which provides opportunity for the development of New Oriental, and helps give full play to functions of transformation, collection, distribution, special and coordination of New Eurasian Continental Bridge as carrier for promoting the development campaign of the western regions. Thirdly, Lianyungang-Huoerguosi expressway and Tongjiang-Sanya expressway meets in Lianyungang, making Lianyungang an expressway hub and enhancing the ability of New Oriental to collect, distribute and transport cargoes. With the implementation of the strategy of “the Rising of the Central Regions” and “the Development Campaign of the Western Regions”, economy of central and western regions as economic hinterlands of Lianyungang has been developing quickly. Economic growth rate of the central and western regions in 2005 reached 15.45% and 12% respectively, 5 percent and 2 percent higher than average economic growth rate of 9.9% of China

respectively⁹.

4.2.3.3 Lianyungang has a rising position in the economic growth strategy of China

If infrastructure and regional geographic advantages of a port can be considered hardware advantages of the port, then its rising position in economic growth of the state will be important software advantages.

Government of Jiangsu province in 2005 gave support to the construction of Lianyungang port and invested 1.3 billion Yuan in the construction of congestion channel and dredging channel, and implemented preferential policy such as charging half toll for container vehicles running in expressway. The State Council promulgated *National Plan for Coastal Port Layout* in August 2006, which is the programmatic document guiding the sustained and healthy development of coastal ports in the long term. This *Plan* lists Lianyungang port, Shanghai port and Zhoushan port as the important hub port in the Yangtze River Delta.

On January 1 2007 when Premier Wen Jiabao visited Lianyungang port, he pointed out development positioning of Lianyungang port, “In the south is Qingdao port while in the north is Shanghai port, and in the west is the Alashan Mountain in the west end of Longhai railway, Lianyungang is in the important node and link connecting the western regions with the eastern regions, and the southern regions with the northern regions. Lianyungan port has a bright prospect for development; Lianyungang should become a leading city in rejuvenating the northern regions of Jiangsu province, and play an important role in promoting harmonious development of the eastern and western regions. Lianyungang is south to the Yangtze River Delta, north to Bohai Bay, and east to Northeast Asia, and connects central regions with western regions and Central Asia through Longhai railway, and is the link between

⁹ Jian Rui. (2004)*Selection of Mode for Development Strategies of Jiangsu Coastal Ports, Shipping Management*, 2,27-29

the southern and northern regions, and the eastern and western regions. Lianyungang has an important strategic position in harmonious development of regional economy of China. ”

The Standing Committee of CPC Jiangsu Provincial Committee held a seminar on construction and development of Lianyungang in March 2007. Liang Baohua, the governor of Jiangsu province, pointed out that the advantage of Lianyungang lies in its port, and its leading and hub role and strategic position also lies in its port; we must promote better and faster development of Lianyungang by focusing on construction of the port. We must make great efforts to make Lianyungang port a regional international hub port and a huge container trunk-line port between the Yangtze River Delta and Bohai Bay.

4.2.4 Analysis of external threats posed to the development of New Oriental

4.2.4.1 Slower adjustment of economic structure of regions along Longhai-Lanxin railway restricted the development of New Oriental

Lianyungang hinterland is one of main producing areas for “the program of transporting coal from northern regions to southern regions” and “the program of transporting coal from western regions to eastern regions”, and has many middle- and small-sized backbone iron & steel enterprises. These industries will dominate economic growth of central and western regions in the long run; these products are unsuitable containerizeable cargoes. Besides, growth of export-oriented economy is quite slow; foreign trade commodity structure is developing towards middle- and small-sized commodities at a slower rate; proportion of finished products is increasing at a slower rate. Therefore, slower adjustment of economic structure of regions along Longhai-Lanxi railway results in slower increase in suitable containerizeable cargoes, which is external factors restricting the development of New Oriental.

4.2.4.2 Fierce competition among surrounding ports results in diversion of cargoes

By resorting to their strong city radiation capacity and high-quality port service, Shanghai port and Qingdao port has attracted a majority of cargoes from the central and western regions. Container transportation of Rizhao port which is 50 sea mile from Lianyungang port shows strong development momentum. The number of Containers handled by Rizhao port in 1996 was 1,700 TEU, Containers throughput of Rizhafo port in 2000 and 2006 was 35,100 TEU and more than 300,000 TEU respectively. With rapid development of container transportation, competition for service market among ports will become increasingly fierce, and attraction of cargo sources will become important factors influencing the development of a port. Take analysis of cargoes from hinterlands in 2004 as the example. Please see the following table (Proportion of cargoes imported from and exported to the following ports).

Table4-9 Analysis of Cargoes from Hinterlands in 2004

Hinterlands	Container Generating Amount	classification	Proportion of cargoes imported from and exported to the following ports				
			Qingdao port	Shanghai port	Nanjing port	Nantong port	New Oriental.
Xuzhou	100000TEU	domestic trade cargoes					30%
		Foreign trade cargoes	60%	30%			10%
Yanchen	120000TEU	domestic trade cargoes					20%
		Foreign trade cargoes		30%		50%	20%
Huaian	50000TEU	domestic trade cargoes					10%
		Foreign trade cargoes		80%	10%		10%
Xuqian	35000TEU	domestic trade cargoes					20%

		Foreign trade cargoes	30%	30%			40%
Lianyungang	140000TEU	domestic trade cargoes					50%
		Foreign trade cargoes	30%				70%
Yangzhou	150000TEU	domestic trade cargoes					5%
		Foreign trade cargoes		60%	20%	15%	5%

Notes: In addition to transportation by sea, domestic trade cargoes are mainly transported by highway and railway.

Source: Li Guangfeng. (2005).Research on Container Sources in Hinterlands of North Area of Jiangsu Province at Lianyungang Port, Containerization, 11,21-22

As seen from the above table4-9, a majority of cargoes from economic hinterlands of New Oriental was diverted into Qingdao port and Shanghai port. New Oriental is facing fierce external competition. If New Oriental fails to improve comprehensive service quality of the port and realize the goal of charging lower freight, then New Oriental will lose its attraction of cargoes from hinterlands and face arduous tasks of achieving development in an environment full of competition among ports.

4.3 Quantitative SWOT Analysis of Development of New Oriental

Through analysis of internal and external environmental factors, this paper shows New Oriental has many opportunities and strengths, but also faces many problems and difficulties. Using Quantitative SWOT Analytical Model to analyze Strengths, Weaknesses, Opportunities and Threats of New Oriental can help it identify its internal resources and external conditions, bring strengths into play, overcome weaknesses, seize opportunities, remove threats and formulate corresponding development strategy. According to above analysis, SWOT analysis of New Oriental is as follow table:

Table 4-10 SWOT Matrix Analysis of New Oriental

	Internal factors		External factors
Strengths	S1 Remarkable regional strengths	O	O1 Rejuvenating northern regions of Jiangsu province has promoted economic growth of direct hinterland
	S2 Infrastructure has been improved greatly	p	
	S3 System and mechanism of New Oriental has been optimizing and its operation level has been raising	p	O2 The development campaign of western regions has increased potential for economic growth of indirect hinterland
	S4 Hinterland has a bright prospect for economic growth	o	
	S5 Developed system of collection, distribution and transportation	r	O3 Lianyungang has a rising position in the economic growth strategy of China
Weaknesses		t	
		u	
		n	
		i	
		t	
Threats	W1 Lack of fund for development, and singular fund source	e	T1 Slower adjustment of economic structure of regions along Longhai-Lanxin railway restricted the development of New Oriental
	W2 Insufficient amount of shipping lines and low density of liners along main lines	s	T2 Fierce competition among surrounding ports results in diversion of cargoes

4.3.1 Calculation of factor intensity

Firstly, score intensity of internal and external key strategic factors. 9-point pairwise comparison scale is employed. Positive values indicate opportunities and strengths while negative values indicate threats and weaknesses. The greater the absolute value is, the greater the intensity is. According to specific situation of the company and repeated discussion, management staff of New Oriental employed expert scoring method to determine specific value of various kinds of factors. For scoring of intensity of various kinds of factors, please see Table4- 11 and Table 4-12.

Table 4-11 Scoring of Intensity of Opportunities and Threats

Opportunities			Threats	
O1	O2	O3	T1	T2

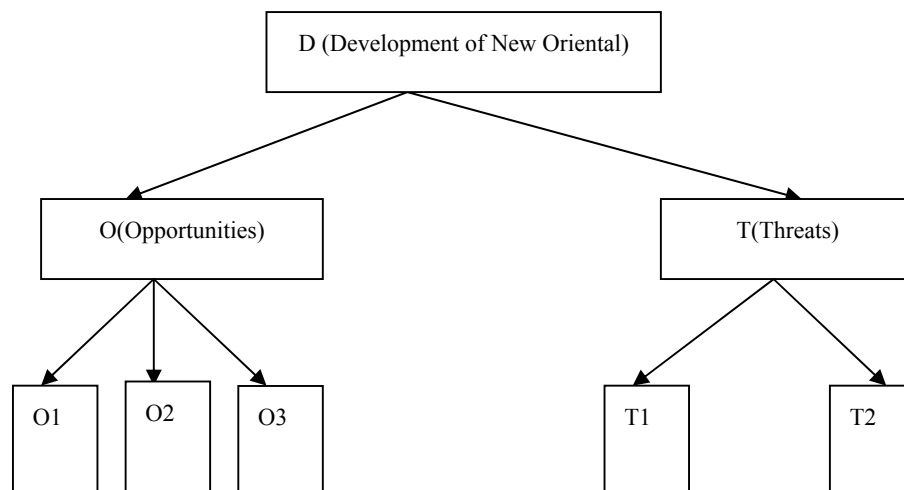
3	2	3	-4	-4
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Table 4-12 Scoring of Intensity of Strengths and Weaknesses

strengths					weaknesses	
S1	S2	S3	S4	S5	W1	W2
3	4	3	4	3	-2	-2

4.3.2 Calculation of relative importance of factors

4.3.2.1 Relative importance of external development factors



Notes: Development of New Oriental hereinafter referred to as D, Opportunities hereinafter referred to as O, Threats hereinafter referred to as T.

Figur4-7 Structural Drawing of Analytic Hierarchy Process of External Development Factors

Draw pairwise comparison matrix by integrating opinions from experts, For weight of various kinds of factors calculated according to formula, please see Table 4-13, Table4- 14 and Table4- 15.

Table 4-13 Weight Coefficient of Opportunities and Threats

External	O	T	(O/T) Weight Coefficient in D
O	1	1	0.5
T	1	1	0.5

Table4-14 Weight Coefficient of Opportunities

O	O1	O2	O3	Weight Coefficient in O	Weight Coefficient in D
O1	1	2	3	0.54	0.27
O2	1/2	1	2	0.30	0.15
O3	1/3	1/2	1	0.16	0.08

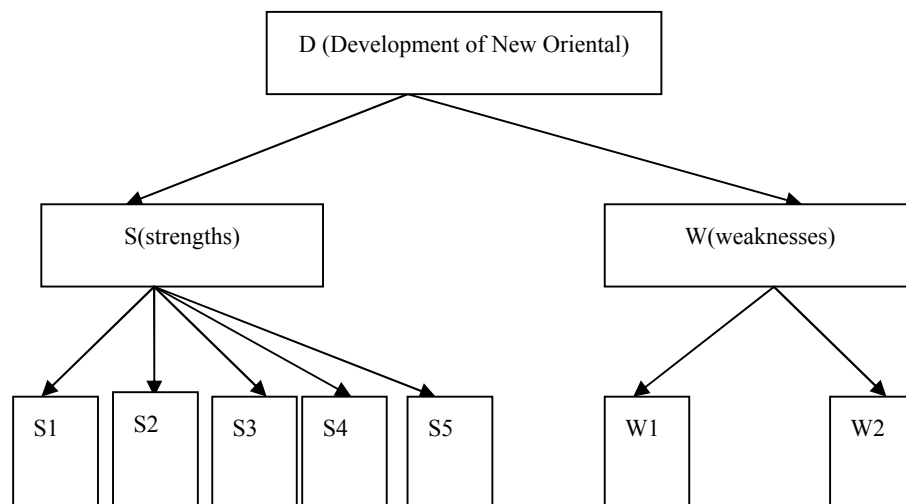
$\lambda = 3.0092$, $CI = \lambda - 3/2 = 0.0046$, $CR = CI / 0.58 = 0.0079 < 0.10$, therefore,

Consistency of pairwise comparison matrix is acceptable.

Table4-15 Weight Coefficient of Threats

T	T1	T2	Weight Coefficient in T	Weight Coefficient in D
T1	1	1/3	0.25	0.12
T2	3	1	0.75	0.38

4.3.2.2 Relative importance of internal development factors



Notes: Development of New Oriental hereinafter referred to as D, Strengths hereinafter referred to as S, Weaknesses hereinafter referred to as W.

Figure4-8 Structural Drawing of Analytic Hierarchy Process of Internal Development Factors

Draw pairwise comparison matrix by integrating opinions from experts, for weight of various kinds of factors calculated according to formula, please see Table4- 16, Table4-17 and Table4-18.

