

SNF REPORT NO 63/00

**Localization and Foreign Direct Investment
- Exemplified by Norwegian Shipping in Singapore**

by

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SNF project no 1065

“Norske rederiers multinasjonale virksomhet”

(The multinational activities of Norwegian shipowning companies)

The project is financed by The Research Council of Norway and
The Norwegian Shipowners Association

SIØS - Centre for International Economics and Shipping

FOUNDATION FOR RESEARCH IN ECONOMICS AND BUSINESS ADMINISTRATION
BERGEN, NOVEMBER 2000

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ISBN 82-491-0095-6
ISSN 0803-4036

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NON-EXECUTIVE SUMMARY

The importance of Foreign Direct Investment (FDI) in the world economy has increased substantially over the last decades. This thesis seeks to explore what determines the *localization* of FDI. Several approaches have been made in order to understand the motivations for and the localization of FDI, and some are presented in the following. Dunning' eclectic paradigm explains foreign direct investment (FDI) by the profitability of combining the ownership and internalization advantages of companies with country-specific location advantages. National competitive advantage thus influences the location decision, and the competitive advantages of countries are important determinants of the localization of FDI. Governments play an important part in shaping the framework and conditions within which the economic activity takes place, and thereby affect the attractiveness of countries as recipients of FDI.

The thesis further provides an analysis of the economic development of Singapore, and explores the competitive advantage of the nation. It will be evident that the Singapore government has played an important part in shaping the operating framework, and has created a business environment regarded by foreign investors as very attractive. The macro- and micro level attractiveness of the country is discussed, as well as the government role in creating this attractiveness.

In order to understand the relative importance of the macro- and micro level attractiveness of Singapore, a more narrow scope is necessary, and an analysis of Norwegian Shipping in Singapore is provided. "Why Singapore?" is the focus, and the objective is to identify crucial determinants of localization. This further elaborates the competitive advantage of Singapore as a recipient of FDI, and highlights the most important factors in the localization decisions of the firms. Predictability and stability in the operating environment and a facilitated infrastructure seem more important than micro-level incentive systems for understanding localization of Norwegian shipping companies in Singapore.

PREFACE

I have always had a special interest for Asia. Through extensive travel in the region during the last five years, as well as studies of Japanese language, regional anthropology and economics I have further learnt to appreciate the vast differences in cultural and economic life. Questions like “what is your favorite place in Asia” provokes a stream of thoughts and suggestions, but no answers. China is incredible and incomprehensible, Tibet is heaven, but occupied, Japan is “westernized”, yet fascinatingly traditional, India and Nepal are poor, but amazingly vivid, Vietnam in transition and thus an experience and the South East Asian countries are similar in the economic development, yet culturally very different.

When I got the chance through the Norwegian School of Economics and Business Administration (NHH) to take part in the exchange program, I was certain that I wanted to go to Asia, and Singapore was my choice. At the heart of the region, this small island state is very convenient for travel and an extremely facilitated and organized place to study. Singapore has got something of everything, and is an amazing mix of cultures, religions, languages and colors. Through my stay in Singapore I was able to understand the framework the companies operate within in a much broader manner than if I had been writing this paper at NHH in Bergen. The firm hand of the government is visible even in the daily life, and I had no problems understanding the Singapore success as far as creating a pro-business environment is concerned. However, the lack of a Western-style democracy is also prevalent, but the increased wealth and stability have been parts of the bargain most people were willing to accept. Still, is a Western democracy even the appropriate form of governance in Asia?

This thesis have significantly broadened my understanding of the Singapore phenomenon, and further increased my interest for the region. I am very grateful to my advisor, Mr. Stig Tenold, and appreciate the advices and attention he has given me throughout the process. I also thank Mr. Jaer, Mr. Due and Mr. Kyrkjebø for taking the time to be interviewed and for introducing me to the “world of shipping”. I was unfamiliar with the shipping industry when I started the work on this thesis, and I have learnt a lot over the last months.

Christine C. Akselsen
Bergen, 2000

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INTRODUCTION

The importance of foreign direct investment (FDI) in the world economy has increased over the last decades, and FDI has become a more important means to serving foreign markets. Globalization of economies through FDI is taking place through an increasingly liberal policy framework. FDI can have a large impact on key objectives of economic development, including increasing financial resources for investment, enhancing technological capabilities, boosting export competitiveness, generating and upgrading employment etc. However, although FDI can yield major economic benefits for the host country, such benefits can be enhanced through appropriate policies. Governments therefore have an important role to play in creating the conditions that attract FDI and in maximizing the positive contribution that FDI can make to growth and development.

Managing FDI policy effectively is a demanding task, and the competitive context further raises challenges to both governments and investors. The Singapore government has to a large extent been able to reap the benefits of FDI through a strategy suited to the conditions in the country at particular stages in its development. The strategy has evolved as the country's needs and competitive position in the world has changed. The government has been successful in improving the attractiveness of the country's inherent factors, as well as in creating new resources in order to attract specific categories of foreign investors.

This thesis is a part of a project entitled "The multinational business of Norwegian shipowning companies". The project aims to study the consequences and composition of the multinational business of the Norwegian shipping sector in general, and FDI in particular.

Singapore has not only received enormous inflows of investments, but also hosts the highest concentration of Norwegian business interests in any city in the world outside of Norway. The activity is largely concentrated around shipping and maritime activity, and many Norwegian shipping companies have moved all or part of their business to Singapore. In this thesis I seek to explore the attractiveness of Singapore for foreign investors, in order to understand the determinants of localization for FDI in general and Norwegian shipping companies in particular. An identification of the elements that constitute the nation's competitive advantage, and a discussion of the government role in developing these advantages provides a platform

for an analysis of the Norwegian shipping activity in Singapore. This analysis aims at highlighting why Singapore was chosen initially and what still makes the location preferred today.

Part 1 outlines the magnitude of and trends in foreign direct investment and provides an overview of the many theories targeted at explaining FDI. Special attention is given to the location-advantages in Dunning's eclectic paradigm, as this is interesting for understanding the determinants of localization. Part 2 explores the Singapore phenomenon; why Singapore opened up for foreign investment and the competitive advantage of the nation. A discussion of the political aspect and the role of government follows. Part 3, Norway in Singapore, consists of a historical overview and an analysis of the experiences of Norwegian shipping companies in Singapore. In Part 4, this is used to arrive at an understanding of the determinants of localization for the shipping sector, but also for FDI in other business areas.

Some of the findings as far as the determinants of localization is concerned are valid not only for Norwegian shipping companies, but only *Norwegian* companies have been interviewed and only *some*. The thesis is also limited in the sense that on several occasions comparisons between Singapore and other countries are being made, e.g. other South East Asian countries and Norway, but the conditions in these countries are not explained. Finally, interesting as the subject might be, I have not been able to study the implications for the Singaporeans of their government's policies.

PROBLEM DEFINITION

Several attempts have been made to explain the phenomenon Foreign Direct Investments (FDI), and different motives and prerequisites for FDI are discussed in the economic literature. For FDI to take place it must be more profitable for the company to utilize its resources abroad than domestically. Consequently, an interesting question arises; *where* will a potential investment take place – *what determines localization?*

John M. Dunning suggested that three conditions all need to be present for a firm to have a strong motive to undertake a foreign direct investment. According to Dunning, if ownership-advantages and internalisation advantages can be combined with localization advantages, FDI will occur. The interesting question of *where* the investment will take place can be seen in the light of Dunning; - *what determines localization?*

Different location-specific factors exist, - the different economic and political environments as well as other factors inherent in a location, determine whether and where the establishment will take place. To what extent can the potential FDI recipients influence the localization decision of firms?

In this paper I will try to explore the “Singapore phenomenon” – *why* the country has been eager to attract FDI and secondly what makes *Singapore* attractive for foreign investors. Which factors constitute Singapore’s competitive advantage? I will be looking at foreign investments in a broad perspective, trying to understand why Singapore found it necessary to not only open up the borders, but also actively use macro-level policy and micro-level incentives to promote Singapore as a favourable location.

Further, I will try to narrow the scope and look at Norwegian shipping investments in Singapore, and the factors that have made Singapore a preferred location for many Norwegian companies in the shipping segment. *Why Singapore* will again be the focus, and the localization factors that constitute Singapore’s competitive advantage will be highlighted through an understanding of the localization-decisions of some Norwegian shipping companies. Why was Singapore chosen initially and what makes Singapore an attractive location today?

In the Singapore case, the government role in attracting FDI is evident, though the relative importance of the different levels of incentives in the government-made economy is more uncertain. The list of micro level incentives seems endless; still, a well-deserved image of being a pro-business government with an understanding of the industry needs may very well be as important. The determinacy, predictability and stability in government policy are very important elements for understanding the Singapore phenomenon.

WORKING METHODS

This study is based on explorative methods and my aim has been to gain insights and understanding. The process has been flexible and unstructured, and I have relied on both primary and secondary data. I have used the Internet as well as the libraries at the National University of Singapore (NUS) and the Norwegian School of Economics and Business Administration (NHH) in order to search for information on the subject. I have gone through literature; books, articles, lecture notes etc. to find the appropriate theories and to achieve an understanding of the Singapore business environment. A whole range of theories is presented, and the intent has been to gain a broad understanding of FDI.

To understand the localization decision of the Norwegian shipping companies in Singapore, I was fortunate to be in the country and was thus able to carry out personal interviews with Mr. Jaer of Thome, Mr. Due of Barwil and Mr. Kyrkjebø of Nortrans. The analysis of the other three companies, Odfjell Tankers Asia, Strømme Ships Service and Masterbulk is based on another thesis in the project "The multinational business of Norwegian shipowning companies", written by Stokke & Hauge (1999). These six companies are not necessarily representative for the Norwegian shipping activity in Singapore, but the information provided by them gives an understanding and strong indications of important localization determinants in the shipping sector. However, the results arrived upon are somewhat tentative, as a broad market research has not been carried out.

PART 1: GLOBALIZATION AND FDI: APPROACHES TO UNDERSTANDING THE MOTIVATIONS FOR AND THE LOCALIZATION OF FDI

1.1 INTRODUCTION

The amount of foreign direct investment undertaken throughout the world has grown rapidly over the last two decades, with a particularly strong surge in the late 1980s (Markusen, 1995:170). In this part of the paper I will first look at the trends in foreign direct investments and later I will review several theories attempting at explaining the phenomenon. Because of the inherent disadvantages and higher costs of FDI (compared to exporting and licensing) a broad understanding is necessary, and a theory that embraces all perspectives in a single explanation is presented in Dunning's eclectic paradigm. Dunning's theory highlights that location-specific advantages need to present for a firm to undertake FDI, and these advantages will contribute to an understanding of the determinants of localization. Consequently, I will look at the location-advantages in particular and also explore a government's possibilities of creating location advantages.

1.2 FDI TRENDS

One of the most notable trends in the world economy over the past decade has been the increasing economic integration. The world economy has witnessed a growing internationalization reflected in terms of the increasing amount of international trade and foreign direct investment (FDI) flows. Cross-border transactions of technology and direct investments have been expanding greatly, especially since the mid-1980s. Several global economic events of a reinforcing nature have contributed to this expansion. Some of the prevalent trends include: rapid technological change, liberalization of national economies to trade and investment, privatization, deregulation, regional economic integration in many geographic regions and the corporate restructuring sparked off by them, the fall of communism in Europe and the subsequent reforms, appreciation of the yen, and rapid technological learning and industrialization in the East Asian countries, to mention some. The

annual magnitude of FDI outflows has risen from about USD 58 billion in 1982 (current prices) to about 800 billion USD in 1999 (UNCTAD, 1999).

