



저작자표시-비영리-변경금지 2.0 대한민국

이용자는 아래의 조건을 따르는 경우에 한하여 자유롭게

- 이 저작물을 복제, 배포, 전송, 전시, 공연 및 방송할 수 있습니다.

다음과 같은 조건을 따라야 합니다:



저작자표시. 귀하는 원저작자를 표시하여야 합니다.



비영리. 귀하는 이 저작물을 영리 목적으로 이용할 수 없습니다.



변경금지. 귀하는 이 저작물을 개작, 변형 또는 가공할 수 없습니다.

- 귀하는, 이 저작물의 재이용이나 배포의 경우, 이 저작물에 적용된 이용허락조건을 명확하게 나타내어야 합니다.
- 저작권자로부터 별도의 허가를 받으면 이러한 조건들은 적용되지 않습니다.

저작권법에 따른 이용자의 권리는 위의 내용에 의하여 영향을 받지 않습니다.

이것은 [이용허락규약\(Legal Code\)](#)을 이해하기 쉽게 요약한 것입니다.

[Disclaimer](#)

**The Perception of the Effectiveness of Thai Government's
Shipping Policies and Measures on National Merchant
Fleet Development by Thai Shipping Companies**

Supervisor: Professor Lee Ki-Hwan

By

Supaporn Bungburapasakul

A thesis submitted in partial fulfillment of the requirements for
the degree of Master of Business Administration

Graduate School of Korea Maritime University
Department of Shipping Management

August 2012

APPROVAL PAGE

This dissertation, which is an original work undertaken by Supaporn Bungburapasakul in partial fulfillment of the requirements for the degree of Master of Business Administration in the Department of Shipping Management, is in accordance with the regulations governing the preparation and presentation of dissertations at the Graduate School in the Korea Maritime University, Republic of Korea.

Approved by the Dissertation Committee:

Professor Shin, Han-Won
Chairman



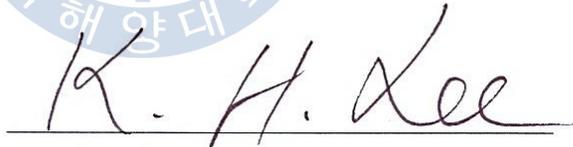
A handwritten signature in black ink, appearing to read 'Shin Han-Won', written over a horizontal line.

Professor Park, Sang-Kab
Member



A handwritten signature in black ink, appearing to read 'S. Park', written over a horizontal line.

Professor Lee, Ki-Hwan
Member



A handwritten signature in black ink, appearing to read 'K. H. Lee', written over a horizontal line.

June 2012

초록

태국은 자국의 경제성장과 국가경쟁력 확보를 위하여 해상운송의 중요성을 인식하고 해양국가로의 발전을 도모하고 있으며, 이러한 발전을 위하여 태국정부는 전세계에서 해운업을 영위하는 자국의 상선대 육성을 위한 각종 해운정책을 수립·실시해 오고 있다. 본 연구의 목적은 태국정부의 해운정책이 상선대 확대에 미친 영향을 평가함과 아울러 해운정책이 자국 상선대 확장에 저해되는 문제점과 장애물이 무엇인지도 분석하였다.

본 연구는 태국 해운정책을 평가하기에 적합한 19개 해운기업을 대상으로 온라인 설문조사를 실시하여 총 32부의 설문지를 수거하였으며, 기업의 내부자료를 활용하여 추가 정보를 확보하였다. 최근 태국은 총 12 종류의 해운정책이 시행되고 있으며, 34개의 정책을 검토 중에 있다. 해운정책 시행이 주는 혜택이 무엇인지를 재정지원, 조세혜택, 마케팅, 해상인력, 법률제정과 정부 행정/운영 6가지 분야로 분류하여 각 분야별 효과를 실증분석하였다. 실증분석을 통해 조세혜택과 투자촉진이 해운정책에 가장 큰 도움이 되는 정책으로 밝혀졌으며, 법률제정, 해기인력양성, 재정지원 등도 효과가 높은 것으로 나타났다. 반면 정부의 행정/운영이 태국 상선대 확장의 저해 요인이자 장애물이며, 이 문제의 해결을 위하여 민간부분이 정부와 긴밀한 협조 관계를 가지면서 해운정책의 시행과 결정에서 중심적인 역할을 수행해야 할 것으로 여겨진다.

그러나 최근에 효율적이고 강력한 혜택을 제공하는 해운정책이 부족한 것으로 논의되고 있다. 태국 정부는 글로벌 시장에서 자국 상선대의 번영을 위하여 효과적인 해운정책을 개발, 유지하여야 한다. 이 논문에서 밝힌 적절한 해운정책과 문제점 해결을 위한 제안은 추후 태국 정부의 해운정책 수립에 활용될 것이라 여겨진다.

ABSTRACT

Thailand, which is a developing maritime country, recognizes the importance of sea transportation as a key to pushing forward economically and to enhancing competitiveness. Shipping policy is one of the important tools of government to support the national merchant fleet to all countries. Similarly, Thailand's government enacted some shipping-friendly measures to help the shipping industry for the expansion of its own merchant fleet. The purpose of this study is to evaluate the existing and proposed government measures as well as identify the key problems and obstacles impeding the development of the Thai merchant fleet.

The study has been carried out by using online survey method to managers of Thai shipping companies, who were directly affected by these policies. It is thought that they were the most appropriate target group to provide useful evaluative opinions on Thai shipping policies and measures. Primary data was obtained from thirty-two managers of nineteen shipping companies and relevant information was gathered from official documents.

Presently, there are twelve existing government measures and thirty-four proposed measures regarding Thai shipping industry. The problems and obstacles are related to six areas; financial support, tax incentives, marketing, maritime personnel, legislation, and government administration and operations. The result of this research showed that tax incentives and investment promotion are evaluated as the most effective measure of existing government measures, and that especially tax incentive measures should be continued. Nevertheless, legislation, maritime personnel, financial support, and other measures are also important areas which the government should remedy as well. In essence, government administration and operation are considered as the main problems to the development of Thai merchant fleet. In order to resolve this problem, the private sector has to play a pivotal role in formulating and implementing shipping policy through close cooperation with the government.

There is not currently any measure which is very effective or strongly agreed upon at all. Thai government should, therefore, maintain and continue in effective measures to ameliorate through moderately effective measures in order to reinforce Thai merchant fleet in the global market. The recommendation of appropriate government measures and problem-solving presented in this research will lead to necessary further action that the government should take. Please note that this study is only restricted to the perspective of Thai ship operators.



ACKNOWLEDGEMENTS

First of all, I am extremely grateful for the wisdom and guidance of my supervisor, Professor Lee, Ki-Hwan, who has supported me throughout my coursework. I would like to thank Professor Shin, Han-Won and Park, Sang-Kab who examined my thesis. I would also like to say a special thanks to Professor Ryoo, Dong-Keun for his guidance through my study. The completion of this thesis would not have been possible without the encouragement and generous support from my family, all staff at Shipping Department of Korea Maritime University and many foreign friends. I convey my deepest gratitude and appreciation to all of them in both Korea and Thailand.

I extend my appreciation to all senior managers of the Thai shipping companies who responded to the online survey questionnaire so nicely, including the Thai government officials who gave much useful information, and others who contributed supporting knowledge, experience and recommendation.

In essence, I would like to especially thank the Ministry of Land, Transport, and Maritime Affairs (MLTM) of the Republic of Korea for the scholarship awarded to me. This scholarship gave me a wonderful opportunity to study at Korea Maritime University.

Lastly, I would like to dedicate this thesis to my beloved parents and elder brother for their love, encouragement and support while I was far away from home.

Thanks be to God almighty, who in His mercy has numerously blessed me in my life for studying, good health and bringing this work to completion.

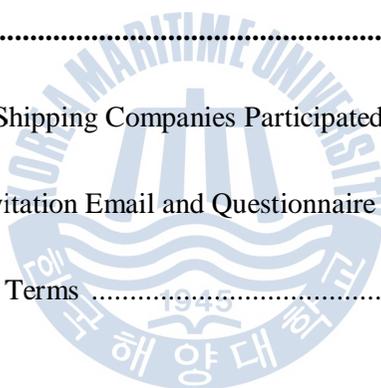
TABLE OF CONTENTS

APPROVAL PAGE	i
초록	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	v
TABLE OF CONTENTS	vi
LIST OF TABLES	x
LIST OF FIGURES	xi
CHAPTER 1 INTRODUCTION	1
1.1 Background	1
1.2 Purpose of the Study	6
1.3 Significance and Scope of the Study	7
CHAPTER 2 AN OVERVIEW OF THAI SHIPPING INDUSTRY AND GOVERNMENT SHIPPING POLICY	9
2.1 Thai Merchant Fleet	9
2.1.1 <i>Current Situation</i>	9
2.1.2 <i>Maritime Promotion Bureau of Marine Department</i>	13
2.1.3 <i>Thai Shipowners' Association</i>	15

2.2 The Evolution of Thai Merchant Fleet	16
2.2.1 <i>Previous Development Plans of Thai Merchant Fleet</i>	19
2.3 The Government's Shipping Policies and Measures	20
2.3.1 <i>The Existing Shipping Policies and Measures</i>	22
2.3.2 <i>The Proposed Shipping Policies and Measures</i>	26
2.4 The Problems and Obstacles to the Development of Thai Merchant Fleet	29
CHAPTER 3 LITERATURE REVIEW	37
3.1 An Introduction to Shipping Policy	37
3.1.1 <i>Background to Shipping Policy</i>	37
3.1.2 <i>Definitions of Shipping Policy</i>	38
3.2 Literature Review of Existing Studies on Shipping Policy	41
3.3 Strategic Approaches to Shipping Policy	47
3.3.1 <i>Protectionist Approach</i>	47
3.3.2 <i>Liberal Approach</i>	48
3.4 Experience on Shipping Policy in Foreign Countries	49
3.4.1 <i>The Republic of Korea's Experience</i>	50
3.4.2 <i>China's Experience</i>	54
3.4.3 <i>UK's Experience</i>	58

3.4.4 Philippines's Experience	59
CHAPTER 4 RESEARCH METHODOLOGY	62
4.1 Research Design	62
4.2 Participants	63
4.3 Research Instrument	64
4.4 Data Collection	65
4.5 Data Processing	66
4.6 Data Analysis and Statistic for Data Analysis	66
CHAPTER 5 ANALYSIS RESULTS AND IMPLICATION	67
5.1 Effectiveness of the Existing Government Measures	67
5.2 Agreement of the Proposed Government Measures	70
5.3 Importance of the Problems and Obstacles	74
5.4 Findings and Discussion	79
5.4.1 Financial Support Area	79
5.4.2 Tax Incentives Area	82
5.4.3 Marketing Area	83
5.4.4 Maritime Personnel Area	84
5.4.5 Legislation Area	86

5.4.6 Government Administration and Operation Area	88
5.5 Implication	90
CHAPTER 6 CONCLUSION	93
6.1 Conclusions	93
6.2 Limitations and Further Research	96
REFERENCES	98
APPENDICES	105
Appendix A: List of Thai Shipping Companies Participated for Study	105
Appendix B: A Survey Invitation Email and Questionnaire	106
Appendix C: Definition of Terms	115



LIST OF TABLES

Table 2-1: Thai Merchant Fleet Statistic between 2002 and 2011	9
Table 2-2: The Amount and Capacity (DWT) based on Age of Thai Merchant Fleet..	11
Table 2-3: Taxation Comparison between Thailand and Singapore	33
Table 5-1: Effectiveness of the Existing Government Measures	67
Table 5-2: Ranking of Effectiveness of Existing Government Measures	69
Table 5-3: Agreement of the Proposed Government Measures	70
Table 5-4: Ranking of Agreement of Proposed Government Measures	74
Table 5-5: The Problems and Obstacles in Financial Support	75
Table 5-6: The Problems and Obstacles in Tax Incentives	76
Table 5-7: The Problems and Obstacles in Marketing	76
Table 5-8: The Problems and Obstacles in Developing Maritime Personnel	77
Table 5-9: The Problems and Obstacles on Legislation	78
Table 5-10: The Problems and Obstacles on Government Administration	78
Table 5-11: Ranking of Problems and Obstacles by Area	79

LIST OF FIGURES

Figure 2-1: Total Deadweight Tonnage of the Thai Merchant Fleet	10
Figure 2-2: Proportion of Type of Thai Merchant Fleet based on DWT.....	11
Figure 2-3: Thai Merchant Fleet and World Total by Number of Vessels	12
Figure 2-4: Thai Merchant Fleet and World Total by Deadweight Tonnage	13
Figure 2-5: 6 Strategies on Maritime Development in Thailand	23
Figure 3-1: Framework for the Development of National Shipping Policies.....	40



Chapter 1

Introduction

1.1 Background

International trade is a significant key to Thailand's economic growth. Transport system, particularly, is an important factor contributing to international trade development. It is an inevitable fact that over 90 percent of world trade is carried on by sea because water transportation is capable of handling a larger volume on a long haul with the cheapest cost than all other different types of transportation. Import-export statistics of Thai Ministry of Transport show that more than 90 percent of import and export of Thailand is also transported by sea as the major transportation mode.

The recent increased international trade volume of Thailand has caused an increasing demand for maritime transport services. International shipping in Thailand is open to both Thai and foreign maritime transport operators. Nevertheless, many of the preceding studies on shipping industry indicate that Thai maritime transportation business has not grown at the same increasing rate of the value and the volume of the international trade. In addition, it is found that the imbalance between supply and demand for shipping is a crucial problem which impedes the economic growth due to the fact that most goods are carried by foreign ship operators. Although the demand for shipping has increased, the Thai merchant fleet still has only a small transport share compared to the foreign merchant fleet. Part of this problem arises from the current situation which the size of the Thai national merchant fleet is very small compared to the volume of goods to be traded with foreign countries. This means that Thailand transferred an immense income of transportation to foreign companies and also loses the opportunity to take that money back for developing their national merchant fleet to be equal with neighbor countries in the same region or world-class. At present, the Thai merchant fleet has only a 10 percent share of the cargo-by-sea import and export volume of the country. Thailand, therefore, has to pay not less than US

\$17 billion foreign currency for freight cost to overseas fleets each year (Thai Marine Department, 2010).

For this reason, the Thai government realizes the importance of sea transportation as a key to pushing economic growth forward. Shipping development is, therefore, one of the important factors in the trade and economic development in Thailand and is also recognized as a critical infrastructure for national development. Many countries have the ambition to be substantial maritime nations, so they place great strategic importance on their national shipping industry because it plays a vital role developing economy in their countries. The term “maritime policy” might be perceived as any decision that could have influence on the future development of maritime activities. In practice, maritime policy will be mainly related to investment decisions aimed at expanding the maritime sector in some form or another (Haezendonck and Winkelmanns 2002). The developed maritime countries invest time and resources to formulate comprehensive shipping policies and strategies. Such policies provide guidance to the shipping industry in the development of business strategies and long term plans. Many countries have reviewed and assessed their government maritime policies and measures for expanding the national merchant fleet.

Each country has to work out its policies in the overall context of national economic objectives and its shipping potential. A study of the maritime operations of successful neighbor countries could affect domestic maritime development. Nevertheless, the policy that works in one country may not necessarily work in the same way, or be as successful, elsewhere (OECD 2012). In other words, a policy that is appropriate for one country may not be appropriate for another. Therefore, the perspective of Thai ship operators is expected to be a useful way for formulating strategy toward shipping policy and can eventually push forward the expansion of the national merchant fleet.

For a long time, Thai government has paid attention to promoting and developing their national merchant fleet that could compete with foreign merchant fleets and also reduce the country’s current account deficit. For these reasons, maritime development was contained for the first time in the Fourth National Economic and Social Development Plan

(1977-1981), later in the Eighth National Economic and Social Development Plan (1997-2001) and lastly in the Tenth National Economic and Social Development Plan (2007-2011). Apparently aimed at Thai merchant fleet development, both in quantity and quality, this is demonstrating that the government sector has the plan to promote its national merchant fleet for 35 years, a very long time. The government in each period attempts to activate Thai maritime business by increasing merchant ships in the Thai fleet in order to raise capability in ocean cargo transportation. In addition, it can also reduce pressures on the current account deficit.

Over the past several years, the Thai government implemented many policies and measures for the development of the Thai merchant fleet as follows:

- Financial Policy is one of the measures promoting Thai maritime business, that is to say, finding sources of investment funds and soft loans at low interest rates by means of establishing maritime credit projects. To meet the government policy, The Export-Import Bank of Thailand (EXIM Bank), boosting organization the value of Thailand's international trade, recently accelerated its lending to Thai maritime businesses by setting a merchant marine loan target of 18 billion baht to be provided directly by the Bank and with other financial institutions within three years (2010-2012).
- Fiscal Policy is one of important measures on which the government places importance and adoption in order to motivate an expansion of the Thai merchant fleet by means of tax reduction and other tax exemptions to cut operating down. An example of tax regime measure is the on-and-off 30% corporate tax exemption measure.
- Legal Policy refers to the measures which the government revisions to law and regulation which are trouble to maritime business and upgrading maritime manpower in order to solve a shortage problem of seafarers. For example, the

enactment of the Carriage of Goods by Sea Act B.E. 2534 (1991). However, the Thai government does not currently implement any measure in the legislation area.

- Cargo Reservation Measure was announced around 1983-1984, stipulating that the government, its agencies and private sectors who sell goods to government and its agencies on specific routes, must ship their goods on Thai ships. However, prior to the announcement of the measure, there were Cabinet resolutions in 1980 and 1982 stating that if the government or its agencies wanted to import cargo, they must use the transportation service from one of the state enterprises which are (at that time) Thai Maritime Navigation Co., Ltd., the Express Transportation Organization of Thailand and Unithai (the major share holders were Thai Maritime Navigation, Jutha Maritime and TIME Line). The cargo reservation scheme was a marketing measure initiated by the Thai government to support the national merchant fleet.

The government has strongly attempted to develop the capacity and potential of the national merchant fleet, keeping up with neighbor countries. For example, fiscal support measures can be related to the acquisition of tonnage and to the operation of such tonnage. While financing schemes assist national shipowners to increase and upgrade their tonnage, favourable taxation and depreciation schemes would assist national fleets to become much more competitive.

However, the support from the government in the past was discontinued and insufficient, such as a financial measure that was recently set after the financial crisis in 1997. An example of tax regime measure is the Thai government's on-and-off 30% corporate tax exemption measure, whereas companies registered in Singapore do not have to pay this tax. The last measure was law and regulations; the enactment of the Carriage of Goods by Sea Act B.E. 2534 (1991). Before the act was drawn, the period of prosecution was 10 years, whereas international laws limited the period to a maximum of only one or two years. Besides, carriers had a liability for the whole value of cargo, whereas the international law, Hague-Visby Rules, prescribed the liability limitation but with

conditions such as loss or damage arising or resulting from perils of the sea and due diligence, etc. including other outdated law. When state laws are ambiguous or put on hold indefinitely, it is too difficult for business owners to set their long-term plans (Thai Shipowners' Association 2008).

The expectation in maritime development is the supporting part of international trade and enhances the competitive capacity of Thailand in the future. According to strategic plan on maritime development of Marine Department 2009, Thai government recognized the problems and formulated 6 strategies for maritime development as follows:

- (1) Strategy to increase the maritime transportation market share by Thai fleet.
- (2) Strategy to promote coastal and river transportation.
- (3) Strategy to develop shipyards to support an expansion of national fleets and strengthen security of the country.
- (4) Strategy to develop a port to promote trades and multi-modal transportation in accordance and suitable with demands.
- (5) Strategy to develop and sufficiently upgrade the standard of seafarers.
- (6) Strategy to promote the strength of operators who run international transportation business, and to develop an integrated network linkage of multimodal transport business.

As mentioned above, this shows that the development of Thai maritime fleet is one of the main strategies to increase the portion of sea transport by the national fleet through expanding service routes and the size of the national fleet to obtain more gross tonnage as well as portion in sea transport including the creation of a fair freight.

According to Review of Maritime Transport 2010 (UNCTAD), the international shipping industry has fallen because of the economic recession in 2008. The year 2009 had the sharpest decline in the volume of global merchandise trade and was also a depressing year for freight rates in the tanker, major dry bulk as well as liner sectors. This is largely due to the contraction in global trade which has lead to an abrupt reduction in the demand for

shipping but also the increase in the number of new ships that have recently entered the market. These new ships were ordered in more profitable times and are now flooding an already oversupplied market, especially, in the tanker sector. For this reason, the perspective of Thai ship operators for their own fleet's expansion might change depending on important factors such as current state of economy, government's promotional policy, any risks and so on. Such a changed situation absolutely has an impact on Thai ship operators. For example, an increase in tonnage dramatically depresses freight rates combined with inflated operational costs, particularly with the high cost of fuel, and this can lead to cash flow and liquidity problems for ship owners. The main impact on the shipowners is a reduction in the availability of finance due to falling ship values. And the falling of charter rates led them to default of loans as covenants. These are the sum of the problems and obstacles which impede the investment decisions of shipowners in creating the capacity of transport services more than Thai merchant fleet expansion.

A national shipping fleet that is internationally competitive would contribute to the long-term stability and efficiency of shipping services and trade including economic promotion. That is why the existing policies and measures need to be examined so as to determine the key problems and obstacles, before laying down any new policies and measures to improve the national merchant fleet. Therefore, the researcher is interested in studying the perspective of Thai ship operators for the existing and proposed shipping policies which would have an impact on the expansion of Thai merchant fleet. Thai ship operators who are directly affected by the policies are the most appropriate target group to provide useful opinions on Thai shipping policies and measures.

1.2 Purpose of the Study

The purpose of this study is to examine the situation of Thailand's own national merchant fleet, assessment of government's shipping policies and measures including determination of current problems and obstacles for the development of Thai merchant fleet by Thai shipping companies. This study is divided into 3 parts. Part 1 is the evaluating of the

effectiveness of the existing shipping policies and measures which have been implemented. Part 2 is the evaluating of the agreement on government's proposed shipping policies and measures which might be used in the future according to strategic plan on maritime development concerned with increasing in shipping proportion by the national merchant fleet. Many problems and obstacles to Thai merchant fleet development impeded the progress of the shipping industry in Thailand. Therefore, Part 3 is the evaluating the importance of the key problems and obstacles which hinder to the development of Thai merchant fleet as well as to inquire some comments and suggestions concerning government's shipping policies in order to propose the useful way for solving problems efficiently. In the arena of Thai shipping industry, the operators' recommendations are expected to go towards formulating of appropriate shipping policies before promulgating any new shipping policies and lead to necessary further action that the government should take.

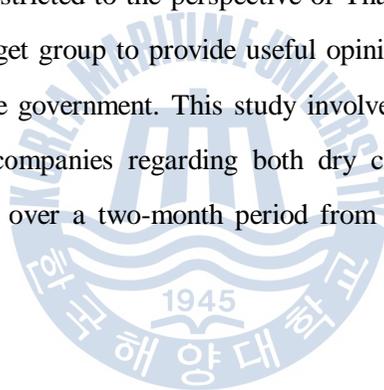
In addition, the experiences in foreign countries may provide a good starting point for the development and implementation of shipping policies and measures. Thus, an examination the maritime operations both of successful and unsuccessful neighboring countries would be also beneficial as findings are applied to the consideration of the strategic plan proposal on maritime development in Thailand.

1.3 Significance and Scope of the Study

In the past, there were many studies about government shipping policies in Thailand. However, there is no study pertaining to the effectiveness of the existing shipping policies and measures at present to managers of Thai shipping companies including their perspective for the proposed shipping policies and measures which might be used in the future. The problems and obstacles which had impeded the maritime development have been investigated as well. Appropriate policies and measures could then be recommended.

This is the main point of a study on the development of Thai merchant fleet which would increase capability competing with neighbor countries' merchant fleets regionally and worldwide. Therefore, this study would be an advantage to the Thai government because it could clearly provide the recommendations on appropriate shipping policy and measures from the perspective of Thai ship operators affecting the expansion of the Thai merchant fleet. By understanding what Thai ship operators desire the government to improve policies and measures which are being used or will be used, it would be substantially more beneficial to economic growth and international trade. Moreover, the research result is expected to be useful for supporting an attempt of the Thai government which will develop national merchant fleet in the future.