Table4-16 Weight Coefficient of Strengths and Weakness

Internal	S	W	(S/W) Weight Coefficient in D
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S	1	1	0.5
W	1	1	0.5

Table4- 17 Weight Coefficient of Internal Development Strengths

S	S1	S2	S3	S4	S5	Weight Coefficient in S	Weight Coefficient in D
S1	1	1/2	2	1	1/2	0.16	0.08
S2	2	1	2	4	4	0.41	0.20
S3	1/2	1/2	1	1/2	1	0.12	0.06
S4	1	1/4	2	1	1	0.16	0.08
S5	2	1/4	1	1	1	0.16	0.08

$\lambda = 5.33$, $CI = \lambda - 5/4 = 0.08$, $CR = CI / 1.12 = 0.07 < 0.10$, therefore, consistency of pairwise comparison matrix is acceptable.

Table 4-18 Weight Coefficient of Internal Development Weakness

W	W1	W2	Weight Coefficient in w	Weight Coefficient in D
W1	1	2	0.67	0.33
W2	1/2	1	0.33	0.17

4.3.3 Calculation of force of various kinds of factors

After determining intensity and value of weight of various kinds of factors, force of these factors can be calculated according to formula. Please see Table 4-19 and Table 4-20.

Table4-19 Force of Opportunities and Threats

	External	intensity	Weight Coefficient	force
O	O1	3	0.27	0.81
	O2	2	0.15	0.30
	O3	3	0.08	0.24
T	T1	-4	0.12	-0.48
	T2	-4	0.38	-1.52

Table4-20 Force of Strengths and Weaknesses

	Internal	intensity	Weight Coefficient	force
S	S1	3	0.08	0.24
	S2	4	0.20	0.80
	S3	3	0.06	0.18
	S4	4	0.08	0.32
	S5	3	0.08	0.24
w	W1	-2	0.33	-0.66
	W2	-2	0.17	-0.34

4.3.4 Calculation of force of total strengths, total weaknesses, total opportunities and total threats

$$S = \sum S_i = 0.24 + 0.80 + 0.18 + 0.32 + 0.24 = 1.78$$

$$W = \sum W_j = -0.66 - 0.34 = -1$$

$$O = \sum O_{k_i} = 0.81 + 0.3 + 0.24 = 1.35$$

$$T = \sum T_l = -0.48 - 1.52 = -2$$

4.3.5 Select development strategy

Four variables including force of total strengths, total weaknesses, total opportunities and total threats are taken as half axis and constitute four-quadrant coordinate system. Draw S', W', O' and T' in corresponding half axis of the coordinate system according to the value of variables calculated, four points form a strategic quadrangle S'W'O'T'. This strategic quadrangle represents strategic position of New Oriental.

$$P(x, y) = p(\sum x_i / 4, \sum y_i / 4) = (0.195, -0.163)$$

$$\theta = \arctg y/x = \arctg -0.836 \approx 320^\circ$$

$$U=O' \times S'=1.35 \times 1.78=2.403$$

$$V=T' \times W'=-2 \times -1=2$$

$$\rho =U/(U + V)=2.403/(2.403+2)=0.55$$

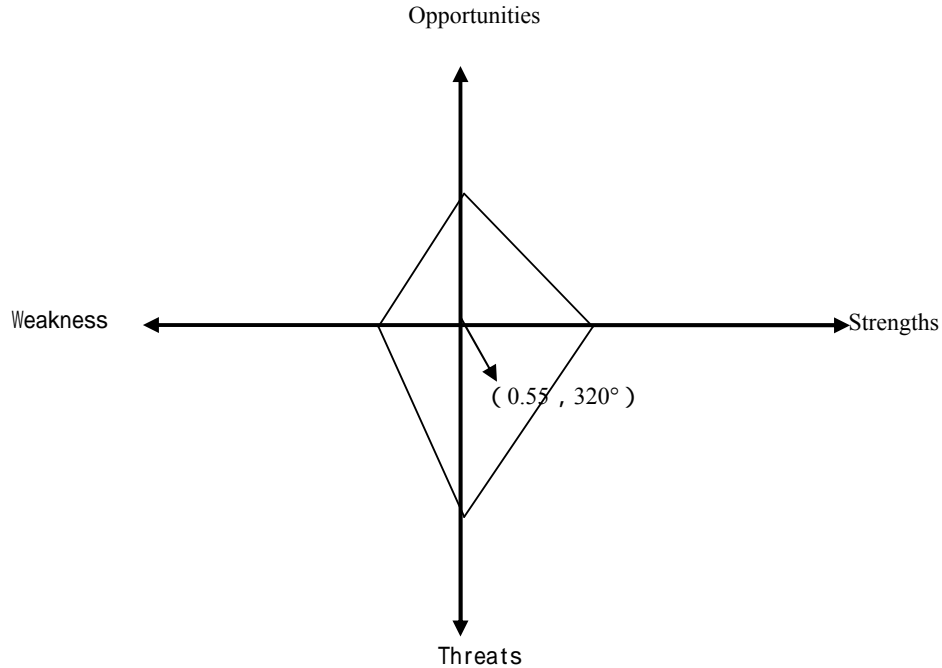


Figure4-9 a strategic quadrangle S'W'O'T' of New Oriental

Please see the figure4-9,in the SWOT coordinate system, coordinate (0.55 , 320°) forms a strategic eigenvector, with azimuth angle of 320° and module of 0.55. In the meantime, as intensity coefficient of strategy ρ is quite high ($\rho > 0.5$), New Oriental should adopt rather high intensity of strategy, and hold active attitude towards implementation of diversified operation strategy according to Table4-4. Quantitative SWOT analysis of development strategy of New Oriental indicates that New Oriental faces certain threats and has certain remarkable strengths. Its remarkable regional strengths and infrastructure of great potential has laid foundation for its rapid development. In the meantime, it also faces remarkable threats. Fierce competition among surrounding ports may probably divert cargoes from hinterlands of New Oriental and hinder its development. Besides, strengthening cooperation between the port and shipping companies and cargo owners may effectively solve

weaknesses including lack of development fund, single source of funds and high cost of collection, distribution and transportation. Therefore, New Oriental may adopt all-round diversified cooperation strategy to decrease risks and seek for development.

5. Analysis of Problems Existing in Cooperation

Although cooperation brings benefits and development to New Oriental, there are some disadvantages of cooperation. It is difficult to quantify potential risks and instable factors existing in cooperation, and cooperation involves parties concerned are unwilling to make their opinion about cooperation known to the public. Therefore, the author employs a combination of questionnaire method and interview survey so as to objectively analyze reasons for problems existing in cooperation.

5.1 Research Methods

Questionnaire method is a kind of method that researcher gathers information or data by requiring a sample of people to answer a set of questions. The researcher lists a set of questions related to his research purpose and asks a sample of people to answer these questions, and gather information by collecting, compiling and analyzing these answers. Questionnaire method is efficient, objective, unanimous and widespread. This paper employed anonymous questionnaire method. The author distributed 200 pieces of questionnaires to management staff of New Oriental, who came from Department of General Manager's Affairs, Planning and Financial Department and Market Development Department of, as well as backbone workers, and collected 180 pieces of questionnaire, with valid collection rate of 90%.

Interview survey is a kind of method that researcher gathers information by interviewing research target. Interview survey is also called visiting method or interview method. Interview is a kind of research interview. Research talks with interviewee (one person or more persons). Interviewer asks interviewee to answer

questions so as to find out the interviewee's behaviors and attitudes and achieve the purpose of survey. Interview survey is flexible, accurate and profound. The author visited New Oriental on April 10 2007 and interviewed Mr. Liu Quan, the general manager of New Oriental, about advantages and disadvantages brought to New Oriental by cooperation and development of New Oriental.

In the following text, this paper analyzes problems existing in cooperation and reasons for the problems based on questionnaire method and interview survey. For questionnaire and interview record, please see appendix.

5.2 Problems Existing in Cooperation based on Survey Method

5.2.1 Overall effect brought by cooperation

As shown by results of questionnaire, a majority of respondents held a positive attitude towards cooperation between Lianyungang port and China Shipping. 55% of respondents believed that cargoes from hinterlands have been increasing greatly since cooperation. 85% of respondents believed that cooperation has forcefully promoted the development of New Oriental. 90% of respondents believed that cooperation has played a great role in promoting construction of infrastructure of New Oriental. 85% of respondents believed that cooperation can help the authorities of the state and Jiangsu province to attach greater importance to the development of New Oriental. General manager Liu Quan also voiced the same opinion. General manager Liu Quan believed that rapid development of New Oriental benefits from the following four aspects: firstly, authorities of the state and Jiangsu province have attached great importance to the development of New Oriental and gave preferential policies; secondly, strategies of “rejuvenating northern regions of Jiangsu province”, “Xuzhou-Lianyungang economic belt”, “grand development of coastal regions”, “rejuvenating the city of Lianyungang by developing Lianyungang port” have been adopted and implemented; thirdly, staff of Lianyungang port has enterprising spirit and holds active cooperation attitude; fourthly, cooperation with China Shipping.

Please see the following figure5-1、 5-2、 5-3、 5-4:

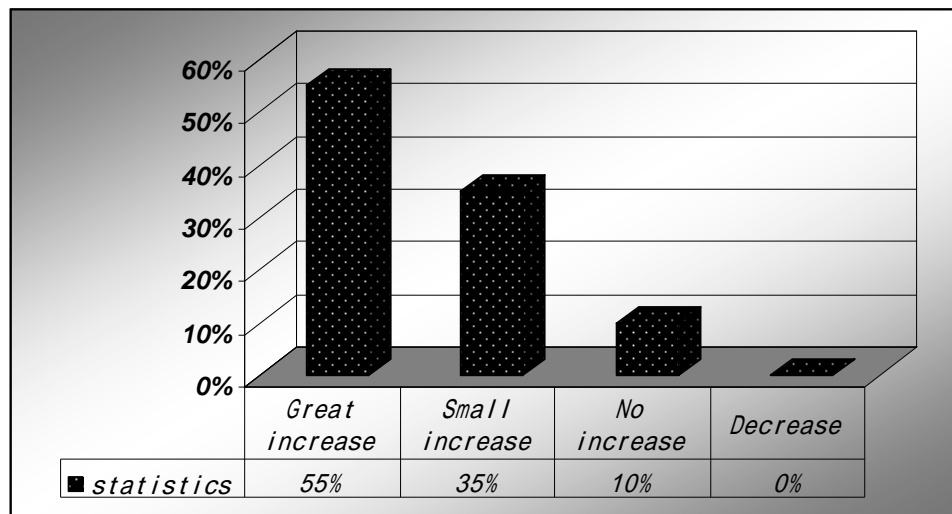


Figure5-1 Statistics Results of Questionnaire about Change in Share of Cargoes from Hinterlands since Cooperation

Sources: Questionnaire

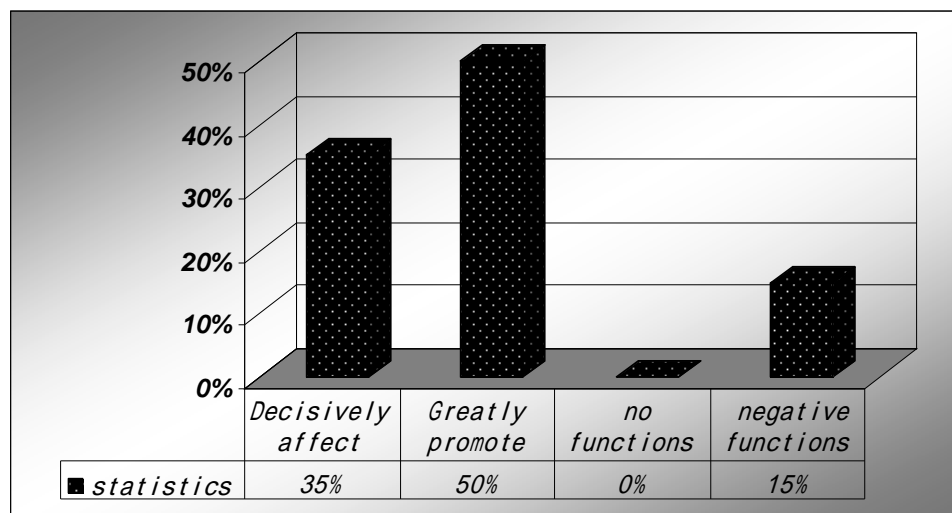


Figure5-2 Statistics Results of Influence of Cooperation on the Development of New Oriental
Sources: Questionnaire