The impact of globalization has been uneven across regions, countries and sectors. Some countries and regions have integrated deeply with the world economy, reflected in growing magnitudes of inward and outward FDI flows and other types of cross border transactions. Others have been left behind. OECD-countries represent the lion's share of both FDI inflows and FDI outflows. Outflows from OECD-countries reached an unprecedented USD 566 billion in 1998 (Financial Market Trends, June 1999). Traditionally, FDI has come from the US and Europe, but new sources of FDI and technology have come up. Japan has emerged as one of the most important sources of FDI the last decades, and FDI outflows from newly industrializing economies (NIEs) such as Taiwan and South-Korea became an established trend by the late 1980s when several enterprises from the Asian NIEs grew into multinational corporations (Kumar, 1998).

As far as the direction of outward FDI is concerned, inflows into OECD-countries (from other OECD-countries) reached new heights in 1998 at USD 465 billion, representing a 71 percent increase over 1997. It should be mentioned that growth in OECD FDI flows was driven by a number of large-scale cross-border mergers and acquisitions, particularly between American and European – often British – firms. The enthusiasm for cross-border mega-mergers among firms based in OECD-countries overshadowed FDI in developing countries, which has continued to grow in spite of the financial crisis in Asia.

East- and South East Asia has received an increasing share of the world's FDI the last two decades, both reflecting and contributing to the rapid economic growth that has taken place in many countries in the region. The emergence of China as one of the most important hosts of FDI inflows should be noted, as well as the "intra-Asian FDI". The internationalization of Asian FDI had its heyday from the late 1980s, though the process stalled at the onset of the Asian Financial Crisis in 1997. However, most of the South East Asian economies are now recovering strongly.

In Asia, the importance of foreign investment varies significantly. Figures from 1995, before the outbreak of the regional crisis, indicate enormous differences, with Singapore being the top recipient as inward FDI stock accounts for 70 percent of GDP (UNCTAD,1999).

The geographic distribution of FDI has, as mentioned above, changed over the years. These changes have largely been caused by changes in the policies of home and host NIEs and developing countries, their development patterns and growth prospects and to a large extent by a changing external environment. However, the least developed of the world's countries continue to receive only a negligible share of FDI inflows despite liberalization of their investment regimes.

1.3 WHY FDI?

In this section I will review several theories of foreign direct investments. The theories approach the phenomenon of foreign direct investments from different perspectives. They are to some extent developed to explain different aspects of the same phenomena. Some, for example, are interested in the "where" and others in the "why" and "how" of foreign production and investment.

One set of theories seeks to explain why a firm will favor direct investment as a means of entering a foreign market when other alternatives are open to it, i.e. exporting and licensing. Another set of theories seeks to explain why firms in the same industry often undertake FDI at the same time, and others why certain locations are favored over others as targets for foreign direct investment. Such theories attempt to explain the observed pattern of foreign direct investment flows. Yet another theoretical perspective, known as the eclectic¹ paradigm attempts to combine the other perspectives into a single holistic explanation of foreign direct investment.

¹ The term *eclectic* means picking the best aspects of other theories and combining them into a single explanation.

1.3.1 A definition of FDI

Foreign direct investments (FDI) in the industrial sector typically refer to the establishment or purchase of a company whose economic activity is performed in a foreign country. The investment should constitute a lasting relationship and the company undertaking the investment should be able to exercise some degree of control of the business (Markusen, 1995).

Does this definition of FDI apply to all industries? As far as shipping is concerned, Tenold (2000a) argues that the definition of FDI in a shipping context should be pragmatic and closely linked to the purpose of the study. He suggests that the analysis should focus on land-based activities rather than on legal linkages for a broad analysis of the FDI of Norwegian shipowning companies, as well as for understanding the motivation and home- and host country effects of FDI. For an analysis of the long-term direct and indirect consequences of FDI, it is more interesting to focus on the land-based operations. Tenold claims this view can be justified by defining the operation of tonnage, rather than the performance of a particular transport service, as the main activity of shipowning companies.

1.3.2 Theories explaining FDI

1.3.2.1 Why FDI

Why do companies undertake FDI when other alternatives are available to them for exploiting the profit opportunities in a foreign market; exporting and licensing? *Exporting* involves producing goods at home and then shipping them to the receiving country for sale. *Licensing* involves granting a foreign entity (the licensee) the right to produce and sell the firm's product in return for a royalty fee etc. Why engage in FDI when these options are available?

The question is an important one, given that a cursory examination of the topic suggests that foreign direct investment may be both expensive and risky compared with exporting and licensing. FDI is expensive because a firm must establish facilities in another country or acquire a foreign enterprise. FDI involves risk because of the problems associated with doing business in a different culture where the "rules of the game" may be very different. To understand *why FDI* is preferred from a company perspective, a deeper examination is

necessary. Such an examination reveals that the answer can be found in the limitations of exporting and licensing as means of capitalizing on foreign market opportunities.

1.3.2.2 Limitations of exporting

The viability of an exporting strategy is often constrained by transportation costs and trade barriers. For manufactured products with low value-to-weight ratio, relative to either FDI or licensing, the attractiveness of exporting decreases.

Much foreign direct investment is undertaken as a response to actual or threatened trade barriers such as tariffs or quotas. By placing tariffs on imported goods, governments can increase the cost of exporting relative to foreign direct investment or licensing. Similarly, by limiting imports through quotas governments increase the attractiveness of FDI and licensing.

In this context two interesting paradoxes emerge. I will not, however, discuss these further, but refer to Swedenborg (1999) for further elaboration. Firstly, there has generally been a lowering of trade barriers the last decades. However, in spite of apparently lower trade barriers worldwide, FDI increases. Secondly, *one* does not reduce *the other*; both trade- and FDI flows are increasing.

1.3.2.3 Limitations of licensing

There is a branch of economic theory known as internalization theory that seeks to explain why firms choose to internalize processes and often prefer foreign direct investment to licensing as a strategy for entering foreign markets (Hill, 1999). According to internalization theory, licensing has three major drawbacks as a strategy for exploiting foreign market opportunities. First, licensing may result in the firm's giving away valuable technological know-how to a potential foreign competitor. A second problem is that licensing does not give a firm the tight control over manufacturing, marketing and strategy in a foreign country that may be required to maximize its profitability. With licensing, control is granted to a licensee in return for a royalty fee. However, for both strategic and operational reasons, a firm may want to retain control over these functions. A third problem with licensing arises when the company's competitive advantage is based not so much on its products but the management-, marketing- and manufacturing capabilities or on knowledge or other intangible resources. Such capabilities are often not amenable to licensing. For instance, in shipping, the nature of

the competitive advantage is very much based on knowledge and reputation. Accordingly, it is relatively difficult to sell or lease this knowledge.

1.3.3 Explaining the pattern of foreign direct investment

Firms in the same industry often undertake foreign direct investment at the same time. Also, firms tend to direct their investment activities toward certain locations. Some theories attempt to explain the patterns that we observe in foreign direct investment flows:

1.3.3.1 Following competitors

One theory used to explain foreign direct investment patterns is based on the idea that firms follow their domestic competitors overseas. First expounded by F. T. Knickerbocker, this theory has been developed with regard to oligopolistic industries. A critical competitive feature of such industries is interdependence of the major players: what one firm does can have an immediate impact on the major competitors, forcing a response in kind. Building on this, Knickerbocker argued that such imitative behavior characterizes foreign direct investment. Fear that a competitor might gain advantages by establishing a subsidiary in a foreign country can therefore lead to FDI by other companies (Hill, 1999).

1.3.3.2 International networks

This is another interesting variation of explaining FDI or the internalization pattern. Internationalization can be explained in terms of relationships and interdependencies, that is, networks. Firms expand internationally to follow other firms in their national networks. The degree of internationalization is a function of the firm's position in other national networks and the relative importance of these foreign networks to the firm (Sikorski & Menkhoff, 2000). By this line of reasoning, the underlying motive for internationalization is to achieve international integration.

Explanation for international investments and business by Asian firms and within Asia might best be viewed as revolving around a particular notion of alliance capitalism, networking. Asian (Singaporean-Chinese) firms expanding regionally have tended to follow other firms in their national networks and they have shown a capability to build new network among other Asian politicians and enterprises (Sikorski & Menkhoff, 2000).

The network explanation of FDI is interesting because it might be able to add some insights to why a large number of interconnected firms from different segments of the Norwegian shipping industry have established operations in Singapore. Were Norwegian shipping companies following their networks when establishing operations in Singapore?

1.3.3.3 The product life cycle

Raymond Vernon's product life cycle theory also explains the pattern of FDI over time, and as a sequence of events. This theory predicted that internationalization would occur as transfer of technology across borders at appropriate stages of maturity of the product, that is, a step-by-step evolution of new market demand and sustainable production sites overseas. In this theory, internationalization follows a systematic, predictable sequence, starting with exports by the innovator of a new product, then following these exports by overseas production in these new markets, first in advanced and later in developing countries, ending with exports from least-cost production sites back to the original innovating country (Sikorski & Menkhoff, 2000). FDI in other advanced countries will be undertaken when local demand is large enough to support local production, and the production will be shifted to developing countries when product standardization and market saturation give rise to price competition and cost pressures.

Vernon, in short, says that firms will undertake FDI at particular stages in the life cycle of a product they have pioneered. Vernon's theory, however, does not explicitly explain why it is profitable to undertake FDI rather than continuing to export from its home base and more importantly, rather than licensing a foreign firm to produce its product. Just because demand in a foreign country is large enough to support local production, it does not necessarily follow that local production through FDI is the most profitable option (Hill, 1999). The overseas production can be undertaken through licensing or FDI, but it is argued that in order to sustain market power the innovator often prefers FDI.

This limits the explanatory power of the theory because it does not explain when it is profitable for the company to invest abroad. The theory is also developed for the production of goods and not services, and is thereby not a preferable theory for explaining the FDI of Norwegian shipping companies.

1.3.3.4 The Flying-Geese pattern

Internationalization, and consequently FDI, as a sequence of logical steps is especially manifested in the "flying-geese pattern" in Asia (Sikorski & Menkhoff, 2000). This is a variation of Vernon's product life cycle-theory, and a popular characterization of intra-Asian FDI especially during the rapid growth years of 1987-1996. Japan is typically pictured as leading the flight pattern, with traders and investors of the Asia Pacific flying together in an inverted "Y" towards economic development. Initial exports of new products from Japan (or other advanced countries) would be stalled by higher costs, but emerging low-cost competitors could provide new export-platforms. In this way, progress in the most advanced economics was repeated with time lags in other Asian economies, usually spurred by FDI. FDI came to developing Asian countries largely for purposes of "outsourcing" or offshore production for export to large markets.

The flying-geese model can characterize changing industry structure within a given country, or the international shift of a given industry from advanced to less advanced countries through FDI. The latter is the right angle for my purpose, and an especially interesting feature is the fact that the flying-geese pattern - as the product life cycle theory - underlines the fact that FDI will flow to the location of comparative advantage. This is interesting when considering the different location alternatives and understanding what determines localization.

1.3.3.5 Market imperfections and FDI

Many scholars have turned to market imperfections for possible explanations of why FDI occurs. In principle, any market imperfection that increases the cost of a market transaction compared to conducting the activity within the boundaries of the firm can be used as an argument for FDI if the transaction in question is to take place across national borders. The examples of market imperfections are plentiful, and in different ways highlight why it can be profitable and sensible for the company to internalize an activity.

Transaction costs related to contract-problems, ex-ante and ex-post, could make coordination of activities across markets more costly than coordination of these activities within the boundaries of the firm. Asymmetrical information is another example of market imperfections. This occurs when one of the partners has inadequate information on, for instance, a product and its quality, and a market transaction can therefore be difficult. In a

situation where asymmetrical information is present, when one partner lacks information, a vertical integration of the activity can be a valuable outcome to reduce the insecurity for the firm.