The scope of this study is restricted to the perspective of Thai ship operators because they are the most appropriate target group to provide useful opinions on Thai shipping policies and measures planned by the government. This study involved data collection from online questionnaires to shipping companies regarding both dry cargo vessels and liquid bulk carriers. Data was collected over a two-month period from early February to the end of March 2012.



Chapter 2

An Overview of Thai Shipping Industry and Government Shipping Policy

2.1 Thai Merchant Fleet

2.1.1 Current Situation

Thailand's international seaborne trade has been increasing steadily and rapidly, particularly during the past decade. For this reason, Thai merchant fleet tonnage has continuously grown year by year. As shown in Table 2-1, Maritime Promotion Bureau of Marine department has published statistical data on Thai merchant fleet from 2002 to 2011.

Table 2-1: Thai Merchant Fleet Statistic between 2002 and 2011

Year	Dry Cargo Vessel		Liquid Bulk Carrier		Total		Growth Rate
	Ships	DWT	Ships	DWT	Ships	DWT	
2002	180	2,431,000	143	406,000	323	2,837,000	23.7
2003	165	2,531,310	139	542,794	304	3,074,104	8.4
2004	184	3,138,659	145	536,571	329	3,675,230	19.6
2005	201	3,422,495	158	528,998	359	3,951,493	7.5
2006	178	3,156,439	176	552,248	354	3,708,687	-6.1
2007	169	2,985,169	178	547,290	347	3,532,459	-4.8
2008	233	3,255,691	249	724,623	482	3,980,314	12.7
2009	207	2,603,200	270	1,096,764	477	3,699,964	-7.0
2010	198	2,389,963	285	2,051,268	483	4,441,231	20.0
2011	185	2,221,150	287	2,124,171	472	4,345,321	-2.2

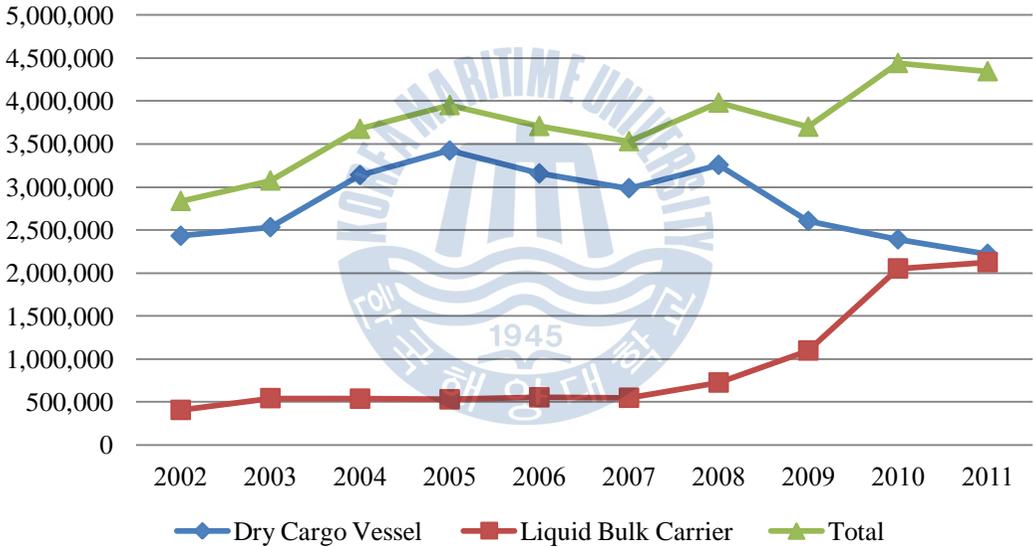
Notes: Based on ships of more than 500 Gross Tonnage, as of end of December 2011

Source: Ship Registration Division, Marine Department and Thai Shipping Companies

Gathered by: Maritime Promotion Bureau, Marine Department

Thai merchant fleet can be divided into 2 main groups as follows: 1) Dry cargo vessel consists of general cargo vessel, bulk carrier and container ship; 2) Liquid bulk carrier consists of tanker, gas carrier and chemical carrier. In 2011, among 472 ships, they are classified into dry cargo vessel 185 ships and liquid bulk carrier 287 ships. There were total of deadweight tonnage 4,345,321. Notice that the amount of Thai merchant fleet grows year by year, in particular liquid bulk carriers, as shown in Figure 2-1. Nevertheless, the growth rate of Thai merchant fleet in 2011 decreased around 2.2 percentages compared to the previous year.

Figure 2-1: Total Deadweight Tonnage of the Thai Merchant Fleet (end-of-year figures)



Notes: Based on ships of more than 500 Gross Tonnage, as of end of December 2011

Source: Ship Registration Division, Marine Department and Thai Shipping Companies

Gathered by: Maritime Promotion Bureau, Marine Department

As shown in Table 2-2, Thai merchant fleet between the ages of 15 and 19 years old amounts 1,268,970 DWT or 29.20 percentages. Secondly, the ships between the ages of 20 and 24 years old amount 1,028,710 DWT or 23.67 percentages. The amount of ships of less than 5 years old is 168,290 DWT or 3.87 percentages.

Table 2-2: The Amount and Capacity (DWT) based on Age of Thai Merchant Fleet (2011)

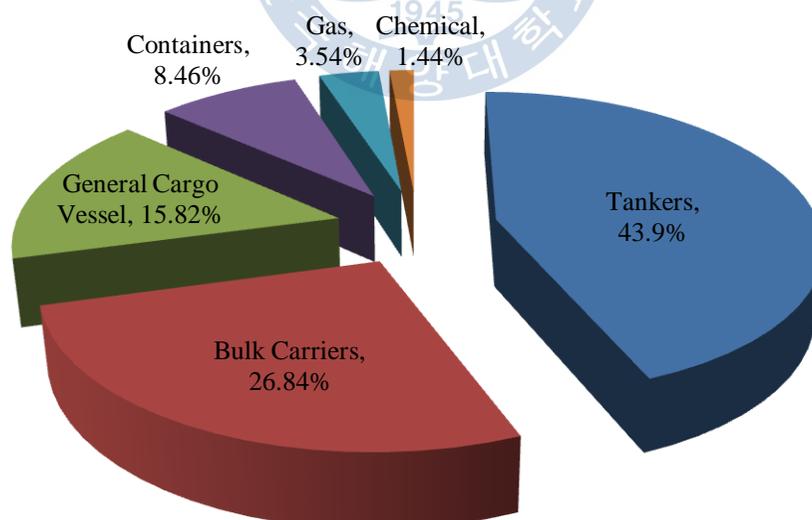
Age (year)	Dry Cargo Vessel		Liquid Bulk Carrier		Total		% of DWT
	Ships	DWT	Ships	DWT	Ships	DWT	
<5	11	134,213	6	34,077	17	168,290	3.87
5-9	14	320,072	5	21,675	19	341,747	7.86
10-14	20	357,586	6	24,586	26	382,172	8.80
15-19	28	493,378	41	775,592	69	1,268,970	29.20
20-24	14	145,162	60	883,549	74	1,028,710	23.67
25-29	23	324,501	52	138,705	75	463,206	10.66
>=30	75	446,240	117	245,986	192	692,226	15.93
Total	185	2,221,150	287	2,124,171	472	4,345,321	100.00

Notes: Based on ships of more than 500 Gross Tonnage, as of end of December 2011

Source: Ship Registration Division, Marine Department and Thai Shipping Company

Gathered by: Maritime Promotion Bureau, Marine Department

Figure 2-2: Proportion of Type of Thai Merchant Fleet based on Deadweight Tonnage



Notes: Based on ships of more than 500 Gross Tonnage, as of end of December 2011

Source: Ship Registration Division, Marine Department and Thai Shipping Company

Gathered by: Maritime Promotion Bureau, Marine Department

At the end of December 2011, dry cargo vessels consist of container ships (8.46%), Bulk carriers (26.84%) and general cargo vessels (15.82%). Liquid bulk carriers consist of 43.9% of tankers, 3.54% of Gas carriers and 1.44% of Chemical carriers. As shown in Figure 2-2, tankers have currently highest ratio of deadweight tonnage in Thai merchant fleet.

According to UNCTAD’s Review of Maritime Transport 2011, the 35 countries controlled fleets. Percentage of Thai merchant fleet is 0.86% with the rank of 33th shows 0.33% as shown in Figure 2-3 and 2-4. This means that Thai merchant fleet is small size compared to the world merchant fleet as well as the neighboring countries in ASEAN, such as Singapore (rank 7), Indonesia (rank 22), Malaysia (rank 24), Philippines (rank 29) and Vietnam (rank 32). As compared to world fleet, proportion of Thai merchant fleet is regarded as very small. For this reason, a large proportion of Thailand’s seaborne trade volume is still relying heavily on foreign shipping services.

Figure 2-3: Thai Merchant Fleet and World Total by Number of Vessels

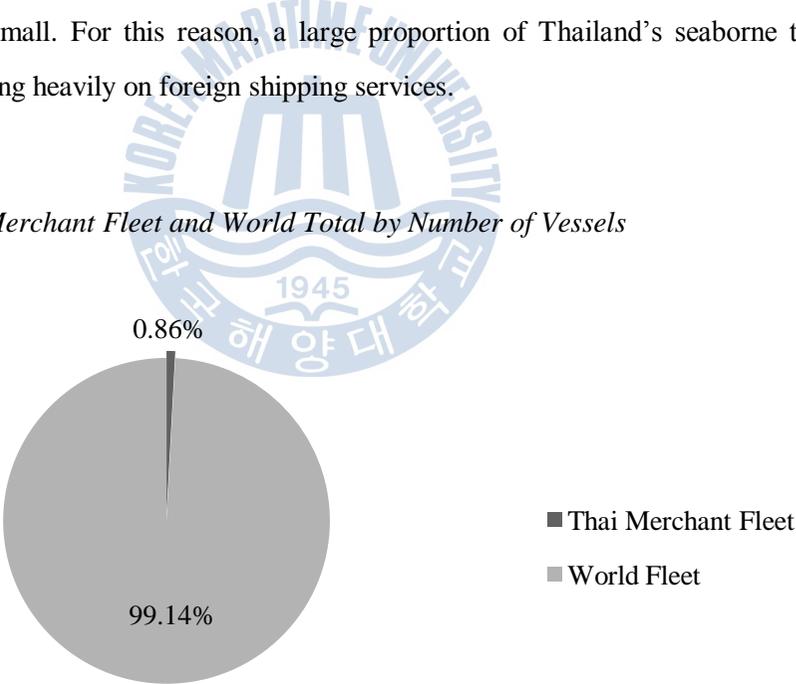
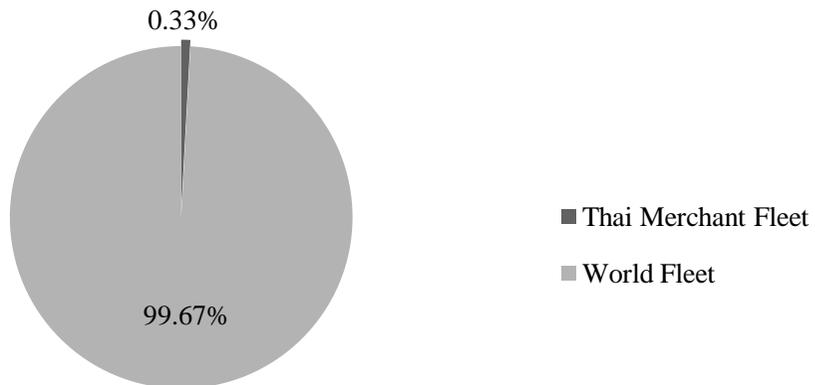


Figure 2-4: Thai Merchant Fleet and World Total by Deadweight Tonnage



2.1.2 Maritime Promotion Bureau of Marine Department

Marine Department is a government authority under the Ministry of Transport. To keep up with the country's economic and social development, the Marine Department's tasks are to keep up with the development of the country and the needs of the people. This is especially so in the promotion of waterway transport system development and maritime trading in order to get connected with other means of transport including the transportation of people and freight. Ship building, the development of port and Thai merchant fleets and various related activities are being promoted so as to provide convenience, safety, and prompt service. The Department also supports Thailand's export sector to grow in strength, increasing its potential and competitiveness in the world market.

The Department's vision and mission, as a result, follow the mainstream development of the country. The Department has therefore divided its mission into 4 main areas:

Regarding water transport, the Department has responsibility to:

- Dredge and maintain the condition of waterways to facilitate transport of goods, passengers and promote tourism.
- Build river and canal bank protection and also coastline protection against erosion.

- Oversee ship inspection and registration.
- Control domestic and international waterway traffic to ensure convenience and safety.
- Issue permission to construct ports and oversee the management of ports regarding transport of goods, passengers and services related to tourism.
- Develop and oversee the pilotage within the port limits to ensure safety of navigation.

Regarding maritime trading, the Department has responsibility to:

- Promote the transport of goods by sea to ensure safety, economy and operation cost reduction including the reduction of work procedures as well as the provision of a one-stop service.
- Promote businesses related to maritime industry i.e. port operation, ship building and sea transport services so as to achieve the highest efficiency.
- Produce qualified human resources in the field of maritime trade, through the Merchant Marine Training Centre as well as cooperating with government and private agencies to develop maritime human resources.

Regarding the promotion of water tourism:

- To promote water tourism on major rivers, and sea tourism, the Department has constructed ports and piers at tourist attraction sites, as well as providing standardized services and safety standards.

Regarding the protection of marine environment:

- To control of the dumping of waste into rivers and seas, the encroachment of buildings over and along waterways, as well as the cleaning of oil spillages. The Department is effectively tackling these problems and preventing adverse effects on the shore ecology.

To achieve its crucial mission and targets, the Marine Department must have a well-oiled mechanism. This mechanism comprises several units within the organization, namely: Office of the Secretary, Finance Division, Ship Standard Bureau, Ship Registration Division, Legal Bureau, Pilot Division, Technical and Planning Division, International Affairs Division, Merchant Marine Training Centre, Marine Safety and Environment Bureau, Channel Development and Maintenance Bureau, which comprises 8 development and maintenance centers in every region of the country. Besides these, there are Maritime Promotion Bureau, Survey and Engineering Bureau and Marine Offices 1-7, along with 40 branches nationwide. However, every part of the mechanism must work together in harmony to achieve its mission. Moreover, the environment must be well-managed and water transport routes and connections need to be suitable. This will help increase the potential in trade competitiveness and services, which will eventually lead to the improvement of the people's quality of life.

Maritime Promotion Bureau (MPB) is a part of Marine Department, the Ministry of Transport which has three importance duties which are (1) developing and supporting marine business, (2) controlling and coordinating marine business, and operation, (3) MPB is also in charge of formulating maritime policies and identifying maritime policy problems in order to keep maritime measure, maritime education school, maritime certification, smooth cooperation with other department, (4) facilitating the implementation of such policies and measures approved previously, and MPB continuously supports the national maritime transport. In the past, there are many successful measures such as tax incentives, financial incentives, Thai vessel measure, coastal transport measure, port measure and shipyard measure.

2.1.3 Thai Shipowners' Association

The Thai Shipowners' Association (TSA) was founded on 7 October 1975. It is a non-profit organization dedicated to the protection and promotion of the interest of its members in shipping and related businesses. The objectives of TSA are:

1. To develop and promote marine transportation, both domestic and international navigation as well as resolve any problems concerning benefits in marine transportation and navigation of Thai vessels.
2. To advise and recommend to members on problems in marine transportation and navigation, as well as accommodate business operations for members.
3. To coordinate and resolve any conflicts occurred among members, between members and government agencies, institutions, or other entities in marine transportation and navigation.
4. To act as a representative for proposing to government agencies and other pertinent domestic and international institutions its members opinions, and policies concerning marine transportation and Thai shipping lines.
5. To cooperate with members which are also members of shipping conferences, to ask shipping conferences to conduct in accordance with the United Nations international agreement on the conducts of shipping conference and
6. To put an end to conflicts of interests, if any, among members, having the Association committee selected an appropriate person to reconcile the conflicts.

As of 1 January 2011, TSA has a total membership of 114, consisting of 55 ordinary members (shipowners), 7 ordinary members (port and shipyard operators) and 52 associated members (related businesses). Members who are shipowners collectively own over 80 percent of Thai registered tonnage. TSA is an active member of the Federation of ASEAN Shipowners Association (FASA) and the Asian Shipowners Forum (ASF).

2.2 The Evolution of the Thai Merchant Fleet

According to the historical evidence, we found out that, Thailand has been trading with foreign nations since when, Sukhothai was the capital of the kingdom. Maritime trading with her neighbors and western countries has prospered for a long time from the past to present. In the past, the Ministry of Transport has organized a series of meetings, aimed at developing and promoting the Thai fleet. During these past meetings, some companies that

were tasked with the responsibility to push for the development of Thai fleet were; Ngow Hock Agency Co., Ltd., Thai Mercantile Marine Co., Ltd., and Thai Maritime Navigation Co., Ltd. These companies joined the ministry of transport in regular meetings.

During the Vietnamese War, Thai Marine Navigation Co., Ltd. made a lot of profits from the logistics of military supplies to Vietnam. Unfortunately, it could not expand the fleet because the government at that time did not give enough support and capital while its performance had continuously plummet until it started recording losses, which forced it to sell the ships and changed the business operation to be a ship agency or freight forwarder only. Apart from Thai Marine Navigation Co., Ltd. which was a state enterprise business, there also was another well-known company – United Thai Shipping Co., Ltd. or Unithai. The Ministry of Transport saw that if the international marine logistics policy was conducted by the government sector, the problem of inflexibility would obstruct the way to succeed. Moreover, the government sector had limited experiences in international maritime transportation. Consequently, Unithai was established by allowing the private sector to hold shares. The operation in the initial stage seemed so good but later it faced problem losses and had to increase the share capital by inviting foreigners to join the investment and hold more shares whereas the government had fewer shares by not increasing the capital in the company.

Later, private shipping companies have become stronger and can run well. For example, RCL Public Co., Ltd., beginning from a few vessels has grown to the international level; Thoresen Group is now ranked as number one corporation in terms of good performance and profits; Precious Shipping Plc. has grown to be a nation's leading shipping company. In fact, there was no need to establish a national shipping line because Thai private fleet is also the national fleet. However, government's policy on the establishment of national shipping line has continued to the later periods but a national fleet could not be established.

Finally, TMN Co., Ltd. was established to respond to the government's policy on the need of having national shipping line. In order to enable the successful operation of TMN Co.,

Ltd., it was necessary that private sector undertake the operation; hence the government allowed the Thai Ship-owners' Association members to join venture in the operation.

So many arguments have been put forward to justify the necessity of having a national fleet. Firstly, it is the security argument. The argument calls for a national fleet in case of emergency. Thailand is a self-sufficient country that can produce food for local consumptions. As a result, in the case of emergency, the country probably does not need conventional vessels (ships to carry food such as rice or grain). While Thailand has no crude oil resources or very little of them, but it has five oil refinery plants. If there is no crude oil tanker vessels, the country will be short of oil. Internal transportation will be halted. Therefore, this issue must analyze what kind of vessels is a necessity and then to provide them in sufficient number.

Secondly, it is the balance of payment argument. In other words, the national fleet will bring in foreign exchange currency, thus helping to reduce the balance of payment deficit. This can be accomplished by two methods. The first method is an import substitution approach. For example, assuming that Thailand does not own any fleet, goods exported are then all carried by foreign carriers, resulting in the flow of foreign currency out of the country. Having our own fleet will reduce our dependence on foreign vessels. The second method is the cross-trade. If Thailand has its own fleet, which is similar to sending workforce to work overseas, the country will gain 100% foreign exchange.

Thirdly, it is the industrial development argument. Maritime business covers three main industries, namely ship, port, and shipyard. Without a shipyard, vessels need to use the repair service abroad. As a result, money will flow out of the country. Shipyard, therefore, is a value added service to the industry. Maritime development structure in model countries, such as Japan, Korea and China, are similar. The development started with the steel industry. Japan imports iron ore and coal to smelt iron. The larger the volume they import, the more scale of economics is in their favor. The upshot of this is that the steel industry's competitiveness is enhanced. At the same time, Japan also builds its plants, not only for internal use, but also for export by added values to steel. Hence, Japan not only

develops the steel industry but also build the shipyard, automotive and machinery which consume a lot of steel. It shows that the development must be carried out as a cluster, not as individual segments.

Fourthly, it is the employment argument. The fleet raises the employment as well as developing the workforce's skills. Ships need crew to run, which comprise two types' crews who work for Thai flag ships and for FOC (Flag of Convenience) ships.

Fifthly, it is the import export argument. If there is a national fleet, it will support and facilitate import and export of the country. For cargo ship, the growth performed a good development. In the past, we had only 4-5 shipping companies and each of them didn't have many ships of its own. However, today Thoresen Group has more than 43 vessels on its fleet and the other 10 vessels are being built. Regrettably, Thoresen's new vessels will be registered as Singapore flag due to the reason of operational flexibility. For RCL Public Co., Ltd., it is a well-known shipping company with a large fleet which was ranked as the 25th of the world's largest container fleet.

2.2.1 Previous Development Plans of the Thai Merchant Fleet

It was not until 1976 that the government included development plans for the Thai merchant fleet in the Fourth to the Eighth National Economic and Social Development Plans (Chaimankong 1995; National Economics and Social Development Commission 1997). The NESD Plans had encouraged and supported investments of the private sector in the expansion of the Thai merchant fleet, and promoted shipbuilding and ship-repair yards. Tax incentives and financial support measures, cargo reservation scheme, legislation mechanism, ship alliances, and maritime human resources development were imposed in the plans. Introduction of foreign investment, initiation of new routes, establishment of a freight booking center and maritime infrastructure services were contained in the plans. The Eighth NESD Plan emphasized on the modernization and improvement on the efficiency of the Thai fleet.

In the year 1996, the Thai maritime master plan was first implemented, with the objectives to increase the market share of sea transport and to increase the freight earnings as well as to enhance efficiency and competitiveness. The main target for fleet expansion was set to increase its size and to improve its performance by not less than 18 % of the country's total sea-borne trade in volume, by the end of the Eighth NESD Plan (by the year 2001). This plan's target was also set to increase up to 25 % by the end of the Ninth NESD Plan (by the year 2006). And latest the Tenth NESD Plan (2007-2011) still emphasized to the development of national merchant fleet. Apparently identified Thai merchant fleet is focused towards developing its capabilities both in quantity and quality, this is an indication that, the government sector has accepted to promote the concept of national merchant fleet for a long time, in 35 years. The government in each period attempts to activate Thai maritime business by increasing merchant ship of Thai fleet in order to raise capability in ocean cargo transportation. In addition, it can also reduce pressures on the current account deficit which eventually encourages economic growth.

The recommended measures were financial support and tax incentives, simplification of ship registration process, establishment of a national shipping line, amendment of outdated maritime laws, and participation in international conventions and conferences (Thai Engineering Consultants, et al. 1999). Thus, past development of the Thai merchant fleet emphasized financial support, tax incentives, liberalize law and regulation, and maritime personnel areas. However, many problems have been encountered.

2.3 The Government's Shipping Policies and Measures

Due to the nature of the industry, it is cyclical. That is, there are peak periods or seasons as well as the low periods or seasons. Therefore, the business cycle requires judicious cash flow management and quick business adjustment. As a matter of fact, the industry needs to be self-adjusting and responsive. So to operate a fleet; the business should not be under a bureaucratic structure because such structure offers slow response to the market.

In the past, there was so much support from government to push forward the growth of Thai merchant fleet. Three measures taken were implemented as follows; namely market protection measure, specifically cargo reservation measure. For example, by giving tax reduction incentives for exporters and importers, and other financial measures. The financial measure involves tax regime, soft loan and subsidy. An example of tax regime measure is the on and off 30% corporate tax exemption measure, whereas companies registered at Singapore do not have to pay this tax. The last measure were rules and regulations i.e. the enactment of the Carriage of Goods by Sea Act B.E. 2534 (1991). Before the act was drawn, the period of prosecution was 10 years, whereas international laws limited the period to a maximum of only one or two years. Besides, carriers had a liability for the whole value of cargo, whereas the international law, Hague-Visby Rules, prescribed the liability limitation but with conditions such as loss or damage arising resulting from perils of the sea and due diligence, etc.