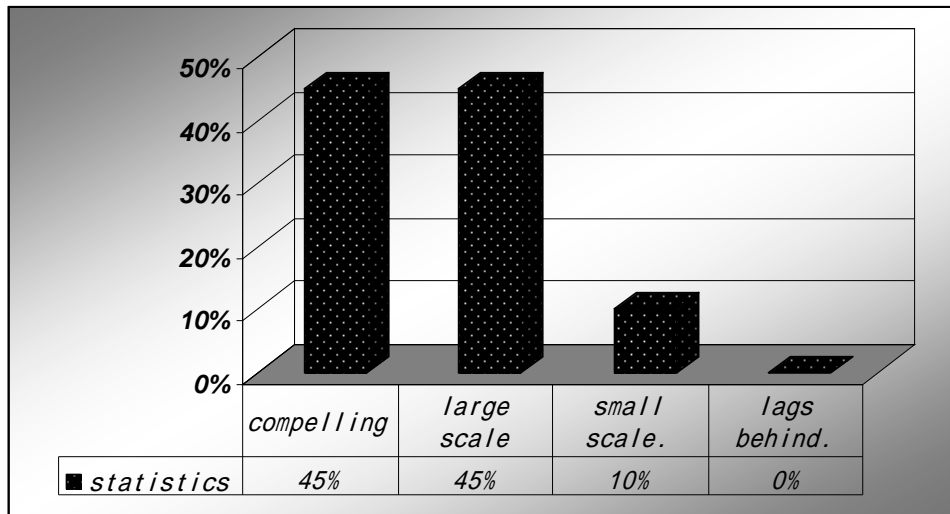


Figure5-3 Statistics Result of Promotion Role of Cooperation in Infrastructure of New Oriental
Sources: Questionnaire

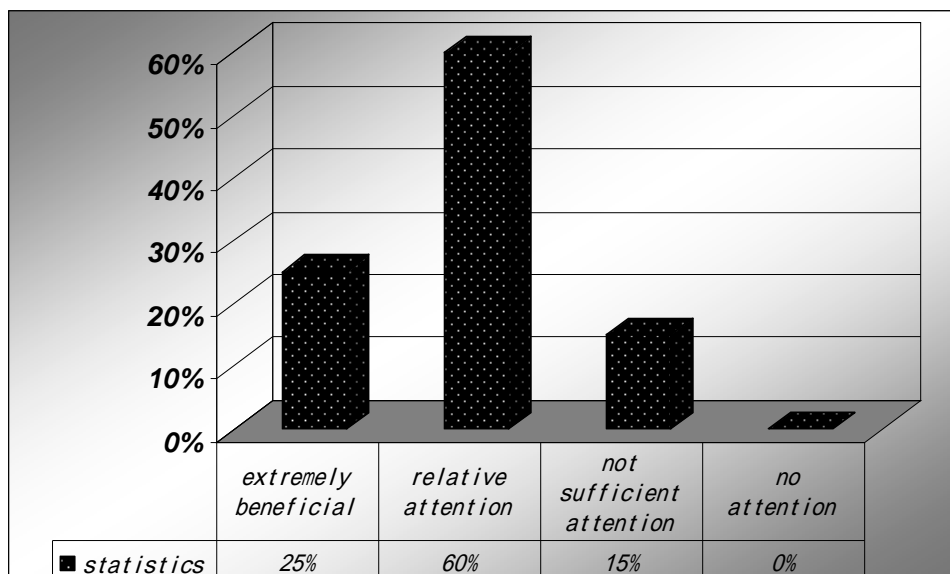


Figure5-4 Statistics Results of Contribution of Cooperation to Importance attached by the State
Sources: Questionnaire

5.2.2 Increase in container throughput fails to completely reflect the development of New Oriental

Results of questionnaire indicate that increase in container throughput can not

completely reflect the development of New Oriental. 80% of respondents believed that increase in container throughput failed to completely reflect the development of New Oriental. 65% of respondents believed that decrease in profits gained by the port party was the main reason why increase in container throughput fails to completely reflect the development of New Oriental. 25% of respondents believed that high empty container rate was the main reason why increase in container throughput fails to completely reflect the development of New Oriental. Please see the following figure5-5、 5-6:

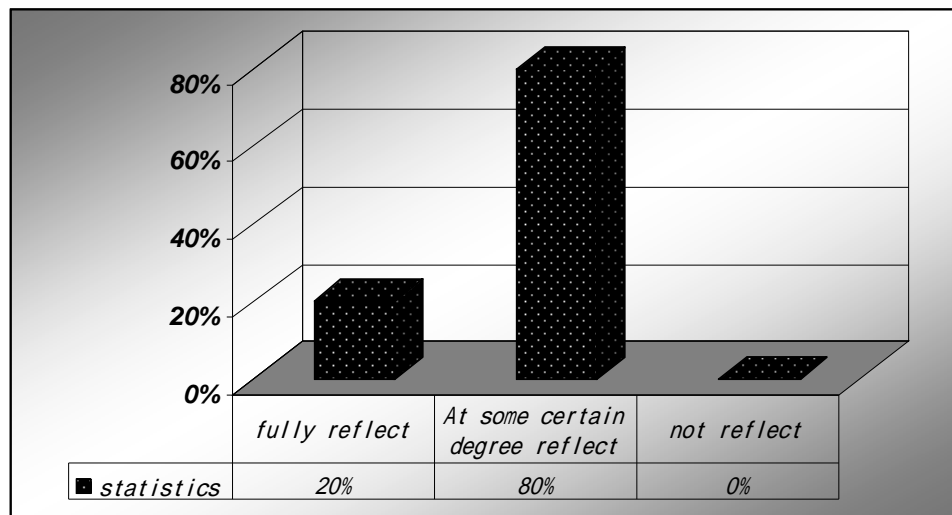


Figure5-5 Statistics Results of the fact that increase in container throughput fails to completely reflect the development of New Oriental

Sources: Questionnaire

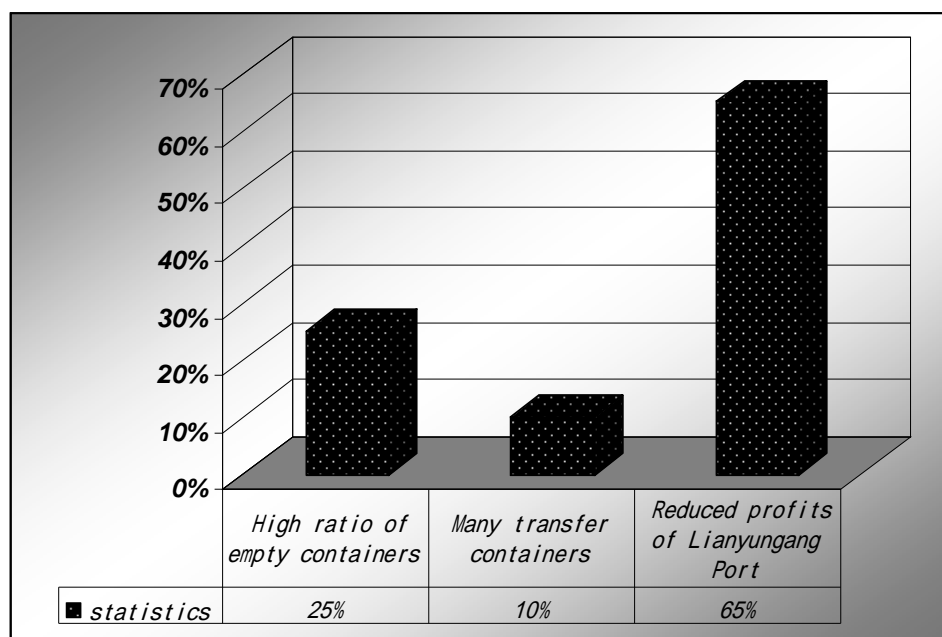


Figure5-6 Statistics Results of the reasons why increase in container throughput fails to completely reflect the development of New Oriental

Sources: Questionnaire

5.2.3 Disadvantages brought by cooperation

According to the results of the questionnaire, potential problems exist in cooperation between both parties. 70% of respondents believed that cooperation would bring disadvantages to the development of New Oriental.55% of respondents believed that many instable factors and potential risks exist in cooperation. Please see the following figure5-7、 5-8:

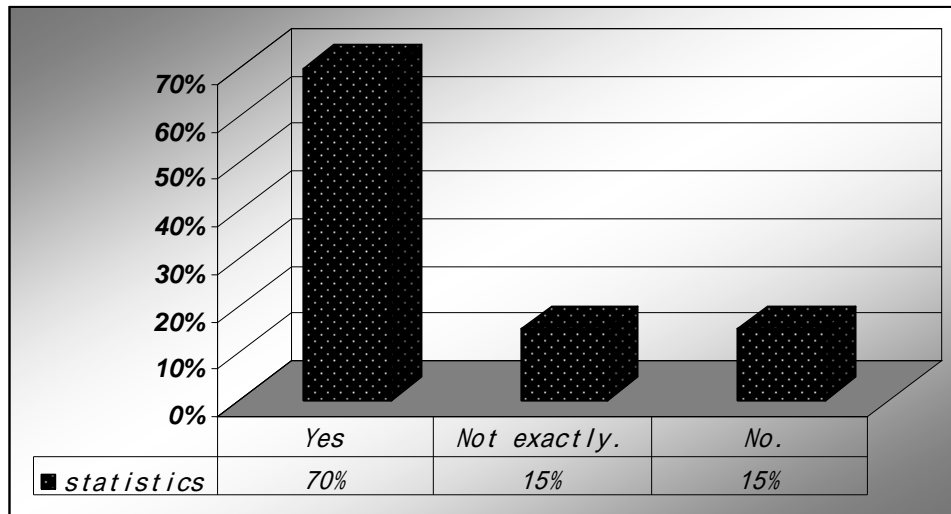


Figure 5-7 Statistics results of disadvantages brought by cooperation

Sources: Questionnaire

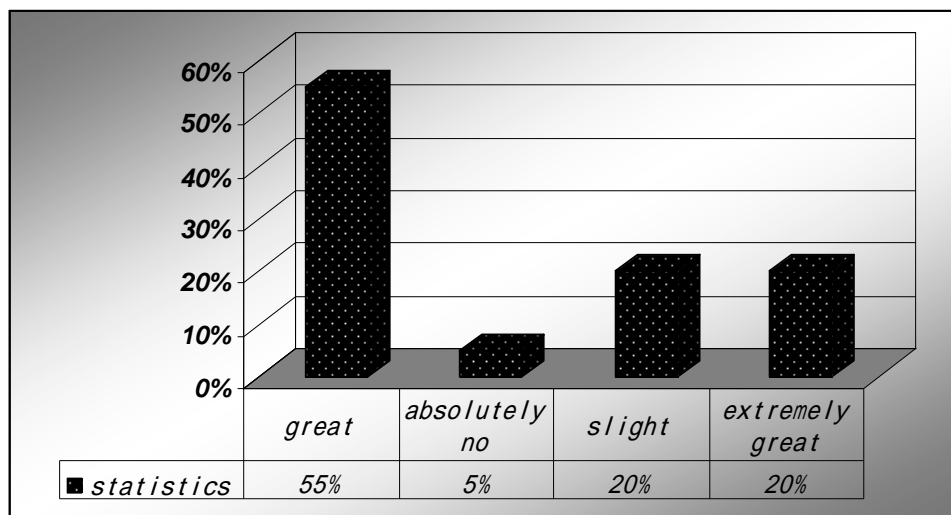


Figure 5-8 Statistics results of potential risks existing in the development of New Oriental

Sources: Questionnaire

5.2.4 Manifestation of disadvantages brought by cooperation

According to the results of the questionnaire, disadvantages brought by cooperation are manifested in the following several aspects. 60% of respondents believed that such cooperation limited cooperation between Lianyungang port and other shipping companies. 15% of respondents believed that such cooperation limited cooperation between Lianyungang port and other cargo owners. 15% of respondents believed that

such cooperation limited the development of container shipping route. 45% of respondents believed that such cooperation was unfavorable to sustainable development of Lianyungang port. General manager Liu Quan also believed that five disadvantages exist in cooperation. These disadvantages are as follows: firstly, profits of Lianyungang port party has decreased; secondly, such cooperation has exerted influence on number of shipping routes and shipping schedules; thirdly, such cooperation has exerted influence on cooperation between Lianyungang port and other shipping companies; fourthly, accessory facilities can't keep up with the development in the short term; fifthly, potential risks including bailout and withdrawal of capital by China Shipping may exist.