Intangible company specific-assets often constitute a company's competitive advantage. A special production technology or superior knowledge of an industry are examples of such assets, and these often have the characteristics of being public goods, making it impossible to exclude other users if they are made widely available. A company that possesses such company-specific public goods might therefore wish to retain the assets within the borders of the firm through the internationalization process, choosing FDI over a transaction across markets.

Dunning emphasizes market imperfections when discussing why internalization advantages exist.

1.3.3.6 Clusters

Yet another attempt at explaining the FDI phenomenon is the motive connected to transfer of knowledge and technology in industrial clusters. In the literature, attention has been given to the advantages that companies can achieve by being located in the same area as other companies with similar activities and technology (i.e. Krugman). In such clusters, both formal cooperation agreements and informal contact will contribute to the spreading of knowledge and technology between the companies. If an industrial cluster is located in another country, companies will have incentives to undertake foreign direct investments (Grunfeld & Battisin, 1996).

As mentioned above, the eclectic paradigm attempts to combine some of the other perspectives into a single holistic explanation of foreign direct investment. This gives a broader explanation of why companies undertake FDI than the theories discussed above.

1.3.4 The Eclectic Paradigm

The British economist John H. Dunning presented the eclectic theory of internationalization. Dunning's theory suggests that FDI will take place when three conditions are present: an ownership advantage, an internalization advantage and a location advantage (Markusen, 1995:173). Dunning thus argues that in addition to the factors discussed above, *location-specific advantages* are of considerable importance in explaining both the rationale for and the direction of foreign direct investment.

By *location-specific advantages*, Dunning means the advantages that arise from utilizing resource endowments or assets that are tied to a particular foreign location and that a firm finds valuable to combine with its own unique assets. Dunning accepts the argument of internalization theory that it is difficult for a firm to license its own unique capabilities and know-how. Therefore, he argues that combining location-specific assets or resource endowments and the firm's own unique capabilities often require foreign direct investment.

Dunning's eclectic paradigm is developed as a result of discontent with the other theories, and even though it was developed to explain the internalization of production, it can also be used for service industries, like the Norwegian shipping industry.

In the following section I will give a brief introduction to the OLI-framework (Ownership, Location, and Internalization) and also see how it applies to the shipping sector. My focus will, however, be on the location advantage since this is important for determining the direction of FDI and thus can highlight factors important for the purpose of this study – investigating *what determines localization*.

1.3.4.1 Ownership advantages

An ownership advantage could be a product or a production process to which other firms have no access, such as a patent, a blueprint, or trade secret (Markusen, 1995:173). It could also be something intangible, like a trademark or reputation for quality. Whatever its form, the ownership advantage offers some valuable market power or cost advantage for the firm sufficient to outweigh the disadvantages of doing business abroad. According to Tenold (2000a:15), ownership advantages largely take the form of the possession of intangible assets

which are, at least for a given period of time, exclusive or specific to the firm possessing them. He further argues that in the shipping sector the firm specific assets may describe knowledge of the shipping market and its agents, a reputation for efficiency and professionalism, long-standing business relations, a high level of competence etc.

1.3.4.2 Internalization advantages

An internalization advantage arises when it is more profitable for the company to organize an ownership-advantage within the company borders than licensing it to other companies in the foreign market. The essence is that the company chooses to internalize the advantage through an extension of its own activities rather than selling it externally through licensing or other contracts with independent actors.

The internalization advantage implies that the shipowning company benefits from using the ownership advantages themselves. Because the nature of the ownership advantage in shipping is very much based on knowledge and reputation, which is relatively difficult to sell or lease, shipping companies have very distinct internalization advantages.

1.3.4.3 Location advantages

Like Tenold (2000a) suggests, this condition lies at the heart of FDI. In Dunning's framework FDI is explained by the profitability of combining the ownership and internalization advantages with some factor inputs outside the home country. The foreign market must offer a location advantage that makes it profitable to produce the product in the foreign country, rather than simply produce it at home and export it to the foreign market. Although tariffs, quotas, transport costs and cheap factor prices are the most obvious sources of location advantages, factors such as access to customers can also be important (Markusen, 1995:173). Markusen further points out that many multinationals are in service industries, in which on-site provision of the services is an inherent part of the companies' business.

Even though the location advantage in the shipping sector might be explained by local prices, e.g. for office space, office personnel wages, infrastructure etc., it is unlikely that any of the elements presented by Markusen weigh heavily in the localizational decisions of shipping companies (Tenold, 2000:15). Stokke and Hauge (1999) have interviewed some Norwegian companies in the shipping sector, which have chosen FDI as a strategy. Their respondents

suggest that factors like a stable and predictable environment, taxation policy, high-quality infrastructure and positive cluster effects are more important sources of location advantages for shipping companies.

Dunning's theory is a useful addition to those outlined above, because it helps to explain how location factors affect the direction of FDI.

1.3.5 What creates location advantages?

Tenold (2000a:20) states that FDI in the shipping sector can be explained by the fact that shipowning companies have firm-specific assets that are difficult to sell, but create profit opportunities when utilized in new markets. The interesting question then emerges - where will the establishment take place? Or, in general - *what determines localization?*

It is generally acknowledged that factor endowment models can no longer satisfactorily explain much of foreign production and investment, just as they cannot explain international trade, especially that between industrial countries (Dunning, 1990). Other country-specific characteristics can influence the ownership advantages possessed by firms and thereby create location advantages. At the same time, the globalization of production and markets has brought about its own consequences for the competitiveness of countries, which in turn affect the propensity of multinationals to invest in and from these countries.

1.3.5.1 The competitive advantages of countries

The competitive advantage of a country is determined by a large number of factors. In "The Competitive Advantage of Nations" Michael Porter (1990) refers to the "diamond" of competitive advantage. The diamond consists of several aspects, including basic factor endowments, firm strategy, structure and rivalry, demand conditions, the presence of related and competing industries, chance and the role of government. These are interrelated and need to be considered as part of a system of competitive advantages. Indeed, according to Porter, it is those countries which have adopted a "systemic" policy towards the creation and sustainment of competitive advantages which have recorded the greatest economic progress over the last decades (Dunning, 1990).

How can an understanding of the competitive advantage of countries help understand the determinants of FDI, and more interesting the localization of FDI?

National competitiveness influences the location decision and creates location advantages in certain industries. Even though Porter's theory is not designed to explain the overseas establishment of MNC subsidiaries or direction of FDI, it does give some interesting insights into the location-decisions of firms and the attractiveness of countries as recipients of FDI. According to Porter, competitive advantage is created, not inherited, and the only way to sustain competitive advantage is to upgrade it. He emphasizes the need to go beyond costs, that the answer is to be found in the "four broad attributes of a nation" and that nations succeed in industries where they are particularly good at factor creation (Porter, 1990:78).

1.3.5.2 Competitive advantage and clusters

As Dunning (1990) interestingly notes, the competitive advantage of countries affects, and is affected by, the behavior of foreign firms producing or contemplating production within their boundaries. By extending this to including production of services, this statement is also valid for the actual and potential FDI of Norwegian shipping companies. This dynamic interplay between the competitive advantages of countries and the activities of international firms can result in geographical agglomerations of economic activity. Such *clusters*, as self-reinforcing mechanisms, can again increase the propensity of firms to establish themselves in certain areas. Is the location decision of Norwegian shipping companies influenced by the large concentration of shipping activity in Singapore?

There are several theories of agglomeration², and different approaches have been utilized to study the phenomenon of industrial clusters. Alfred Marshall (1920) stated three reasons why one should expect agglomeration. Firstly, geographically concentrated activity includes a large pool of specialist workers which the group of firms can utilize more efficiently than if they were spread. Secondly, concentration creates a more efficient market for suppliers with respect to price, quality and lower transportation costs. Finally, information is spread more easily locally than over longer distances; ideas are more easily spread out (technological spillovers). Later, other theories of agglomeration have emerged. Endogenous growth models

² Tor Wergeland, "International Competition", Fall 1999, lecture notes.

emphasize the positive external effects of research and knowledge dissemination in clusters, and state that growth becomes endogenous in growth centers due to such positive external effects. Further, by looking at the interaction of economies of scale, transport costs and geographical location, new trade theory has been developed to help understanding the phenomenon of agglomeration (the Krugman-models). As I have already mentioned, Porter's method studies both the location and competitiveness of individual sectors.

The phenomenon of clusters can thus contribute to the understanding of the determinants of localization. Knowledge is generated and spread in industrial clusters. Such positive spillover-effects, or externalities, make it beneficial for firms to be located close to the source of knowledge generation. In Dunning-terms, a cluster has a location specific advantage in the generation of knowledge in the particular industry, and might thereby affect the direction of FDI in that industry.

1.3.5.3 The role of government

The literature has numerous examples of the way in which locational factors affect the geographical distribution of value-added activities by multinational enterprises. The focus has turned away from costs and basic factors and shifted to reflect the business environment and the innovatory and entrepreneurial dynamism of the recipient country. The locational pulls for high value added foreign investment are being increasingly determined by variables affecting the transaction rather than the production costs of firms. According to Dunning (1990), these include an economic and cultural ambience congenial to competition, entrepreneurship and innovation, and a holistic and integrated approach by governments to ensuring that human and physical resources are properly directed to this end.

How can the potential FDI recipients influence the localization-decision? The critical role of government in influencing the organization of economic activity should not be underestimated, as the case of Singapore might highlight. The government plays an important part in shaping the framework, or conditions, within which the economic activity takes place, and thereby the attractiveness of countries as locations for FDI.

Like Porter claims, no topic engenders more argument or creates less understanding than the role of government in the debate of the competitiveness of nations. There are different views

on government involvement, and the extent of government involvement through micro-level subsidies and incentives and macro-level directing of the economy has been highly disputed. Few analysts would disagree that it is the responsibility of government to ensure that economic activity is organized in a way which promotes the welfare of its citizens. But, as to how this responsibility should best be exercised, there is little consensus. Some state that the government should solely provide the appropriate framework, others vote for more active involvement in determining the direction of the economy.

I do not intend to discuss neither these views nor the reasoning behind them, but in the following I will give a short presentation of how the government can act as a creator and shaper of favorable location factors.

1.3.5.4 Different levels of government influence

According to Porter, government policies that succeed are those that create an environment in which companies can gain competitive advantage (Porter, 1990:86). An environment where business can flourish can be a result of sound macro-economic management as well as of specific incentives, financial and non-financial.

As far as *macro-level* attractiveness is concerned, a stable and predictable environment might play an important role. Political stability and fiscal and monetary policies oriented towards the long-term competitiveness of the nation are influencing the business environment. The government role in providing the institutional structure and the legislative framework is also important, and an open and transparent system appears attractive to potential investors. The level of investment in areas in which the private sector is likely to under-invest, like infrastructure and manpower, influences the cost of doing business and thereby affects the attractiveness of countries as recipients of FDI. The role of government in economic affairs will be investigated in the upcoming parts. The Singapore government is often described as acting *with* the market, as far as upgrading the quality and productivity of the resources available is concerned.

On the *micro-level*, it is common for governments to offer incentives to foreign firms to invest in their countries (Hill, 199:219). Such incentives take many forms, but the most common are tax concessions, low interest loans and grants or subsidies. Spending on infrastructure and

education spending in special fields are also used as incentives. Incentives are motivated by the desire to gain from the resource transfer and employment effects of FDI. Motivation can also arise from a desire to capture FDI away from other potential host countries.

The role of government in creating clusters should also be mentioned, and there is strong international “competition for clusters”. Tax-policy games are being played out to get particular companies or special knowledge-generating activities to establish in a specific region, hoping to achieve an agglomeration effect that will be beneficial to the country.