However, the support from the government in the past was not sufficient as such, it was discontinued. Examples are the no tax reduction, the on-and-off 30% corporate tax exemption, (financial measure was recently set after the financial crisis in 1997), and other outdated law. When state laws are ambiguous or put on hold indefinitely, it is difficult for business owners to set their long-term plans.

Thai cargo reservation measure was announced around 1983-1984, stipulating that the government, its agencies and private sectors who sell goods to government and its agencies on specific routes, must ship their goods on Thai ships. However, prior to the announcement of the measure, there were Cabinet's resolutions in 1980 and 1982 stating that if the government or its agencies wanted to import cargo, they must use the transportation service from one of the state enterprises which are (at that time) Thai Maritime Navigation Co., Ltd., the Express Transportation Organization of Thailand and Unithai (the major share holders were Thai Maritime Navigation and Jutha Maritime and TIME Line). These two measures are overlapping. One measure supports Thai ships,

which are not restricted to state enterprises, while the other is. If the agencies received the privilege and could settle on the issue of the national fleet, it would be good.

2.3.1 The Existing Shipping Policies and Measures

Strategic plan proposal on maritime development, by the Marine Department started at review procedure on strategies, suggestions, and the related result research problems and constraints. Including Thailand's potentiality of its maritime field and studying on maritime operation of successful neighboring countries, in order to apply a strategic plan for consideration on maritime development. More so, this strategic plan will be the main strategy on maritime development in Thailand. It would be realized through its proper execution. Success will lie on emphasis and expectation in maritime development as the supporting part of international trade and enhance the competitive capacity of Thailand in the future. According to the strategy no.1 toward proportion and increasing on sea transport by national merchant fleet, there are the following different targets in each period.

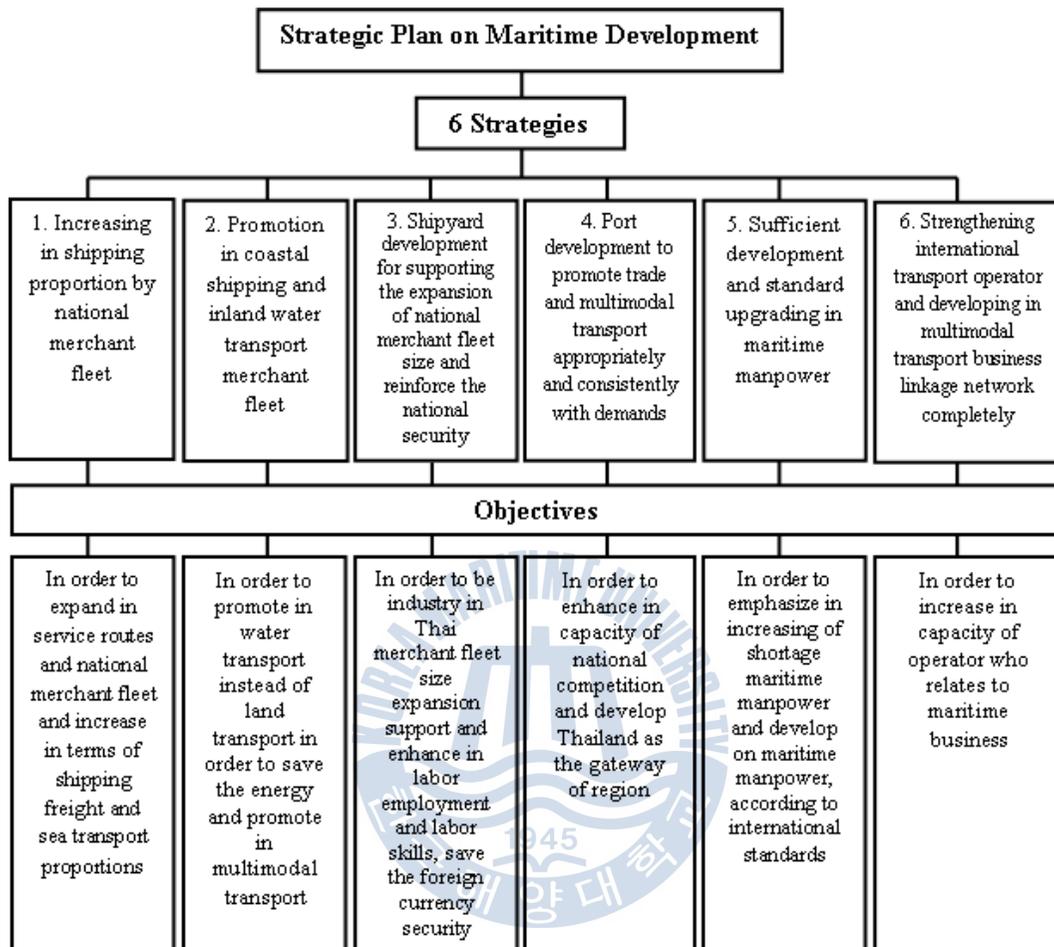
Target in short term

- To induce Thai ship owner who registers in the name of foreign flag vessel in order to change/return to register as Thai flag vessel.

Target in medium and long term

- To attract the owner of foreign flag vessel to change into Thai flag vessel registry and specify to have tanker, which has sufficient freight in crude oil transport from Middle East to the proportion of 10% of import volumes.
- To specify the capacity of merchant fleet in import-export cargo transport among Thai and overseas in proportion of 50%.
- To expand the routes that Thai merchant fleet should be provided service in the future.

Figure 2-5: 6 Strategies on Maritime Development in Thailand



Source: Maritime Promotion Bureau, Marine Department

From the past to the present, Thai government has implemented many policies for the development of the Thai merchant fleet. The following are the existing government measures.

1. Financial Measure

OECD (2002) defines financial policies as policies related to the regulation, supervision, and oversight of the financial and payment systems, including markets and institutions, with the view to promoting financial stability, market efficiency, and client-asset and consumer protection. Thailand's government enacted some shipping-friendly measures to

help the shipping industry. Especially, the Thai government provides Thai shipowners with operating subsidies and a shipping promotion fund for the expansion of the national merchant fleet.

In response to the Thailand's government policy, EXIM Thailand, boosting organization the value of Thailand's international trade, accelerated its lending to Thai maritime businesses by setting a merchant marine loan target of 18 billion baht to be provided directly by the Bank and with other financial institutions within three years (2010-2012). EXIM Thailand is now ready to increase Merchant Marine Financing to facilitate Thai ship operator's purchase of new and old ships. This is aimed to promote the use of Thai ships instead of foreign carriers and also to generate more foreign exchange earnings. Moreover, it will also be increasing of national merchant fleet. According to resolution of the cabinet at 22 March 2011, the supportable budget has been approved amount 1,050 million baht to Export-Import Bank of Thailand or Exim Bank for the period of 7 years. By Exim bank is a creditor that might be lending accompany with the other financial institution or Syndicated Loan. The objective of this policy is to develop Thai merchant fleet's size and support entrepreneurs in shipping business to have capital source at low interest rate.

2. Tax Measures

There are eight subsections of the existing tax measures as follows:

- Exemption on corporate income tax.
- Exemption on income tax from selling ships or rebates from insurance companies.
- Reduction of withholding tax on the income earned by Thai ships used in international transport.
- Exemption on income tax from dividends from the international lines.
- To hasten value added tax repayment within 15 days.
- Ship operators who transport domestic cargo have privilege registering of value added tax like transport by aircraft in realm.

- Exemption on import duty for general cargo ship, which has the size of 1,000 GRT or lower, in rate of 10%.
- Exemption on personal income tax for crews of ships used in domestic transport.

3. Investment Promotion Measure

The current legislation governing investment promotion in Thailand is the Investment Promotion Act (No.3) B.E. 2544 (2001). This Act provides investment incentives in the form of guarantees, protection measures, tax incentives and permissions. Similarly, the government has a policy to promote Thai private operators to operate supply vessels as this subsector has a good prospect and provides a good job opportunity with attractive remuneration. The investment promotion measure privileges to Thai ship operators according to the Investment Promotion Act (No.3) B.E. 2544. This measure also includes exemption on import duty for importing ship and machine from overseas and exemption on corporate income tax for 8 years.

In addition, the promotion of supply vessels will pave way for industrial development and technological advancement as well as other maritime-related services. Since the supply vessels in several countries have been given government support by means of tax incentives and financial measures, Thai government has provided investment privileges to attract Thai operators into this service sector. During the year 2007 - 2011, 7 Thai companies with 21 supply vessels under Thai flag were granted investment promotion privileges by Thailand's Board of Investment (BOI), the government agency responsible for providing incentives to stimulate investment in Thailand (Marine Department 2012).

4. Thai Vessel Promotion Measures

There are two subsections of Thai vessel promotion measures as follows:

- Cargo reservation in accordance with Mercantile Marine Promotion Act, B.E. 2521 covering 9 routes between Japan, Korea, Taiwan, Hong Kong, Singapore, Europe, US, China and Malaysia to Thailand.

- To improve chartering permission by permitting to charter the ships from foreign countries.

2.3.2 The Proposed Shipping Policies and Measures

The following are the proposed shipping measures which government expected to implement in the near future (Thai Marine Department, 2010).

1. Financial Measures

- Loan guarantees by government to Thai ship operators.
- To create promotion measure to Thai shipyards enable them to grant credit for shipbuilding.
- Maritime fund establishment in form of revolving fund, its interest is lower and its regulation in loan borrowing is convenient.

2. Tax Measures

- Exemption of income tax on revenues from international sea transport in form of Door to Door basis by specifying in exemption and covering in term of using Thai vessel for a determinate period in order to incur the incentive.
- Thai crew's income tax exemption (special labor) in order to cover other revenues, which is not only salary and wage such as over time wage, other welfare wages (at present, exempted on income tax in part of salary and wage only according to Finance Ministerial Regulation, 24th issues, B.E 2539 No.1).
- Period expansion of rights in income tax exemption, deriving from old vessel sale and purchase the new vessel or new shipbuilding ordering from 1 year become 2 years as from the date of old vessel sale because it is appropriate time for shipyard in new shipbuilding and in case of new shipbuilding by service using with Thai shipyard, it should be expanded as 3 years in order to obligate in shipyard development.

- To collect income tax, derived from service providing of offshore supply vessel with Thai flag by using the same criterion and tax rate to foreign vessel.
- Income tax levy exemption in the rate of 1% for estimated income, which is chartering rent that used in international cargo transport.
- To specify the collected VAT rate with Thai ship operator who operates in international cargo transport outside Thailand (cross trade) in rate of 0% and covering in case of purchasing vessel from overseas in order to register as Thai vessel and purchased various equipments of Thai vessel both of inland and overseas including in case of ship repairing and shipbuilding both of inland and overseas.
- To give the privilege in term of VAT specifying in the rate of 0 % to service activities and service using in ship management in order to be the guidelines in administrative efficiency development for merchant fleet.
- To reduce import duty for general cargo ship, which has the size of 1,000 GRT or lower, in rate of 1% (Thai Shipbuilding and Repairing Association derives the impact from this measure and against with Thai industrial shipbuilding and ship repairing promotion and development).
- To establish the fund for ship repairing, which has the size of 1,000 GRT or lower by specifying in VAT levy as 0 % and Thai shipyard can deposit as security credit to company in case of ship repairing and shipbuilding with Thai shipyard (In case of imported ship, it must be paid for duty in rate of 1% and VAT in rate of 7%).
- To specify VAT of shipbuilding by Thai shipyard in rate of 0%.
- Exemption of withholding tax, from levy with remuneration that Thai ship operator pays for foreign ship operator in chartering international sea ship and chartering container storage, container, and container repairing.
- To improve measure toward depreciation of ships in order to subserve to Thai ship operators.

3. Laws and Regulations Amendment Measures

- Laws amendment, which are the constraints to capacity development in competition of Thai ship such as draft of the Act on Carriage of Goods by Sea, (issue No....) B.E., and draft of Marine Insurance Act, B.E. ...
- To improve procedure toward the carriage of petroleum product.
- Lenient measure on compulsive regulations in case of switching person in Thailand instead of seafarer who is still on ship in overseas by using the operating principle of international standard.
- To improve practice toward registering ship in system of one stop service.
- Unlimited nationality of seafarers on Thai ships in order to increase flexibility in operation cost.
- Additional acceptance measure in using the ship survey results of classification societies, which are accepted in international level.
- Law amendment measure enable to be registered the vessel in form of second registry.

4. Personnel Promotion Measures

According to strategies no.5 for maritime development, it shows that maritime personal development intended to focus on creating the shortage of personnel and developing capabilities of maritime staff to meet international standards and adequate for market's demand. The guideline for short term operation is to exempt income tax for the Thai crew and cover other types of income besides salary paid. For long term operation is laying down measures in deregulation such as to standardize in shuffling officer from Thailand with officer who is working on the ship in foreign country. There are 5 subsections of personnel promotion measures as follows:

- To support money to Thai ship operators for sending seafarers train merchant shipping both domestic and overseas.

- To support money to Thai ship operators for inviting expert from foreign countries educate in seafarers.
- To support money to students who concentrate on maritime education.
- Promotional measure for Royal Thai Naval Academy joining to product officers.
- Promotional measure for maritime training institution both of government and private sector in order to generate seafarers and crews.

5. Other Promotional Measures

- Fiscal system improvement measure conforms to International Accounting Standard regarding depreciation deduction, bad-debt disposal and settlement extension.
- Permission in Bare boat charter registration, chartering ship in form of leasing enable to register the ship.
- Ship mortgage permission by dividing the ship into each part according to the parts of complete constructed ship in shipyard.
- Promotional measure in Thai flag vessel providing such as VLCC, container ship, break bulk cargo ship.
- The routes expansion of Thai merchant fleet by increasing the number of Thai ships in the future such as the routes of Thailand-Australia-New Zealand, Thailand-Japan, Thailand-Middle East-Europe, and cargo transport routes in Asia.
- Government might form joint ventures with shipping line for supporting international trade and developing Thai port or use measure in supporting Thai ship operators to take over overseas shipping business.

2.4 Problems and Obstacles to the Development of Thai Merchant Fleet

Over the past years, the national merchant fleet development has experienced various problems and obstacles. These involved six important areas, namely financial support,

taxation incentives, marketing, maritime personnel, laws and regulation, as well as government administration and operation.

(a) Financial Problems

In 1997, before the economic crisis, most loans are sourced offshore due to the expensive interest rate of Baht loans (about 12%) compared to offshore loans (about 3-4%) and the lack of expertise of local financial institutions in providing ship financing and acquisition. The usual form of ship financing is by means of an onshore or offshore loan provided by a single lender or a syndicate of lenders and in the form of financial lease. The most common form of financing is a loan, for which the lender or the bank will require evidences of various kinds of guarantees including the ship mortgage, assignment of insurance, an assignment of charter party and a guarantee from major shareholders of the borrower or its parent company.

Being restricted by Thailand's legal system in contrast to that of countries with full promotion of commercial maritime business, offshore banks have confronted problems with Thai ship mortgage law, the Mortgage of Vessels and Maritime Liens Act B.E. 2534 (1991). The enactment of the mortgage law and the availability of the remedy of arrest of vessel strengthened and the confidence of local lenders to finance the acquisition of vessels by Thai owners. However, as far as foreign lenders are concerned, the inability to enforce the Thai mortgage outside Thailand or to arrest a Thai vessel in Thailand is discouraging, especially to those not familiar with the legal system. This distinct problem causes the limited loan for the Thai shipowners to be approved by the lenders. Under this circumstance, lenders have to learn more about Thai laws and study for any risky conditions in order to make a proper assessment, which will increase an interest rate to 3-4% instead of 1-2%. That means the higher cost for Thai shipowners.

There is an inevitable fact that shipping is so capital-intensive industry and ships also tie up a lot of money. Therefore, the problem of capital shortage is a big problem for maritime operation. Financial problems included insufficient maritime funds with uncompetitive

conditions such as high interest rates, short grace period, short repayment period, and low loan to asset ratio (Sakuratana 1998; Thai Shipowners' Association 2003). The financial institutions also did not truly understand the maritime business (OMPC 2001) and were therefore reluctant to provide loans to shipping companies.

The other problem is the source of fund. Once the office of Merchant Marine Promotion Commission existed, there was an idea to establish a merchant marine fund as a current fund not only as the source for buying ship but also for shipyard so that the operator could not successfully be established because at that time the government saw that the interest rates from financial institutes were rather low. Moreover, the current financial measure limits specific Thai ship owners, not cover the whole of shipping industry. That's why the other maritime business, such as shipyard, cannot access sources of investment funds. Although the shipowners know much more about ship financing at present, but the lack of skilled personal in ship finance is also important problem.

(b) Taxation Problems

At present, most maritime countries attempt to provide various tax incentives to their shipping companies to become internationally competitive. Thai ship owners also enjoy the benefits of various tax incentives provided by the Thai government. However, major problems lie on the taxes measure such as value added tax. Although the ship owners can request for tax refund but this is a prepaid cost which take a long time to be refunded (Wannakrairoj 2004). Another case is 15% revenue withheld tax that is deducted when ship owners buys goods or services in foreign countries. As a matter of fact, Thai shipowners have to bear 15% tax themselves. Whereas the vessels registered in Singapore does not bear any tax at all.

The Association has tried to give an explanation to the Revenue Department for the tax exemption that this does not make the government lose income because the government can collect tax from the consecutive business such personal income tax from the employment in this business. However, today, it is accepted that the government has also

given grace on taxes to this business. There is levy in terms of Value Added Tax (VAT) and income tax withholding. This is different from the case of several other countries, which have a tax exemption or smaller tax payment. The government is also considering the idea of using measures to help exporters directly in order to promote waterways transportation in the country. However, it is necessary to study carefully whether the tax measures will affect other industries. If the privilege has been given to the marine business, other businesses may also ask for the same privilege. In the meantime, it should be realized that while reducing the direct tax, it could gain indirect tax, which probably offsets or even brings in more money than the direct tax lost. The Ministry of Finance understands the benefits and is weighting its option on this matter (Thai Shipowners' Association 2008).

There were higher operating costs incurred from taxation than those of other countries such as personal income tax for crews, ship import duty, tax on vessel rental revenue, income tax from selling ship or rebates from insurance companies (Chaimankong 1995; Sakulratana 1998; Thai Shipowners' Association 2003). Other problems included unclear definitions in tax privilege issues resulting in complications of tax collection and slow process of getting value-added tax refunds. Moreover, there were different definitions of personal income tax for crews in each area (OMPC 2001).

For example, Thoresen Thai Agencies (TTA), one of Thailand's largest owners of dry bulk vessel, has registered own ships under the Singapore flag because of its tax incentives. TTA considered the Maritime and Port authority's Approved International Shipping Enterprise scheme, that gives tax exemptions on qualifying shipping income must have also played a big part in its decision. Therefore, tax measures should be realized as the main measure due to it influences to Thai ship owners' decisions on registering their ships. Taxation comparison between Thailand and Singapore is shown in Table 2-3.

Table 2-3: Taxation Comparison between Thailand and Singapore

Types of Tax	Criteriaions of Thailand	Criteriaions of Singapore
1. Personal income tax of crew who works on international shipping vessel	Exempted only salary and wage, but, other revenues such as welfares without exception	Exempted of all according to fiscal code Part IV No.13 (1)(W)
2. Corporate income tax of international sea transport operator	Thai operator is exempted on corporate income tax and dividend from profit.	Singaporean ship owner/operator or Singapore legal person/operator, who operates by using foreign vessel, is exempted on corporate income tax according to fiscal code Part IV No.13A., and dividend is exempted as well, according to Part IV NO.13A(B).
3. Chartering ship tax or chartering container of Thai ship owners who charters from overseas	Thai ship owners must be deducted withholding tax 15% of the chartering ship, but, in facts, they are responsible for such tax instead of ship owner or container owner in overseas.	Ship owner or container owner in Singapore is not deducted such tax because such revenue is exempted on tax according to fiscal code Part IV No.13A (16)(A)(B).
4. Value Added Tax (VAT)	<ul style="list-style-type: none"> - Purchasing vessel from overseas in order to be registered as Thai flag must be paid for VAT 7% of values of purchasing vessel. - Foreign ship chartering or chartering container must be paid for VAT. 	<ul style="list-style-type: none"> - Used tax is in rate of 0% according to GST ACT PART V (1)(2). - Foreign ship chartering or chartering container is not paid for VAT.
5. The principle of difference in VAT rate base of 0%	International sea transport is not involved with Thailand, so, it cannot refund such VAT.	Types of service base; (1) From somewhere, outside Singapore, then, moved to somewhere, outside of Singapore, its tax rate is 0%. (2) From somewhere, outside Singapore, then, returned to Singapore, its tax rate is 0%. (3) In oppositional side of No. (2), its tax rate is 0% as well.
6. Income tax from investment of person or corporate in overseas, then, transfer the foreign currency to Thailand in order to invest in maritime business.	Such tax is not exempted in Thailand in order to induce Thai people in transferring their foreign currency to Thailand in order to increase in investment for maritime business.	Exempted in income tax according to fiscal code in Singapore (INCOME TAX ACT PART IV NO.13 (8))

Source: Maritime Promotion Bureau for Water Transport and Maritime Operation

(c) Marketing Problems

As mentioned in current situation of Thai merchant fleet, although a large proportion of Thailand's seaborne trade volume is still relying heavily on foreign shipping services. This sometimes has led to the controversial issues alleged by Thai shippers as unfair increased freight rates and unnecessary surcharges. For this reason, Thai shipowners are in disadvantaged condition and have higher cost compare with the competitors in the part of credit and tax in particular.

Thai importers and exporters preferred purchase of goods at Cost, Insurance, and Freight (CIF) prices and sell at Free on Board (FOB) prices, and therefore did not choose to use Thai vessels (Chaimankong 1995). Lack of a good marketing network, which covered both inbound and outbound trips, was also considered another major problem (OMPC 2001). Frequency of services was low since Thailand is not located on the main shipping routes of the world (Sakulratana 1998).

(d) Maritime Personnel Problems

According to strategies no.5 for maritime development, it shows that maritime personnel development is one of the main strategies. This is due to there is serious shortage in Thai maritime manpower. One of the strategies listed in the Maritime Promotion is to recruit and train more seafarers, both officers and crew, so that there are enough to serve the market. Existing seafarers need to have their skills and knowledge upgraded as well.

Problem on personnel is also important because the existing academies cannot produce personnel sufficiently to meet the demand, especially personnel in officers level. Moreover, it is also lack of efficient personnel since students who chose to study at the Merchant Marine Training Center did not really wish to study this subject but came to study here because they could not pass the entrance examination to study in the university. Nevertheless, recently students are more interested in the study in naval academy (Thai Shipowners' Association 2008). There was a shortage of maritime personnel for both onshore and offshore work (Sakulratana 1998). This situation occurred at every level

due to a problem from the Standards of Training, Certificate and Watch-keeping for Seafarers (STCW 95) guideline promulgated by the International Maritime Organization (IMO) of the United Nations and policed by Port State Controls (PSC). Thai seafarers did not meet STCW standard, which requires them to have knowledge of written and spoken English adequate to understand charts, nautical publications, meteorological information and message, and adequate to communicate with other ships and coast station and multilingual crews.

Moreover, the quality of Thai maritime personnel did not meet international standard. This was due to a lack of cooperation between the government units in controlling and supporting the maritime education and training institutions (Wannakrairoj 2004). Consequently, its production capability is unable to meet the demand of seafarers in the future. Lack of cooperation between ship owners and the training center also made the qualification of trainees out of line with the requirements of the ship owners, thus resulting in a lack of ships for training both training ships for cadets and cargo ships for apprentices. The knowledgeable quality of maritime personnel, weakness of the articulated education system, lack of maritime textbooks in Thai language, high wages and short sea service life were also considered maritime personnel problems (Southeast Asia Technology 2001).

(e) Laws and Regulations Problems

The exact laws and regulations differ from country to country. Although Thailand had some legislation in accordance with the International Conventions, several legislation problems still remained. The complicated law and regulations that do not follow international standards and there is no announcement of the cancellation or amendment of laws to the relevant groups are the important problems for the development of Thai merchant fleet (Wannakrairoj 2004).