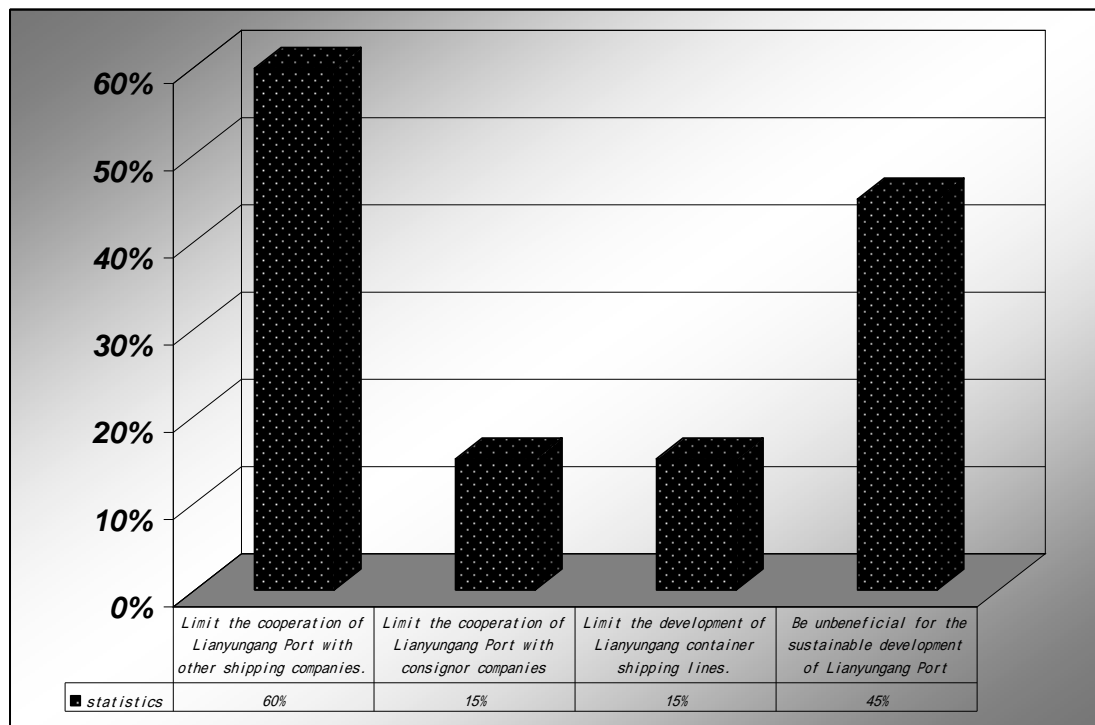


Figure5-9 Statistics results of disadvantages brought by cooperation

Sources: Questionnaire

95% of respondents believed that such cooperation enabled container ships of China Shipping to enjoy the most preferential and convenient services. 90% of respondents believed that such cooperation had resulted in unfair competition in container market of Lianyungang. 95% of respondents believed that such cooperation had caused

monopolization situation of container market of Lianyungang. 55% of respondents believed that such dominant situation was unfavorable to sustainable development of New Oriental. 45% of respondents believed that China Shipping seemed to have privately owned the container terminal. 75% of respondents believed that withdrawal of capital by China Shipping would give a heavy blow to the development of New Oriental.

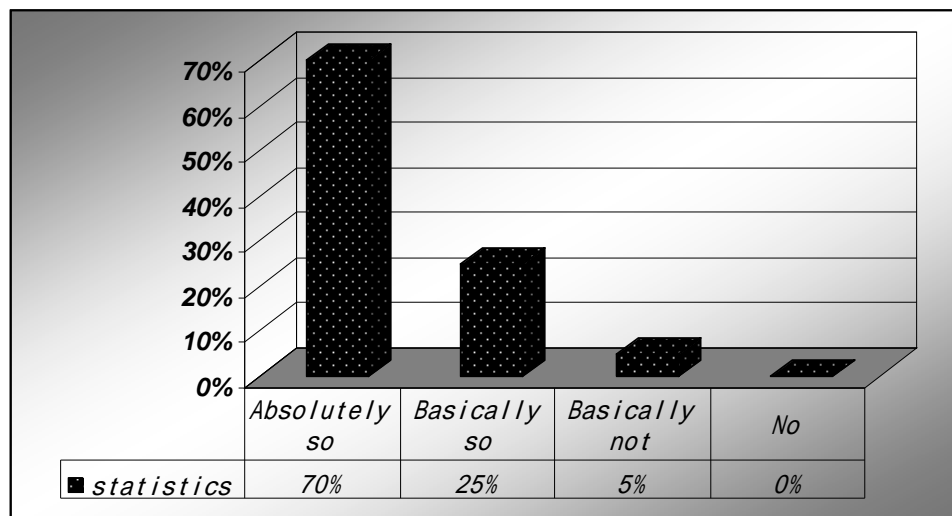


Figure5-10 Statistics results of the most preferential and convenient services that container ships of China Shipping has enjoyed

Sources: Questionnaire

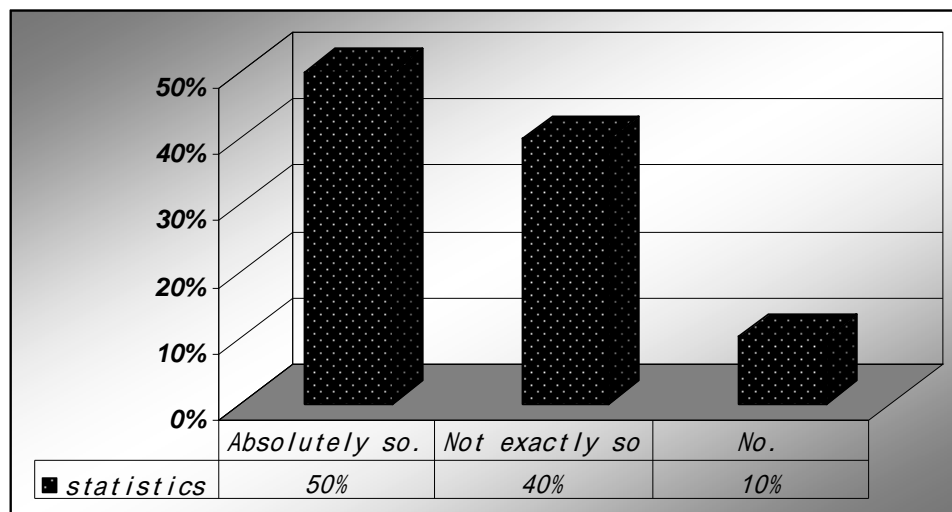


Figure5-11 Statistics results of unfair competition in container market of Lianyungang resulting from cooperation

Sources: Questionnaire

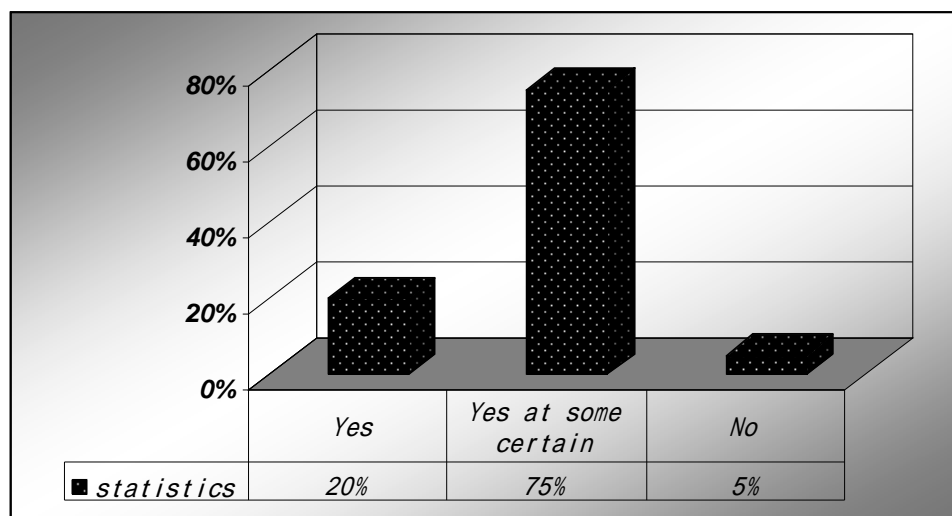


Figure5-12 Statistics results of monopolization situation in container market of Lianyungang resulting from cooperation
Sources: Questionnaire

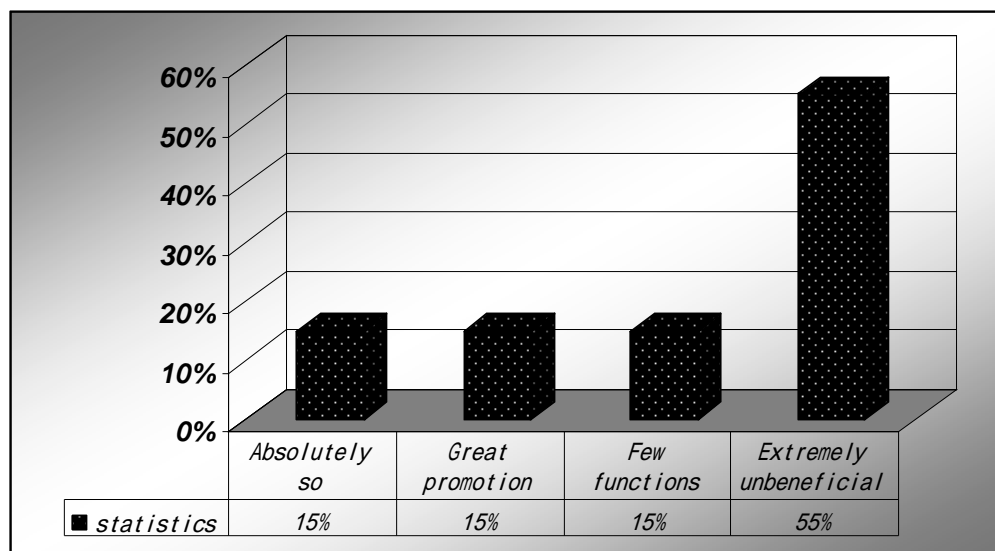


Figure5-13 Statistics results of the belief that such cooperation is unfavorable to the sustainable development of New Oriental
Sources: Questionnaire

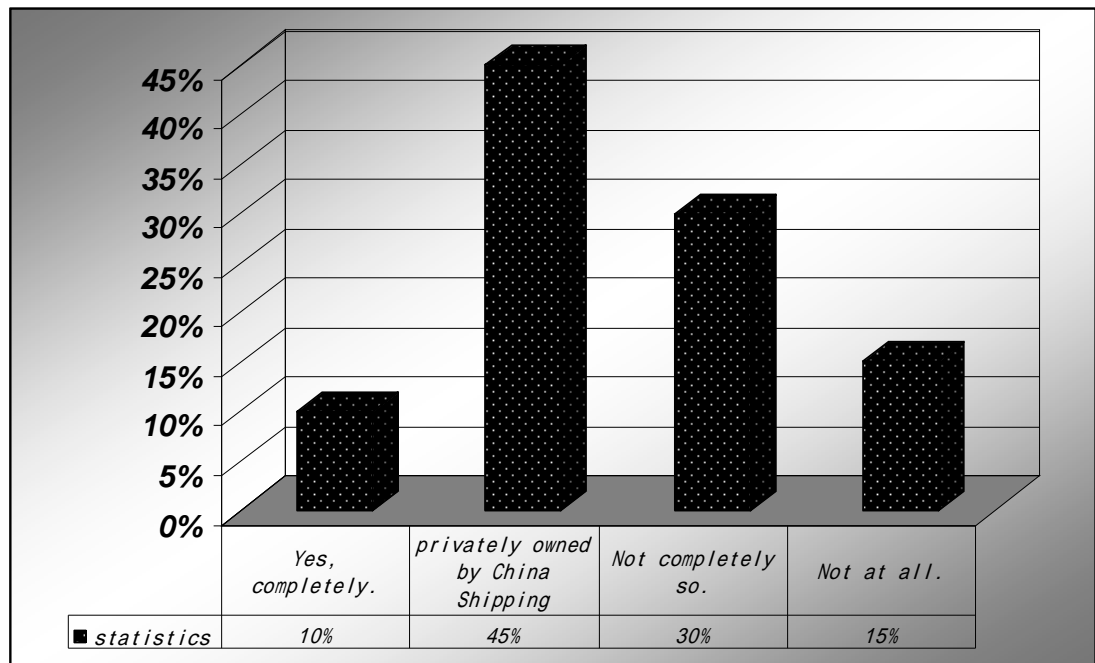


Figure5-14 Statistics results of the belief that container terminal is of no complete public interest

Sources: Questionnaire

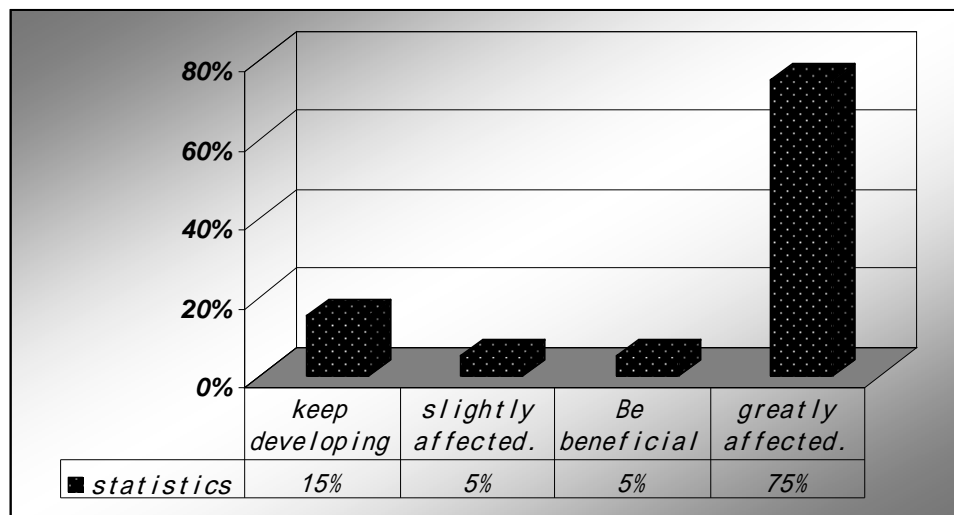


Figure5-15 Statistics results of the influence of withdrawal of capital by China Shipping on the development of New Oriental

Sources: Questionnaire

5.3 Analysis of Reasons for Problems Existing in Cooperation

5.3.1 Results of questionnaire about problems existing in such cooperation

According to the results of the questionnaire, 60% of respondents believed that the fact that China Shipping has possessed right to control New Oriental is the main reason for disadvantages resulting from cooperation. 15% of respondents believed that strategy of New Oriental was unfavorable to its long-term sustainable development. 25% of respondents believed that the development of New Oriental was restricted by China Shipping. 75% of respondents believed that preferential policies given to China Shipping had resulted in unfair competition in container market.