From this part of the paper, it can be understood that the competitive advantages of countries are becoming a more important determinant of the extent and pattern of the international allocation of economic activity and localization of FDI. Understanding the competitive advantage is then crucial in an analysis of the determinants of localization. In the following part, I will try to exemplify *what determines localization* by looking at the competitive advantage of Singapore. A historical overview is also presented in order to understand why Singapore opened up for FDI.

PART 2: WHAT DETERMINES LOCALIZATION – EXEMPLIFIED BY SINGAPORE

2.1 INTRODUCTION

As can be seen from above, there are several factors that can influence the localization of a foreign subsidiary or production site. The importance of these factors varies with the area or country in question and the industry.

Among the Asian nations, Singapore has been the most aggressive in attracting foreign investors, and the government has played an active role. In fact, Singapore is a prime example of how the government has been successful in creating an environment that investors regard as very attractive. There are also several factors inherent in the country itself that have played and are still playing an important part in the localization decisions of firms. Why is Singapore so eager to attract FDI, historically and today, and what makes Singapore attractive for foreign investors in general, and shipping-companies in particular?

To answer this question, it is necessary to take a closer look at how Singapore reached its level of development, the importance of foreign investments in the economic development and the economic policy that brought the country where it is today. I will also try to identify the specific localization-factors that are of importance for foreign investors, with a special focus on shipping investments, and make an attempt to determine the extent of government involvement in developing these advantages. This part will thus only provide an overview, and the analysis and evaluations will follow in the upcoming parts of the paper.

2.2 WHY FDI IN SINGAPORE? – A GLANCE AT HISTORY

The different phases and the political responses in the history of Singapore after the independence from the British in 1959 give important insights as to *why* and *how* Singapore has reached its current level of development. I will focus on the events of importance for the *economic* development of the country, the challenges faced by the country and the actions

taken by the government to overcome these obstacles. This section will broaden the understanding of why the Singapore government saw the need to attract foreign investors.

During this historical overview, I will also try to highlight the main events and policy actions as far as shipping and port-development is concerned, and trace the development of the Singapore fleet. It is evident that the strategic position of the island and the government efforts in taking advantage of this significant asset were the main factors turning Singapore into an international maritime center.

2.2.1 Background - Colonial heritage³

Singapore was founded in 1819 by Sir Stamford Raffles, and rapidly grew from a small, largely uninhabited island to a bustling city port, soon overtaking Penang and Malacca as the center of international trade in South East Asia. From its inception, the port of Singapore was established on the principle of free trade, as it was to be the conduit through which international free trade flowed between East and West. With the discovery of tin and the establishment of rubber plantations in surrounding countries, Singapore quickly became an entrepot, collecting and processing raw materials from its economic hinterland for export and distributing imported manufactured goods from the West to its neighbors. Trading with the rest of the world was therefore the *raison d'être* of Singapore's existence from the beginning. It is thus evident that the birth of Singapore, like its later development, was based on close economic ties with other countries.

The British ruled Singapore for about 135 years, and during this period of time considerable development took place in terms of infrastructure, administration, finance and other services. The British established an efficient public administration (based on the British Civil Service) and a system of education along British lines, using English as the medium of instruction. These developments were later to play an important part in the economic development of Singapore, as they laid the foundations for its transition from a LDC (Less Developed

³ Based on Gerald Tan (1995); "Newly industrialized countries of Asia".

Country) to a NIC (Newly Industrializing Country).⁴ Trade and commerce had become the life-blood of the Singapore economy, and British firms were instrumental in the development of Singapore as one of the centers of world trade. Around the merchandise trade grew financial institutions as well as large shipping firms and ship-chandlers which supplied vessels with all their provisions.

2.2.1.1 Shipping before 1959

The modern port of Singapore traces its origins to the mouth of the Singapore River and it was here that the port developed and flourished for its first 40 years. Sir Stamford Raffles had declared that "...the Port of Singapore is a Free Port and the Trade thereof is open to Ships and Vessels of every Nation free of duty equally and alike to all", and this preamble appeared on the earliest regulations for the administration of the port which were promulgated in 1823. Records of local shipping in the Master attendant's report book show that for the year 1822 a total of 139 square-rigged vessels entered the Port of Singapore and in 1834, 517 vessels totaling 156,513 NRT were recorded. As the traffic increased, congestion of the Singapore River set in. The situation was further aggravated when steamships started passing through Singapore. The Keppel Harbor, which was later destined to be the major gateway of the Port of Singapore, was opened in the 1850s, and development of Keppel Harbor was rapid during the next fifty years. Land reclamation was undertaken to improve communications between the Keppel Harbor and the town center and the Singapore River. Port facilities in Keppel Harbor were much enhanced by the Singapore Harbor Board (SHB), replaced in 1963 by the Port of Singapore Authority (PSA) (Singapore Port History, 1982).

By 1870 the aggregate tonnage of steamers calling at the port had exceeded that of sailing ships, and the total shipping tonnage rose to 5,7 million NRT in 1900 (Singapore Port History, 1982). The period until 1913 was one of continuous expansion, and the total net registered tonnage of merchant vessels cleared at Singapore that year reached 9,2 million tons. During World War One, vessels were requisitioned for war usage; by 1918 total tonnage had fallen to three-fifths of its 1913-level. After the War shipping services were quickly re-established, and a new period of growth began in the 1920s (Huff, 1994). Later, during the Pacific War, about

⁴ NIC (Newly Industrializing Country) and NIE (Newly Industrializing Economy) (used in Part I) are different terms explaining the same phenomenon. NIE is sometimes used in order to be politically correct, because Taiwan is not considered to be an independent "country".

70 percent of the warehouses at Keppel Harbor suffered damage from bombing raids, and machinery and equipment fell into a state of despair. SHB resumed control in 1946 and restoration and re-construction began. With the restoration of port facilities and the eventual resumption of passenger and cargo services, the shipping tonnage steadily mounted from 20, 4 million NRT in 1947 to 82,9 million NRT in 1963.

2.2.2 1959-1965: Import substitution

By the time Singapore was granted self-government from the British in 1959, it had developed into a relatively modern city-state. Though still in the infancy, Singapore had a standard of living well above that of its regional neighbors. However, a number of economic and political problems began to emerge. Firstly, Singapore's entrepot trade, which had been the mainstay of the economy for over a century, began to stagnate as neighboring countries began to develop their own ports in order to trade directly with the West. This was an early warning signal that Singapore was unlikely to be able to rely on entrepot trade as the main engine of growth. Secondly, the domestic market was considered too small to support a viable manufacturing sector. A solution that made impeccable economic sense was a merger with Malaya, but political obstacles to this scheme eventually proved to be insurmountable.

The main problem for the federation was that the vast majority of the inhabitants of the city-state (over 75 percent) were Chinese. The fear amongst the Malays was that, after a merger, the Chinese would dominate economic life and later encroach the political dominance held by the Malays in Malaya. Eventually, political and racial tensions between the Malays and the Chinese reached a crescendo and threatened to break out in widespread inter-communal violence. The only way of averting such a catastrophe was to have Singapore leave the Federation. The federation was dissolved in 1965.

During this period Singapore had embarked on a strategy of industrialization through import substitution, to solve the problem of high unemployment, and diversify away from the dependence on entrepot trade. The strategy of import substitution made sense under the federation with Malaya, but after 1965 the small country with little natural resources had a domestic market where substituting industrialization lost its rationale.

2.2.2.1 Shipping 1959-1965

During this period, the Port of Singapore Authority (PSA) was formed to take over the functions, assets and liabilities of the Singapore Harbor Board. This event marks the start of more active and stronger seaport policy from the government. Most areas of the Singapore economy were affected by the maritime- and port policy, and the further development of Singapore as a shipping nation was a result of as well as a reason for the different measures undertaken by the government. PSA has been the main instrument of seaport policy (Ho Kim Hin, 1996:28), and the objectives in the seaport policy have evolved since the PSA inception in 1964.

2.2.3 1965-1979: Export-Oriented Industrialization⁵

The years 1959-1965 had been marked by great political turbulence and uncertainty, and in 1965 Singapore faced several challenges: Cut off from the economic hinterland, the economic prospects and long term-viability were uncertain. The separation caused the import-substitution strategy to be aborted. Confrontation with Indonesia further threatened Singapore's traditional role as a major trading post for the region. Finally, the announced withdrawal of the British bases on the island, demanding local services and employing around 40.000 workers (according to Tan (1995): 20.000 civilian jobs and 14 % of Singapore's GDP), was an enormous threat to the already troubled economy.

Long-term viability lay in an industrialization strategy based on export of labor-intensive manufactured goods. Breaking with what was then the preferred development strategy in both political and academic circles, Singapore took an export-oriented approach to industrialization. Hong Kong was perhaps the only other economy to adopt a similar strategy. This approach required a reversal of economic policy. Existing import barriers were to be eliminated, and more importantly; Singapore started to encourage labor-intensive export oriented firms to set up their operations on the island. The aim was to attract foreign investors to Singapore to develop the manufacturing and financial sectors. The Economic Development Board (EDB) was charged with the important task of promoting foreign investment in Singapore. Under the new regime, the EDB sought firms that would set up facilities in

⁵ Based on information from the Ministry of Trade and Industry (MTI), www.gov.sg/inti/ and Tan (1995).

Singapore primarily for export. The concept of Singapore as a “global city” was promoted, and the attractive geographical location, low-cost labor, good infrastructure and “one-stop” processing for FDI applications made the island an attractive location for multinational firms.

The government also focused on improving the labor climate and investment environment by enacting the Employment Act in 1972. The aim was to lay down standards of employment to help resolve industrial disputes. In addition, the National Trade Union Congress (NTUC) and National Wage Council (NWC) were also formed in 1972 to promote better labor-management relations.

To further attract foreign MNCs, the government offered various financial incentives (such as tax holidays, accelerated depreciation allowances, tax deductions for export promotion expenses etc.) and low-cost factory space in industrial estates. The government also removed the barriers to the flow of funds in and out of Singapore, made it easy for foreign executives to work in Singapore, signed double-taxation agreements and worked to provide an efficient and honest public service (Tan 1995). The efficiency in the public service and the absence of corruption is still regarded by investors as one of the main advantages of Singapore compared to other location-alternatives in the region.

Favorable international economic conditions as well as the incentives offered by Singapore led to large inflows of foreign investments, resulting in a large expansion of export-oriented manufacturing. By 1975, foreign-owned firms and firms with minority foreign participation accounted for over 70 percent of gross manufacturing and over 80 percent of manufactured export.

By the early 1970s, products manufactured became more sophisticated and included computer parts, computer peripherals, software packages and silicon wafers. This led to new investments (particularly in electronics) and product diversification which greatly enhanced export performance in spite of world recession (1975). MNCs also began to undertake research and development activities on the island, as a logical extension of their successful manufacturing operations in Singapore. This underlined their long-term confidence in the nation.

Growth averaged 10 percent p.a. during this period (1965-1979), and by 1979 the unemployment had fallen to 3,3 percent from an estimated 10 percent in the turbulent years in the early sixties.

2.2.3.1 Shipping 1965-1979

The government had planned, already from the end of the 1960s, to develop Singapore as a major shipping-, shipbuilding- and ship repair center. Local industry was built up, and doors were opened for foreign direct investments (FDI) in this industry as well. This period saw the establishment of a number of shipyards, and the turnover in the ship repair- and shipbuilding industry increased from S\$ 237 million in 1969 to S\$ 1 628 million in 1982. From the beginning of the 1970s, Singapore focused on the building of and service for offshore rigs and supply ships, and was by 1974 the fourth largest oil refinery center in the world.

One of the milestones of the history of the port was the opening of the first container berth on 23 June 1972 at the Tanjong Pagar Terminal. This was in response to the change in shipping and cargo handling technology towards containerization, and made Singapore an important link in the new chain of global container ports.