(f) Government Administration and Operation Problems

Many government units exercised authority of policy formulation, control, administration, and operations (Chaimankong 1995; Sakulratana 1998; Thai Shipowners' Association

2003). After the government administration reform in the year 2002, Thai ship owners still maintain their collective view that there was no exclusive government department to support them as in the past. Especially, Thai government does not really understand the characteristics of the maritime business as well as the discontinuity on government's each policy and measure causes promotion unsuccessful as expected (Wannakrairoj 2004). This is due to shipping companies should not be run under a bureaucratic structure because it needs to be flexible and reacts fast to changing market conditions (Thai Shipowners' Association 2008). Moreover, the management level must have a strong sense of belonging and a sense of ownership to be able to control the outflows.



Chapter 3

Literature Review

3.1 An Introduction to Shipping Policy

3.1.1 Background of Shipping Policy

General characteristics of the shipping industry are an international business and globally competitive, ephemeral services if not used immediately as well as wild fluctuations in freight rates. The shipping is so capital intensive and has a cost structure of heavy fixed cost. When price competition or rate war breaks out, it often leads to cut-throat competition. This is the reason why most governments still allow shipping firms to form shipping conferences and strategic alliances in international liner shipping. However, anti-trust immunity has become a hot issue in maritime transport reform.

There is no consensus about shipping policies and global maritime order between major maritime nations and among global economic organizations such as the World Trade Organization (WTO), UNCTAD and OECD. In Geneva, the WTO negotiation group of maritime transport sector (NGMTS) wants to build a general policy framework for transparency and the progressive liberalization of the shipping market.

With globalization accompanied by deregulation and liberalization leading to open markets, the shipping business is changing rapidly, transforming it and other economic sectors as well. Rapid developments in information and communications technologies have brought a knowledge-based global economy, seriously affecting shipping business.

Thanks to the extensive global logistics networks of global carriers, all economies, developed and developing, have become more interdependent and complementary to each other. Now the world economy is working as a single market.

3.1.2 Definitions of Shipping Policy

Shipping policy is a part of a country's transport policy which is an important component of the national economic development plan. In particular, whether developed countries or not, shipping policy consists of various elements depending on the size and the economic importance of the merchant fleets of these countries. Shipping policy, however, includes the national economic objectives, policies, strategies, and measures as well as the implementation plan.

Chrzanowski (1985) defined that National Shipping Policy may be a totality of economic, legal and administrative measures by means of which the state influences the position of its national fleet, its place and role in the national economy and in international freight markets. The attitude of the state to its own merchant fleet as a rule reflects indirectly its attitude to the fleets of other countries.

ESCAP (1999) stated that shipping policy is one of crucial policy in country's trade and economic development. Shipping policies can be broad objectives at a macro economic level. On the other hand, they can be related to more detailed policy objectives at a micro economic level. National shipping policies can cover a wide-range of maritime activities such as shipowning, operating, seafaring and related activities, ports and infrastructure.

The term "shipping policy" can be interpreted in a wide sense as covering the entire maritime sector or in a narrow sense as covering trade and service related shipping policies. Even if the term is narrowly defined, shipping policies cannot be developed in isolation. Shipping policies also have to take into account policies about developing in ports, infrastructure and ancillary services, road and rail transport and related industry sectors. It is therefore important that the government decides at the outset, the scope of the policies to be formulated from the range of topics that would be covered in a comprehensive maritime policy.

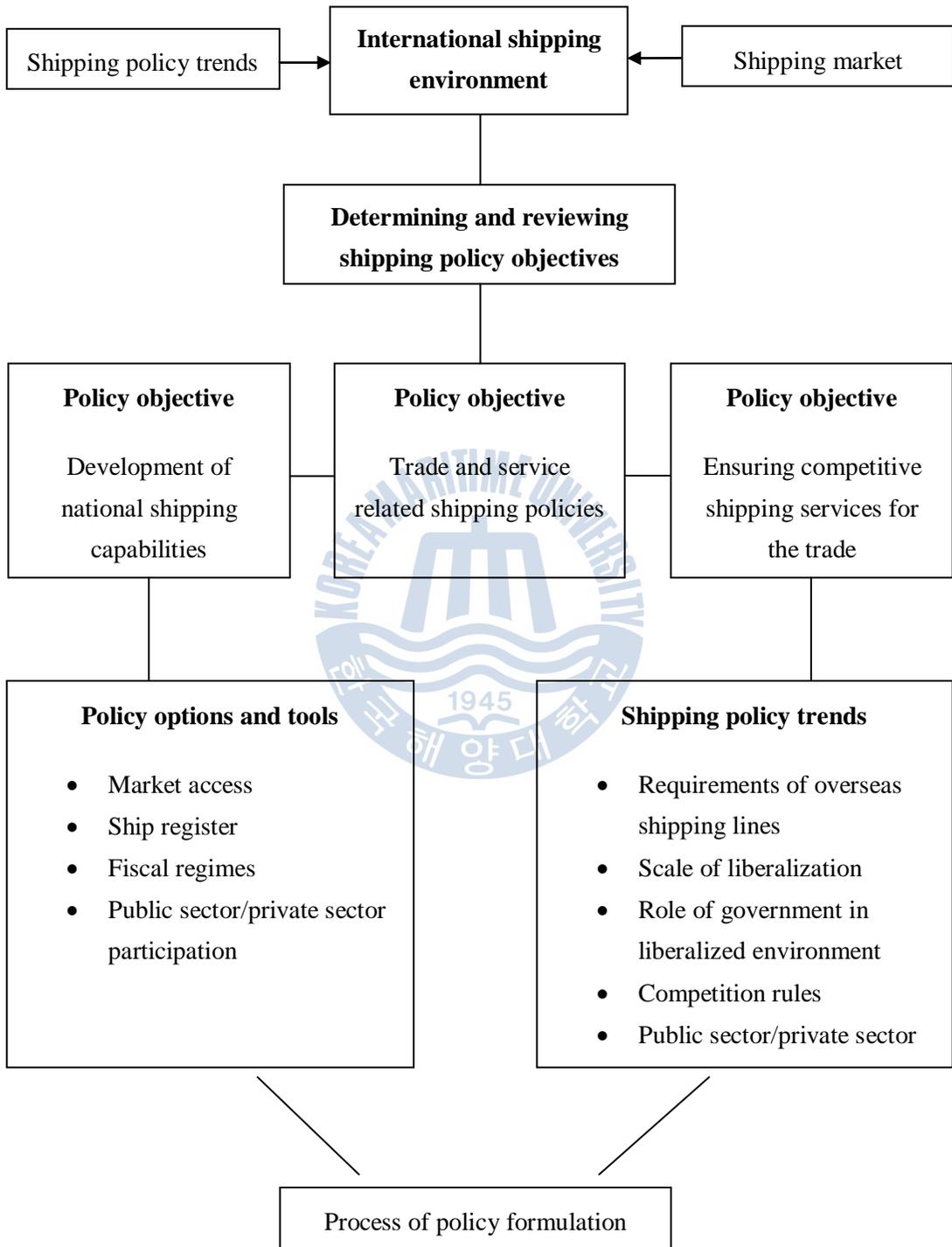
Shipping policy has two aspects namely, domestic and international. Domestic aspect is the attitude of government towards its own shipping fleet, while the international aspect is the

attitude towards the fleets of other countries. Normally, the purpose of shipping policy is to encourage and support the national merchant fleet to compete with foreign fleets. Thus, studies of shipping policies in other countries would be the good starting point to learn about other countries strategies as well as to develop an implementation plan.

According to ESCAP (1999), it presented a framework for the development of national shipping policies (Figure 3-1). Policy development requires detailed knowledge of the international and regional shipping environments, shipping markets and policy trends, and policy options and tools. The experiences of developed maritime countries and the policies that have been adopted by these countries could be an important starting point. However, each country has to work out its own policies in the overall context of its national economic objectives and its shipping potential. A policy that is appropriate for one country may not be appropriate for another. The issues to consider, however, are similar and the framework may assist government maritime policy makers to make decisions on a range of subjects pertaining to trade and services related shipping policies (ESCAP, 1999).

Policies and strategies can be implemented both through national legislation, administrative measures and through further development and implementation of specific business plans. Implementing shipping policies are typically accomplished by the maritime administrations or special governmental organizations. The organizations which are responsible for maritime administration must keep pace with the contemporary development in the shipping industry domestically and internationally. Movements in bilateral and multilateral agreements also have to be aware. Administrative direction is also important for successful policy implementation. Fragmentation of national organizations will hinder the development and implementation of shipping policies including the growth often shipping industry as a whole.

Figure 3-1: Framework for the development of national shipping policies (ESCAP 1999)



3.2 Literature Review of Studies on Shipping Policy

Lord Alexander (1999 cited Brooks and Hodgson 2005) concluded that the government's policy for shipping cannot be achieved without creating a tonnage tax regime to ensure a fiscal environment which is, and is perceived to be, user-friendly. The existing structure is unsatisfactory. It acknowledges that the principle of subsidy provides substantial benefits for the industry and yields comparatively little tax, but is not commercially attractive to companies or investors. Whilst the economic case alone is not wholly convincing, and the success of the policy in a highly competitive market is far from being assured, the future of our shipping industry is now at a critical point. Without attempting the tonnage tax, further decline seems inevitable and may face a risky situation where it will become irreversible.

Nijdam and Van Der Horst (2007) described about the effects of fleet size related to the usefulness of shipping policy. The results show that shipping policies will only have limited economic effects. For the largest part this is due to the international character of shipping, there is little impact in the national economy. The study leads to the following specific conclusions: (1) Policies aiming at maximizing the number of ship that are under the national flag are not found to be beneficial for a country other than the income from the register fee; (2) The presence of shipping companies does show some, although weak, positive effects on shipbuilding and seaports; (3) The most positive effects of shipping companies locating in a country seem to be the effect on the labor market and the education. A study of the Dutch situation shows that shipping companies have a strong influence on the education of maritime personnel. At the same time the demand for maritime education is very dependent on regulation regarding manning; (4) The labor market in ports consists for a considerable part of people with specific maritime knowledge and experience. Especially in maritime services and shipping companies, former seafaring personnel find a post sea career. By doing so, they keep their knowledge available in the national maritime industry; (5) The effects on innovation from the shipping sector are limited, large fleets do not necessarily lead to innovation. However, countries with a large fleet and a substantial shipbuilding industry seem to perform better on this issue.

Based on these results, governments should consider the costs of a shipping policy carefully before implementing any legislation. External benefits of the shipping sector are found in the so-called agglomeration effects (knowledge and labor market). Therefore a shift from sector policies towards cluster policies might have a positive effect, because cluster policies typically aim at enhancing positive agglomeration effects.

Ratanamalawong (1995) studied about state's policies and measures in developing mercantile marine of Thailand. He found that mercantile marine or maritime transportation is very important to many countries especially in economics, military and international politics. In economics, a country with its own maritime fleets is able to transport cargoes to other countries comfortably. Furthermore, she can acquire international currencies from shipping service and provide more jobs to the people. In military, vessels can be used as armed force carriers or can be converted to warships in case of war. Moreover, a country obtaining a huge maritime fleet in numbers and sizes creates the country's threats towards others, not only to show off her power but also create international influence. Many countries such as the United States of America, Japan, Taiwan, Singapore, etc. all paid their attention in establishing their own maritime fleets by using measures in finance, taxation, cargo reservation and various restrictions which fully support their maritime fleets. Since maritime business is very competitive, those countries have to build strong and efficient maritime fleets.

Thailand has to rely on foreign vessels in carrying both her inbound and outbound cargoes about 10 percent annually, therefore she is unable to use her own maritime fleet to promote international trade causing the country's loss of foreign currency in freight and lack of guarantee in maritime transportation services. Moreover, both importers and exporters have been taken advantages by foreign fleets. Thai government has attempted to develop mercantile marine by setting up the state's shipping company, formulating mercantile marine policies and guidelines in the National Economic and Social Development Plans, issuing laws forcing the government cargoes imported from oversea to be carried by permitted Thai vessels, and issuing Mercantile Marine Promotion Acts B.E. 2521 (1978),

and various cabinet resolutions concerning Mercantile Marine Promotion. However, Thai mercantile marine has been expanded slowly because Thai shipowners have not been supported in capital, operational costs and State's laws and regulations.

Measures in mercantile marine as mentioned earlier must be implemented as soon as possible due to the successful negotiation under Uruguay round in trade in service – Inland Waterway and Sea Transportation. This has affected GATT's members cancelling regulations and measures in supporting or assisting their maritime fleets for free competition in this business. For those countries who obtain strong maritime fleets will take advantages while Thai maritime fleet will become more disadvantageous. Thailand does not have much time to develop her mercantile marine especially maritime fleet. The government should implement various policies and measures in order to assist Thai maritime fleet immediately. Although Thai maritime fleet cannot be competed with foreign maritime fleets which have long been developed at least it should be improved in both sizes and efficiencies in providing service at almost the same level as foreign maritime fleets to guarantee Thailand's security in international trade.

Thai Marine Department (2003) made the study project of operational plan developing Thai merchant fleet. Maritime Promotion Bureau (MPB) of Ministry of Transport employed the Consultant Company to have conducted this project for Master Plan for Maritime Development 1999-2006 as well as promotional and development evaluation of Thai merchant ship system. The important part of this project was an evaluation for monetary and fiscal measure affecting Thai maritime development. The Consultant Company used the economic model, Cobb-Douglas Production Function, in order to analyze an effect of these measures. By means of gathering from the questionnaires to 42 Thai shipping companies, then only 11 Thai shipping companies which published annual information from 1998 to 2000 replied to this study. These questionnaires were the pooled time series-cross section analysis. As a result, low interest rate and tax exemption had an impact on an increase of shipping quantity by Thai merchant fleet.

Pittayapreechanon (2005) studied about maritime promotion policies of Thailand, particularly the monetary measures and fiscal measures adopted to boost Thai shipping. Moreover, the study also aims at the analysis of the returns to scale in the shipping industry of the dry cargo ships. The study analyzes the growth of the Thai merchant fleet of dry cargo ships by using the Cobb-Douglas Production Function as a basis to create the model to determine the efficiency of monetary and fiscal measures. The ordinary least square method is used to estimate the coefficients of the multiple regression equation.

The results of the study show that the monetary measure, i.e. low interest merchant marine loan, has no effect on the growth rate of cargo carried by ships while the fiscal measures, i.e. tax exemption, can be related to the growth rate of cargo carried by ships. The estimated coefficient shows that if the amount of exempted tax is increased by 1 percent, the quantity of cargo transported by the company will increase by 0.0024 percent. The shipping industry of the dry cargo ships experienced an increasing return. As a result, the government should continue to promote the merchant marine business in this area. The most important aspect is the development of seafarers which had the most impact on the growth rate of cargo carried by ships. The estimated coefficient shows that if the number of seafarers is increased by 1 percent, the quantity of cargo transported by the company will increase by 3.007 percent.

Sriarun (2005) studied about current situation of Thai maritime business and suggest the way to develop Thai shipping. Regarding monetary and fiscal measures, this study pointed the reinforcing of entrepreneurship due to the shortage of capital. He explained that the domestic money market shows still high interest rate compared with foreign countries. This makes Thai ship owners become disadvantaged compared to foreign ship owners.

He mentioned that there exists the discrepancy of credit and demand in maritime business. It is thought that credit is only given for international maritime entrepreneurs who do cover the other maritime business such as navigation business, coastal business, shipyard, port, international shipping, maritime training institutes and multimodal transport business. In addition, the entrepreneurs must periodically request credit limit from government.

This makes unable to define direction for developing in long term. He offered a strategy on reinforcing of entrepreneur by forming maritime fund.

Yang, Yi-Chih (2010) described about the competitive advantage of the national merchant fleet, based on the resource-based view, he collect competitive advantage assessment factors from literature, and use the analytic hierarchy process methodology to compare the importance of assessment dimensions and variables. The article's conclusions include a recommendation that the government review the current allocation of resources and implement measures to reinforce the national merchant fleet. This study's findings can be summarized as follows: (1) Criteria dimensions are ranked in the order of competitive strength, organizational capability, tangible assets, and intangible assets. (2) Criteria variables can be ranked in the order of freight revenue, cargo loading ratio, accuracy of shipping schedule, dead weight tonnage, number of vessels, standard of customer service, reputation of shipping company, cargo transportation volume, gross tonnage, sailing frequency, shipping knowledge, fleet specialization, number of crewmen, and fleet technological level. (3) The government should review existing maritime regulations and measures in order to formulate specific and transparent policies, and seek to adopt optimal alternatives from other countries concerning such issues as tonnage tax, bilateral income tax reduction or exemption agreements, second-registration mechanisms and shipbuilding basis, etc.

Kittisuphakhun (2005) studied on considering factors for registration of ships under Thai Flag. Although the recent increased international trade volume of Thailand had caused the increasing demand in maritime transportation, however, the studies indicates that Thai maritime transportation business does not depend on the increasing rate of the value and the volume of the international trade. In addition, it is found that not only the change in the number and the capacity of Thai ships is not in balance with the demand of maritime transportation, but the number of Thai ships does not also meet the demand of the service market for the maritime transportation. From the past to the present, the level of Thai maritime transportation services has been very low when compared to that of the foreign

maritime transport. The expected main reason is related to the registration of ships. This causes the business ship owners not interested in registering their ships under Thai flags, but register under Singapore and other countries' flags instead.

The objectives of this research were to study the differences in the services of Thai and Singapore in registration steps of ships, to study the problems and limitations in Thai registration steps of ships, to examine the factors that Thai business ship owners used in the consideration of the ships' national flags, and to study the ideal ship registration steps in Thailand that meet the desire of the business ship owners. These studies were carried out through the in-depth interviews with management officers of ship fleet or with the management officers of the maritime transportation routes of the international maritime transportation service companies. In addition, the studies were also conducted through the information collected by the questionnaire structure and interviewed with owners of Thai ships. This research suggests a few useful ideas for improving the ship registration in many areas such as maritime trade law, finance and tax duty, promoting maritime transportation policy, and ship crews.

Sridid (2006) analyzed the problems and obstacles of the Thai merchant ship fleet development. All problems and obstacles have an influence on trade of logistics services and Thai navigator service. These reasons created to have interest in studying primary cases of the problems by researching from the internet and other traditional sources, and by interviewing with people involved in Thai maritime navigation. It was found that the Thai maritime navigation has encountered many key problems as follows: public enterprise, unqualified maritime human resources and government policy. The best way to solve all problems is the support by the Thai government through setting up flotilla, low interest rate, charity law, supporting the flotilla, and seeking alliances among navigation businesses.

Nguyen, Hong-Oanh (2011) studied about explaining variations in national fleet across shipping nations. Many studies on national shipping attribute the declines in national fleets of developed economies to the lack of comparative advantage, but little has been done so

far to identify factors contributing to countries' shipping comparative advantage using a systematic approach. Although shipping markets are highly international and competitive, it is not clear whether tonnage owned by countries is governed by country-specific factors. The main variable of interest is national fleet tonnage owned by country of domicile as opposed to registered tonnage. The results of econometric analysis using data from 84 shipping nations indicate that various country-specific factors do indeed contribute to variations in fleet tonnage across shipping nations, albeit at different levels of significance. Financial market development, external trade, ship registration, shipbuilding and shipping history appear to have the most significant factor, followed by the level of development and technology and maritime policy. The overall analysis results strongly suggest that development of the shipping industry can also be influenced by the shipping policy.

3.3 Strategic Approaches to Shipping Policy

Prior to formulating government maritime policy for the development of national merchant fleet, government maritime policy makers should understand two basic approaches; protectionist approach and liberal approach.

3.3.1 Protectionist approach

Protectionism is a policy to protect the national industries against external competition. The objectives of protectionist shipping policy are to assist the national merchant fleet and to meet the needs of the shipping industry and the national economy. Some measures of protectionist policy are (Cho 2002):

- Direct or indirect financial assistance by the government for private ship-owners;
- Administrative and legal measures to bring definite advantage to national shipowners.

However, protectionism, by means of quotas, maritime equivalents of customs tariffs subsidies, or any other kind of fiscal favor could distort the optimum result of distribution of resources leading to lower levels of economic welfare (Goss 1993).

3.3.2 Liberal approach

Shipping liberalism is based on the principle of free and fair competition. Firms have free access to shipping markets, while shippers have the right to choose the carrier with either a national or foreign flag (Cho 2002).

A liberalization approach has resulted from both international and domestic factors. World Trade Organization (WTO), Organization for Economic Cooperation and Development (OECD), European Union (EU), and United States of America (USA) are the international factors. The domestic factors come from the awareness that:

- Liberal trade policy may help the expansion of export and import.
- Domestic market forces may be insufficient for industries to survive and compete with the outside competitors and technological change (ESCAP 1999).

The selection of any approach to shipping policy depends on the nature of the fleet and its role for the national economy. Countries with strong and competitive fleets are likely to take the position of shipping liberalization, while those with weak fleets having a weak market position will need intensive protection of their interest against competition from more efficient foreign carriers (Cho 2002).

Evolution of the shipping industry in the ESCAP region is divided into 5 stages, which completed its cycle in the last 50 years (ESCAP 1999). First stage, shipping services were provided by overseas shipping line and controlled by liner shipping conference practices. This stage took place in 1950s and 1960s. Second stage, shipping services are provided by national fleets and overseas shipping line, and controlled by government through legislation. This occurred during 1970s. Third stage, shipping services were provided by national fleets and overseas shipping line, and controlled by government through partial

removal of protectionism measures and weakening of liner conferences in 1980s. Fourth stage was in 1990s. Shipping services were provided by overseas shipping line with some participation of national fleets. Fifth stage, shipping services have been provided by major shipping lines through mergers and alliances which have complete liberalization and application of market forces during twenty-first century. However, there are no countries that fully practice the principle of liberalism. There is some criticism that the concept of shipping liberalism is more a slogan than a reality (Cho 2002).

3.4 Experiences on Shipping Policy in Foreign Countries

Normally, the purpose of shipping policy is to strengthen and support the national merchant fleet to compete with foreign fleets. Many countries in Southeast Asia are alert to promote domestic maritime transport business. Each country took measures in order to support the expansion of merchant fleet. Mostly the government of these countries gives precedence to establish the national merchant fleet in order to reduce dependence on foreign ships for international shipping.

Experiences in foreign countries may provide a good starting point for the development and implementation of shipping policies for Thailand. There are four example countries: Korea, China, UK and the Philippines. In formulating government maritime policies in the long run, policy makers should understand not only examples of successful policies of growing fleets in developing countries, but also unsuccessful experiences leading to declining fleets of developed maritime countries. Thus, studies of shipping policies in other countries would be the good starting point to learn about other countries strategies as well as to develop an implementation plan. Shipping policy of each country will be discussed in this section.

3.4.1 The Republic of Korea's Experience

Korea is an export oriented nation with the world class shipping firms and shipbuilders and wants to grow as a shipping and logistics center in the North-east Asia. The primary objectives of shipping policy are as follows: (1) to support Korean importers and exporters by providing them with quality shipping services at the right time on a stable basis; (2) to enable the shipping sector to maintain competitive edge in the global marketplace; (3) to create employment on board and shore and (4) to earn foreign exchanges. As a divided nation between North and South, the confrontation has not ended on the Korean peninsula. In this context, the Korean merchant marine is also playing a non-economic role of strategic importance for the national security and well-being of the people.

Iheduru (1992) recommended South Korea as a good example of how to develop shipping policy for a national merchant fleet. Kim (1992), Lee (1999) and Cho (2002) described the government policies and its impacts on the shipping industry in Korea. Korean shipping policy was modified over time due to the changes in targets and directions of the nation's economic policy in response to changing trading environment of the world economy. The policy objectives were to maintain order in maritime transport and to pursue sound development of the shipping industry. This resulted in a contribution to the development of the national economy and the promotion of public welfare, and to improvements in international competitiveness of the Korean shipping firms (Van de Linden 2001; Cho 2002). The government had been pursuing a long term goal of building Korea as a global shipping centre in the Asia-Pacific region and as a logistics centre in the North-East Asia. To implement this goal, the government was preparing to open a shipping exchange in Korea as a private initiative and to activate a Korean Protection and Indemnity (P&I) Club for Korean ship-owners. The final goal was to establish an independent marine insurance market in collaboration with other P&I clubs in this region (Cho 2002). For development and implementation of maritime policies in Korea, there are five important measures, which lead Korea to be a successful country in developing a national merchant fleet.