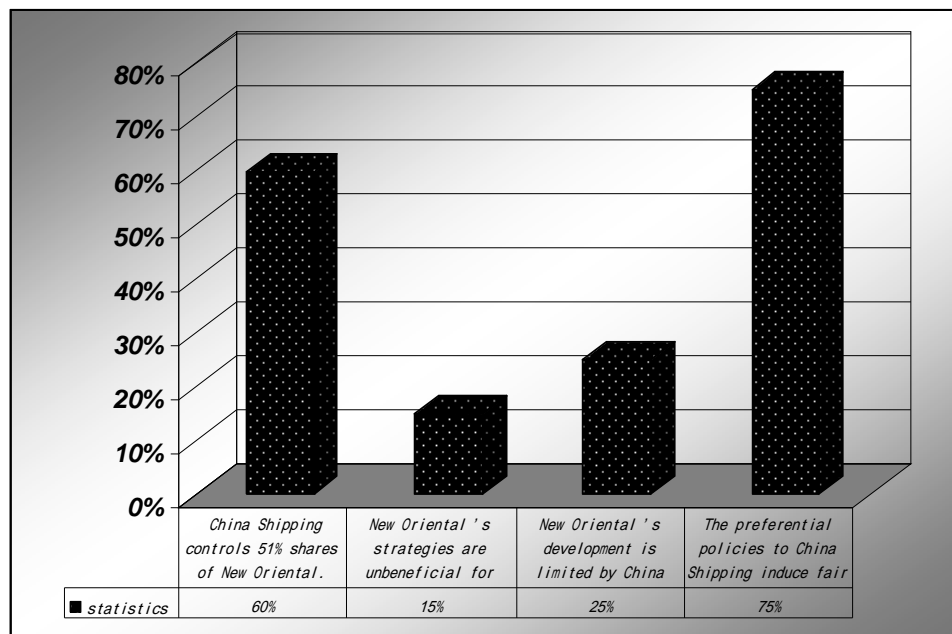


Figure5-16 Statistics results of main reasons for disadvantages resulting from cooperation

Sources: Questionnaire

75% of respondents believed that, for the sake of sustainable development of New Oriental, right to control New Oriental should be transferred from China Shipping to Lianyungang Port. 60% of respondents believed that cooperation between Lianyungang Port and other shipping companies and cargo owners should be strengthened. 50% of respondents believed that construction of container yard should

be accelerated, and container storage capacity should be enhanced. 55% of respondents believed that construction of accessory facilities for system of collection, distribution and transportation should be reinforced, and container handling capacity should be enhanced. In the meantime, general manager Liu Quan believed that New Oriental would make great efforts to seek for diversified cooperation including cooperation with other ports and cargo owners, cooperation with shipping companies, and cooperation with other companies.

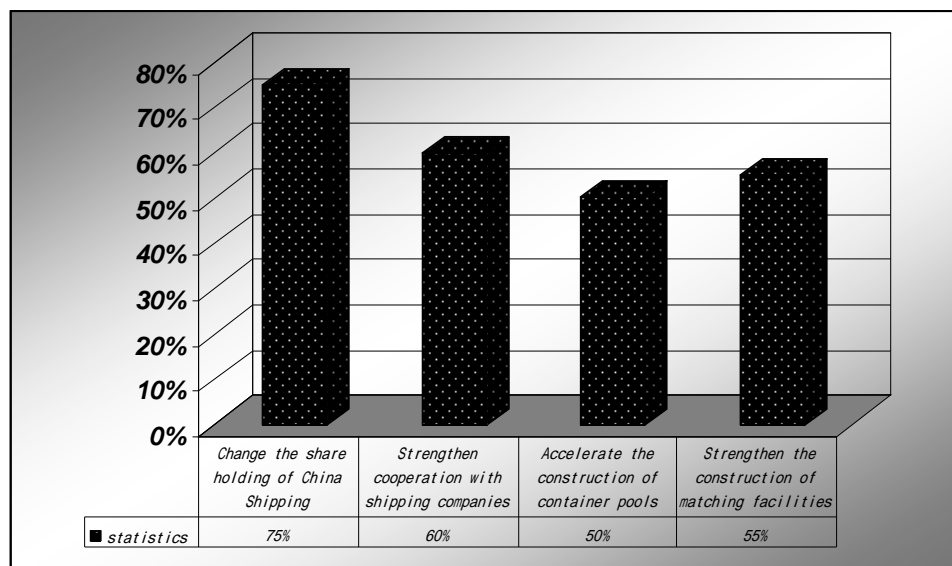


Figure5-17 The strategies that shall be adopted by New Oriental at current stage

Sources: Questionnaire

According to the statistics results of the questionnaire, It find that problems and potential risks resulting from cooperation between Lianyungang port and China Shipping lie in the following aspects. Firstly, such cooperation has influenced entry and operation of shipping schedule of other shipping companies; secondly, such cooperation has hindered cooperation between Lianyungang port and other shipping companies; thirdly, construction of system of collection, distribution and transportation has lagged behind construction of berths; fourthly, uncertain risks including withdrawal of capital by China Shipping may exist; fifthly, such cooperation lays emphasis on cooperation in shipping routes, and cooperation between the port and its hinterlands still lags behind.

5.3.2 Analysis of reasons for existing problems

According to the results of the questionnaire and interview survey, it finds that problems result from the following reasons:

Firstly, China Shipping has enjoyed much preferential policies and convenience. The reason why such cooperation may probably influence entry and operation of shipping schedules of other shipping companies is primarily because 7 years cooperation had enabled China Shipping to possess quite strong first-mover advantages and make use of related terminal resources to provide priority service for its ships. Therefore, such cooperation may probably hinder entry and operation of shipping routes of other shipping companies.

Before such cooperation, container handling capacity of China Shipping was more than 100,000 TEU, accounting for 20% of total container throughput. Its container handling capacity has accounting for around 60% of container throughput in 2005. Ships of China Shipping can get the lowest port charges, and remain exempt from other charges as much as possible, go through more simple and convenient procedures. Lianyungang port party would take the initiative in coordinating with departments concerned, and simplifying procedures for customs clearance for ships of China Shipping.

It is difficult for ships of other shipping companies to enjoy the preferential policies and convenience that ships of China Shipping have enjoyed, especially world-class shipping companies, it is because the preferential resources are limited and China Shipping would hinder this move. One example is that CMA-CGM opened a shipping route to Europe in 2004 and stopped running this shipping route later. Besides, leaders from COSCO visited Lianyungang for many times for review of cooperation affairs, but failed to take any action for cooperation.

Secondly, China Shipping doesn't have more advantages in hinterlands of Lianyungang. With its head office in Shanghai, China Shipping has been founded for several years. History of China Shipping is not as long as that of China Ocean Shipping. China Shipping has no broad and dense cargo source attraction network in the central and western regions and especially regions along New Eurasian Continental Bridge. Therefore, New Oriental has to attract cargoes from the central and western regions by making use of original cargo source channel. The reason why the container throughput of New Oriental in recent years has been increasing is because economy of the central and western regions has been developing quickly, and original cargo source attraction network of Lianyungang port has been playing its role. Cargo source attraction network of China Shipping fails to play an active role.

Thirdly, China Shipping is unwilling to invest in construction of facilities of collection, distribution and transportation. Lianyungang port is featured by high cargo collection and transportation cost and low profits. Although container throughput in 2006 reached 1,300,000 TEU, profits only amounted to 1,160,000 Yuan. This is partly because, in order to attract more cargo sources and shipping companies, Lianyungang port provides preferential policies, and partly because internal cost is too high. One of reasons for high cost is that it cost New Oriental much money to distribute and transport cargoes in container yard. Land area of Lianyungang is narrow, and marshalling yard is insufficient; and only by passing through urban area can vehicles arrive at container yard; transportation by vehicles is featured by low efficiency and high cost. It is of urgent need to construct special road for distribution and transportation of cargoes. However, China Shipping fails to hold a positive attitude towards construction of special road for distribution and transportation of cargoes; it holds a positive attitude towards construction of berth. Over the past seven years, China Shipping has invested more than 4 billion Yuan in construction of 7 berths. The reasons why China Shipping holds a positive attitude towards construction of berth are as follows. Investment in construction of berth is

featured by clear assets boundary and quick return, and can directly bring benefits and convenience to ships of China Shipping; which also in road for distribution and transportation involves in a large sum of assets, and is featured by long yield period; China Shipping is unfamiliar with investment in construction of road for collection, distribution and transportation of cargoes; and capital of China Shipping is limited.

Fourthly, China Shipping holds the majority of shares of New Oriental. Lianyungang port party cooperated with China Shipping in operating New Oriental. China Shipping held a 51 percent controlling stake in earlier stage and a 55 percent controlling stake later. Although Lianyungang port party strived for holding controlling stake in the process of negotiation, China Shipping insisted that they should hold controlling stake. Lianyungang port party finally let China Shipping hold controlling stake. As China Shipping holds controlling stake of New Oriental, and New Oriental is the only one container terminal company of Lianyungang port, so operation direction, strategy and objective of New Oriental can only be determined by China Shipping and must be determined in the interest of China Shipping. New Oriental has to make great efforts to realize maximization of interest of China Shipping. China Shipping is naturally unwilling to allow the port party to cooperate with other shipping companies, or hinders such a kind of cooperation. Therefore, Lianyungang port party can only cooperate with China Shipping in the short term. Such cooperation would inevitably cause the abovementioned problems. Qingdao port and Shanghai port cooperates with many world-class shipping companies in container terminal.

Fifthly, there is interest difference. According to the results of the questionnaire, some problems still exist in such cooperation. Some problems have emerged; some other problems haven't emerged; potential risks still exist. This Dissertation has analyzed the reasons for these problems, but the root cause lies in interest difference between both parties. Lianyungang port and China Shipping have common interests in cooperation, but interest difference between both parties does exist. Interest

difference will inevitably results in the abovementioned problems. There is the following interest difference between both parties:

- There is difference in primary business between both parties.

Primary business of China Shipping is shipping, and the purpose of cooperation with Lianyungang port is to extend supply chain, facilitate shipping and enable its shipping business to gain a competitive edge. Primary business of Lianyungang port is operation of the port, and the purpose of cooperation with China Shipping is to open more shipping routes and shipping schedules with the help of China Shipping, and make use of capital of China Shipping to construct container terminal.

- There is difference in amount of assets between both parties.

Assets of Lianyungang port party is less than 5 billion Yuan while assets of China Shipping is more than 60 billion Yuan and is more than twelve times as much as that of Lianyungang port. Therefore, New Oriental is quite important to Lianyungang port, accounting for a great proportion of Lianyungang port. New Oriental accounts for a negligible proportion of China Shipping. Something that really matters to Lianyungang port doesn't matter to China Shipping. Lianyungang feels anxious about fluctuation of container throughput, but China Shipping doesn't worry about this.

- There is difference in number of partners between both parties.

New Oriental is the only one container terminal company in Lianyungang port. Lianyungang port only has one partner, China Shipping. China Shipping has many partners, and has cooperated in container terminal with eleven ports including Yingkou port, Shanghai port and Xiamen port. However, in other partners' ports, ships of China Shipping can enjoy preferential policies and convenience that it has not enjoyed in Lianyungang port. Lianyungang port party can only resort to China Shipping for opening shipping routes and shipping schedules.

- There is difference in capital form between both parties.

Port industry is a kind of capital intensive industry. A shipping company has the right to select port that it calls at. Therefore, port in which the port invests heavily has to face the investment risks resulting from uncertainty of decision-making of the shipping company. China Shipping invests capital fund in the port, and can withdraw or transfer its investment in the port at any time when periodic fading appears or China Shipping makes great adjustment of its development strategy. Lianyungang port invests fixed capital such as terminal, sea-route, marshalling yard and container yard in the port. Lianyungang port is unable to transfer the fixed capital or transfer of the fixed capital will result in devaluation of the fixed capital. In 1998, China Ocean Shipping (Group) Company made strategic adjustment and reduced its investment scale and ceased its investment in the project of “China Ocean International Town at Taicang”, to which Lianyungang port should attach great importance.

- There is difference in development objective between both parties.