In 1968 the Singapore government introduced a tax-free registry for foreign vessels. This was done to draw foreign tonnage to Singapore, and consequently to increase the employment of Singaporean seamen and increase expertise in shipping. Combined with the liberal legislation on transfers of capital and profits, this non-tax policy made the Singapore flag a Flag of Convenience. The growth of the Singapore fleet after the 1969 opening of the register was dramatic. By 1979 the Singapore registry had grown from its January 1969-size of a quarter of a million grt to slightly less than eight million grt. The number of vessels had grown by 450 percent (Brooks, 1985). This made Singapore the third largest Flag of Convenience in the world, after Liberia and Panama (Gisnås, 1995).

In April 1979, the government introduced new rules designed to “tighten up” the registry, including the condition that foreign owned vessels were required to be less than fifteen years of age and greater than 1,600 grt to register.

2.2.4 1979-1985: Industrial Restructuring⁶

By the early mid-1970s, the emergence of excess demand in Singapore's labor market began to exert upward pressure on real wages, entailing some loss of competitiveness vis-à-vis neighboring countries. The emergence of lower cost developing countries in the region, now strong contenders for MNC investments, forced a restructuring the economy towards higher value-added activities. The plans were drawn out in the early 1970s, but because of the recession in the world economy in 1974-1975, they were put on hold. In 1979, the program for restructuring of the economy was put into effect and a three-year wage-correction policy to reflect the tight labor market and induce efficient use of labor had also been introduced.

To spur growth, foreign investment in high-technology industries were encouraged by the EDB by granting firms five years tax holidays. Enterprises that were already in Singapore were also offered incentives to upgrade the skills of their employees, to improve the technology level of new investments and to increase automation. Singapore began to expand on knowledge-intensive activities. Under what was billed as the "Second Industrial Revolution" by the government, the EDB focused on attracting higher value-added and skill-intensive FDI, which required specialist manpower, particularly with the advent of increased research and development activities and product development by MNCs in Singapore.

However, a high wage policy led to swelling wage bills. Singapore's competitiveness began to decline and led to a second recession in 1985-86, which coincided with the global economic slowdown that hit Singapore in 1985.

An Economic Committee led by Lee Hsien Loong, then Minister of Trade and Industry, was set up to provide new measures to put Singapore back on the road to economic recovery. The most far-reaching recommendation was the introduction of the flexi-wage, where pay hikes would be relative to a company's profitability. This measure reflected Singapore's successful tripartite approach with the government, labor union and employers working together in a concerted manner to solve national problems (Tan Chwee Huat, 2000).

In response to the negative impact of the recession, the EDB followed the Economic Committee's recommendation to focus on all aspects of economic activity. Under the initiative

⁶ Based on information from the Ministry of Trade and Industry (MTI), www.gov.sg/mti/.

of selling Singapore as a “Total Business Center”, the EDB was given the additional mission of attracting international service corporations. Hence, the Singapore economy was to be supported by twin engines of growth: manufacturing and services.

In this period the economic growth averaged 6,8 percent p.a. and the proportion of skilled labor rose from 11 to 22 percent of the total labor force.

2.2.4.1 Shipping 1979-1985

In 1979, the start of this period, Singapore was the third busiest port in the world, after Rotterdam and Yokohama. The economic downturn in 1985 also affected the port with activity declining six percent from 1984 (Building a Nation, 1990). However, in 1986 the port became the busiest in the world in terms of shipping tonnage.

There were large changes in the composition of the world fleet during the shipping crisis of the 1970s and 1980s. Important for the shift in maritime dominance was the increased participation of some relatively new entrants in the maritime sector. These “Emerging Maritime Nations” were non-OECD developing countries, and it was especially Asian countries that increased their share of the world fleet. The Asian share of the world fleet increased from less than 3,5 percent in 1970 to almost 15 percent by 1987, and the average growth rate of the Singapore fleet was more than 20 percent (Tenold, 2000b).

Through the Singapore Registry of Ships (SRS), unlike traditional Flags of Convenience, the government had tried to establish a relatively close link between the national economy and the shipping sector, e.g. through the tax rebates offered to ship owners employing domestic crews. When the government embarked on the mission of cleaning up the image of the Singapore flag in the beginning of this period, the shipping policy had already been successful in creating a strong national fleet and a shipping environment. The introduction of higher standards did not lead to any significant flight of tonnage. In 1987, Singapore ranked 13th among the world’s maritime nations (Tenold 2000b).

2.2.5 1986-1999: Capability building and Economic diversification

The stagnation in the world economy had reached Singapore in 1985, but the suggestions by the government committee on measures to reduce business costs, led to renewed growth already the summer of 1986.

The challenges faced by the country in this period are mainly related to Singapore being a more mature economy. The growth has slowed, resource constraints become more binding and consequently, costs are rising. This is coupled by intense competition from both developed and developing countries. Singapore also had a relatively low technology base on a global basis. Several issues were focused on, including:

*** Deepening the Technology Base:**

The government took the lead in catalyzing the development of technology through the National Technology Plan from 1991-1995 and the National Science and Technology Plan from 1996 to 2000. To maintain high growth rates and improve performance in manufacturing, attempts were made to find new sectors where the technological gap could profitably be exploited. Biotechnology, computer peripherals and aerospace were identified as potential high growth sectors and were actively promoted by the EDB with pioneer and expansion incentives.

*** Cluster Development:**

EDB adopted a cluster development approach to formulate action plans in the electronics, engineering, chemicals and the exportable services sectors. Industrial strategy was refined to leverage on synergies at the firm and industry levels. Mutually supporting industries were identified and developed to entrench entire clusters in niche areas.

*** Promoting Manufacturing and Services as twin Pillars of the Economy:**

To reduce vulnerability and secure a broader base for the economy, the service sector was promoted together with manufacturing as a main pillar of the economy. Many incentives offered for manufacturing investments were extended to investments in service sectors.

*** Regionalization:**

The government encouraged leveraging on the potential of the Asian markets in order to overcome local resource and market constraints. To put it simply, through close ties with countries in the region, Singapore is engaged in international division of labor. The creation of economic space beyond Singapore occurs when local and Singapore-based multinationals

distribute resource-dependent operations to resource rich countries while maintaining and upgrading their operations in Singapore to higher-end activities, which require Singapore's set of competencies. To create new economic space, Singapore borrows the land and manpower resources of other countries to establish industrial parks in the Asia-Pacific region.

GDP growth averaged 8.5 percent p.a. during 1986-1998. The share of financial and business services sectors of total GDP grew from 20 percent in 1986 to 26 percent in 1998. Between 1987-1998, the number of research scientists and engineers grew by 13 percent p.a.

The Singapore economy was hit by the regional crisis that started with the devaluation of the Thai bath in 1997. Although the fundamentals were good, close linkages to the deteriorating regional economies adversely affected the country. Exports were affected by the shrinking domestic demand of regional economies, and the appreciation of the Singapore dollar relative to other currencies in the region drastically threatened competitiveness. Economic growth slowed from 8,4 percent in 1997 to 0,4 percent in 1998.

As a response, both short- and longer-term measures were implemented. Focus was put on reducing business costs through property tax rebates, rental reductions from Jurong Town Corporation (JTC) and rebates and reductions in other service charges. In fact, during the crisis, the incentive-programs were made even more generous. This can be seen as yet another evidence of the government devotion to attracting foreign investment (Stokke & Hauge, 1999:64).

2.2.5.1 Shipping 1986-1999

Today the maritime industry in Singapore is more vibrant than ever before. As can easily be seen from the history, this might not have happened without the visible hand of the government. The Trade Development Board (TDB) introduced another important policy in 1991. The Approved International Shipping (AIS) scheme was introduced with the aim of encouraging more shipowners to base their whole operation or part of it in Singapore.

Companies that qualified for the scheme were granted tax exemptions for ship operation, irrespective of the flags the ships fly. The TDB was convinced that the presence of more shipowners would encourage more auxiliary service providers, including marine insurers, lawyers and ship financiers to establish offices in Singapore, thereby strengthening it into an

international maritime center, and increasing the growth and welfare of the economy as a whole (Singapore Maritime Directory, 1997).

According to the 1998 Edition of the Lloyd's Register on World Fleet Statistics, the Singapore Registry of Ships (SRS) is currently ranked 7th in the world and in January 2000, the SRS broke the 24 million Gross Tons (GT) mark. This may be explained by the advantages shipowners still stand to gain by registering their vessels in the registry, including exemption of profits from income tax, no restriction of crew nationality etc. The Registry is also well known for its efficient services and its high operational and pollution control standards.

2.2.6 Future Outlook: Transforming into a Knowledge Based Economy

The Singapore economy is advancing into the stage where knowledge or intellectual capital is needed increasingly to create value. As the costs for providing traditional factors of production such as land and labor has gone up, Singapore will face tougher competition, exemplified by regional neighbors catching up. The forces of rapid technological change and globalization will bring new challenges for Singapore, and the government is trying to be predictable in meeting challenges by pursuing eight strategies formulated by the Committee on Singapore's Competitiveness⁷:

- * Manufacturing and Services as Twin Engines
- * Strengthening the External Wing
- * Building World Class Companies
- * Strengthening the Base of Small and Medium-sized Local Enterprises
- * Human and Intellectual Capital as a Key Competitive Edge
- * Leveraging on Science, Technology and Innovation
- * Optimizing Resource Management
- * Government as a Business Facilitator

⁷ See the MTI-website (www.gov.sg/mti/) for further elaboration of these eight strategies.

2.3 SINGAPORE TODAY

Over the last three-four decades since independence, Singapore has grown from a third world country with a per capita GDP of Singapore dollars (S\$) 1,329.6 (current market prices) to a major industrial country with a per capita GDP of S\$ 39,721.4 (1999) (www.singstat.gov.sg) - or about US \$ 27,205 (1999) (EIU, Jan. 2000).

The Singapore economy has weathered the Asian economic storm and is recovering strongly. The economy picked up vigorously in 1999, faster than expected, and the overall economic growth in the country was 5,4 percent. The economy is estimated to grow by 6,8 per cent this year (EIU, May, 2000), buoyed by increasing employment and wages, and export growth fuelled by bright prospects in the world electronics market.

This year, Singapore was again ranked the most competitive economy, excelling in nearly every major area that counts in terms of competitiveness, according to the Swiss-based World Economic Forum (WEF). This is the fourth consecutive year that Singapore has achieved the top spot in the WEF Global Competitiveness Report, in front of the US and Hong Kong. In 1999, Fortune ranked Singapore as the "Best City in the World for Business". These achievements are testament of Singapore's competitive advantages that have made it a choice investment location and value-adding partner for successful business. Later, I will return to the importance of the government in building these advantages and determining the direction of the Singapore economy.

As far as maritime activity is concerned, Singapore was the world's busiest port in terms of shipping tonnage with 141,523 vessels calls totaling 877 million gross tonnage in 1999. In the same year, the port handled 15.94 million TEUs (Twenty-foot Equivalent Units) of containers. Singapore has also been the world's top bunkering port since 1988, with a total of 18.89 million tons of bunkers handled in 1999 (Ministry of Communications and Information Technology (MCIT), www.gov.sg/mcit/).

The Singapore port has received several international awards in recognition of its excellent infrastructure and services, including the Asian Freight Industry Award for Best Seaport (Asia) 12 times. Singapore's container terminal operator PSA Corporation, the former

government body, has also won the Asian Freight Industry Award for Container Terminal Operator (Asia) 11 times. It won the Lloyd's List Maritime Asia Award for "Best Container Terminal" when the award was inaugurated in 1999 (MCIT, www.gov.sg/mcit/).

2.4 WHY SINGAPORE? - EXPLORING THE COMPETITIVE ADVANTAGE⁸

It is obvious that it was necessary for Singapore to attract foreign investors, and that foreign investors regarded Singapore as an attractive location. I will now try to identify the factors that constitute the nation's competitive advantage as a location for foreign direct investment (FDI). This is important for understanding the operating environment for the investors and will thus widen the understanding of Singapore's attractiveness as an FDI recipient.