1) Financial Support Measures

During the period of building up the national shipping fleet when Korea was short of foreign exchange for buying ships, the government allowed ship-owners to buy ships by means of bare boat charter with hire/purchase options. When this ship financing policy was adopted in the middle of 1970s, it brought about desirable results for the Korean shipping community to build up its national fleet during the period of the increasing demand in the fast growing economic conditions.

Government also allowed ship-owner to import secondhand ships. There were three methods of ship financing: local currency loans, leasing and foreign currency loans. Imported second hand ships accounted for fleet expansion in the range of 30% to 60% in the past. Since 1984, it had drastically decreased to less than one percent (Cho 2002).

For financing of new ship buildings in Korea, there were the planned ship-building program and the bare boat charter with hire/purchase options. The government had been implementing this ship financing scheme under the following conditions: 7% annual interest rate, 10 years of loan repayment period, 80% of proportion of finding, and 10% of equity capital in the new ship building. To respond to the new challenge, the shipping community invented a new device of financing of new ship buildings. This new method was the bare boat charter with hire/purchase options. This financing method was possible because the Korean shipping firms had cargoes to carry, efficient shipyards and highly skilled manpower to operate the ships competitively.

In addition, the government had persuaded the banks to take a major responsibility for the purely financial support aspects of this program. Many banks had substantial loans outstanding to the shipping companies. These two financial support schemes were used for the fleet expansion. In 2003, Korea also introduced ship investment company system such as KG or K/S in Germany and Norway. Though this program, Korean shipping companies bought more than 100 ships.

2) *Cargo Reservations Scheme*

Previously, the Korean government used the cargo reservation scheme, the designated cargo system, for non-liner cargoes which were strategically essential to the Korean economy. When it negotiated entry conditions to the OECD, this cargo reservation scheme was completely abolished by the end of 1998. Korea has liberalization of market access and has not discriminated against foreign flag vessels.

3) *Shipping Register and Seafarer*

There were some restrictions on crewing associated with the Korean registry in order to maintain skilled national manpower base of the industry in the long term. The Korean government enacted the International Vessel Registry Act (a Korean version of second registry) in July 1997, to improve competitiveness of national shipping firms. The implementation of the second registry started in April 1998. The vessels registered under this second registry had more flexibility in employing foreign seafarers and enjoyed extraordinary tax benefits than the regular Korean flags. In this regard, the government introduced a new policy on seafarers of the second register ships. Its purpose was to increase the number of foreign seafarers to the maximum extent except the captain and a few chief engineers (Lee 1996; Cho 2002).

The other problem of Korea shipping was maritime labor. The problem was not a matter of supply of seafarers themselves but the result of increase in national income and social preferences. The main causes of the problem were high level of wages and reluctance of seafarers to be on board ship. To resolve the problem, the government allowed shipping firms to employ up to six foreign seafarers for an international shipping vessel and up to two for a coastal ship.

4) *Planned Shipbuilding Program*

Planned shipbuilding program was a way of linked development between the two related industries, shipping and shipbuilding. This policy played a critical role for supporting the

shipbuilding sector financially so that it could improve and secure international competitiveness on the basis of the domestic market. At the same time, the shipping sector could obtain the fleet at a competitive price and make profit by carrying growing volumes of raw materials necessary for processing in Korea and finished products to overseas markets.

In year 2010, Korean shipbuilders made every effort to accumulate the advanced technology required for the construction of high value added vessels. In the late 10s, Korean shipbuilders achieved great productivity improvement both in terms of yearly production volume per employee and yearly number of turnover of dry docks.

5) *Taxation Incentives Measure*

Korean taxation had been reduced for shipping business. A corporate income tax had been reduced to 16% of net earnings below 100 million Korean won, and to 28% of net earnings over 100 million Korean won. Taxation for dividends had been reduced to 15%. Taxation for profits from sale of company shares had been reduced to 0%. Value added tax for ocean going shipping had also been reduced to 0%. Income tax for seafarers on board ocean going vessels was free up to the monthly income of 1 million Korean won (Cho 2002).

In case of Korea, it was found that the shipping policies emphasized on financial support measures, cargo reservations scheme, shipping register and seafarer, shipbuilding program, and taxation incentives measures. After these measures had been implemented, Korean national fleet had been increased. In year 2010, the Korean government has steadily introduced liberalization and deregulation policies in the shipping industry, guaranteeing liberalization in the private sector and opening the domestic market to foreign carriers for the purpose of corresponding with the trends of globalization. As a result of these efforts, Korean shipping industry is now largely liberalized due to the elimination of almost all trade barriers in maritime transport services. Accordingly, the Korean government

understands it can no longer foster the growth of the shipping industry through protective policies. Liberalization measures have included the following.

- Foreign carriers were allowed to establish branches in Korea.
- Foreigners were allowed to invest in shipping auxiliary services, including maritime agency service and maritime freight forwarding service.
- In the case of the cargo reservation system for non-liner shipping, the number of items on the designated cargo list has been gradually reduced (items were already removed from the designated cargo list government procurement goods, refrigerated goods, cement, steel products, raw material for fertilizer, grain, coal and petrochemicals).
- The Waver System in liner shipping has been eliminated, allowing free access to the Korean market by foreign carriers.
- The licensing system of ocean-going shipping was transformed into the filing system, maintaining the policy of gradual liberalization the shipping industry.
- The Designated Cargo System was abolished entirely.

The success also resulted from the modification of shipping policies over time since the targets and directions of the nation's economic policies had been revised due to changing trading environment of the world's economy.

3.4.2 China's Experience

Frankel (1998), and Sun and Zhang (1999) reviewed the Chinese shipping policy and maritime development which had been divided into two periods: the period of planning economy from October 1949 to 1978 and the period of the implementation of the open policy of China since 1979. Their study indicated that Chinese fleet had an important position in the world while progressing to the 21 century. The fleet has been growing rapidly and successfully as a result of systematic and periodical process of Chinese policy development with encouragement and assistance from the government (Sun and Zhang 1999).

1) Period of planning economy

During the period of October 1949 to 1978, China's shipping policy mainly reflected the protectionism and full support for the ocean transport. The process of the particular development was divided into two parts: one was the initiation of shipping industry through international cooperation and leasing foreign vessels; the other was the period of the establishment of its own national ocean shipping fleet, developing the international shipping business. The Chinese government took the following measures to develop foreign trade transport, and initiated shipping business through international cooperation in shipping; leasing vessels; unification of operation and management of business of vessel agencies; and setting up its own tariff system.

At the end of the 1950s, the international shipping policy of the Chinese government started turning to the historical period of establishing national and its own ocean fleet to speed up the development of China's shipping industry. The Chinese government set up state-owned ocean going enterprises and ocean fleet in 1958, and granted loans for purchasing vessels and establishing state-operated shipping fleet. Therefore, China's shipping industry was rapidly growing strong.

2) Period of open policy

Since the implementation of the reform and the opening policy in 1978, China had also reformed the state owned shipping enterprise undertaking international marine transport. This could be divided into five steps: releasing power and making the enterprises more beneficial, reforming the system from profit to taxation, changing the system of job responsibility through operation by contract, transforming of the operational system and experimenting on establishing modern enterprise system. The adjustment and development of shipping policy were (Sun and Zhang 1999):

- The national policy regarding state shipbuilding and purchasing vessels had made significant changes. In 1984, the government decided that banks would provide

low interest loans for building vessels and purchasing vessels, and extend the time limit of repaying the loan, as well as reduce the custom taxation.

- Over the period 1978 to 1979, the Ministry of Communications had implemented the enterprise funding system for all state-owned shipping enterprise. In 1980, the enterprise funding system was changed into profit remaining system. From 1983 to 1985, the government had also implemented the system of profit and taxation at the same time. Since 1986, taxes had been considered as profit. After the enterprise had paid the state tax and adjust tax, it could realize its profits and keep it with the enterprise. In 1994 the taxation system was reformed. The privilege policy was abolished and the income tax was unified to 33%.
- Before the 1980s, China basically implemented the policy of national cargoes transported by national vessels. The Chinese foreign trade cargoes were unified and allocated by relevant departments. The individual company just implemented the national instructive plan for the transport. At the same time, the Chinese government signed contracts on bilateral trade and transport with relevant countries, with the clauses of cargoes reserved for the Chinese ships. From 1988, the Chinese government abolished the policy of having national cargoes transported by national ships. In addition, the tariff barriers were removed. The reservation has been decided by market mechanism. At present, China only has reserved cargoes for the countries that previously signed marine agreements.
- The operational subsidy policy in China was not clear. It had been difficult to find particular provision or regulations, since the loss incurred in enterprises was assumed by state. It has no difference between subsidy or non-subsidy. At present, the state-owned enterprises gradually become the subject of the market and assume sole responsibility for their profits and losses.
- The market access and national treatment were the major components of the important adjustments in China's international shipping policy. The Chinese government continuously adopted and promulgated a series of new policies connecting market access and national treatment according to the general tendency

of international shipping practice in international marine transport, port service and other related services. It aimed at accelerating the construction pace to match modern international shipping industry.

From the review, the Chinese government in the beginning period paid attention on international co-operation, leasing vessel, unification of operation and management of business of vessel agencies, establishment of national merchant fleet, development of China's shipping industries, and granted loans for purchasing vessels. For the developing period, Chinese government emphasized shipbuilding and purchasing policy, taxation policy, cargo reservation policy, operation subsidy policy, and market access and national treatment policy. After the merchant fleet had grown, the Chinese government abolished the cargo reservation and all subsidy policies. China's policies then became universal and complied with international shipping practices.

China is now working on revising its maritime policy not only to carry on its commitments, but to pave the way for further negotiation on the WTO Maritime Agreement. As trade is forecasted to expand exponentially, no industry will be more affected than shipping, particularly as the rising volumes will be accompanied by a sharp increase in competition when overseas companies swarm in for a share of the Chinese market. In 2002, China ranked fourth in importance among maritime countries and territories, after Greece, Japan and Germany in terms of dead weight tonnage. The growth in volume of China's seaborne cargo in 2002 kept pace with that of the national economy.

Now, as a full WTO member, China is embarked on another initiative, reform of its legal system, which should have an equally important impact on China's economy and society in the future. With respect to reform of the law regulating maritime commerce and shipping, some satisfactory results have already been achieved, and they no doubt instill greater confidence in foreign investors. China's WTO accession surely promises greater opportunities for foreign investors, allowing them to compete with domestic investors on an equal basis. Even if China has yet to fully open its shipping industry, its trend is clearly in that direction (Kelvin et al. 2005).

3.4.3 *UK's Experience*

Ledger and Roe (1992) attempted to outline the evolution of UK shipping policy in the context of the decline of the UK merchant marine and assessed whether a coherent and logical policy has been developed. Jenssen's (1993) analysis of the causes of failure of the former Eastern Germany's shipping industry showed that the principal weakness, deficiencies and faults of the command type of economy was not viable. The main causes have been identified as: no entry to the markets; no competition as an economic stimulus; and no convertible currency. Evangelista and Morvillo (1998 cited in Jensen 2003) found a major declining of Italian shipping was due to the lack of entrepreneurship. The Dutch government saw the decline of their national fleets to be the cause of a significant decrease in national income, the rise in unemployment rates, and obstacle to the defense of the country (Veenstra et al. 2000). However, UK is a good example of a declining national merchant fleet.

In 1950 Britain had the largest merchant fleet in the world. However, it dropped to the eleventh rank by 1990. This was due to two threats facing the British fleet. First threat was that fleet owners needed to buy new ships but mostly could not afford them. Second threat was that new ships had to be placed on the UK registry (Ledger and Roe 1992). Roberts (2000) found that this was due to the fact that the UK merchant fleet had been largely flagged-out. Lord Donaldson (1994 cited in Dinwoodie 2000) stated that fewer UK nationals were available to provide important expertise in support of UK merchant fleet, raising the requirement to employ non UK nationals.

After UK government realized the problem of national merchant fleet, many measures had been launched to aid the maritime sector. Merchant Shipping Act of 1988 provided financial assistance for the training of seafarers and repatriation costs. Transport Committee welcomed the assistance to reduce the differential between the cost of employing UK and third world crews, and to stem the decline in number of British seafarers employed on UK ships. The government provided assistance with training costs by helping offset the salary costs of cadets and increase cadet numbers. The government

withdrew the previous tax allowances for investment in shipping, such as the lower rate of corporate income tax and the universal 25% write-down Business Expansion Scheme for investment in ships. The government also provided other measures to aid reinvestment: the roll-over relief for balancing charges, 50% allowance as an incentive for investment in ships. The measures to assist running costs were on income tax and social security charges, navy strategic contract and crew related allowance. The measures to improve trading prospects with reducing costs were the delegation of surveys to classification societies and reform of Merchant Shipping Act. The other measures were to allow the unimpeded transfer of ships that meet internationally accepted standard on to the UK register, to accept all ship board positions, to implement the Lome Convention, to eliminate the cabotage restrictions, and to negotiate stages 2 of shipping policy (Ledger and Roe 1992; Goss 1993).

National Union of Marine, Aviation and Shipping Transport (NUMAST 1991 cited in Ledger and Roe 1992) warned that fiscal measures were urgently needed to help British shipping compete on an equal basis in the world market. Thus the most important shipping policies in the decline period were relaxation of various kinds of taxes, and emphasis on ship register and seafarer measures to prevent widespread flagging out of remaining UK fleet. Consequently, other policies such as financial policy and legislation policy had been revised. Although British merchant fleet may not be a good example for developing country but it shows the cycle of maritime development during decline period. To prevent from decline period, a country may use UK's experiences to draw up its strategic plan.

3.4.4 The Philippines's Experience

The countries discussed above provided experiences of the development of policies and measures. On the other hand, the Philippines is a good example of implementing a plan. Maritime Industry Authority of the Philippines set up the 1999 Annual Plan and 2001-2004 Medium-Term Plan. These plans comprised of objectives, strategies and measures. The main objective of the plans was to develop a strong merchant fleet through ship-ownership/lease purchase, ship-ownership/bare boat chartering, and ship management.

The strategies were to develop ship financing program, to provide tax incentives, to encourage/enhance participation of Philippine-flag ships in carrying of the country's foreign trade, to expand cargo markets for Philippine-flag vessels, to improve shipping-related service sector, to strengthen the Maritime Administration, and to develop ship management as an industry (Maritime Industry Authority of the Philippines 1999).

The 1999 Annual Plan emphasized on international agreements and participation with related international organizations. The annual plan also consisted of financial measure of the ship financing/leasing scheme to conceptualize a maritime bank, legislation amendment of the Ship Mortgage Law, the RA 7471, and international maritime safety law. The annual plan included tax incentives to attract both local and foreign investors to engage in shipping operations and ship management in the Philippines. To pursue bilateral shipping agreement by signing of the RP-France Merchant Shipping Agreement and implementation of the four concluded agreements was the other measure. The annual plan also showed interest in information technology system and research & development (Maritime Industry Authority of the Philippines 1999). Jenssen (2003) also recognized that information and communication technology is one of the three important driving forces in shipping.

On the other hand, the 2001-2004 Medium-Term Plan was focused on financial measure, taxation incentives, ship-register measure, and marketing measure. Marketing measures were to expand cargo base with efficient multi-modal transport services and liberalizing shipping services provisions. To strengthen the maritime administration, computerization of information and data bank would be established. The other measures were the development of ship management as a ship management country, implementation and fill compliance of domestic and overseas vessels to international and national laws, rules and regulations. This plan was also to develop joint cooperation program in the enforcement of maritime safety law, rules and regulations among ASEAN and develop ASEAN maritime organization that will regulate and control maritime safety administration in the region (Maritime Industry Authority of the Philippines 1999).

The Philippines set a good example of specifying details of an annual plan and medium term plan. These plans covered important areas such as financial support area, tax incentive area, marketing support area, ship-registration area, maritime administration area, shipping related service area and legislation area. The plan emphasized both domestic and foreign Acts and the country's participation in international organizations including maritime safety. These implementation plans imply that the Philippines has firm commitment to maritime development and is opening itself to international market, just like Korea and China.



Chapter 4

Research Methodology

This chapter describes the research methodology used in this study. The credibility of findings and conclusions extensively depend on the quality of the research design, survey instrument, data collection, data management, and data analysis. Therefore, the description of all these procedures will be presented below.

4.1 Research Design

A survey of the perspective of Thai ship operators was conducted to evaluate the degree of effectiveness of existing government measures as well as the degree of agreement with the proposed measures including the problems and obstacles which impede the development of Thai merchant fleet as well.

The focus of the evaluation was on the view of Thai ship operators. In order to gather the necessary data, the researcher utilized the descriptive method using quantitative approaches. The online questionnaire is the most important of the methods of this survey. From the many past studies found that Thai shipping companies have not associated with government sector as expected for returning the questionnaire; only a few responses were returned. For this reason, the researcher adopted the online survey questionnaire because it would be the most suitable way to get required data from Thai shipping companies. E-mail and web-based data collection methods are attractive to researchers in international marketing because of low costs and fast response rates (Ilieva et al. 2002). Mailed questionnaires were utilised in case the respondents required the completion of questionnaires at their own convenience.

The research design was a self-administered questionnaire in Likert format for the data gathering process to get quantitative data. The questionnaire using the Likert format with a five-point response scale was structured in such a way that participants will be able to

answer it easily. A Likert Scale is a rating scale that requires the subject to indicate his or her degree of agreement or disagreement on each question item.

The primary aim of the questionnaire is to evaluate the government's shipping policies and measures including identifying the important level of problems and obstacles to Thai merchant fleet development. This research, therefore, will use a mixture of closed questions and more open comments or suggestions in the online survey questionnaire. A closed question is one that has pre-coded answers. Through closed questions, the researcher will be able to limit responses to being within the scope of this study. Furthermore, some comments or suggestions given by the participants were useful data which can be used for analysing the result together with quantitative data.

4.2 Participants

Firstly, the researcher defined the population. For this study the target group is Thai ship operators because they can provide better understanding of the current situation of government policies and measures.

Secondly, this study has required assistance from senior managers of each Thai shipping company for accomplishing the objectives. Therefore, the researcher took some information (contact details) of all shipping companies through the member database on the website of Thai Shipowners' Association (TSA). This online survey questionnaire was sent via electronic mail to 35 shipping companies in Thailand. A total of 32 respondents from 19 companies - both dry cargo vessel companies and liquid bulk carrier companies - were participants for this research. However, due to constraints of number of Thai ship operators, the sample size is small. To get data for this study, selected participants answered an online survey questionnaire structure in Likert format and could only complete the survey via the internet.

4.3 Research Instrument

The online survey method was the research instruments used in order to achieve the main objective of this study. A link to a self-administered questionnaire was sent via electronic mail to the selected senior managers of Thai shipping companies. The questionnaire used for data collection is presented in Appendix B. It consists of various matrix tables and diverse items arranged independently in order to address the research questions and the relationships depicted in this study. The online survey questionnaire is designed using both Likert Scale and some suggestions. To make the questionnaire, the participants were also required to give the name of their company since otherwise the system would not be able to save and return that questionnaire. The research questionnaire is arranged in three primary sections with each section containing research questions that addressed the three main objectives as follows:

Section A: This part of the questionnaire is the format of typical 5 levels Likert by online to survey the effectiveness of existing policies and measures. It consists of four main measures, namely (1) financial measure, one question, (2) tax measure, eight questions, (3) investment promotion measure, one question and (4) two questions of Thai vessel promotion measure, for a total of twelve questions. The columns were labeled using a scale of five that identifies five descriptors or options: (1) Not effective at all, (2) Less effective, (3) Moderately effective, (4) Effective, and (5) Very effective.

Section B: This part of the questionnaire is the format of typical 5 levels Likert by online to survey the attitude of Thai ship operators to the proposed government measures. It consists of five main measures, namely (1) financial measure, three questions, (2) tax measure, twelve questions, (3) laws and regulations amendment measure, seven questions, (4) personnel promotion measure, five questions and (5) seven questions of other promotional measures, for a total of thirty-four questions. The format of a typical five-level Likert item is (1) Strongly agree, (2) Agree, (3) Undecided, (4) Disagree, and (5) Strongly disagree.

Section C: This part of the questionnaire is also the format of typical 5 levels Likert by online to survey the importance of preceding problems and obstacles for Thai merchant fleet development which government sector should emphasize and resolve quickly. This section consists of six main problems and obstacles, namely (1) financial support, twelve questions, (2) tax incentives, four questions, (3) marketing, nine questions, (4) maritime personnel, six questions, (5) laws and regulation, four questions and (6) four questions of government administration and operation. The format of a typical five-level Likert item is (1) Not important at all, (2) Less important, (3) Moderately important, (4) Important, and (5) Very important.

4.4 Data Collection

Thai ship operators are considered as the appropriate target group to answer the questions. Process of data collection for this study started from selecting Thai shipping companies which are member of Thai Shipowners' Association (TSA) from web database and sending the survey invitation email along with the attached specific link for surveying online to chief executive officers of all 35 Thai shipping Companies. This is presented in Appendix A and B. Also, some of the Thai shipping companies are large and also have many managers who might have some different ideas on the government's shipping policies and measures. Therefore, this online survey has several participants from the large shipping companies and a participant from the smaller ones. Thirty-two responses were received from managing directors, general managers or managers. Of these, all responded via electronic mail. Data was collected over a two-month period from early February to late March 2012. As this survey was an exploratory study, strict standards for determining an acceptable response rate were not established. However, in order to look for the best results, a combined and active follow-up strategy by phone reinforced data collection as well.

Primary data has been collected from Thai shipping companies by online survey. This was a useful way to see their reactions to the online questionnaire. There were a total of

32 participants. For this particular study, the researcher utilized documentary secondary data gathered primarily from journals, published summaries and articles from textbooks which are written by specialists in shipping industry and, where necessary, are properly acknowledged in the report. In essence, relevant literature review was regarded as the important materials to support the survey results and meet the objectives of this study.

4.5 Data Processing

When the senior managers who participated in this online survey completed the questionnaire, all data consisting of date, time stamp, the name of shipping company and scores of each item are automatically saved to the personal database. Data processing started from checking error on completed questionnaires which returned from all Thai shipping companies participated. After checking, total online questionnaires were downloaded as an Excel file and proceeded by computing the weighted mean and standard deviation of each survey item. The computed values were compared to the Likert Scale for data interpretation and the results were analysed to discover answers that conform to research objective afterwards.

4.6 Data Analysis and Statistic for Data Analysis

In order to accomplish the purpose of this study, data gathered by the application of the scale (primary data) was analyzed by using descriptive statistics. The basic statistics for data analysis are the Mean and Standard Deviation computed in order to analyze the value of data. These statistics were applied for quality methodology. Frequencies ranking for the ordinal scale and arithmetic means for the Likert scale were used in the data analysis to describe central tendencies of the distribution, and standard deviation was used to measure dispersions (Zigmund 1997). Results of the survey will be presented in tables of Chapter 5. Excerpts from some comments or suggestions are integrated based on the analysis outline. In addition, relevant literature to support the findings is also included.

Chapter 5

Analysis Results and Implication

This chapter reports the results of the study and evaluates them according to the stated objectives and research questions. For this study, the results of data analysis will be described in the following sections.