Development objective of Lianyungang port is to enlarge the scale of the port, increase container throughput and promote local economic growth. Development objective of China Shipping is to enlarge the scale of shipping fleet, improve shipping competitiveness and contribute more to the economic growth of the state. China Shipping hopes to invest the yield from operation of container terminal in the enlargement of the scale of its shipping fleet while Lianyungang port hopes to invest the yield from operation of container terminal in the enlargement of the scale of the port.

The above paragraphs analyzed disadvantages and benefits brought to Lianyungang port and China Shipping by cooperation, and disadvantages brought to the development of New Oriental by cooperation, probed into problems and potential risks existing in the cooperation, as well as root causes for these problems and risks.

6. Development Strategies of New Oriental

Through the above swot analysis , questionnaire and interview survey, it can be seen that the existing problems and potential risks in the cooperation between Lianyungang Port and China Shipping result from single partner and cooperation means as well as the fact that the port party has no right to control New Oriental. Therefore, priority should be given to the strategy of diversified cooperation among all development strategies of New Oriental.

As the sole container terminals operator in Lianyungang, New Oriental should seek for all-round cooperation, as long as it wants to avoid destructive competitions among ports, strengthen its own capacity to withstand external risks from the market, reduce costs, improve economic efficiency and upgrade its organizational structure. Diversified cooperation has broader connotations; as for means of cooperation, there is not only cooperation between ports and shipping enterprises, but also cooperation between ports and cargo owners as well as that between port enterprises. As for cooperation partners, there is cooperation with a single partner, and cooperation with a number of partners.

6.1 Expanding Cooperation between Ports and Shipping Enterprises

6.1.1 Means of expanding cooperation between ports and shipping enterprises

At present, the cooperation between China Shipping and Lianyungang Port is mainly concentrated on more shipping routes and schedules; their cooperation means is relatively unitary, not conducive to the sustainable development of New Oriental. Hence, besides strengthening cooperation in shipping routes and schedules, China

Shipping and Lianyungang Port should also increase means of cooperation. Firstly, conduct terminal business cooperation, namely, using the experience in operating terminals of China Shipping Terminal Development Co., Ltd., which is subordinate to China Shipping Group, to increase the cooperation of both parties in terminal assembly and disassembly, dock warehousing, transfer, and other field operations. Secondly, conduct agency business cooperation, and increase cooperation in shipping agency and freight agency. Once China Shipping and Lianyungang Port Group begin cooperation in agency businesses, ships of China Shipping will be provided with quality agency services, the radiation range of agency services will be extended and the agency efficiency improved. Thirdly, conduct cooperation in logistic business. Lianyungang Port and China Shipping can also cooperate in logistic program design and planning, logistics information system design and development as well as other value-added services, so that they can provide customers with modern logistic services. Once shipping companies and ports cooperate in modern logistics businesses, they can share resources, complement strengths, integrate their own services, extend and expand the service chain and gradually transfer from basic services to offer high value-added services.

6.1.2 Expanding the objects for cooperation between ports and shipping enterprises

In 2000, China Shipping and Lianyungang Port held negotiations for as long as 10 months because China Shipping wanted to hold the controlling stake of New Oriental. During the early period of negotiations, Lianyungang port did not agree to the proposal of China Shipping. However, under the pressure of slowly-growing container throughput, as China Shipping stated that they will turn to Rizhao Port (the competitor of Lianyungang Port) for cooperation, Lianyungang port party finally agreed to the unilateral holding demand. However, cooperation between ports and shipping companies is mainly in the form of multi-corporate cooperation. For example, the 2nd-phase project of Yangshan Deepwater Port Area which was put into

trial operation in 2006 is co-funded by Shanghai International Port (Group) Co., Ltd., Hong Kong Hutchison Whampoa Group, A.P. Moller-Maersk Group, COSCO Group and China Shipping.

As New Oriental is a joint venture co-funded by China Shipping and Lianyungang Port, its cooperation objects are relatively unitary; still due to the holding of China Shipping, there are many potential disadvantages (the reasons have already been analyzed in chapter five). Therefore, Lianyungang Port should expand objects for cooperation and attract other shipping companies to cooperate with it in various ways. Taking into account of the fact that China Shipping will safeguard its own interests, Lianyungang Port may take a loose cooperative strategy, and gradually realize cooperation by developing new shipping routes, joining hands in associated transportation, human resources, and leasing of terminals, etc, particularly in the area of opening new shipping routes. When seeking after cooperation with new shipping magnates for the newly built container terminals at north port area, the Port shall try to not let shipping company to hold the controlling stake and had better hold the controlling stake itself. Port shall strive for establishing a joint venture by over three parties, with one party holding less than 50 percent stake, so as to strengthen the commonweal of the operation of terminals.

6.2 Carrying out Cooperation between the Port and Cargo Owners, and Between the Port and Hinterlands

Cooperation between the port and cargo owners and between the port and hinterlands are important component parts of diversified cooperation. In the maritime industry, the port and shipping enterprises are two nodes in the supply chain, the end-users are cargo owners. Singular port or shipping company can not meet the diversified and rapidly changing needs. The all-around cooperation between the port and cargo owner can improve the efficiency, reliability and flexibility of goods transportation, enhance the service level and develop value-added services on this base. To deepen

cooperation between the port and cargo owner, and between the port and hinterlands, New Oriental must intensify the cooperation with southern and western regions.

6. 2.1 Cooperation between the port and the southern regions

In 2006, New Oriental container throughput reached 1.3 million TEU, among which, 70% of the containers handled in New Oriental come from the northern regions of Jiangsu province, but containers from the northern regions handled in New Oriental only account for 25% of total containers from the northern regions. The northern regions of Jiangsu province are direct economic hinterland of New Oriental and still have great potential suitable containerizeable cargo source to be attracted to New Oriental. As the only large-scale container terminal operator in northern regions of Jiangsu province, New Oriental should speed up the construction of the third-stage Miaoling project of the sixth generation container terminal, ensuring the completion of a modernized container terminal with integration of the old and new terminals, and with a coastline of more than 2,000 meters, nine container berths and an annual handling capacity of more than four million TEU in 2009. It should increase its attraction of cargoes from Taizhou and Yangzhou in the central and northern regions of Jiangsu province, improve the proportion of cargoes from the northern regions of Jiangsu Province, and promote the economic takeoff of the northern regions of Jiangsu province.

6.2.2 Cooperation between the port and the western regions

After the New Eurasian Continental Bridge is put into use, Lianyungang Port is put at a special position as the east bridgehead for international trade highway; thus, its status in international transportation is improved significantly and the probability of intercontinental cargo transit via New Oriental is gradually increasing. Therefore, as for cooperation between the port and the western, firstly it is necessary to strengthen the international cargo transit function of the new Eurasian Continental Bridge. Compared with Siberian Continental Bridge, the new Eurasian Continental Bridge

has more prominent advantages because via it the distance to middle Asia and west Asia can be shortened by 2,000—5,000km; Via the new Eurasian Continental Bridge, the distance from the Far East to west Europe can be shortened by 15,000km compared with via Cape of Good Hope, or 8,000km via the Suez Canal, or 11,000km via the Panama Canal. Secondly it is necessary to enhance the function of assembly, disassembly and transfer of cargo transportation within the hinterland. Longhai and Lanxin economic belts have unique natural conditions, abundant mineral resources, significant agricultural characteristics, great potential and broad prospects for economic development. Though currently the overall economic development level there lags far behind the Pearl River Delta, the Yangtze River Delta and the Bohai rim, as China's key area of sustainable development in the new century, they have been included in the rank of priority development. Hence domestic and foreign trade transportation will be stimulated and the areas will become the major economic growth zone in China.

6.3 Carrying out Cooperation among Ports

Along with the rapid economic development in port hinterland, the competition and cooperation between ports are becoming hotter day by day. In the area of port cooperation, some domestic ports have made successful results. For example, through the implementation of the Yangtze strategy, Shanghai port has conducted 10-odd joint projects in some important ports along the Yangtze River, including a strategic cooperation framework with Chongqing Port at the upper reaches of the Yangtze River, a shareholding contract with Wuhai Port at the middle reaches and maintaining a good growth momentum with Longtan Container Port Area belonging to Nanjing Port. Since the implementation of the Yangtze strategy, the volume of cargoes exported and imported via Shanghai Port keeps rising. According to statistics, in 2006, the transit volume of Shanghai Port Group reached 2 million TEU, representing a growth of 41.8% compared to 2005¹⁰.

¹⁰ Tong Yongbin.(2006) Initial Discussions on Development Strategies of Our Country's Container Ports, Traffic and Transport, 9,10-12

Compared with the port-port cooperation conducted by Shanghai Port, the development of New Oriental is still lagging behind. As a hinterland port, it is essential for New Oriental to strengthen port-to-port cooperation. Currently, Lianyungang Port has signed strategic cooperation agreements with Dafeng Port and cooperation will be conducted from the following five aspects. The first is cooperation among ports. Two ports will cooperate in jointly developing market and attracting cargo source and providing convenient and economic logistic service for the central and northern regions of Jiangsu province and surrounding regions. Secondly new shipping routes will be opened: an extension route for containers from Lianyungang Port to Dafeng Port will be put into use. Thirdly, technical talent support will be provided. Lianyungang Port will help Dafeng Port build a modern port production management system. Fourthly, business equipment support will be provided. Lianyungang Port will help Dafeng port to be familiar with procedure for customs clearance as well as quarantine business. As long as Dafeng Port is capable of tugboat berthing and operations, relevant enterprises affiliated to Lianyungang port will help Dafeng port to complete tugboat and pilot operations it cannot finish by itself. By way of transfer or leasing, they will provide some equipment for Dafeng Port. Fifthly, project cooperation will be conducted. Lianyungang Port will participate in terminal construction and operation at Dafeng Port while Dafeng Port will cooperate with Lianyungang Port by giving the most preferential policies; they will jointly develop and build container berths and other bulk cargo berths.

To further address challenges from neighboring ports and promote the rapid development of Lianyungang port, New Oriental should continue to find new cooperation partners, enrich the content of cooperation, implement and deepen the cooperation with Dafeng Port, accelerate cooperation with Yangzhou Port, Taizhou Port and Nantong Port, discuss the feasibility of cooperation with neighboring ports ,such as the Rizhao Port, use the platform advantages of Lianyungang Port as a listed company and enhance core competitiveness through asset acquisitions, equity swap, equity participation and holding.

6.4 Promoting Cooperation between Ports and Railways

New Oriental has cooperated closely with railway companies and opened five scheduled trains from Lianyungang to Alamyshan Mountain, and from Lianyungang to five central Asian countries, which has enabled New Eurasian Continental Bridge to occupy a dominating position in terms of container transit transportation volume ever since its opening and operation. Its transportation volume accounts for 90% of the total. In 2006, the transit transportation volume reached a record of 40,000 TEU; it plays an important role in promoting economic development of hinterlands and continental bridge..

Therefore, New Orient should further promote cooperation between ports and railways, and bring into full play their own advantages and strengthen the communication with railway departments. Firstly, it must do a good job of market segmentation, clearly determine market targets and improve the efficiency of cargo attraction. Secondly, it is necessary to strengthen spot management, improve the quality of services. The quality of services can be reflected through railway freight safety quality, or by providing associated transport service. During actual operations, goods shall be neatly stacked to facilitate pick-up; still the principle of voucher delivery shall be strictly enforced; loading and unloading, handling and storage departments shall work together to do a good job of quality control. Wrong pick-up, theft and fraud shall be prevented. Thirdly, increase railway transportation value-added services, and provide many kinds of value-added services like demolition, encasement, packaging and labeling, offer all-round cargo services, form scale advantages, develop complementary, interdependent and stable cooperation relations, so as to lay a solid foundation for stable cargo sources.

7. Conclusion

New Oriental is a container terminal company established with the joint investments of a port enterprise and a shipping enterprise, so the research on its development strategies has not only intercommunity but also particularity.

Intercommunity, also called as commonness, indicates that, through analysis on the cooperation course of Lianyungang Port and China Shipping, and research on the advantages and benefits brought by the cooperation for the two investment parties, it is possible to explore some basic advantages of cooperation between ports and shipping companies, which has some certain reference significances on plentiful domestic container terminal companies similar to New Oriental.

So-called particularity indicates that, through the research in this article, it is found that there are still some problems and potential risks in the cooperation between Lianyungang Port and China Shipping, and New Oriental shall strengthen and accelerate implementing diversified cooperative management strategies to promote the cooperation between port and shipping companies, port and ports, port and railways, and port and hinterlands, so as to ensure its sustainable development.

The main work results of this article are summarized as below:

- Generally describe the researches related to domestic and overseas cooperation between ports and shipping companies, and select the research method of this article;

- Introduce the cooperation course of both parties, and analyze the advantages and benefits brought by the cooperation for Lianyungang Port and China Shipping;
- By combining the comparison with neighboring container terminal companies, the article conducts qualitative and quantitative SWOT analysis on New Oriental and determines the direction and type of the development strategies of New Oriental Company;
- The author went to New Oriental Company personally, and analyzed the reasons for the problems reflected in the investigation based on the method of combining questionnaire and interview;
- Based on quantitative SWOT model analysis and investigation method research, the article brings forward that New Oriental Company shall strengthen and accelerate implementing diversified cooperative management strategies from the four aspects, namely the cooperation between port and shipping companies, port and ports, port and railways, and port and hinterlands.