Singapore's reputation as a global hub stems from the excellent infrastructure and the strategic location at the crossroads of major shipping routes. Good banking and financial services, an efficient telecommunications network, a stable government and a skilled and disciplined workforce are factors contributing to Singapore's success as the maritime center for the Asia-Pacific Region.

According to the Norwegian Trade Council (NTC), the EDB and other organizations, there are several reasons that Singapore is a favored location among foreign investors:

- Low- risk and stable business environment
- Strategic location
- First class business infrastructure
- An attractive business center

2.4.1 Low risk and a stable and predictable business environment

Compared to many of the neighbors, Singapore has a unique record in political, economic and social stability over the past three decades. This has indeed attracted many MNCs to fit Singapore into their global strategies. The country has enjoyed political stability roughly since 1965, an effect of the one-party dominance. The PAP, guided by the ideas of Lee Kuan Yew

⁸ The framework for this section is based on information from EDB and the Norwegian Trade Council.

(prime minister from 1959 to 1990), has dominated politics in Singapore, portraying itself as the only possible government and successfully knocking down opposition activity.

The government policies have been consistent and forward-looking. The firm and decisive hand of the government has ensured a commitment to the various policies introduced, aiming at developing the country by providing an environment within which business can flourish. The free enterprise- and free-port policies should again be mentioned, as should the free movement of capital and profits and the enduring incentives given to foreign MNCs.

Singapore has also enjoyed particularly harmonious labor relationships, ensured by the tripartite cooperation between the government, employers and unions. This cooperation, since the Employment Act in 1972, has contributed to the stable and problem-free business environment the country can offer (Tan Chwee Huat, 2000).

Inflation has averaged less than four per cent annually over the last 25 years, and the Singapore dollar has remained strong and stable for a long time. The Singapore dollar survived the Asian crisis far better than most of the other currencies in the region.

2.4.2 Strategic location

Singapore is located at the heart of South East Asia, a region rich on resources such as oil, gas, palm oil, rubber and tin. These riches coupled with a regional population exceeding 420 millions, underline the importance of this region. Singapore is well placed to serve these fast growing markets.

The strategic geographical location is one of the crucial factors that have made Singapore the global hub for shipping that it is today. The island is a crossroads of major shipping routes, and its existence is based on this positioning. What started as a transshipment hub, is today one of the most extensive maritime centers of the world. This is also to a large extent a result of government policy, aiming at maximizing the advantage that the geographical location represents.

The location and sophisticated telecommunications network allow financial institutions and other companies to transact business with any part of the world within the same working day. This is important for foreign investors dependent on efficient communication with head offices, subsidiaries or customers in other parts of the world. International travel is equally convenient, and valued for the same reasons.

2.4.3 Business infrastructure

Singapore has first-class infrastructure, in telecommunications as well as land, sea and air communications. As a business and financial center, the government continually enhances the efficient and sophisticated infrastructure to serve the changing needs of business.

2.4.3.1 Multi agency networking

One of Singapore's competitive advantages is the established multi-agency government network involved in promoting economic and business development. These agencies work closely together to respond quickly to the needs of business, and to ensure the relevance of the various strategic programs by reviewing and adapting them to a changing environment. This effort is to ensure that Singapore achieves sustainable economic growth by remaining a competitive, value-adding investment location.

The multi- agency networking is a good example of the Singapore Inc. approach, reflecting the concerted approach to economic development.

2.4.3.2 Transport

Air

The location at the crossroads of international trade routes and the excellent airport infrastructure has made Singapore a key air hub in the region. Today, Singapore Changi Airport is convenient for international air transport for both passengers and air cargo, the formula for success being clockwork efficiency, quality service and world-class facilities. Singapore Changi Airport is served by 69 international airlines providing over 3,200 weekly scheduled flights, making it the airport with the most air links in the Asia-Pacific region.

In 1998, Singapore Changi Airport received its eleventh consecutive "Best Airport" award from the Business Traveler (UK). Feasibility of travel is important for MNCs, and the government is still developing Changi in order to strengthen its role as a transport hub in the region. The scheduled new Terminal 3 will increase Singapore Changi Airport's total handling capacity to over 60 million passengers a year when it opens in 2006, pushed on from 2004 to allow for upgrading of the existing terminals.

Sea

"For several years now, Singapore has been the world's busiest port in terms of shipping tonnage. Our port contributes 5 % to our Gross Domestic Product, by no means a small contribution."

Minister of Communications, Mr. Mah Bow Tan at the launch of MPA, 23 April 1996

The Singapore port has been an integral infrastructure in the development of Singapore's economy. It has indeed played a critical role in the country's transformation into a global trading power. Singapore has since 1986 been the busiest port in the world in terms of shipping tonnage, with more than 800 ships in port at any time. It is a focal point for some 400 shipping lines linking Singapore to more than 700 ports in 130 countries worldwide. The port consists of six terminals located at Tanjong Pagar, Keppel, Brani, Pasir Panjang, Sembawang and Jurong, which can accommodate all types of vessels from container ships to passenger liners.

Singapore is a major bunkering port with bunker sales averaging about 18 million tons a year, and the world's third largest oil refining center. Global players such as companies like Shell and Esso operate here, with a refining capacity of over one million barrels per day.

Singapore is also Asia's main transshipment hub. Container and cargo handling operations are handled by PSA Corporation Ltd, which is the world's single largest container terminal operator. The Corporation's business focus is on three strategic areas: Container terminal operations in Singapore, development, operations and management of international port terminals and warehousing and logistics management. Thus, the PSA provides a one-stop service for multi-national companies involved in regional distribution.

PSA Corporation Ltd. was formed in 1997 from the former Port of Singapore Authority, which then was divided into the Maritime Port Authority of Singapore (MPA) and the PSA, which was corporatized. MPA is now the sole regulatory body responsible for all port and maritime affairs in Singapore.

Singapore's main port competitor is undisputedly Hong Kong, which handled 14.6 million TEUs (Twenty-foot Equivalent Units) in 1998 compared to the 15.1 million TEUs the Singapore port handled the same year. In 1999, the Singapore port handled 15.944 TEUs. However, Singapore's position was further secured when Singapore Port adopted the *Trade Net* system. The use of Trade Net increases efficiency of paperwork, thus reducing the likelihood of corruption compared with other ports in the region. Consequently, transaction costs in Singapore are also reduced. Although Singapore is not a low cost location, due to its efficiency, total cost of an operation by the Singapore port is low. The port's efficient operation allows a 12-hour turnaround time for a ship compared with a few days turnaround period for other ports. This is undoubtedly a source of competitive advantage for Singapore.

2.4.3.3 Communications, Technology and Information⁹

Telecommunications

The importance of the telecommunications infrastructure alongside the development of the Singapore economy, has spurred the strive to ensure quality telecom services at competitive prices on the island.

Singapore's telecommunication sector has seen unprecedented changes and growth in recent years. This is a result of the former Telecommunications Authority of Singapore's (TAS) drive to develop the info-communication industry to enhance Singapore's competitiveness. International deregulation is forcing the industry to open up faster than envisaged. To maintain Singapore's competitive edge, TAS decided in 1996 to liberalize the basic telecommunication market from year 2000, ahead of the original deadline of 2007. Singapore has also paved the way for progressive liberalization in other telecommunication sectors and there is already competition in the mobile phone, paging and the Internet access markets.

⁹ This is based to a large extent on Joyce A. Tan (Jan, 2000), "Singapore – Telecommunications, the Millennium, the Internet and Beyond".

Information Technology

The authorities relatively early identified information technology (IT) as a key pillar of Singapore's growth. The National Computer Board (NCB) was set up in 1981 to ensure Singapore's growth through an extensive exploiting of IT, also a means to enhance the nation's economic competitiveness. The board outlined in 1992 a national information technology plan known as the IT2000 to provide the framework for guiding Singapore into the 21st century. IT2000 seeks to develop Singapore into an "Intelligent Island", where IT is pervasive in every aspect of its society.

The Telecommunications Authority of Singapore (TAS) and the National Computer Board (NCB) have recently replaced by a new statutory board named Info-Communications Development Authority of Singapore (IDA) as the ultimate authority charged with the power to grant licenses for the provision of all telecommunications services, including Internet access services.

In the past two decades of national computerization, Singapore has established a world-class information technology infrastructure to support the increasingly sophisticated economy. The Singapore Civil Service is today one of the most highly computerized in the world, and about 90 percent of companies with more than 10 employees are computerized.

It should also be mentioned that the directive and controlling government hand is visible in this aspect of society as well. At first, the government seemed willing to take a relaxed attitude towards the growth in the use of Internet, aware that any attack on it would sit uneasily with Singapore's claim to be a world leader in information technology development. Citizens were simply warned about the network's "dark byways". However, in July 1996 formal regulation of the Internet was introduced. Internet access service providers must register with the Singapore Broadcasting Authority (SBA); so must organizations classified as Internet content providers (ICPs), although not individuals putting up web pages. Guidelines prohibit anti-government material and material that jeopardizes security or defense, undermines confidence in the administration or defense, or misleads and alarms the public. The effect of this is probably minor for foreign investors, but it limits the personal freedom of the Singapore citizens (EIU, Country profile 1999/2000).

Technology

By placing greater emphasis on R&D, Singapore adds depth to its economy and creates new growth areas and opportunities for companies located on the island. The driving force behind this effort is The National Science & Technology Board (NSTB). NSTB's mission is to develop Singapore's capabilities in science and technology to strengthen selected industrial and services sectors. Key areas are manufacturing and engineering systems, information technology and services, electronic components and systems, chemicals and environmental technology and life sciences; biotechnology, food and agro technology.

To encourage companies to invest in R&D, NSTB partners multinational and local companies and supports company-based and consortia-type research programs. NSTB oversees the development of Singapore's technology infrastructure, which includes the national research institutes, centers and tertiary institutions. These form a pool of expertise and technical support for industry clusters to tap into. Competence areas cover both technologies of immediate impact to companies, as well as strategic areas of research for the industry's longer-term competitiveness.

2.4.3.4 Industrial facilities

The existence of a large amount of industrial estates is a testament of the government's effort in offering facilities in order to attract foreign investors. Jurong Town Corporation (JTC) has been the architect of Singapore's industrial landscape since 1968. It was established on 1 June 1968, as a statutory board, during the tumultuous political period in Singapore's history. JTC's primary role then was to take over the quasi-government Economic Development Board's function of developing industrial estates. Its first major project was to transform the swamp land of Jurong into a manufacturing base. Within a relatively short time JTC turned the mangrove swamps into the island's largest industrial township (JTC, www.jtc.gov.sg). Its primary role today is still to develop and manage quality industrial facilities to support the growth of the manufacturing sector in Singapore.

JTC has 33 industrial estates under its management, housing more than 5,600 companies. They provide a wide range of facilities to meet the various needs of industrialists including prepared industrial land for companies preferring to custom-build their factories, and ready-built factories for quick start-ups. JTC also offers specialized parks, which cater to industries with

specific facility or location requirements. They include: Wafer Fabrication Parks, Business Parks, the Jurong Island reclamation areas to support the growth of the petrochemical and chemical industries and Singapore Science Park-facilities to cater to R&D companies etc.

2.4.3.5 Good regional linkages

A significant element when doing business in the Asia Pacific is government-to-government relationships. Singapore's leaders have invested time and effort to understand the setup of countries in the region and to develop and nurture personal ties. However, the difficult relationship with Malaysia has been a fact since the sixties, and the last few years a number of issues have further complicated matters. Singapore also has a difficult relationship with Indonesia (EIU, Country Profile 1999/2000).