5.1 Effectiveness of the Existing Government Measures

The main objective of this section is to evaluate the effectiveness of existing government measures. As shown in Table 5-1 and 5-2, the results from the survey indicate that the effectiveness of each existing measure ranges from 2.84 to 3.84. Based on the score of rating 5 = very effective, 1 = not effective at all, all twelve existing measures have been classified into five groups according to their individual mean value as follows:

- (1) Very effective: Individual mean is from 4.51 to 5.00
- (2) Effective: Individual mean is from 3.51 to 4.50
- (3) Moderately effective: Individual mean is from 2.51 to 3.50
- (4) Less effective: Individual mean is from 1.51 to 2.50
- (5) Not effective at all: Individual mean is from 1.00 to 1.50

Table 5-1: Effectiveness of the existing measures to the development of Thai merchant fleet

Measures	X = 32		Classification	Rank
	Mean	S.D.		
1. Financial Measure				
1.1 Financial support by EXIM Bank at low interest rates	3.31	1.03	Moderately effective	10
2. Tax Measures				
2.1 Exemption on corporate income tax.	3.63	1.10	Effective	4
2.2 Exemption on income tax from selling ships or rebates from insurance companies.	3.50	1.11	Moderately effective	7

2.3 Reduction of withholding tax on the income earned by Thai ships used in international transport.	3.41	1.04	Moderately effective	8
2.4 Exemption on income tax from dividends from the international lines.	3.34	1.10	Moderately effective	9
2.5 To hasten value added tax repayment within 15 days.	3.56	1.22	Effective	5
2.6 Ship operators who transport domestic cargo have privilege registering of value added tax like transport by aircraft in realm.	3.53	0.92	Effective	6
2.7 Exemption on import duty for general cargo ship, which has the size of 1,000 GRT or lower, in rate of 10%	3.70	0.99	Effective	3
2.8 Exemption on personal income tax for crews of ships used in domestic transport.	3.75	1.11	Effective	2
3. Investment Promotion Measure				
3.1 Thai ship operators have the right to ask for promoting investment according to the Investment Promotion Act including exemption on import duty for importing ship and machine from overseas and exempt corporate income tax for 8 years.	3.84	0.88	Effective	1
4. Thai Vessel Promotion Measures				
4.1 Cargo reservation in accordance with Mercantile Marine Promotion Act, B.E. 2521 covering 9 routes between Japan, Korea, Taiwan, Hong Kong, Singapore, Europe, US, China and Malaysia to Thailand.	3.31	1.23	Moderately effective	10
4.2 To improve chartering permission by permitting to charter the ships from foreign countries.	2.84	1.19	Moderately effective	11

Out of the twelve existing government measures, six of them are considered as effective; namely, Thai ship operators have the right to ask for promoting investment according to the Investment Promotion Act B.E. 2544 (3.84), this measure also includes exemption on import duty for importing ship and machine from overseas and exemption on corporate income tax for 8 years. Thai government has provided investment privileges to attract Thai operators into this service sector. During the year 2007 - 2011, 7 Thai companies with 21 supply vessels under Thai flag were granted investment promotion privileges by

Thailand's Board of Investment (BOI). Therefore, the investment promotion is considered as an effective measure at present. Exemption on personal income tax for crews of ships used in domestic transport (3.75), exemption on import duty for general cargo ship, which has the size of 1,000 GRT or lower, in rate of 10% (3.70), exemption on corporate income tax (3.63), to hasten value added tax repayment within 15 days (3.56), ship operators who transport domestic cargo have privilege registering of value added tax like transport by aircraft in realm (3.53). These effective measures are parts of the investment promotion and tax incentive area.

Six moderately effective measures are: exemption on income tax from selling ships or rebates from insurance companies (3.50), reduction of withholding tax on the income earned by Thai ships used in international transport (3.41), exemption on income tax from dividends from the international lines (3.34), financial support by EXIM Bank at low interest rates (3.31), cargo reservation in accordance with Mercantile Marine Promotion Act, B.E. 2521 covering 9 routes between Japan, Korea, Taiwan, Hong Kong, Singapore, Europe, US, China and Malaysia to Thailand (3.31), to improve chartering permission by permitting to charter the ships from foreign countries (2.84). These measures are fields of financial supports, Thai vessel promotion and little tax incentives.

Table 5-2: Ranking of Effectiveness of Existing Government Measures

Measures	Total No. of Measures	Average	Classification	Rank
Financial Measure	1	3.31	Moderately effective	3
Tax Measures	8	3.55	Effective	2
Investment Promotion Measure	1	3.84	Effective	1
Thai Vessel Promotion Measures	2	3.08	Moderately effective	4
Total	12	3.45		

The results of this survey on the existing government measures show that measures of investment promotion and tax incentives are the most effective one. Many studies on national shipping policy identified that financial support is also the most important measure for the development of merchant fleet. On the other hand, existing financial

measure is still in medium level. Nevertheless, there is no any existing measure which is very effective at all. Therefore, Thai government should keep effective measures and ameliorate moderately effective measures.

5.2 Agreement of the Proposed Government Measures

The main objective of this section of the survey is to explore the opinion of Thai ship operators for proposed government measures. Results from the survey (Table 5-3 and Table 5-4) indicate that Thai ship operators' agreement on each measure ranges from 3.03 to 4.22. Based on the score of rating 5 = strongly agree, 1 = strongly disagree, all thirty-four proposed measures have been classified into five groups according to their individual mean value as follows:

- (1) Strongly agree: Individual mean is from 4.51 to 5.00
- (2) Agree: Individual mean is from 3.51 to 4.50
- (3) Undecided: Individual mean is from 2.51 to 3.50
- (4) Disagree: Individual mean is from 1.51 to 2.50
- (5) Strongly disagree: Individual mean is from 1.00 to 1.50

Table 5-3: Agreement of the proposed measures to the development of Thai merchant fleet

Measures	X = 32		Classification	Rank
	Mean	S.D.		
1. Financial Measures				
1.1 Loan guarantees by government to Thai ship operators.	3.84	1.17	Agree	9
1.2 To create promotion measure to Thai shipyards enable them to grant credit for shipbuilding.	3.75	0.95	Agree	11
1.3 Maritime fund establishment in form of revolving fund, its interest is lower and its regulation in loan borrowing is convenient.	3.69	1.12	Agree	14
2. Tax Measures				
2.1 Exemption of income tax on revenues from international sea transport in form of Door to Door basis by specifying in exemption and covering in term of using Thai vessel.	3.90	1.01	Agree	7

2.2 Thai crew's income tax exemption (special labor) in order to cover other revenues, which is not only salary and wage such as over time wage, other welfare wages.	4.22	0.91	Agree	1
2.3 Period expansion of rights in income tax exemption, deriving from old vessel sale and purchase the new vessel or new shipbuilding ordering from 1 year become 2 years.	3.91	0.89	Agree	6
2.4 To collect income tax, derived from service providing of offshore supply vessel with Thai flag by using the same criterion and tax rate to foreign vessel.	3.84	0.85	Agree	9
2.5 Income tax levy exemption in the rate of 1% for estimated income, which is chartering rent that used in international cargo transport.	3.88	1.01	Agree	8
2.6 To specify the collected VAT rate with Thai ship operator who operates in international cargo transport outside Thailand (cross trade) in rate of 0% and covering in case of purchasing vessel from overseas and equipments of Thai vessel.	4.16	0.92	Agree	2
2.7 To give the privilege in term of VAT specifying in the rate of 0 % to service activities and service using in ship management.	4.03	1.15	Agree	4
2.8 To reduce import duty for general cargo ship, which has the size of 1,000 GRT or lower, in rate of 1%.	3.74	1.00	Agree	12
2.9 To establish the fund for ship repairing, which has the size of 1,000 GRT or lower by specifying in VAT levy as 0 % and Thai shipyard can deposit as security credit to company in case of ship repairing and shipbuilding with Thai shipyard.	3.56	1.13	Agree	18
2.10 To specify VAT for shipbuilding by Thai shipyard in rate of 0%.	3.94	1.21	Agree	5
2.11 To exempt withholding tax, from levy with remuneration that Thai ship operator pays for foreign operator in chartering international sea ship and chartering container storage, container, and container repairing.	3.66	1.15	Agree	16
2.12 To improve measure toward depreciation of ships in order to subserve to Thai ship operators.	3.84	0.99	Agree	9
3. Laws and Regulations Amendment Measures				
3.1 Laws amendment, which are the constraints to capacity development in competition of Thai ship such as draft of the Act on Carriage of Goods by Sea.	3.69	1.18	Agree	14
3.2 To improve procedure toward the carriage of petroleum product.	3.94	1.11	Agree	5

3.3 Lenient measure on compulsive regulations in case of switching person in Thailand instead of seafarer who is still on ship in overseas by using the operating principle of international standard.	3.91	0.96	Agree	6
3.4 To improve practice toward registering ship in system of one stop service.	4.13	1.10	Agree	3
3.5 Unlimited nationality of seafarers on Thai ships in order to increase flexibility in operation cost.	3.50	1.16	Undecided	20
3.6 Additional acceptance measure in using the ship survey results of classification societies, which are accepted in international level.	3.75	0.98	Agree	11
3.7 Law amendment measure enable to be registered the vessel in form of second registry.	3.53	1.16	Agree	19
4. Personnel Promotion Measures				
4.1 To support money to Thai ship operators for sending seafarers train merchant shipping both domestic and overseas.	3.81	1.12	Agree	10
4.2 To support money to Thai ship operators for inviting expert from foreign countries educate in seafarers.	3.75	1.08	Agree	11
4.3 To support money to students who concentrate on maritime education.	3.91	1.15	Agree	6
4.4 Promotional measure for Royal Thai Naval Academy joining to product officers.	3.59	1.07	Agree	17
4.5 Promotional measure for maritime training institution both of government and private sector in order to generate seafarers and crews.	3.84	1.08	Agree	9
5. Other Promotional Measures				
5.1 Fiscal system improvement measure conforms to International Accounting Standard regarding depreciation deduction, bad-debt disposal and settlement extension.	3.72	0.81	Agree	13
5.2 Permission in Bare boat charter registration, chartering ship in form of leasing enable to register the ship.	3.66	0.90	Agree	16
5.3 Ship mortgage permission by dividing the ship into each part according to the parts of complete constructed ship in shipyard.	3.75	0.95	Agree	11
5.4 Promotional measure in Thai flag vessel providing such as VLCC, container ship, break bulk cargo ship.	3.75	1.05	Agree	11

5.5 The routes expansion of Thai merchant fleet by increasing the number of Thai ships in the future such as the routes of Thailand-Australia-New Zealand, Thailand-Japan, Thailand-Middle East-Europe, and cargo transport routes in Asia.	3.68	1.11	Agree	15
5.6 Government might form joint ventures with shipping line for supporting international trade and developing Thai port.	3.03	1.20	Undecided	22
5.7 Government will use measure in supporting Thai ship operators to take over overseas shipping business.	3.09	1.12	Undecided	21

From the perspective of most Thai ship operators, the first ten measures which they agreed are as follows: income tax exemption for Thai crew (4.22). Presently, exempted of income tax in part of salary and wage only according to Finance Ministerial Regulation, 24th issues, B.E 2539 No.1, specifying the collected VAT rate with Thai ship operator who operates in international cargo transport outside Thailand (cross trade) in rate of 0% and covering in case of purchasing vessel from overseas in order to register as Thai vessel and purchasing various equipments of Thai vessel both of inland and overseas (4.16), improving practice toward registering ship in system of one stop service (4.13), specifying in the rate of 0 % to service activities and service using in ship management in order to be the guidelines in administrative efficiency development for merchant fleet (4.03), shipbuilding by Thai shipyard, specifying VAT in rate of 0% (3.94), improving procedure toward the carriage of petroleum product (3.94), period expansion of rights in income tax exemption, deriving from old vessel sale and purchase the new vessel or new shipbuilding from 1 year become 2 years as from the date of old vessel sale (3.91) because it is appropriate time for shipyard in new shipbuilding and in case of new shipbuilding by service using with Thai shipyard, it should be expanded as 3 years in order to obligate in shipyard development, lenient measure on compulsive regulations in case of switching person in Thailand instead of seafarer who is still on ship in overseas by using the operating principle of international standard (3.91), supporting money to students who concentrate on maritime education (3.91), exemption of income tax on revenues from international sea transport in form of Door to Door basis (3.90). These measures are most parts of tax incentives, laws amendment and maritime personnel area.

Three measures are considered as being undecided; namely, unlimited nationality of seafarers on Thai ships in order to increase flexibility in operation cost (3.50), government should use measure in supporting Thai shipping companies to take over overseas shipping business (3.09), government might form joint ventures with shipping line for supporting international trade and developing Thai port (3.03). Most Thai ship owners extremely disagree on joint ventures or takeover overseas shipping business due to the competitive potential of Thai merchant fleet that has not developed as expected. The government, therefore, needs to reinforce own merchant fleet before thinking of takeover or joint venture with the overseas shipping business which have more strength and power.

Table 5-4: Ranking of Agreement of Proposed Government Measures

Measure	Total No. of Measures	Average	Classification	Rank
Financial Measures	3	3.76	Agree	3
Tax Measures	12	3.89	Agree	1
Laws Amendment Measures	7	3.78	Agree	2
Personnel Promotion Measures	5	3.78	Agree	2
Other Promotional Measures	7	3.53	Agree	4
Total	34	3.75	Agree	

As a result of the Table 5-4, tax measures are the most important area which should be proceeded with a mean 3.89, laws amendment measures (3.78), maritime personnel measures (3.78), financial measure (3.76), and other promotional measures (3.53) respectively. However, the next section will explore further the problems and obstacles impeding the expansion of Thai merchant fleet which might also occur from moderately effective and discontinued measures.

5.3 Importance of the Problems and Obstacles

Although many countries have appropriate policy and the implementation plan, but some problems and obstacles still remain in practice. There are several problems which occur to the development of Thai merchant fleet. These problems and obstacles are identified in six

areas: financial support, tax incentives, marketing, maritime personnel, legislation, and government administration as well as operations. Some of these problems may arise from moderately effective or less effective implementation of various measures, whilst the others may not be related to any government measures at all. Anyway, all these problems and obstacles need to be remedied within the short-term.

All senior managers of Thai shipping companies have been asked to rate the importance of each problems and obstacles in Likert Scale from 1 to 5. From the analysis of results (Table 5-5 to Table 5-10), all 39 problems and obstacles in the 6 areas mentioned above are rated in a range from 3.53 to 4.42. Based on the score of rating 5 = very important, 1 = not important at all, all the problems and obstacles have been classified into five groups according to their individual mean value as follows:

- (1) Very important: Individual mean is from 4.51 to 5.00
- (2) Important: Individual mean is from 3.51 to 4.50
- (3) Moderately important: Individual mean is from 2.51 to 3.50
- (4) Less important: Individual mean is from 1.51 to 2.50
- (5) Not important at all: Individual mean is from 1.00 to 1.50

As shown in Table 5-5 to 5-10, the results of this section show that all problems are important level, which have individual mean from 3.51 to 4.50, are listed in each area as follows:

Table 5-5: The Problems and Obstacles in Financial Support

Item	Problems and Obstacles	X = 32		Classification	Rank
		Mean	S.D.		
1	Thai shipping companies have limitation in capital and loan repayment period.	4.06	0.76	Important	5
2	Financial support from Thai government is not enough.	4.25	0.76	Important	2
3	Delay in establishing maritime fund which is revolving fund.	4.16	0.68	Important	3
4	Domestic interest rate is higher than foreign rate.	3.78	0.79	Important	8

5	Loan period according to maritime promotion measure is relatively short.	3.88	0.75	Important	7
6	Loan repayment period is relatively short and have no time period for being free from returning interest.	3.91	0.78	Important	6
7	Domestic financial institutions or banks do not understand characteristic of maritime business.	3.91	0.82	Important	6
8	Loan of Thai ship operators depends on size and reliability of business.	4.13	0.71	Important	4
9	Bond issue of Thai ship companies against all odds because they have not been business which is able to speculate the profit in short time.	3.63	0.79	Important	10
10	The current financial measure only limits specific Thai ship operators.	3.75	0.76	Important	9
11	Financial support measures depend on right understanding of the cabinet.	3.91	0.93	Important	6
12	Lack of skilled personnel in ship finance.	4.31	0.78	Important	1
	Average	3.97	0.78	Important	

Table 5-6: The Problems and Obstacles in Tax Incentives

Item	Problems and Obstacles	X = 32		Classification	Rank
		Mean	S.D.		
1	The tax right of Thai ship operators is bare compared with foreign countries.	4.31	0.82	Important	1
2	There are many regulations and definitions in calculating tax collection.	4.13	0.83	Important	2
3	Repayment of value added tax takes a long time.	4.06	0.88	Important	4
4	For a value-added tax refund, The Revenue Department often audits the company account, which leads to complexity in operation.	4.09	0.93	Important	3
	Average	4.15	0.86	Important	

Table 5-7: The Problems and Obstacles in Marketing

Item	Problems and Obstacles	X = 32		Classification	Rank
		Mean	S.D.		
1	The right of Thai ship operators is bare.	4.13	0.79	Important	3
2	Thai importers and exporters don't show their patriotism by supporting the use of Thai ships.	3.91	1.03	Important	6

3	Thai importers and exporters have weak bargaining power with the shipping operators in choosing Thai ships, which make them to buy with CIF and sell with FOB.	3.88	0.83	Important	8
4	Thai ship operators have a small transport share because Thai importers buy with CIF and exporters sell with FOB.	4.03	0.90	Important	4
5	Thai ship operators are in disadvantaged condition and service cost is higher than overseas ship operators.	4.19	0.75	Important	1
6	The Thai fleet, in a foreigner's view, does not reach international standards both in quality of services and safety.	3.97	1.03	Important	5
7	Thailand is not located on the main shipping routes of the world.	3.53	1.08	Important	9
8	Low frequency of service of the Thai merchant fleet.	3.88	0.98	Important	7
9	Lack of marketing network.	4.16	0.69	Important	2
	Average	3.96	0.90	Important	

Table 5-8: The Problems and Obstacles in Developing Maritime Personnel

Item	Problems and Obstacles	X = 32		Classification	Rank
		Mean	S.D.		
1	Shortage of quality seafarers in every level.	3.88	1.04	Important	5
2	The study course takes a long time, so maritime personnel are not enough for need of market.	3.69	1.00	Important	6
3	Lack of cooperation between government units in controlling and supporting the training center.	4.22	0.83	Important	1
4	Lack of ships for training both training ships for cadet and cargo ship for apprentices.	4.00	1.10	Important	4
5	Insufficient maritime personnel knowledge and understanding.	4.06	0.80	Important	3
6	Training expenses for seafarer program are high.	4.16	0.81	Important	2
	Average	4.00	0.93	Important	

Table 5-9: The Problems and Obstacles on Legislation

Item	Problems and Obstacles	X = 32		Classification	Rank
		Mean	S.D.		
1	Obsolescence and delay in process of Thai vessel registration compared with foreign countries.	4.13	0.87	Important	1
2	Formality for importing ship from overseas and registration of the new ship are drawback and do not conform general trade practice.	4.00	0.88	Important	4
3	Complicated law and regulations do not follow the international standard.	4.09	0.78	Important	2
4	The procedures, related laws and regulations do not subserve to transaction.	4.03	0.82	Important	3
	Average	4.06	0.84	Important	

Table 5-10: The Problems and Obstacles on Government Administration and Operation

Item	Problems and Obstacles	X = 32		Classification	Rank
		Mean	S.D.		
1	Thai government does not understand the needs of maritime business.	4.19	0.86	Important	4
2	The operational delay of Thai bureaucratic system and lack of cooperation between the various departments.	4.44	0.72	Important	2
3	Discontinuity on government's each policy and measure causes promotion unsuccessful as expected.	4.48	0.77	Important	1
4	Lack of expertise in planning the organization management system to be international practices.	4.38	0.75	Important	3
	Average	4.37	0.77	Important	

As a result of the Table 5-11 below, it shows that the most important problem that hampers the development of the Thai merchant fleet is government administration and operation (4.37), then tax incentives (4.15), legislation (4.06), maritime personnel (4.00), financial support (3.97), and marketing (3.96) respectively. The problems and obstacles of government in all areas are in important level.

Table 5-11: Ranking of Importance of Problems and Obstacles by Area

Area	Total No. of Problems	Area Average	Area Classification	Area Ranking
1. Financial Support	12	3.97	Important	5
2. Tax Incentives	4	4.15	Important	2
3. Marketing	9	3.96	Important	6
4. Maritime Personnel	6	4.00	Important	4
5. Legislation	4	4.06	Important	3
6. Government Administration and Operations	4	4.37	Important	1
Total	39	4.09	Important	

However, the problems in each area have different important level which all these should be remedied hastily from related groups such as the government, the private sectors and so on.

5.4 Findings and Discussion

From the above mentioned analysis and results, there are the classifications of the effectiveness of existing government measures (Table 5-1 and 5-2), the agreement of proposed measures (Table 5-3 and 5-4), and the classification of problems and obstacles associated with the six areas of finance, taxation, marketing, maritime personnel, laws and regulations as well as government administration and operation (Table 5-5 to 5-11). Details of these problems will be discussed below.

5.4.1 Financial Support Area

In evaluation of the effectiveness of existing financial measure, we found that financial support is only in medium level and it is agreed to generate the proposed financial measures. However, there are several problems associated with this measure: namely, lack of skilled personnel in ship finance; financial support from government is not enough; delay in establishing maritime fund which will resolve fund; loan of Thai ship operators depends on size and reliability of business; insufficient maritime funds with inappropriate

conditions such as high interest rate, short repayment period and short grace period. These are the major obstacles to the fleet development.

In the past, the loan repayment period of five years, the conditions set by Ministry of Finance, was relatively shorter than the break-even period of ship acquisition. There is some doubt that five years is sufficient in giving an operator to invest in vessels that require 20 years or more for depreciation. The loan is obtained via the Japan Government's Maritime credit corporation, with payback usually allowed up to a minimum of 15 years (Baird 2001). These problems in the financial support area indicate that the government does not truly understand the features of maritime business.

In spite of continuous effort by the maritime support organization, the establishment of the maritime fund is still being considered by the government. Thai ship operators who are unable to obtain government loans might try to borrow from domestic commercial banks. However, the problem still remains since Thai commercial banks are reluctant to provide loans for shipping companies. Most of them do not accept collateral asset of ships, hence the loans are often rejected. The lack of ship financing was a major obstacle to the fleet development. Thus the source of ship financing in Thailand is always regarded as the most important and is the decisive factor to the success or failure of the Thai merchant fleet development. There is an inevitable fact that shipping industry is so capital intensive and ships tie up a lot of capital, but the maritime promotions have not been considered as the main policy of Thailand yet and the support from government sector has just a little bit. For this reason, most of high-potential managers divert to run other business because of the limitation of capital unless the large shipping companies that have a big capital could only be persistent. Thai ship operators, therefore, suggest an improvement to the existing measure by providing sufficient amount of funds and reviewing the loan conditions by the Thai government. They also suggest that Thai government should persuade domestic commercial banks to support the maritime industry.

Maritime policy in most countries usually inclines to support their national fleet by providing financial and other kinds of subsidy. The national shipping finance policy is

significant policy for promoting shipping industry. Financial policy usually results in an increase of ships under the national flag in a country. That's why, the government in each country resorts to subsidies for its shipping industry. Globally, governments have provided financial support for their operators. Diverse financing approaches and instruments are currently available for fleet expansion and working capital requirements, including shipping funds, IPOs, bonds, leasing schemes, private placements, venture capital and shipbuilding credit (Orfandis 2004). Among all the available choices, bank loan has remained the primary source of financing for the shipping industry although some of the largest companies recently resort to the public equity and bond markets. In other words, banks and financial institutions have been the main source of ship financing via debt mode for shipping companies.

Thailand's government currently enacted some shipping-friendly measures to help the shipping industry. To meet the government policy, The Export-Import Bank of Thailand (EXIM Bank), boosting organization the value of Thailand's international trade, accelerated its lending to Thai maritime businesses by setting a merchant marine loan target of 18 billion baht to be provided directly by the Bank and with other financial institutions within three years (2010-2012). According to resolution of the cabinet at 22 March 2011, the supportable budget has been approved amount 1,050 million baht to Export-Import Bank of Thailand or Exim Bank for the period of 7 years. By Exim bank is a creditor that might be lending accompanying with the other financial institution or syndicated loan. The objective of this policy is to develop Thai merchant fleet's size and support entrepreneurs in shipping business to have capital source at low interest rate.

As mentioned above regarding government's Financial Policy, Precious Shipping Public Company Limited (PSL), the largest Thai dry-bulk shipping company, signed a \$100 million term loan with Export-Import Bank of Thailand to finance as much as 80 percent of the acquisition costs of new and second-hand vessels in February 2012. The loan has a commitment fee equal to 0.7 percent per year of the undrawn facility, payable quarterly, and total monies outstanding will be repaid in 8.5 years, according to a regulatory

statement by the company. This is an example of shipping company which benefit from financial policy.

According to Review of Maritime Transport 2010 (UNCTAD), much of the international shipping industry has fallen victim to the pressures of the economic recession in 2008. The year 2009 had the sharpest decline in the volume of global merchandise trade and was also a depressing year for freight rates. This is largely due to both the contraction in global trade which has led to an abrupt reduction in the demand for shipping and the increase in the number of new ships that have recently entered the market. These new ships were ordered in more profitable times and are now flooding an already oversupplied market, especially in the tanker sector. Moreover, the reduction in trade combined with an increase in tonnage dramatically depresses freight rates and asset values. When combined with inflated operational costs, particularly with the high cost of fuel, this can lead to cashflow and liquidity problems for ship owners. Most ship owners, therefore, try to reduce cost and sell as the second-hand vessels in order to diminish loss in business. At present, the price of second-hand vessel is very low. If there are all forms of government subsidy, Thai ship operators suppose that they will be able to compete with foreign ship operators and might be results of Thai merchant fleet expansion in the near future which conforms to strategy increasing the maritime transportation market share as well.