Restricted by the author's level and time, there are surely many improper points in this article. Hopefully, the readers could provide as many instructions as possible, and care about the development strategies of New Oriental, so as to realize the further improvement and development of this Company.

Reference

Avery, P. (2000). *Strategies for Container Ports*. London: Cargo Systems.

Analysis of Chinese container transport development. 2005(9). *Water Transport Digest*.

Benson, P., Hill, A. & Hoffmann, T. (1982). Manufacturing systems of the future-a Delphi study. *Production Inventory Management*, 23 (3), 87-105.

Bray, J. R. (1996). *Virginia inland port: The case for moving a marine terminal to an inland location*. American Association of Port Authorities Professional Port Manager Program. Retrieved February 10, 2006 from the World Wide Web:
http://www.aapa-ports.org/pdf/ppm_papers/bray.pdf

Cao Jiaming. (2004) Research on Lianyungang Port Development Strategies, *Journal of Lianyungang Technical College*, 11,2-4

Chen Jianmin and Xu Yongjiu.(2005). Lianyungang Persisting in the Road of Cooperative Development, *China Port*, 10, 10-14

Cheng Xueliang.(2004).The Reasons for the Teetering in Container Transport of Lianyungang, *China Water Transport*,10,30-32

Cai Xin.(2004). Research on Cargos Source Organization of Ports, *China Port*, 9, 10-11

Containerization International (2001, November). *Take Your Partners*, 11, 57-61.

Cao Jiaming. (2004). Discussions on Key Points of and Countermeasures for Lianyungang Port Development, *Journal of Huaihai Institute of Technology*,3,14-17

Chen Jiayuan. (1999).Port Enterprise Management, Dalian:Dalian Maritime University Press,

Feng Weiqin. (2006).Develop Close-to-port Industry, and Develop Lianyungang Port, *Port Economy*,1,29-30

Gu Quanlin. (2000) .From Friendly Port to Port Strategic Alliance. *China Port*, 4, 15-17

Huang Weihong.(2006). Countermeasures for Development of Lianyungang Port Container Transport, *Journal of Chongqing Jiao tong*, 7,21-23

He Min.(2006). Research on the Problems about Selection of Port Strategic Alliance Partners of Xiamen Port. Unpublished master's thesis, Dalian Maritime University, Dalian, China

Jian Rui. (2004)Selection of Mode for Development Strategies of Jiangsu Coastal Ports, *Shipping Management*, 2,27-29

Lu Ruifeng. (2002)Discussion on Development Strategies of Yangtze River Ports, *China Water Transport*, 3, 17-18

Li Guangfeng. (2005).Research on Container Sources in Hinterlands of North Area of Jiangsu Province at Lianyungang Port, *Containerization*, 11,21-22

Liu, B, Li, J. 2006(2). China's effect on the world economy. *World Shipping*

Ma Zongwu. (1989)Port Economics, Beijing: China Urban Economic Society Press,

Ma Gaoliang.(2003).The Ways for Shipping Enterprises to Invest in Ports, *China Ocean Shipping Monthly*, 11,19-20

Mikko Kuritila, Mauno Pesonen, Jyrki Kangas, Miika Kajanus.(2000) Utilizing the analytic hierarchy process (AHP) in SWOT analysis- a hybrid method and its application to a forest-certification case. *Forest Policy and Economics*, 1:41-52.

Notteboom, T., & Rodrigue, J. P. (2004). *Inland freight distribution and the sub-harborization of port terminals*. Retrieved December 31, 2005 from the World Wide Web:

http://people.hofstra.edu/faculty/Jean-paul_Rodrigue/downloads/ICLSP-%20Notteboom-Rodrigue-final%20version.pdf.

Ping Haosheng and Yang Ting. , (2004) Thoughts on the Development of International Container Transport of Lianyungang, *Containerization*, 10, 22-23

Qu Xuehai. (2000) *Research on the Application of SWOT Method in Compilation of Operation Strategies of Port Enterprises*, Unpublished master's thesis, Dalian Maritime University, Dalian, China

Song Hua. (1994). Thoughts on Development Strategies of China Ports, *Export-oriented Economy*, 12, 19-20

Shen Yidong and Wu Yijian.(2005)Discussion on Ability Harmonization between Lianyungang West Station and Port, *Railway Transport and Economy*,9,19-20

Sun Guangqi and Min Dequan.(2000). Strategic Value and Mode of Cooperation between Ports and Shipping Companies, *China Port*, 5, 23-27

Tang Zhongfu. (2006).Port Container Transport and Hinterland Economic

Development, *Port Economy*, 1, 19-21

Tong Yongbin.(2006) Initial Discussions on Development Strategies of Our Country's Container Ports, *Traffic and Transport*, 9,10-12

Wang Yunxia.(2003). *Discussions on Cooperative Competition of Large-scale Port Enterprises of China*, Unpublished master's thesis, Shanghai Maritime University, Shanghai, China

Wang Bing'an and Gan Jiansheng.(1995)Analytical Models of SWOT Marketing Strategies, *Systems Engineering —Theory & Practice*.

Xu Yeyang. (2001)Relation of Competition to Unified Programming and Cooperation of Ports, *Water Transport Management*, 12, 15-17

Yu Kehui. (2005) Coexisting Marketing Strategy of Shipping Market in China, *Journal of Nantong Vocational & Technical Shipping College*, 5, 22-24

Yang Fei(2005), *Research on Strategies for Container Business Cooperation and Competition of Shanghai Port*, Unpublished master's thesis, Dalian Maritime University, Dalian,China

Zhou Jiongfeng.(2003). *Analysis on the Strategies for Shipping Enterprises to Invest in Chinese Terminals*, Unpublished master's thesis, Shanghai Maritime University, Shanghai, China

Zhao Linying. (2002), Management Mode Innovation for Strategic Alliance Management of Ports and Shipping Enterprises, *Communications Enterprises Management*, 2,9-12

Zheng Xun. (2005). Analysis on the Mode of Cooperation between Shipping Companies and Ports, *China Port*, 4, 18-21

Zhang Yuanyuan(2006), *The Application of SWOT Quantification Model in the Strategic Planning of Steel Structure Enterprises*, *Unpublished master's thesis*, Hefei University of Technology, Hefei, China

Zou Junshan. (1997). *Modern Port Economics*, Beijing: the People's Communication Press,

Zhen Hong. (2000) *Port Management*, Shanghai: China Textile University Press,

Appendix1 Questionnaire

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Questionnaire about the Research on Development Strategies of Lianyungang New Oriental Container Terminal Co., Ltd

April 2007

Dear Sir or Madam,

Greetings! For the sake of the development of Lianyungang and New Oriental Company, the first work is to compile correct development strategies. However, correct development strategies are sourced from your earnest and correct replies to the following questions, and your answers are very important for the beautiful future of Lianyungang Port and your individuals! So, hopefully, you could spare time from your busy work to fill out this questionnaire, and thank you so much for your cooperation!

Note: China Shipping (Group) Company is hereafter simplified as “China Shipping”. Lianyungang Port (Group) Co., Ltd is hereafter simplified as “Lianyungang Port”. Lianyungang New Oriental Container Terminal Co., Ltd is hereafter simplified as “New Oriental”.

At the right side of each option is the percentage of responders selecting this option among all the responders (obtained from statistics).

I. Selection

1. How is about the share of containers at the hinterland of Lianyungang Port after cooperation with China Shipping?

A Great increase	55%
B Small increase	35%
C No increase	10%
D Decrease compared with that before cooperation	0%

2. What are the influences of the cooperation between Lianyungang Port and China Shipping on New Oriental?

A Decisively affect the development of New Oriental	35%
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B Greatly promote the development of New Oriental	50%
C Have no functions on the development of New Oriental	0%
D Have negative functions the development of New Oriental	15%

3 What are the promotion functions of the cooperation between Lianyungang Port and China Shipping on the infrastructure of New Oriental?

A The construction of the infrastructure of New Oriental is compelling.	45%
B The construction of the infrastructure of New Oriental is of large scale.	45%
C The construction of the infrastructure of New Oriental is of small scale.	10%
D The construction of the infrastructure of New Oriental lags behind.	0%

4. Is the cooperation between Lianyungang Port and China Shipping beneficial for the country and provincial departments to pay attention to the development of New Oriental?

A It is extremely beneficial for causing the attention of the country and provincial departments.	25%
B It doesn't arouse sufficient attention.	15%
C The country and provincial department pay relative attention to its development compared with before.	60%
D It arouses no attention of the country and provincial departments at all.	0%

5. Does the increase of containers throughput after cooperation fully reflect the development of New Oriental?

A. Yes.	20%
B. At some certain degree.	80%
C. No.	0%

6. If not fully so, the main reason is:

A. High ratio of empty containers	25%
B. Many transfer containers	10%
C. Reduced profits of Lianyungang Port	65%

7. Does the cooperation between Lianyungang Port and China Shipping have some certain negative influences on the development of New Oriental?

- | | |
|-----------------|-----|
| A. Yes | 70% |
| B. Not exactly. | 15% |
| C. No. | 15% |

8. If so, these negative influences are (multiple choices):

- | | |
|---|-----|
| A. Limit the cooperation of Lianyungang Port with other shipping companies. | 60% |
| B. Limit the cooperation of Lianyungang Port with consignor companies. | 15% |
| C. Limit the development of Lianyungang container shipping lines. | 15% |
| D. Be unbeneficial for the sustainable development of Lianyungang Port. | 45% |

9. If there are negative influences, the main reasons are: (multiple choices)

- | | |
|---|-----|
| A. China Shipping controls 51% shares of New Oriental. | 60% |
| B. New Oriental's strategies are unbeneficial for long-term sustainable development. | 15% |
| C. New Oriental's development is limited by China Shipping. | 25% |
| D. The preferential policies to China Shipping induce fair competition of container market. | 75% |

10. Will the container vessels of China Shipping enjoy the most preferential and most convenient treatments in Lianyungang after cooperation?

- | | |
|-------------------|-----|
| A. Absolutely so. | 70% |
| B. Basically so. | 25% |
| C. Basically not. | 5% |
| D. No. | 0% |

11. What strategies shall be adopted by New Oriental for the sustainable development at present? (Multiple choices)

A. Change the share holding of China Shipping to that of Lianyungang Port. 75%

B. Strengthen cooperation with shipping companies and consignors other than China Shipping. 60%

C. Accelerate the construction of container pools, and strengthen container storage capacity. 50%

D. Strengthen the construction of matching facilities for inland transport, and enhance the comprehensive capacity. 55%

12. Is it necessary to pay equal attention to quantity increase and efficiency improvement for the future development of New Oriental?

A. Absolutely so. 60%

B. Not exactly so. 35%

C. No. 5%

13. Does the cooperation between Lianyungang Port and China Shipping reduce the opportunities for cooperation with other shipping companies?

A Absolutely so. 60%

B Not exactly so. 25%

C No 15%

14. Does the cooperation between Lianyungang Port and China Shipping cause the unfair competition environment of Lianyungang container market?

A Absolutely so. 50%

B Not exactly so. 40%

C No. 10%

15. Does the cooperation between Lianyungang Port and China Shipping cause the monopolization pattern of Lianyungang container market?

A. Yes 20%

B. Yes at some certain degree. 75%

C. No. 5%

16. If such market monopolization pattern is caused, will it be beneficial for the sustainable development of New Oriental?

- A. Absolutely so 15%
- B. Great promotion 15%
- C Few functions 15%
- D Extremely unbeneficial 55%

17. Does the terminals built in Lianyungang with the investments of China Shipping after cooperation have commonweal?

- A.Yes, completely. 10%
- B. The terminals are privately owned by China Shipping 45%
- C. Not completely so. 30%
- D. Not at all. 15%

18. What the aftereffects will be if China Shipping withdraws its investment in New Oriental?

- A. New Oriental will keep developing. 15%
- B. New Oriental will be slightly affected. 5%
- C. Be beneficial for the development of New Oriental 5%
- D. New Oriental will be greatly affected. 75%

19. Are there unstable factors and potential risks in the development of New Oriental after the cooperation between Lianyungang Port and China Shipping?