Nevertheless, government-to-government relations have paved the way for many regional investments by Singapore companies, Singapore-based MNCs, as well as consortiums formed by Singapore and international companies.

Singapore is also a key member of ASEAN, and still believes it can derive economic benefits from this organization, by chivying its partners down the road to freer trade, through the ASEAN free-trade area due to be implemented in 2003.

2.4.3.6 Professional and skilled manpower

According to EDB, Singapore's performance is the result of its emphasis on productivity, which has seen a steady average annual growth of 4.1 percent in the period 1981-1998. To sustain this, Singapore has recognized the need to focus on qualitative improvements, that is, how to get the best and make smarter use of its manpower and capital resources, or what economists call Total Factor Productivity (TFP).¹⁰ The Singapore Productivity and Standards Board (PSB) was set up in 1996 to deal with productivity improvements by addressing the key factors that impact TFP - manpower development, technical progress and economic restructuring.

¹⁰ Total Factor Productivity; productivity in the production process that is attributable not to any particular factor of production, but to all; growth in total factor productivity is often measured as a weighted average of growth in average productivities of all factors of production (Burda & Wyplosz, 1997).

The aim has been to achieve an average annual TFP growth of 2 percent, to support an average annual productivity growth of 4 percent. This would, in turn, meet the 7 percent annual GDP growth target. According to the Economist Intelligence Unit, the productivity target now appears to have been dropped, following the economic downturn. Productivity (per employee, not per hour worked), fell by 1,3 percent in 1998, owing to the usual time lag between a downturn in output and labor redundancies (EIU, Country Profile 1999/2000).

The education system is highly efficient, and the pool of highly educated and English-speaking workers is attractive to foreign investors.

2.4.3.7 Conducive living environment

Living conditions in Singapore are among the best in Asia. Compared to other countries in the region, living costs are high, and the major expenses are housing and car. Executive homes are available, though most expatriates rent apartments while living in Singapore. There are educational facilities to meet the needs of the expatriate community, including 23 international schools, several offering education up to university entrance level. Schooling for children can also be a significant expense. Singapore's health system is a hybrid of public and private provision and health facilities are the most advanced in the region.

Singapore's multi-cultural heritage and cosmopolitan society represent a fascinating mix of religions, languages, values and other cultural aspects. This is valued by expatriates in the sense that nobody stands out, and you are not regarded as a "foreigner" in daily life. Understandably, Singapore is an easy place to live for foreigners, and a modern and "westernized" place, making the culture shock often experienced by expatriates going to Asia small. A preferred living environment is therefore yet another advantage of Singapore.

2.4.4 An attractive business center

Good banking and financial services are available, and the banking sector has been one of the major growth sectors in the Singapore economy. Singapore has become a major financial center, chasing Hong Kong as the financial hub of Asia.

The Monetary Authority of Singapore (MAS) performs the function of a central bank, except for the issue of currency. It supervises and regulates financial institutions to ensure that prudent practices are adopted. The MAS strives to strike a balance between supervision on the one hand and development of the financial markets on the other.

Singapore survived the regional crisis better than any of the other South East Asian countries, but its leaders are well aware that as the neighbors are forced to put their houses in order, the island risks losing some of its competitive advantage. In order to strengthen the competitive advantage, the government is pushing boundaries today, opening up the economy to foreign competition in the banking and financial sector. However, the strong concentration of banks and financial organizations is a factor contributing to Singapore's success as the most efficient maritime center for the Asia-Pacific region, and the recent opening up and deregulations in the financial industry further strengthens this advantage.

2.5 THE POLITICAL ECONOMY

2.5.1 The role of government

The small city-state of Singapore appears in many ways to have defied all economic and political laws of gravity. Not only has it survived economically and politically, it is progressing into a society with a high standard of living and maybe arguably, a high quality of life defined by its constraints (Low, 1998). Porter (1990) talks about how selective disadvantages in the basic factors can force innovation and upgrading – and this is what the Singapore government has done. The disadvantage of space has been turned, through active intervention, to an advantage.

The small size of the country implies limited resource endowments and a small domestic market, necessitating imports and exports, and leaving the country dependent and vulnerable to exogenous factors. On the other hand, the small size can be an advantage – small is easier to administer and manage. This advantage is evident when looking at how Singapore is “government made” in its growth and development.

In Singapore, the state has traditionally played an important role in determining the direction of the economy. The Singapore case is an example of the positive role the typical “East Asian developmental and directive state” can have. The significance of the government - business relationship, and the intense creation of a national competitive advantage by the Singapore government blur the notion that Singapore owes its success solely to the free market and economic openness. The story of Singapore demonstrated the necessity and capacity of a country with no natural resources to *create* a national competitive advantage through selective industrial promotion and infrastructural development and continuously to renew it in a relentless process of upgrading industrial structure and living standards (Tan Kong Yam, 1995).

The government has involved itself as a key player in the economy, largely on the justification of weak institutional structure in the early stage of development, coordination failures, positive externalities and perceived pervasive market failures in the small open economy. It assumes the function of a factor creator, such as human resource development, investment in research and development and internationally competitive infrastructure. The approach adopted by the government is strategic and proactive, not ad hoc and reactive. This creation of national competitive advantage is crucial for Singapore as the island has few natural factor endowments besides its human resources and geographic location (Tan Kong Yam, 1995).

According to Linda Low (1998), the role of government in a small city-state *does* make a difference. Singapore was typical of small economies that have no economies of scale, no capital or technology and therefore latching on to foreign direct investments and MNCs; requiring the government to formulate fiscal incentives and stimulate a conducive investment environment. Singapore enjoyed a “first-mover” advantage in tapping foreign investments and expertise to industrialize in the region, but now needs to be alert as others are catching up.

The well-managed public finance and fiscal policy in this open city-state has garnered financial resources. This gave the government the means to sculpture the economics and socio-politics of the state, and should not be underscored (Low, 1998).

As can be understood, the disadvantage of small size has been turned into an advantage. A good government and efficient and effective policies and implementation on micro and macro levels provide the explanation.

2.5.2 Macro-level attractiveness

The geographical positioning of Singapore might be one of its most important competitive advantages. Though, it is obvious that the government has played an important part in exploiting this advantage to achieve growth and development. The development of Singapore as a hub for trade and investment is not by any means a coincidence, but much more a result of targeted and firm long-term government strategies.

The political stability and stable and predictable business environment should not be underestimated as a location advantage. Compared to other countries in the region, the firm and decisive hand of the government has created a reputation for and track record of stability, encouraging long-term investment. Corruption is absent, and the system is transparent.

The Singapore government has to a large extent acted as a strategic player. This is exemplified by direct intervention in local industries, through the offering of incentives for foreign investors, and in their broader economic policies to affect the competitiveness of the economy and the national and foreign firms within it. One of the most appreciated roles of the Singapore government by foreign investors is the role as a business facilitator and creator of an environment where private business can flourish.

The vision of the Ministry of Trade and Industry (MTI) is for Singapore to become an advanced and globally competitive knowledge economy. The principles of strong adherence to a free market economic system and an active pursuit of outward-oriented economic policies underpin the philosophy of the economic management. The MTI performs its macro economic management role by providing the legislative framework, providing a stable environment for business, investing in infrastructure and manpower and facilitating business. Strategic development plans for all aspects of the economy have been a key tool for the government since the independence.

Compulsory tax- and pension systems have been used to increase private saving, resulting in a high savings rate. The large savings have financed the extensive infrastructure investments undertaken in Singapore. Investment in education and human capital is emphasized and large investments in technological competence centers and research institutes are seen as means of developing Singapore into a “Knowledge Based Economy”.

As far as facilitating business is concerned, the Economic Development Board of Singapore (EDB) is the primary agency entrusted with the role of promoting foreign investment, and the one-stop office for foreign investors. The Board's key focus includes ensuring a conducive and competitive business environment as well as working with the government to ensure that relevant infrastructure and manpower capabilities is available.

The efficiency in government operations and in the economy as a whole also deserves mentioning. In fact, this crucial ingredient of efficiency is like an intangible asset for the country. With the lack of natural resources, efficiency and productivity becomes more crucial. The margins are small, and precision in government policies and strategies more important, explaining the need for a strong and efficient government in Singapore.

2.5.3 Micro-level incentives

As discussed throughout the paper, foreign direct investment has played a major role in Singapore's development. A whole range of incentives has been offered foreign investors, and the nature of these as well as the industries targeted has changed as the economy has progressed. The Singapore government encourages FDI, particularly if it involves high technology and is export-oriented.

Singapore continues to attract foreign investors who choose the city-state as their regional headquarters. The attraction to Singapore, despite the disadvantage of being a more expensive place in which to establish a business than other countries in the region, is in part due to the liberal laws with respect to foreign investment and the incentives offered. There are neither restrictions on the amount of capital investment in Singapore, nor on the repatriation of capital or remittance of profits. Further, there are no restrictions placed on the proportion of foreign ownership of enterprises operating in Singapore.

2.5.3.1 Business entities

Business may be carried out in Singapore in the form of sole proprietorships, partnerships or incorporated companies. In addition, a foreign company may carry out business through a registered branch or it may open up a representative office. Virtually no restrictions are placed on the type of business which may be carried out, but all businesses must be registered with the Registry of Companies and Businesses, or in the case of representative office, with the Trade Development Board. Certain activities are required to apply for licenses from the government, but increasing deregulation has reduced the areas where this is necessary.

2.5.3.2 Investment incentives

The list of incentives is long, including tax- and non-tax incentives, and I will not be able to go in detail, but I will try to highlight some interesting aspects.

As far as *non-tax incentives* are concerned, the existence of industrial estates and the facilities they offer is an incentive for establishing a business in Singapore. These are modern and well developed and offer fully serviced sites for establishment in various industries. Free trade zones have been established in Singapore since 1969, and provide a range of services and facilities for the storage and re-export of dutiable and controlled goods. The Economic Development Board (EDB) administers a number of schemes through which the government offers assistance in the form of loans, grants and manpower training. Venture Capital Funds, some set up by the EDB, are available, as well as a whole range of schemes searching to promote product development, R&D, manpower development, patent development etc. (Chong, 1997).

A number of *tax-incentives* are available to companies or other types of business organizations interested in investing in Singapore. Many of these are administered by the EDB under the Economic Expansion Incentives (Relief from Income Tax) act, first introduced in 1967 and substantially amended since that time. For instance, tax relieves are available for companies approved as pioneer enterprises, expansion enterprises, export enterprises etc. by the Minister of Finance or the EDB. A range of other tax incentives is available, and different conditions apply. Approved International Trades Scheme (AIT), Approved Oil Trader Scheme (AOT) and Approved International Shipping Enterprise Scheme (AIS) are some of the incentive-schemes.

The Approved International Shipping Enterprise Scheme (AIS) was designed to increase the attractiveness of Singapore as a location for shipowners and thereby promoting Singapore as an international maritime center. By increasing the concentration of shipowners in Singapore, the government hoped to encourage other service providers, including marine insurers, lawyers and ship financiers to establish offices in Singapore, thereby strengthening it into an international maritime cluster. In addition, the government wishes to attract shipping companies to increase Singapore's competitiveness and thereby attract other MNCs engaged in higher value-added and knowledge based activities.

The Singapore Trade Development Board (TDB), operating under MIT, administers the AIS. A company with AIS status (local or foreign) gets tax exemption on income from operation of a Singapore ship in international waters. The tax exemption is for an initial period of ten years, subject to five-year review. A "Singapore ship" is a ship for which a permanent certificate of registry has been registered in Singapore, irrespective of whether the ship calls at Singapore. The qualifying income covers income from operation of non-Singapore-flag vessels outside Singapore and qualifying dividends from approved subsidiaries and associated companies. To qualify for the AIS, the company should be a significant owner and operator of a fleet of vessels. It has to have a directly attributable total business spending in Singapore of at least S\$ 4 million a year, and it has to have at least 10 percent of its fleet in terms of number registered under the Singapore flag (Tan Chwee Huat, 1996).