However, almost all of private ship owners have to manage risk by themselves. Some of Thai shipowners argue that government should lay down measure pertaining to hull's assessment. If government could take action, it would increase competitive potential to Thai ship operators. In addition, they could also consider buying the efficient ship at a low age which may be benefit to overviews of country's maritime business eventually.

5.4.2 Tax Incentives Area

Tax incentive is the most important scheme for the development of the national merchant fleet by the view of Thai ship operators. Favorable taxation and depreciation schemes would help the national fleet to become internationally competitive (ESCAP 1999).

At present, Thai ship operators enjoy the benefits of various tax incentives provided by the Thai government. Exemption on corporate income tax, personal income tax for crews and import duties for general cargo ship are really important in reducing their operating cost. From the classification of existing measures, tax incentives are effective measure. Other exemption on ship selling tax, dividend income tax, and reduction of withholding tax on income earned by Thai ships used in international transport are rated moderately effective.

Thai ship operators agreed to the government's proposed tax measures because they realized that tax incentives are very useful measure. Therefore, this measure should be continued and ameliorated in order to encourage Thai ship operators to expand investment.

Many the Thai ship operators encountered serious problems related to this measure: the refund process takes a long time. The tax refund for maritime business is not specifically mentioned in the Tax and Custom Laws. There are many definitions in calculating tax depending on the judgment of the tax collectors, and the Revenue Department often inspects the company account books. Nevertheless, the current taxation relief should be maintained but its implementation should be improved.

5.4.3 Marketing Support Area

Marketing support area is also an important area for Thai ship operators. At present, there is no marketing measure implemented by the Thai government except the cargo reservation scheme covering 9 routes from Japan, Korea, Taiwan, Hong Kong, Singapore, Europe, US, China and Malaysia to Thailand. In the marketing area, nine important issues are: service cost is higher than overseas ship operators; lack of marketing network; Thai traders have weak bargaining power in choosing Thai ships; Thai ship operators have low transport share because most of the government goods are bought at CIF prices and sold at FOB prices; Thai merchant fleet does not reach international standards both in quality of services and safety; Thai exporters and importers do not specifically support the use of Thai ships; low frequency of service of the Thai merchant fleet; and Thailand is not located

on the main shipping routes of the world. These problems are important obstacles which substantially hinder to the development of Thai merchant fleet.

Thai ship operators suggest that the Thai government should expand the international cargo base by encouraging exporters to sell at CIF prices and importers to buy at FOB prices, and to promote Thai shipping companies to all importers and exporters. This measure has been implemented in the Philippines (Maritime Industry Authority of the Philippines 1999). Other important problems are the lack of marketing network and low frequency of service of Thai fleet. In the expansion of marketing network and increase frequency of service, Thai ship operators should enhance routes and concentrate on offshore expansion to gain economy of scale, as well as frequency of services through their own marketing strategies. Onshore enhancement should also be considered to cover the activities of multi-modal transport and propose a one-stop service to their customers (Martin 1996; Maritime Industry Authority of the Philippines 1999; Saldanha et al. 2002).

Furthermore, the government should give precedence in maritime transport industry by supporting Thai ship owners uniformly and should consider standard of transport rate, especially domestic national companies are almost monopolies, that is to say, they control almost all of the entire shipping industry. This is a main reason of lowering the freight rate which is substantially destroying the powerful development and competitive opportunity of Thai merchant fleet.

5.4.4 Maritime Personnel Area

Thai ship operators consider the maritime personnel area as an important issue. At present, Thai government implements measure in this area only for short period. In the past, there was a measure toward the reduction in number of Thai seafarers from 75% to 50%. At that time, Thai ship operators considered that this measure should be continued because this will allow them to hire more foreign seafarers because of a shortage in every level of seafarers in Thailand. However, since this measure was abolished, the Thai government still does not promulgate any measures.

From the analysis of results in section 5.3, important problems and obstacles that need to be resolved are examined as follows: a lack of co-operation among government units in controlling and supporting the maritime education as well as training institutions; high training expenses for seafarer program; shortage of maritime personnel in every level; insufficient maritime personnel knowledge and understanding; lack of cooperation and discussion between shipowners and training center; and lack of ships for training.

In order to resolve the problems, the managers of Thai shipping companies expressed their opinions that the government should set up clear objectives and goals for maritime human resources development. The government should increase personnel quality to meet international standards, so as to serve not only the Thai market, but also the international market. To raise the quality of Thai seafarers to meet the standard of STCW 78/95, the efficiency of the maritime education and training institutions with appropriate training courses and high quality course instructors or trainers are recommended. This recommendation also contains a proper selection of cadets admitted for training.

Beside these, financial assistance should be provided for the training of seafarers and repatriation costs. Klikauer and Morris (2002) provided an example of the German shipping industry sponsored training and recruitment programs on the Kiribati atolls, and continues to invest significant money into their training school.

According to strategies for maritime development, they show that maritime personal development is a part of the main strategy to focus on creating the shortage of personnel and developing capabilities of maritime staff to meet international standards and adequate for market's demand. The guideline for short term operation is to exempt income tax for the Thai crew and cover other types of income besides salary paid. For long term operation is laying down measures in deregulation such as to standardize in shuffling officer from Thailand with officer who is working on the ship in foreign country (Thai Marine Department 2010).

As mentioned above, one of the strategies listed in the Maritime Promotion is to recruit and train more seafarers, both officers and crew, so that there are enough to serve the market. Existing seafarers are required to refine their skills and upgrade knowledge as well. One short term solution is the Short Term Acceleration Officers Course Project, which grants a certified degree that is below a Bachelor's Degree. The course takes about two and half years to complete, while a normal curriculum would take about five years. The project will begin this academic year. Other measures include asking the support and help from private educational institutes to produce qualified and skilled marine officers with lower than Bachelor's degrees (Thai Shipowners' Association 2008).

Nowadays, labour market for Thai seafarers is opening wide and waiting for support from government sector seriously. Obviously, Thai seafarers have good work culture and are the need of foreign ships but they did not get a chance as expected because of lack of language skills and also policy on income-personnel tax. According to report on Philippines, it is revealed that the number of Filipino seafarers sailing on foreign ships has jumped to 400,000 in 2011 despite the global economic slowdown and the Eurozone crisis. If government seriously promotes maritime personnel both language skills and other privileges, it can increase market share of seafarers absolutely.

Considering the fact that the maritime personnel development is important for shipping industry, therefore, the government sector should cooperate with the private sector for developing quality maritime personnel, such as Merchant Marine Training Center, Logistics Faculty, Burapha University, International Maritime College, Kasetsart University and so on.

5.4.5 Legislation Area

Legislation is considered by Thai ship operators as being important to the development of national merchant fleet. At present, the Thai government has not implemented any measure in the legislation area. However, there are four important problems. There are obsolescence and delay in process of Thai vessel registration compared with foreign

countries. Most complicated laws, rules and regulations do not follow international standards, such as the Thai Vessel Act, 1938 and the Navigation in Thai Waters Act, 1913. This causes inconvenience to Thai shipping companies.

Thai ship owners recommend that the enforcement of international laws, such as SOLAS, MARPOL, must conform to neighbor countries, otherwise it may be promotion in taking the ships, which has a low quality and have not followed rule of international law, enter the market in order to underprice as well as generally destroy maritime business because ship owners might not be able to buy a ship conforming with state of business. For example, the fact that the exemption from enforcement of law regarding preventing maritime spills suspended indefinitely, this causes tween-deckers vessel is lower the freight rate as same as single deck vessel in spite of tween decks has high price and more safety. The ship owners, therefore, might not be able to make an orientation for transport management in the market appropriately.

By the way, to increase the capacity and range of Thai flag vessel fleet operations, shipping policy should be changed. As the primary obstacle to greater vessel operations is the high cost of operating Thai flag vessels, reform should be primarily focused on changes to regulations that enable higher productivity of operations and use of lower cost resources. Reform of vessel crewing regulations could enable cost savings from productivity gains from greater application of current vessel technology (United States Department of Transportation, 2009).

Furthermore, there are the contrary regulations against working of capable seafarers with foreign ship operators and lack of support on maritime personnel from government sector seriously. This is hindrance for Thai seafarers in period of economic recession because foreign ship operators want to employ Thai seafarers in order to reduce operation cost. This means that Thailand lost the opportunity for earning foreign currency due to the outdated law.

From the online survey, the private sector in the petroleum business such as PTT Group, Thai Oil, Bangchak Petroleum, IRPC, confronts the rigid regulation toward ship inspection. Therefore, the group of petroleum business requires related government sector to mitigate the strict regulation and procedure, otherwise the private sector cannot survive generally and go out of business eventually because the operation cost is very high including trade barrier as well as commercial promotion.

However, in the resolves of these problems, the government might accomplish by amending laws, rules and regulations. In addition, Thai shipping companies recommend reform of the Merchant Marine Promotion Act and review of regular practices applying to the provision of shipping services and bring them in accordance with international practices. The addition of maritime laws and the revision of Carriage of Goods by Sea Act; Arrest of Ships Act; and Ship Mortgages and Maritime Liens Act are also recommended by Thai shipping companies.

5.4.6 Government Administration and Operation Area

As mentioned above, government administration and operation is considered as the important problem for Thai ship operators. Most of them agreed that it hampers the development of Thai merchant fleet, especially the discontinuity of government policies and measures and operational delay of Thai bureaucratic system. From the online survey, some of Thai shipping companies comment that the corruption of some government officials is also a part of a big problem to the stage of shipping industry development.

Since the government organization reform of 2002, the Office of Maritime Promotion Commission (OMPC) has been amalgamated with the Harbour Department to form a new “Marine Department”, under The Ministry of Transport. In consideration of the structure of the new Maritime Promotion Department, Szilagyí et al. (1990) suggested that the most appropriate structure for an organization depends on its context such as goals, environment, size and culture. Characteristics of appropriate structure include clear lines of authority and accountability, effective differentiation and integration, and well-developed

and clear communication channel. The new Marine department is also expected to have enough unified capabilities to implement the recommended policies and measures.

Due to the nature of the business, shipping companies should not be run under a bureaucratic structure because it needs to be flexible and reacts fast to changing market conditions. Therefore, the ideal solution is to let the private sector run the maritime business but the government support should be done in the form of providing easier financing, reducing operating costs, rectifying laws, etc. Most importantly, it is absolutely necessary for the government who is responsible for issuing policies to understand the nature of the business so that it will know how to support the business efficiently.

As some of Thai shipping companies still operate as family business, potential personnel could not perceive shipping business and access to management of this area. Some of managers argue that the difficulty of accessibility to any information is also the important obstacles to the development of merchant fleet. They suggest that the government should arrange seminar in group of merchant ship, liquid bulk carriers in particular.

At present, Thai ship operators have extremely not utilized from the existing shipping policies and measures. Moreover, the maritime promotions have not been considered as the main policy of Thailand yet, the support from government sector only has a little bit. However, Thai shipping companies recommend Thai government to have clear regulatory framework, to minimize bureaucracy, and to strengthen the maritime administration. In addition, the government sector should promote seriously regarding the development of ports and maritime infrastructure in order to support merchant fleet and stimulate further economic expansion.

Shipping industry can be enhanced by means of cooperation from several institutions, such as Ministry of Transport and Marine Department which are important government sectors. They should understand and implement a vision which emphasizes the developing of water transport system to ensure safety, convenience, rapidity and efficiency along with marine environmental management and international standard. Also the promotion of

proper distribution of water transport and expansion of transport network should be done in order to increase the potential for trade and service competition. Moreover, the government sector must cooperate with the private sector concerning knowledge, regulation, and procedure in proceeding maritime business continuously.

5.5 Implication

In the past, there were many studies about government shipping policies in Thailand. However, there is no study pertaining to an evaluation of the effectiveness of the existing shipping policies and measures at present by senior managers of Thai shipping companies including their perspective for the proposed shipping policies and measures which might be used in the future. Regarding literature review of studies on shipping policy, the evidence of these studies strongly showed that the government's policy for shipping cannot be achieved without creating tax measures and financial support (Ratanamalawong 1995; Thai Marine Department 2003; Brooks and Hodgson 2005; Pittayapreechanon 2005; Sriarun 2005). Similarly, the results of this study suggest that tax measures are the most important area for the development of national merchant fleet and can increase competitive capacity in maritime business of the country as well. Moreover, this study is different from other studies due to it also showed that the Thai government's shipping policies and measures concerning legislation and maritime personnel should be remedied promptly in order to respond to market demand and reinforce Thai merchant fleet.

The findings of study suggest some practical implications in the shipping field. According to In-House Consultant at Maritime Promotion Bureau for water transport and maritime operation in year 2010, the consultant has assigned its experts for sorting the strategies into an important order with recommends from participants in the first seminar. Simultaneously, the consultant has considered in consistency with related strategic plans as well. Finally, it was founded that the participants had their views as follows; merchant fleet strategy should be the first urgent strategy in execution. The second urgent strategy should be maritime manpower strategy and the third and the fourth should be coastal and

inland water transport strategy and shipyard strategy respectively. Six strategies for maritime development of Thailand were suggested through understanding the following parts. The government policy must identify process framework and target; government sector must have a clear policy with comprehensive information on all relevant issues; there must be consultation between government and private sectors in each target to acknowledge and exchange information.

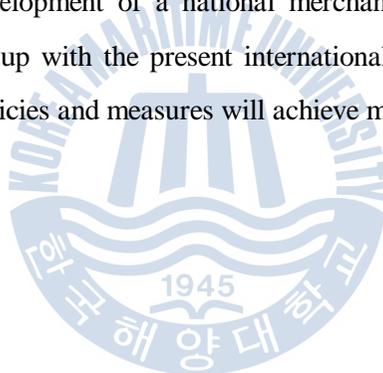
Therefore, this research could be applied to the development of shipping policies of Thai government and could also give useful information for supporting an attempt of Thai government to develop the national merchant fleet. One in six main strategies of the government for Maritime Development is “Increasing in Shipping Proportion by National Merchant Fleet” and it is formulated as the strategy no.1 as well. The objective of this strategy is to expand service routes and national merchant fleet, to increase shipping freight and sea transport proportions including monitor in fair freight rate. Thus, the study on the existing and proposed government measures is important and helpful for the development of the national merchant fleet which leads to economic growth eventually. Moreover, this study contributes to better understanding on the situation of shipping policies and measures as well.

The result of the study implies that Thai merchant fleet development is the most important strategy and this study result shows that tax measure is one of the most important tools for the development of Thai merchant fleet and it can create competitive capability with foreign merchant fleets. Apart from tax incentives, maritime laws and regulations are considered to amend and enact in order to facilitate the improvement of Thai shipping services. Maritime personnel development is also the important area which be identified in the main strategies for maritime development. In addition, financial and marketing support are identified as important area which the government should subsidize and expand network respectively. In essence, government administration and operation is considered as the main problems and obstacles to the development of Thai merchant fleet. The result indicates that understanding characteristics of maritime business is a crucial factor leading

to an effective development plan. Therefore, the ideal solution is to let the private sector run the maritime business but the government support should come in the form of providing easier financing, reducing operating costs, rectifying laws, etc.

At present, the existing shipping policies and measures are inadequate to create competitive capability of Thai merchant fleet concerning an increase of shipping market share. The government administrator has not concentrated on the problems of maritime business seriously. Various policies and strategies have been drafted but they still did not be utilized conscientiously. Therefore, the recommendation of Thai shipping companies in this study would be lead to necessary further action that the government should take.

However, apart from the recommendation of appropriate government measures and problem-solving for the development of a national merchant fleet, government maritime policy makers need to keep up with the present international and regional economics and environment so that these policies and measures will achieve maximum effectiveness.



Chapter 6

Conclusions

6.1 Conclusions

Shipping policy is one of the important tools of government to support the national merchant fleet to all countries. Thailand, which is a developing maritime country, recognizes the importance of sea transportation as a key to pushing forward economically and to enhancing competitiveness. Due to this fact, the national merchant fleet plays an important role in promoting international trade and improving trade balance, current account and economy of the country. Apparently identified Thai merchant fleet is focused towards developing its capabilities both in quantity and quality, this is an indication that, the government sector has accepted to promote the concept of national merchant fleet for a long time, in 35 years.

Although shipping policies and measures were mostly emphasized to develop the national merchant fleet, ports, shipyards and maritime personnel which are the most important elements in maritime business, Thailand's shipping industry still cannot rely on itself. That is because the Thai government neglected effective implementation of policies and measures including the support from government in the past was not sufficient as such, it was discontinued. Simultaneously, the lack of knowledge and incomplete administration are the crucial obstacles affecting failure of all measures. For this reason, Thai government recognized the problems and formulated 6 strategies for maritime development. One in 6 strategies is to increase the maritime transportation market share by Thai fleet.

Economic and policy research on the maritime transport is also critical to identifying the priority goals, strategies and major projects and formulating the short term and long term development plans for building the nation's shipping industry. Therefore, the purpose of this study is to evaluate the effectiveness of existing government measures, the agreement on proposed measures as well as identifying the problems and obstacles to Thai merchant

fleet development. This study clarifies the six main areas, namely financial support, taxation incentives, marketing, maritime personnel, legislation, and government administration and operation. All of these six areas have been evaluated as being important to the development of national merchant fleet.

From the review of experiences in Korea, China, UK and Philippines, it was found that financial support and tax incentives are very important to the development of national merchant fleet. Most maritime countries attempt to provide various tax incentives to their shipping companies to become internationally competitive. Similarly, tax incentives are utilized to foster and encourage shipping industry in Thailand. In evaluation of government's shipping policies and measures is found that investment promotion and tax incentives are evaluated as the effective measures of existing government measures and therefore should be continued, especially tax incentives measure. Nevertheless, there is not currently any measure which is very effective or strongly agreed upon at all.

As an analysis result of the problems and obstacles to Thai merchant fleet development, government administration and operation is considered as the most important issue. The policies and strategies have been drafted but they still did not be utilized. This means that the government administrator has not concentrated on and solved the problems of maritime business conscientiously. Moreover, the result of the study indicates that understanding characteristics of maritime business is a crucial factor leading to an effective development plan. Due to the nature of the business, shipping companies should not be run under a bureaucratic structure because it needs to be flexible and reacts fast to changing market conditions. Therefore, the ideal solution is to let the private sector run freely the maritime business and play a pivotal role in formulating and implementing shipping policy in close cooperation with the government, since economic efficiency and excellent performance can be obtained to the maximum extent with the private sector's strong initiatives. At the same time, the government has to play a key role in training and provision of the necessary manpower in order to create competitive edge in the shipping and port industries.

Additional appropriate measures are recommended. The financial support measures are to develop skilled personal in ship finance, encouraging domestic commercial banks to provide loans for Thai shipping companies with competitive terms and establishing a permanent maritime financial institution. The tax incentive measures are to maintain various taxes relief to Thai shipping companies and to provide an extraordinary tax to Thai ship users. The marketing support measures are to encourage exporters to sell CIF and importers to buy FOB and to promote the use of Thai ships through the Ministry of Commerce. The maritime personnel development are to support maritime education and training institutions, appropriate courses and high quality instructors in order to enhance the capability and efficiency of Thai seafarers. Additional legislation should be drafted and enacted in order to comply with international conventions and practices. The administration and operation of the Maritime Promotion Bureau (MPB) should be strengthened by having clear functions and responsibilities, minimizing bureaucracy in particular. These policies and measures are expected to enhance capacity and competitiveness for the Thai merchant fleet in supporting international trade, reducing trade in balance, increase the current account, and improve economic development of the country in the future. Thai government should, therefore, maintain and continue in effective measures to ameliorate through moderately effective measures in order to reinforce Thai merchant fleet in the global market.

Although the existing and proposed government measures are inadequate to create competitive capability for Thai merchant fleet concerning an increase of shipping market share according to strategy for maritime development, but the recommendation of appropriate government measures and problem-solving presented in this research would lead to necessary further action that the government should take. Apart from such recommendation for the development of a national merchant fleet, government maritime policy makers need to catch up the present international and regional economics and environment so that these policies and measures will be achieved in implementing efficiently. Moreover, the experiences of developed maritime countries and the policies may provide a good starting point for the development of Thai merchant fleet.

Finally, the success of merchant fleet development needs to rely on the cooperation of both government and private sector including all related groups. Based on such policy recommendations, the government may establish the comprehensive shipping policy by providing clear policy objectives, strategies and policy instruments so that the national firms can compete in the global shipping marketplace.

6.2 Limitations and Further Research

This is the first study that collects data from the senior managers of shipping companies in Thailand by using the online survey questionnaire. I realized the fact that the existing researches of government concerning the perspective of Thai ship operators have not responded as expected. For this reason, this method would be the most suitable way to get required data from Thai shipping companies. It is designed in order to be easy for expressing one's opinion both Likert Scale type and more open suggestions.

This study covered a wide range of issues related to the development of the Thai merchant fleet. It is however restricted to the views of Thai ship operators only. In the online survey method using comprehensive questionnaire, all participants were asked exactly the same questions. This questionnaire covered many areas. Some managers had limit knowledge in some areas such as legislation, hence provide incomplete responses but only a little bit.

Limitation of developing a merchant fleet must be investigated prior to formulating and developing the policies and measures. To develop appropriate national shipping policies and measures, a country must understand the current situation of its own national merchant fleet. For example, a ship purchased at the right time can make a significant contribution to success in shipping operations. The existing and proposed government policies are expected to be useful to Thai ship operators regarding both dry cargo vessels and liquid bulk carriers. However, some of shipping policies and measures might be only useful either dry cargo vessel companies or liquid bulk carrier companies such as legislation concerning the carriage of petroleum products. Hence, there should be study on

comparison between the perspective of operators of dry cargo vessels and liquid bulk carriers, in terms of difference and similarity with the government's shipping policies and measures.

In addition, the study of Thai government could be extended through further development and implementation of specific business plans such as financial plans and marketing plans. While the study of the private sector (Thai shipping companies) also contributes to the success of the Thai merchant fleet, it could be extended for further research such as financial strategies, marketing strategies and maritime legislation in order to facilitate the improvement of Thai shipping services, and other key success factors that contribute to the success of Thai merchant fleet development. Nevertheless, these areas are beyond the scope of this research and its detailed study should be conducted separately as further research work.

Lastly, Thai maritime government officials are directly involved in the formulation and implementation of government policies and measures, their opinions on these issues should be also surveyed in order to gain a full insight of existing problems and obstacles. Therefore, the further research should examine the view of all related groups, such as government, shipping companies and traders on government's shipping policy, and then to analysis different or similar result from the study.

REFERENCES

- Baird, A. J. (2001), "State subsidy system for remote island liner services in Japan", *An International Journal of Maritime Economics*, Vol.3, No.1, pp.102-120.
- Brooks, M. R. and Hodgson J. R. (2005), "The Fiscal Treatment of Shipping: A Canadian Perspective on Shipping Policy," *Research in Transportation Economics, Shipping Economics*, Vol.12, pp.143-171.
- Chaimankong, C. (1995), "*Thai Fleet Development*", Thesis, Dhurakit Bundit University Library, Bangkok.
- Cho, K. S. (2002), "Major features of shipping policy", www.kmi.re.kr/ Assessed in March 2002.
- Chrzanowski, I. (1985), "An Introduction to Shipping Economics", Fair Publication, pp.112.
- Dinwoodie, J. (2000), "The perceived importance of employment considerations in the decisions of students to enroll on undergraduate courses in Maritime Business in Britain", *An International Journal of Shipping and Port Research: Maritime Policy and Management*, Vol.27, No.1, pp.17-30.
- Economic and Social Commission for Asia and the Pacific (ESCAP 1999), Framework for the Development of National Shipping Policies, United Nations, New York.
- Evangelista, P. and Morvillo, A. (1998), "The role of training in developing entrepreneurship: the case of shipping Italy", *An International Journal of Shipping and Port Research: Maritime Policy and Management*, Vol.25, No.1, pp.81-96.
- Frankel, E. G. (1998), "China's maritime developments", *An International Journal of Shipping and Port Research: Maritime Policy and Management*, Vol.25, No.3, pp.235-249.