- A. There are great unstable factors and potential risks. 55%
- B. There are absolutely no unstable factors and potential risks. 5%
- C. There are slight unstable factors and potential risks. 20%
- D There are extremely great unstable factors and potential risks. 20%

20. If there are unstable factors and potential risks, the main reason is:

A. The share holding of China Shipping induces that the decision making leans to the benefits of China Shipping.	55%
B. Historical reasons of the Port.	10%
C. The reasons of Lianyungang Port	20%
D. Mistakes in decision making of New Oriental	15%

Appendix2 Interview survey

Interview with General Manager Liu Quan of Lianyungang New Oriental Container Terminal Co., Ltd

April 10, 2007

Interviewee: Liu Quan, the General Manager of Lianyungang New Oriental Container Terminal Company

Interviewer: Wei Yizhou, postgraduate of Shanghai Maritime University

Interviewing background: Lianyungang New Oriental Container Terminal Company, established with the joint investments of Lianyungang Port and China Shipping, is the only terminal company specially dealing with container business at Lianyungang Port. In 2000 and before cooperation with China Shipping, Lianyungang Port had a container throughput of around but not over 100,000 TEU for many years ,even though it hadn't built a new container berth in the past over 10 years since the whole Port had been in heavy debts and difficult operations. However, since cooperation with China Shipping, the container throughput at the Port has grown quickly, and topped 1 million TEU in 2005, making the Port enter into the range of China Top 10 Container Ports and World Top 100 Container Ports. In 2006, the throughput kept rising to 1.30 million TEU. The rapid growth has been regarded as the typical case of double-win cooperation between ports and shipping companies in domestic and overseas shipping fields. To complete the master thesis, summarize the experiences and problems of the cooperation between port and shipping company in Lianyungang, and especially research the potential risks in such cooperation, the author has specially interviewed the general manager of the company about some problems related to cooperation.

Questions:

1. Wei Yizhou: General Manager Liu, the news said that Premier Wen Jiabao illustrated the important strategic position of Lianyungang in the whole national

economic development with four oranges at your home this New Year's Day. This is really great encouragement to Lianyungang people. Here, I want to know what aspects Premier Wen considered for emphasizing the important position of Lianyungang in national development in your opinions?

General Manager Liu: Well, in my opinions, Premier Wen's taking a special trip to survey Lianyungang at the very beginning of the New Year has specially important significances, and his illustration on the important position of Lianyungang in the national economic development is actually great encouragement to our people at the port, which has made us feel not only proud, but also heavy responsibilities. Now, we are making full efforts to carry out the instructions of the Premier. As for the question you just brought forward, Premier Wen has illustrated it in the whole surveying. According to the instructions of the Premier and my own understanding, I think the reasons mainly reset with the following several aspects. The first is the special geographical location of Lian Yungang. Lianyungang is located at the middle part of coastal area of China, connects with the Yangtze River Delta in the south and with Bohai Sea Bay in the north. Also, it faces toward Japan and Korea on the other side of the Sea, is parallel to the Yangtze River through Longhai-Lanxin Railway running through the east and west as well as Lianyungang-Houerguosi National Highway, and links the Midwest of our country. The second is the importance of Lianyungang for the economic development of the Midwest and Central Asia. Lianyungang is the shortest, most convenient and most economical seagoing outlet for the Midwest of our country and Central Asian countries, and is the bridge head of the new Asian and European transcontinental railway, which undertakes over-bridge transport of over 90% transit transport, and has non-replaceable important functions for development of Jiangsu north-area, growth of middle parts, west exploitation. The third is the rapid development of Lianyungang in recent several years, especially the powerful development trend shown from the ultra-normal development of containers throughput. In 2006, the throughput of Lianyungang topped 70 million tons and reached 72 million tons; the containers topped 1 million TEU in 2005, making

Lianyungang Port enter into the range of China Top 10 and World Top 100 Ports, and increased to 1.30 million TEU in 2006. Also, at present, there are 4 berths especially for containers, and 5 berths are in construction. After completion of construction, the handling capacity will reach up to 4 million TEU, and be available the sixth generation containers vessels to berth for loading and unloading. In addition, the construction of matching facilities for the inland transport of containers at the port is also in intense process. All of these achievements have shown the development trend of Lianyungang and the spirit of Lianyungang people. To sum up, I think the Premier illustrated the important position of Lianyungang from these several aspects and the national strategic height.

2. Wei Yizhou: General Manager Liu, you just mentioned that, besides the special geographical location of Lianyungang and its importance for the arrangement of national economic strategies, the reasons for Premier Wen to emphasize the important strategic functions of Lianyungang in the development of national economy also included the rapid development of Lianyungang in recent several years, especially the quick growth of container throughput. Would you please talk about the reasons for the rapid development of container throughput of New Oriental in recent years?

General Manager Liu: OK, generally speaking, the rapid development of Lianyungang container throughput is due to reasons of several aspects. The first is the much attention paid and preferential policies provided by national, provincial, departmental and municipal leaders. The *Planning for Arrangement of National Coastal Ports* approved by the State Council in 2006 has orientated Lianyungang port as one of thee main-body ports coordinate to Shanghai and Ningbo-Zhoushan among the port group in the Yangtze River Delta. In recent years, Jiangsu provincial governor and deputy provincial governor for separate management have taken special trips to work at the site of Lianyungang, and determined to provide Lianyungang with multiple preferential policies and over 1 billion financial supports.

Also, the Ministry of Communications has supported the “conversion of debts into shares” and the construction of 150,000t navigation channel etc. The second is the determination and implementation of the strategies of Jiangsu province such as “development of north areas of Jiangsu province”, “Xuzhou-Lianyungang economic belt”, “coastal great development” and the “city development with port”, “promoting the port with public fund” of Lianyungang city, which has driven the accelerated economic development of north areas of Jiangsu province, promoted the increase of containers at the speed of 60% in Lianyungang, and caused the increase of joint-venture projects, foreign funds, and national investments and attention. The third is the enterprising spirit and close cooperation attitude of Lianyungang people. Lianyungang people have always worked hard and kept their nose to the grindstone to powerfully promote the rapid development of local place; in addition, Lianyungang people usually summarize historical lessons, conduct solidified cooperation, strengthen communications, solve conflicts by themselves, reduce inner consumption, form resultant force, and seek for development with one heart. The fourth is that the cooperation with China Shipping has directly promoted the rapid development of container throughput. In 2000, following the general trend of cooperation between ports and shipping companies, Lianyungang established Lianyungang New Oriental Container Terminal Company actively together with China Shipping in the form of joint venture; and in 2004 and 2006, the two parties conducted cooperation twice in building berths especially for containers. Meanwhile, China Shipping invested in container shipping lines and opened European, American and domestic shipping lines. As of the beginning of this year, there had been over 20 shipping lines and monthly 220 schedules. Also, in the past 5 years, the container throughput has grown at the speed twice higher than the nationwide average speed.

3. Wei Yizhou: General Manager Liu, as you said, the cooperation with China Shipping was an important reason for the rapid development of Lianyungang during the past over 6 years, but concretely, what benefits has the cooperation with China Shipping brought for New Oriental Container Terminal Company?

General Manager Liu: The benefits brought by the cooperation with China Shipping for New Oriental are mainly embodied at the following several points. The first is increased shipping lines and schedules. Before cooperation with China Shipping, the international Container shipping lines of Lianyungang only included Japan, Korea and Hong Kong, and domestic shipping lines only included Shanghai and Qingdao etc. However, after cooperation with China Shipping, China Shipping has begun to invest in handling the international lines including American West Coast, Europe, Mediterranean Seal trunk line and Middle East, and South-Asia line etc., as well as domestic south line and north line. As of April this year, the shipping lines and monthly schedules have reached up to over 20 and 220 respectively. The second is the quick growth of container throughput. In 2000 before cooperation, the throughput was only 150,000 TEU, and had been kept at around over 100,000 TEU for many years. But after cooperation, the growth speed has reached up to 60%, one time over the national average growth speed; in 2006, the throughput reached up to 1.30 million TEU, where over 50% were transported with the vessels of China Shipping, and Lianyungang Port entered into the range of China Top 10 and World Top 100 Ports. The third is the increased berths and strengthened throughput. No container terminal was constructed in nearly ten years before cooperation; but 7 special berths have been built and are being built with the investments of China Shipping after cooperation, and the throughput will be increased by nearly 20 times. The fourth is obvious large-scale of container vessels. The 2 special long-ton berths newly built in 2004 have made the length of container vessels available to berth from within 200m to that of the sixth generation of container vessels, reaching up to over 260m at most. The fifth is powerful solicitation abilities. China Shipping has made use of its own solicitation network advantage to constantly develop the container sources for New Oriental, and increase the proportion of container sources from indirect hinterlands. In addition, the cooperation between the two parties has brought some other benefits, such as arousing the attention of the national and provincial departments, as well as domestic and overseas navigation industries, and the support of preferential policies.

4. Wei Yizhou: General Manager Liu, we know that everything has two sides. Besides so many benefits brought for Lianyungang New Oriental Container Terminal Company, does the cooperation with China Shipping have any negative influences and risks? If so, what are the main aspects?

General Manager Liu: This question is very sensitive, and is very difficult for me to answer it as the general manager of the company. Anyway, I will try to reply it, but I don't want it to be reported for fear of any misunderstanding and troubles.

Wei Yizhou: Thank you very much, General Manager Liu. This is just for academic research, so just set your heart at rest.

General Manager Liu: As you said, everything has positive and negative sides, and there is no absolutely good or bad thing in the world. Similarly, the cooperation between ports and shipping companies, including that between Lianyungang Port and China Shipping, has its beneficial and unbeneficial sides, and even potential risks. Of course, to see from the current situations, the problems are not highlighted, and unbeneficial influences have not shown obviously, since potential risks are potential after all, but not inevitable. It is certainly necessary for me to understand these problems as a leader of the company. As for me, the unbeneficial influences mainly include the following several aspects: (1) Part of profit will be got by China Shipping based on the share proportion after all, causing a bit of loss in profit, however, it is of trifling importance compared with the investment; (2) Development of shipping line and schedule by other shipping companies will be influenced to a certain extent. Especially, there will be greater influence on the medium-and-small-scale companies. It is because they cannot enjoy the equivalent preferential treatment as China Shipping. Moreover, China Shipping is the share-holding party; (3) Other large-scale shipping companies will be influenced regarding turning into joint venture. It is scarcely possible in short term. The newly established 5 appropriate berths, which have been invested by China Shipping, are the examples. COSCO (Group) Company

visited here to survey for many times, anyway, the intention in investment has not come into being so far. (4) The supporting facilities cannot keep up with the pace of the development of wharf during a short term. China Shipping attaches importance to the investment and construction of berth in wharf, while has less enthusiasm in investment of the supporting facilities, such as back-up yard, freight condition, facilities of port inspection entity and electronic platform, etc. Besides, the port party is in lack of capital, leading to large wharf with small support and accordingly the wharf without integrated capability. It may become a little more prominent after the five new berths are established. (5) The potential risk such as bailout and capital withdraw by China Shipping may exist. After all, China Shipping is a shipping company, which primarily engages in shipping industry. In case of toughness in operation, caused by stagnant market, it is likely to reduce investment in wharf so as to guarantee shipping. It is indicated by the case that COSCO (Group) Company bailed out from Taicang Port several years ago. However, once China Shipping decides to bail out, it is difficult to find the fund reliever in a short period. Therefore, the negative influence will be brought to development of Lianyungang New Oriental Container Terminal Company.

5. Wei Yizhou: General Manager Liu, as you know, cooperation between ports and shipping companies will be a global development trend. Lianyungang jumps on the bandwagon and decides to cooperate with the shipping leader China Shipping. It is undoubtedly a so reasonable decision, and also a correct decision already proved in practice. As everyone indulges in hurrah and is intoxicated by the achievement from cooperation, as the General Manager assigned from Lianyungang port, it's uncommon to foresee the existing problems and potential risks in cooperation with China Shipping clearly, again, it shows that General Manager Liu always has a strategic vision and has far-reaching thoughts on development of New Oriental Container Terminal Company. So General Manager Liu, encountering the advantages, problems as well as existing potential risks in cooperation with China Shipping, would you like to talk about what strategies of development should be taken?

General Manager Liu: in order to lower the impact of these problems and prevent potential risks, efforts should be made to engage in multi cooperation and form core competence. First, in the field of cooperation, we will not be limited by the shipping companies and will seek cooperation with other ports, such as Dafeng Port. Thus Dafeng Port will be enabled to develop to the feed Lianyungang port. Besides, we will also seek cooperation with the freighter for construction of storage yard and depository, etc. and will cooperate with hinterland government for construction of berths in joint venture wharf as well as cooperate with railway for railway-shipping combined transport, etc. Second, the means of cooperation should be diversified, but not limited to joint venture. We may build berths of owner's wharf and adopt the ways such as line chartering, etc. for cooperation with shipping companies. Third, China Shipping is not the only shipping company that we will cooperate with. For the further cooperation business, we will seek another national or international shipping leader as the partner as best as we can. Fourth, the means of cooperation will be diversified, but not limited to share holding by the shipping company, or alternatively, share would be hold by the port party as far as possible from now on. It will manifest communal of the port much better. Fifth, it is a distinctive advantage to build up the core competence, as well as enhancing the non-copy ability. It mainly includes: (1) rise of the water depth in dredging navigation channel; (2) establishment of cargo canvassing dense network; (3) resolve of non-support problems in collection, distribution and transportation as soon as possible; (4) establishment and continuous perfection of coordination operation mechanism of units associated with ports, so as to relieve the disputes and internal consumption; (5) speeding up in construction and perfection of EDI.

Wei Yizhou: General Manager Liu, thank you very much for sparing time from busy work to accept my interview. I wish and believe that Lianyungang New Oriental Container Terminal Company could develop in a quicker and better way.