- Gross, R. (1993), "The decline of British shipping: A case for action? A comment on 'The decline of the U.K. merchant fleet: an assessment of government policies in recent years'", *An International Journal of Shipping and port Research: maritime Policy and Management*, Vol.20, No.2, pp.93-100.
- Haezendonck, E. and Winkelmans, W. (2002), "Strategic positioning as an instrument for competition analysis", *Port Competitiveness: An economic and legal analysis of the factors determining the competitiveness of seaports*, pp.17-33.
- Iheduru, Alhabet. C. (1992), "Merchant fleet development by legislation: lessons from West and Central Africa", *An International Journal of Shipping and Port, Maritime Policy and Management*, Vol.19, No.4, pp.297-317.
- Ilieva, J., Baron S., Healey, N. M. (2002), "Online surveys in marketing research: pros and cons", *International Journal of Market Research*, Vol.44, pp.361-376.
- Jenssen, B. (1993), "Changing policies in Eastern Europe and their impact on the maritime field: experiences from Eastern Germany", *An International Journal of Shipping and Port Research: Maritime Policy and Management*, Vol.20, No.4, pp.309-317.
- Jenssen, I. J. (2003), "Innovation, capabilities and competitive advantage in Norwegian shipping", *An International Journal of Shipping and Port Research: Maritime Policy and Management*, Vol.30, No.2, pp.93-106.
- Jong-Hee, G. (2000), "Introduction of the Korean Shipping Industry", Senior Research Fellow of KMI.
- Kelvin, X., Kevin, C., Hong, Y. and Jin, C. (2005), "Maritime Policy in China after WTO: Impacts and Implications" *Journal of Maritime Law & Commerce*, Vol.36, No.1.
- Kim, G.S. (1992), "Government preference and its influence on the shipping industry of Korea", *An International Journal of Shipping and Port Research: Maritime Policy and Management*, Vol.19, No.4, pp.265-277.

- Kittisuphakhun, A. (2005), "Considering Factors for Registration of Ships under Thai Flag", Thesis, Chulalongkorn University.
- Klikauer, M. and Morris, R. (2002), "Kiribati seafarers and German container shipping", *An International Journal of Shipping and Port Research: Maritime Policy and Management*, Vol.29, No.1, pp.93-101.
- Komutkul, S. (2008), "Strategies for Developing Thai Merchant Fleet", *Maritime Promotion Bureau of Marine Department, Ministry of Transport*, pp.1-13.
- Ledger, G. and Roe, M. (1992), "The decline of the UK merchant fleet: an assessment of government policies in recent years", *An International Journal of Shipping and Port Research: Maritime Policy and Management*, Vol.19, No.3, pp.239-251.
- Lee, T. W. (1996), "Flagging options for the future: A turning point in Korean shipping policy?", *An International Journal of Shipping and Port Research: Maritime Policy and Management*, Vol.23, No.2, pp.177-186.
- Lee, T. W. (1999), "Restructuring of the economy and its impacts on the Korean maritime industry", *An International Journal of Shipping and Port Research: Maritime Policy and Management*, Vol.26, No.4, pp.311-325.
- Maritime Industry Authority of the Philippines (1999), *Annual Plans 1999 and 2000; Medium-Term Plan, 2001-2004*, www.marina.gov.ph/ Accessed in March 2001.
- National Economic and Social Development Commission (1997), *The Eighth National Economic and Social Development Plan 1997-2001*, Office of the Prime Minister, Bangkok, Thailand.
- Nguyen, Hong-Oanh (2011), "Explaining variations in national fleet across shipping nations", *Maritime Policy & Management*, Vol.38, No.6, pp.567-583.

- Nijdam, M. and Van Der Horst, M. (2007), "The Economic Effects of Shipping Policy", *Department of Port, Transport and Regional economics*, Erasmus University Rotterdam.
- Office of the Maritime Promotion Commission (OMPC 1998), *The Development of Maritime Transport in Thailand*, Bangkok.
- Office of the Maritime Promotion Commission (OMPC 2001), "Enhancing the Effectiveness of Maritime Transport Measure", Seminar paper for public hearing, Sol Twin Tower Hotel, Bangkok, 21 August, 2001.
- Orfandis, A. (2004), "Shipping Finance: Approach to the Hellenic Market", Dissertation, National Technical, University of Athens.
- Pattaraachachai, W. (1983), "A study on management system and operation of shipping companies for Thai maritime development", Thesis, Chulalongkorn University.
- Pittayapreechanon, N. (2005), "A Study on Factors Effecting Thai Maritime Promotion", Thesis, Dhurakij Pundit University.
- Ratanamalawong, S. (1995), "State's Policies and Measures in Developing Mercantile Marine of Thailand", Thesis, Ramkhamhaeng University.
- Roberts, S. (2000), "Occupational mortality among British merchant seafarers (1986-1995)" *An International Journal of Shipping and Port Research: Maritime Policy and Management*, Vol.27, No.3, pp.253-265.
- Sakulratana, S. (1998), "New secretariat with the development of Thai shipping policy", *A Journal of Maritime Transport, Bangkok*, Vol.17, No.3, pp.1-38.
- Saldanha, J. and Gray, R. (2002), "The potential for British coastal shipping in a multimodal chain", *An International Journal of Shipping and Port Research: Maritime Policy and Management*, Vol.29, No.1, pp.77-92.

- Senarak, C. (2011), "Thai Government Measures in Promoting Thai Merchant Fleet", *Navigational Journal* 94, No.8, pp.33-41.
- Southeast Asia Technology Co., Ltd. and Golden Plan Co., Ltd. (2001), "*The Study of Guidelines to Produce Maritime Personnel*", Office of Maritime Promotion Commission, Bangkok.
- Sriarun, S. (2005), "*The Guideline for Developing Thai Merchant Fleet*", Seminar paper of Ministry of Transport.
- Sridid, K. (2006), "*The Problem of Thai Merchant Vessel Fleet Development: A Case Study of Thai Maritime Navigation Co., Ltd.*", Thesis, Faculty of Logistics, Burapha University.
- Stopford, M. (2009), "The World Financial System and Types of Finance: Financing Ships and Shipping Companies", *Maritime Economics*, 3rd Edition, Chapter 7, pp.269-317.
- Sturmey, S. G. (1965), "National Shipping Policies", *The Journal of Industrial Economics*, Vol.14, pp.14-29.
- Sun, G. and Zhang, S. (1999), "General review of the Chinese shipping policy for the contemporary era", *An International Journal of Shipping and Port Research: Maritime Policy and Management*, Vol.26, No.1, pp.93-99.
- Szilagyi, A. D. and Wallace, M. J. (1990), *Organizational Behavior and Performance*, 5th Edition. Scott, Foresman / Little, Brown, Higher Education, Glenview, Illinois, USA.
- Thai Engineering Consultants, Frederic R. Harris B.V. and Upham International Corporation (1999), *Maritime Promotion Master Plan*, Report Submitted to Office of Maritime Promotion Commission, Ministry of Transport, Bangkok.

Thai Marine Department (2000), *“The Feasibility Study Project on Financing for Maritime Development”*, Maritime Promotion Bureau, Executive Summary Report.

Thai Marine Department (2003), *“The study project of operational plan developing Thai merchant fleet 1998-2005 and evaluating promotional measures and Thai merchant fleet development”*, Bangkok.

Thai Marine Department (2007), *“The In-House Consultant Project at Maritime Promotion Bureau for Water Transport and Maritime Operation (Beginning Period)”*, Executive Summary Report.

Thai Marine Department (2010), *“The In-House Consultant Project at Maritime Promotion Bureau for Water Transport and Maritime Operation (Progress Report 1)”*, Executive Summary Report.

Thai Marine Department (2012), *“For the Opening of Regional Marine & Offshore Summit – Focus Thailand”*, 28 March 2012, Le Meridien, Bangkok.

Thai Shipowners’ Association (2003), *“The Role of the Thai Merchant Fleet to the Potential Development of Thai Maritime Transport”*, Bangkok.

Thai Shipowners’ Association (2008), *“The Development of Maritime Fleet under the Supervision of Marine Department”*, Maritime Directory.

UNCTAD (2010), *Review of Maritime Transport*, Secretariat Report of the United Nations Conference on Trade and Development, Geneva.

UNCTAD (2011), *Review of Maritime Transport*, Secretariat Report of the United Nations Conference on Trade and Development, Geneva.

United States Department of Transportation (2009), *“An Evaluation of Maritime Policy in Meeting the Commercial and Security Needs of the United States”*, Prepared by IHS Global Insight, Inc.

- Van de Linden, J. A. (2001), “The economic impact study of maritime policy issues: application to the German case”, *An International Journal of Shipping and Port Research: Maritime Policy and Management*, Vol.28, No.1, pp.33-54.
- Veenstra, A. W. and Bergantino, A. S. (2000), “Changing ownership structures in the Dutch fleet”, *An International Journal of Shipping and Port Research: Maritime Policy and Management*, Vol.27, No.2, pp.175-189.
- Wannakrairoj, J. (2004), “*A Review on Formulation of Government Policies and Measures for the Development of National Merchant Fleet*”, Dissertation, International Graduate School of Management, University of South Australia.
- Yang, Yi-Chih. (2010), “Assessment criteria for the sustainable competitive advantage of the national merchant fleet from a resource-based view”, *Maritime Policy and Management*, Vol.37, pp.523-540.
- Zikmund, W. G. (1997), *Business Research Methods*, Fifth edition, The Dryden Press, Harcourt College Publishers, USA.

Website:

- <http://www.md.go.th>
- <http://www.thaishipowners.com>
- <http://www.exim.go.th>
- <http://www.oecd.org>
- <http://www.fasa.org.sg>
- <http://www.unctad.org>
- <http://www.thaithesis.org>
- <http://www.journals.elsevier.com/marine-policy>

APPENDICES

Appendix A: List of Thai Shipping Companies Participated for Study

Dry Cargo Vessel Company

1. Jutha Maritime Public Co., Ltd.
2. Phulsawat Navy Co., Ltd.
3. Precious Shipping Public Co., Ltd.
4. Sang Thai Navigation 1977 Co., Ltd.
5. SC Carrier Co., Ltd.
6. Thai Maritime Navigation Co., Ltd.
7. Thoresen & Co., (Bangkok) Ltd.
8. Wong Samuth Navy Co., Ltd.

Liquid Bulk Carrier Company

1. Ama Marine Ltd.
2. B.P.P. Supply Co., Ltd.
3. C.&P. Co., Ltd.
4. Nathalin Co., Ltd.
5. P.S.V. Supply Co., Ltd.
6. Siam Maritime Co., Ltd.
7. Siam Mongkol Marine Co., Ltd.
8. Thai International Tankers Co., Ltd.
9. Thai Oil Marine Co., Ltd.
10. Tipco Maritime Co., Ltd.
11. V.L. Enterprise Co., Ltd.

Source: Thai Shipowners' Association (TSA)

Note: Excluding Coastal Shipping Companies/Ferry/Tug Boat/Pilot Boat/Crew Boat

Appendix B: A Survey Invitation Email and Questionnaire

**Department of Shipping Management
Graduate School of
Korea Maritime University**

February 2, 2012

To Senior Managers of Shipping Company

My name is Supaporn Bungburapasakul. I am now studying at the department of shipping management of Korea Maritime University as a Master Degree student. I am writing this email to request your assistance for my thesis research.

This questionnaire is designed to conduct my thesis on the title of “The Perception of the Effectiveness of Thai Government’s Shipping Policies and Measures on National Merchant Fleet Development by Thai Shipping Companies” This research is expected to be useful for supporting an attempt of Thai government to develop the national merchant fleet according to 6 strategies for maritime development. The opinions you kindly provide will lead to better understanding on the situation of shipping policies and measures. Therefore, I would appreciate it if you could participate in the following online questionnaire.

To begin the section 1 and 2, please click the survey URL below:

<https://docs.google.com/spreadsheet/viewform?formkey=dHN3MVgycU1qMGR4VmcxeUZfdTZoLXc6MA>

And section 3

<https://docs.google.com/spreadsheet/viewform?formkey=dEUxOWoyWU9jM1czamRMT3VOb3FIZVE6MA>

Your response will not be individually identified in the survey questionnaire or in any other way. Also, all information required will be kept completely confidential.

Yours sincerely,

Miss Supaporn Bungburapasakul

Questionnaire

The Perception of the Effectiveness of Thai Government's Shipping Policies and Measures on National Merchant Fleet Development by Thai Shipping Companies

Explanation

This research questionnaire is divided into 3 sections as follows:

Section A is to evaluate of effectiveness of existing shipping policies and measures.

Section B is to inquire of the opinion on government's proposed shipping policies and measures which might be used in the future according to strategic plan on maritime development concerned with increasing in shipping proportion by Thai merchant fleet.

Section C is to identify the crucial problems and obstacles impeding to the development of the Thai merchant fleet which government sector should emphasize and resolve promptly.

Section A: Evaluation of effectiveness of existing shipping policies and measures

In this section, there is a series of statements that describe existing government measures. Think about how effective each measure applies to the development of the Thai merchant fleet. After each item, please choose the response that best describes your opinion.

5 = Very effective

4 = Effective

3 = Moderately effective

2 = Less effective

1 = Not effective at all

Measures	Rating				
	5	4	3	2	1
1. Financial Measure					
1.1 Financial support by EXIM Bank at low interest rates					
2. Tax Measures					
2.1 Exemption on corporate income tax.					

2.2 Exemption on income tax from selling ships or rebates from insurance companies.					
2.3 Reduction of withholding tax on the income earned by Thai ships used in international transport.					
2.4 Exemption on income tax from dividends from the international lines.					
2.5 Repayment of VAT within 15 days.					
2.6 Ship operators who transport domestic cargo have privilege registering of value added tax like transport by aircraft in realm.					
2.7 Exemption on import duty for general cargo ship, which has the size of 1,000 GRT or lower, in rate of 10%					
2.8 Exemption on personal income tax for crews of ships used in domestic transport.					
3. Investment Promotion Measure					
3.1 Thai ship operators have the right to ask for promoting investment according to the Investment Promotion Act. This includes exemption on import duty for importing ship and machine from overseas and exempt corporate income tax for 8 years.					
4. Thai Vessel Promotion Measures					
4.1 Cargo reservation in accordance with Mercantile Marine Promotion Act, B.E. 2521 covering 9 routes between Japan, Korea, Taiwan, Hong Kong, Singapore, Europe, US, China and Malaysia to Thailand					
4.2 To improve chartering permission by permitting to charter the ships from foreign countries.					

Section B: The opinion on the government's proposed shipping policies and measures

In this section, there is a series of statements that describe government's proposed measures in accordance with strategy on increase of fleet's size and shipping proportion by the national merchant fleet. Think about how important each measure might be applied to the development of the Thai merchant fleet in the near future. After each item, please choose the response that best describes your opinion.

5 = Strongly agree

4 = Agree

3 = Undecided

2 = Disagree

1 = Strongly disagree

Measures	Rating				
	5	4	3	2	1
1. Financial Measures					
1.1 Loan guarantees by government to Thai ship operators.					
1.2 To create promotion measure to Thai shipyards enable them to grant credit for shipbuilding.					
1.3 Maritime fund establishment in form of revolving fund, its interest is lower and its regulation in loan borrowing is convenient.					
2. Tax Measures					
2.1 Income tax exemption from revenues of international sea transport in form of Door to Door basis by specifying in exemption and covering in term of using Thai vessel.					
2.2 Thai crew's income tax exemption (special labor) in order to cover other revenues, which is not only salary and wage such as over time wage, other welfare wages (at present, exempted on income tax in part of salary and wage only according to Finance Ministerial Regulation, 24 th issues, B.E. 2539 No.1).					
2.3 Period expansion of rights in income tax exemption, derived from old vessel sale and purchasing the new vessel or new shipbuilding ordering from 1 year become 2 years.					
2.4 To collect income tax, derived from service providing of offshore supply vessel with Thai flag by using the same criterion and tax rate to foreign vessel.					
2.5 Income tax levy exemption in the rate of 1% for estimated income, which is chartering rent that used in international cargo transport.					
2.6 To specify the collected VAT rate with Thai ship operator who operates in international cargo transport outside Thailand (cross trade) in rate of 0% and covering in case of purchasing vessel from overseas in order to register as Thai vessel.					
2.7 To give the privilege in term of VAT specifying in the rate of 0% to service activities and service using in ship management.					
2.8 To reduce import duty for general cargo ship, which has the size of 1,000 GRT or lower, in rate of 1%.					
2.9 To establish the fund for ship repairing, which has the size of 1,000 GRT or lower by specifying in VAT levy as 0 % and Thai shipyard can deposit as security credit to company in case of ship repairing and shipbuilding with Thai shipyard.					
2.10 To specify VAT of shipbuilding by Thai shipyard in rate of 0%.					
2.11 To exempt withholding tax from levy with remuneration that Thai ship operator pays for foreign operator in chartering international sea ship and chartering container storage, container, and container repairing.					

2.12 To improve measure toward depreciation of ships in order to subserve to Thai ship operators.					
3. Laws and Regulations Amendment Measures					
3.1 Laws amendment, which are the constraints to capacity development in competition of Thai ship such as draft of the Act on Carriage of Goods by Sea, (issue No....) B.E., and draft of Marine Insurance Act, B.E.					
3.2 Improving procedure about the carriage of petroleum product.					
3.3 Lenient measure on compulsive regulations in case of switching person in Thailand instead of seafarer who is still on ship in overseas by using the operating principle of international standard.					
3.4 To improve practice toward registering ship in system of one stop service.					
3.5 Unlimited nationality of seafarers on Thai ships in order to increase flexibility in operation cost.					
3.6 Additional acceptance measure in using the ship survey results of classification societies, which are accepted in international level.					
3.7 Law amendment measure enable to be registered the vessel in form of second registry.					
4. Personnel Promotion Measures					
4.1 To support money to Thai ship operators for sending seafarers train merchant shipping both domestic and overseas.					
4.2 To support money to Thai ship operators for inviting expert from foreign countries educate in seafarers.					
4.3 To support money to students who concentrate on maritime education.					
4.4 Promotional measure for Royal Thai Naval Academy joining to product officers.					
4.5 Promotional measure for maritime training institution both of government and private sector in order to generate seafarers and crews.					
5. Other Promotional Measures					
5.1 Fiscal system improvement measure conforms International Accounting Standard regarding depreciation deduction, bad-debt disposal and settlement extension.					
5.2 Permission in Bare boat charter registration, chartering ship in form of leasing enable to register the ship.					
5.3 Ship mortgage permission by dividing the ship into each part according to the parts of complete constructed ship in shipyard.					
5.4 Promotional measure in Thai flag vessel providing such as VLCC, container ship, break bulk cargo ship.					
5.5 The routes expansion of Thai merchant fleet by increasing the number of Thai ships in the future such as the routes of Thailand-Australia-New Zealand, Thailand-Japan, Thailand-Middle East-Europe, and cargo transport routes in Asia.					

5.6 Government might form joint ventures with shipping line for supporting international trade and developing Thai port.					
5.7 Government will use measure in supporting Thai ship operators to take over overseas shipping business.					

Section C: The problems and obstacles to the development of Thai merchant fleet

In this section, there is a series of statements that identify the problems and obstacles of Thai merchant fleet development. Think about how important each problems which government sector should emphasize and solve these problems promptly so that Thai merchant fleet will be developed efficiently. Please choose the response that best describes your opinion.

5 = Very important

4 = Important

3 = Moderately important

2 = Less important

1 = Not important at all

1) Problems and obstacles in Financial Support

Item	Problems and Obstacles	Rating				
		5	4	3	2	1
1	Thai shipping companies have limitation in capital and loan repayment period.					
2	Financial support from government is not enough.					
3	Delay in establishing maritime fund which is revolving fund.					
4	Domestic interest rate is higher than foreign rate.					
5	Loan period according to maritime promotion measure is relatively short.					
6	Loan repayment period is relatively short and have no time period for being free from returning interest.					
7	Domestic financial institutions do not really understand characteristic of maritime business, so they are doubtful to loan because of high risk.					
8	Loan of Thai ship operators depends on size and reliability of business.					
9	Bond issue of Thai ship companies against all odds due to they have not been business which be able to speculate the profit in short time.					
10	The current financial measure limits specific Thai ship operators. The other maritime business, such as shipyard, cannot access sources of investment funds.					

11	Financial Measure depends on right understanding of the cabinet.					
12	Lack of skilled personnel in ship finance.					

2) Problems and Obstacles in Tax Incentives

Item	Problems and Obstacles	Rating				
		5	4	3	2	1
1	The tax right of Thai ship operators is bare compared with foreign countries.					
2	There are many regulations in calculating tax collection.					
3	The repayment of value added tax takes a long time.					
4	The Revenue Department often audits the company account, which leads to complexity in operation.					

3) Problems and Obstacles in Marketing

Item	Problems and Obstacles	Rating				
		5	4	3	2	1
1	The right of Thai ship operators is bare.					
2	Thai importers and exporters do not show their patriotism by specifically supporting the use of Thai ships.					
3	Thai importers and exporters have weak bargaining power with the shipping operators in choosing the use of Thai ships, which make them to buy with CIF and sell with FOB.					
4	Thai ship operators have a small transport share because Thai importers buy with CIF and exporters sell with FOB.					
5	Thai ship operators are in disadvantage condition and service cost is higher than overseas ship operators.					
6	The Thai fleet, in a foreigner's view, does not reach international standards both in quality of services and safety.					
7	Thailand is not located on main shipping routes of the world.					
8	Low frequency of service of the Thai merchant fleet.					
9	Lack of marketing network.					

4) Problems and Obstacles in Developing Maritime Personnel

Item	Problems and Obstacles	Rating				
		5	4	3	2	1
1	Shortage of quality seafarers in every level.					

2	The study course takes a long time, so maritime personnel are not enough for need of market.					
3	Lack of cooperation between government units in controlling and supporting the training center.					
4	Lack of ships for training both training ships for cadet and cargo ship for apprentices.					
5	Insufficient maritime personnel knowledge and understanding.					
6	Training expenses for seafarer program are quite high.					

5) Problems and Obstacles on Legislation

Item	Problems and Obstacles	Rating				
		5	4	3	2	1
1	Obsolescence and delay in process of Thai vessel registration compared with foreign countries.					
2	Formality for importing ship from overseas and registration of the new ship are drawback and do not conform general trade practice.					
3	Complicated law and regulations do not follow the international standard.					
4	The procedures, related laws and regulations do not subserve to transaction.					

6) Problems and Obstacles on Government Administration and Operation

Item	Problems and Obstacles	Rating				
		5	4	3	2	1
1	Thai government does not understand the needs of maritime business.					
2	The operational delay of Thai bureaucratic system and lack of cooperation between the various departments.					
3	Discontinuity on government's each policy and measure causes promotion unsuccessful as expected.					
4	Lack of expertise in planning the organization management system to be international practices.					

Some comments and suggestions

.....

.....

.....

.....

.....

I sincerely appreciate your time and assistance.

Miss Supaporn Bungburapasakul
Graduate student of Korea Maritime University
Department of Shipping Management
Email: supaporn.kmu@gmail.com



Appendix C: Definition of Terms

National merchant fleet

This study refers to Thai merchant fleet divided into two main groups as follows:

- 1) Dry cargo vessels comprised of bulk carrier, general cargo ship and container ship.
- 2) Liquid bulk carriers comprised of chemical tanker, oil tanker and gas carrier.

Thai ship operator

This study refers to Thai ship-owner, owner of a Thai merchant vessel. In the commercial sense of the term, a ship owner is someone who equips and exploits a ship.

Marine Department

The Thai government assigned the Marine Department (M.D.) of the Ministry of Transport to take care of the maritime administration. The Marine Department's mission is entirely consistent with the government's policy on development and the public need to link the water transport and commercial navigation system with other modes of transport for carrying both passengers and freight.

Existing shipping policy

This refers to the government's shipping policy which is being used for developing shipping industry as strategies created at present.

Proposed shipping policy

This refers to the government's shipping policy that has been planned to be used in the future. However, it may or may not be used depending on situation and appropriation.