In order to understand the effect of schemes like the AIS, and more importantly, to explore the relative importance of the macro- and micro level attractiveness of Singapore discussed in this part, a more narrow scope is necessary. The upcoming part will look into the Norwegian shipping activity in Singapore, and the experiences of some Norwegian shipping companies will be analyzed. This will provide the platform for Part 4, where the determinants of localization for Norwegian shipping companies will be highlighted.

PART 3: NORWAY IN SINGAPORE

3.1 OUTLINE

In this part of the paper I will try to narrow the scope, look at Norwegian shipping investments in Singapore, and explore the factors that have made Singapore a preferred location for Norwegian shipping investments. This part will be divided into two sections. In the *first section* I will present some background information on Norway in Singapore. Today, the Norwegian activity in Singapore is to a large extent concentrated around the shipping and maritime industry. To understand how this came about, and to show the importance of shipping from the beginning, a retrospective approach is necessary.

The *second section* will provide an analysis of experiences. Based on information from Norwegian companies in Singapore, and to some extent the Dunning framework, I will try to understand the advantages of being located in Singapore for these companies. Through this, I hope to understand *why* Singapore was chosen initially, and the localization factors that still make Singapore a preferred location. The competitive advantages of Singapore discussed in Part 2 – to what extent are these important for attracting FDI in the different segments of the shipping industry? In short, my intentions for this section is again to ask *what determines localization*, and exemplify this in a more narrow scope by looking at the Norwegian shipping cluster in Singapore.

Section 1: Norway in Singapore – A short presentation

3.2 INTRODUCTION

Before oil was discovered in Norwegian waters – before the term "hi-tech" was even coined – Norway was a shipping nation. In the first half of the 20th century only Great Britain and the United States had a larger merchant fleet. Today, the Norwegian fleet is still no. 4 in the world in tonnage, and shipping is the most extensive Norwegian international industry.

Only 10 percent of Norwegian vessels ever call on their home country. Obviously, the vessels call elsewhere, and Singapore is the most important regional port for the Norwegian fleet. 700-800 Norwegian ships call at the Singapore port annually (NTC, www.ntc.org.sg).

Not surprisingly then, it was through shipping bonds were first established. Today, a range of other Norwegian industries and interests are represented in the country. I will try to give a short overview over the Norwegian activity today, take a glance at history to see how it all came about and look into the resulting Norwegian cluster, especially within the shipping industry.

3.3 A GLANCE AT HISTORY¹¹

The first contact between Norway and Singapore was through shipping. This is not surprising when considering that the free-port policy was the main pillar of the newer history of the island, and shipping was the most extensive Norwegian international industry.

3.3.1 Sailing on the Far East

The first Norwegians sailed in the Far East already in the 17th century as crew on Dutch ships. There were also many Norwegians working on British ships in the Far East in the beginning of the 19th century. Norwegian ships started sailing in the region by the end of the 18th century.

¹¹ Based on Gislås (1995), "Jakten på kjempemarkedet".

As discussed in Part 2, Singapore played an important part in the trade and shipping in Asia from the mid-nineteenth century, and the importance of the Singapore port increased sharply after the opening of the Suez-canal in 1869.

There was no direct trade between Norway and Singapore in the 19th century. Most Norwegian ships calling on Singapore came with coal and went onwards to Burma (Myanmar) to load rice. Measured in ship arrivals, Singapore was not an important port for Norwegian ships before in the 1890s, but there was a huge increase in Norwegian ship arrivals by the end of the 19th century. Ship arrivals continued to increase, but decreased after the outbreak of the First World War, because many of the Norwegian ships previously engaged in Asia started operating in Europe.

By the entrance to the 20th century, there was still no direct trade between Norway and Singapore. Norwegian agents visited the island to introduce Norwegian paper products and pulp, but without success, as the products were too expensive for the local buyers. From about 1905 Norwegian condensed milk established a market in Singapore, but Norwegian exports to Singapore first increased after the First World War. Condensed milk was still an important item, but also canned fish, matches, paper and chemicals were exported.

In the 1920s Norwegian ship arrivals increased again. In 1920 Norway was the 9th largest shipping nation in the region measured by ship arrivals in Singapore. Ten years later only Holland, the UK and Japan were bigger. In 1924, there were 50 Norwegian ships sailing on the Far East, and for the rest of the inter-war period the number of ships varied around this. In September 1939, between 50 and 70 Norwegian vessels were active in East Asia.

Several of the shipowning companies had local agents in Singapore from the turn of the century, some even earlier. The first Norwegian offices were established in the 1950s and were opened by companies that had specialized on sailing on the Far East. The establishments emanated from the shipowners' activity in Hong Kong and China (Brusgaard Kiøsterud & Co. (Thoresen & Co.) and Wallem & Co.).

3.3.2 The first establishments

Through sailing on the Far East since the 1870s and later establishments of Norwegian companies in the region, Norwegians gained understanding for and experience of the market

conditions and possibilities in Asia. This was a strong fundament, and the continuity in the Norwegian activity in the region was established.

In 1952, Brusgaard Kiøsterud & Co. opened an agency office in Singapore, Thoresen & Co. (Malaya) Ltd. Thoresen & Co. functioned as an agent for most Norwegian shipowners with ships in the region, and represented by the end of the 1960s about 60 ships (tramp) per month.

Indonesia, just after achieving independence from the Dutch, started nationalizing a range of Dutch business activities in 1957-1958. New opportunities for the Norwegians emerged in the vacuum that appeared when the Dutch had to pull out. It was mainly shipowners Karlander and Wallem who took advantage of the new opportunities in the Indonesian market. This activity in Indonesia had important repercussions for Norwegian business activity in Singapore the following years. Wallem & Co. established an office in Singapore in 1958 to have a base for the activity in Indonesia. The office was opened by Fridtjov Thome from Fredrikstad, a man who later became a central figure for Norwegian shipping in Singapore. Thome was an old friend of Egil Paulsen with Karlander, and ensured Wallem & Co. the agency of Karlander in Singapore. In 1963 Thome left Wallem, and together with Paulsen established a formalized partnership, the agency Thome & Co. in Singapore. The opening of the J.P. Roed & Partners office can also be said to be a result of the increased opportunities offered by the political instability and changes in Indonesia.

3.3.3 Increased activity in the 1960s

From the end of the 1950s until the mid-1960s, there was a significant increase in the number of Norwegian ship arrivals in Singapore. From 1961 to 1964 there were more than 1000 ship arrivals annually. This development reflects the growth in Norwegian shipping during this period. In 1965 there was a decrease in the Norwegian ship arrivals in Singapore. The explanation for this decrease is somewhat ambiguous, but the insecurity surrounding Singapore's withdrawal from the Federation of Malaya and the conflict with Indonesia might provide some explanation. The next year the activity recovered, and in 1967 and 1968 the highest number of arrivals in the period 1952-1995 was registered. Transport of oil from Indonesia to the refineries in Singapore by Norwegian shipowners and increased traffic due

to the Vietnam War as well as the closing of the Suez Canal in 1967¹² offer explanations to this trend. The Straits Times (Singapore newspaper) claimed in March 1968 that Norwegian shipping was the third largest customer of the port authorities in Singapore.

The increased sailing on Singapore by Norwegian ships from the late fifties offered opportunities for Norwegian maritime suppliers. The efforts of the Singapore government to build up the shipbuilding industry from the mid-1960s further increased the possibilities. As a result, some suppliers of goods and services to the shipping industry established themselves in Singapore during this period.

The increased activity in the late fifties and sixties led to the growth of a Norwegian colony in Singapore. There were few (about four) Norwegians in Singapore when Thoresen & Co. opened in Singapore in 1952. In comparison, there were about 100 Norwegians in Hong Kong at that time. The turnover in the Norwegian colony was high, but the colony in Singapore grew steadily from about 1955. By the end of the fifties about 15-20 Norwegians lived on the island, in 1963 the colony consisted of 24 Norwegians (including children) and an estimate from 1967 shows that the colony had increased to around 70 people, including children. The Norwegian Seamen's Mission had opened in Singapore in the mid-1950s, and the activities here increased with the growth in the Norwegian colony. The Mission was especially important for women and children.

As mentioned above, the first establishments in Singapore in the 1960s were based on Norwegian shipowners' frequent sailing on the port of Singapore. This sailing represented an enormous market for Norwegian suppliers of goods and services to the shipping industry. Considering the number of Norwegian ship arrivals and the increasing importance of the Singapore port, one can ask why not *more* Norwegians opened up offices in Singapore in the 1960s. The majority of the suppliers of goods and services for the shipping industry did not come before the 1970s, ironically, when Norwegian shipping had a large recession, also measured in ship arrivals in Singapore. This odd trend has been explained by the large mental distance between Norway and Singapore in the 1960s, and later by the development in the transport- and communications technology that narrowed the perceived distance between the

¹² The closing of the Suez Canal should theoretically lead to fewer arrivals in Singapore, as the Suez Canal made Singapore a central port on the shortest route from Europe to the Far East. However, the closing led to increased demand for Singapore's ship-repair facilities, and the turnover in Singapore's ship building- and repair industry nearly doubled from 1966 to 1968.

two countries¹³. In addition, the crisis in Norwegian shipping in the 1970s forced innovation and restructuring.

Singapore wished to attract Norwegian ship-industrial knowledge, and Norway was intended to play an important role when the Singapore authorities from 1966 started to plan the new shipbuilding industry. They wanted a spread between British, Japanese and Norwegian interests in this industry. The leader of The Singapore industrial development program, Hon Sui Sen (later Finance Minister in Singapore), went to Norway to encourage Norwegian companies to invest in Singapore, but none of the invited companies chose to invest! Japanese companies got involved in the operations of Jurong and the ship repair dock and building berth there. The British Swan-Hunter Group took over the operation of Keppel and Sembawang. While the Japanese and the British became important in the shipbuilding industry in Singapore, the Norwegian presence remained limited to the supply and production of goods and services for the shipping industry.¹⁴

As mentioned, four Norwegian companies were central in the Norwegian activity in Singapore in the 1960s and 1970s. These companies, Thoresen & Co., Wallem & Co., Thome & Co. and J.P.Roed & Partners/Norse Management, and the men behind them, functioned as local contacts and information resources for Norwegians looking towards Singapore and the Far East, and represented the continuity of Norwegian activity. The companies were all initially small when they started operating in the region, and none of the larger Norwegian ship owners concentrated on the Far East when these companies were established. Wallem and BK/ Thoresen focused on the Far East during a period when the freight markets were low in the region, apart from the war years, while Thome and Roed came during an economic upturn. These establishments were offensive, thereby contrasting sharply to the shipping establishments in the 1970s and 1980s.

3.3.4 The 1970s and 1980s – industrial investments

Norwegian activity in Singapore changed from the end of the 1960s. The activity was until then mostly maritime, locally rooted, and based on Norwegian sailing on Singapore. In the 1970s Norwegian direct investments in Singapore increased and establishments in new

¹³ The SAS-establishment of a route to Singapore in 1968 had significant importance.

¹⁴ This is to a large extent explained by the activity and opportunities in the North Sea in this period.

business areas, including industrial production, banking and later offshore, took place. This change, and consequently the Norwegian effort from and towards Singapore in the 1970s and 1980s, was a result of the internationalization of Norwegian business activity as well as of the new development strategy of inviting foreign investors that Singapore had embarked upon.

The establishment of Dyno Industries (S) Pte. Ltd. by Norsk Sprængstoffindustri in 1970 is said to be a symbol of the change in activity. While the earlier establishments were small and shipping related, this was an industrial company closely related to the central agent in the Norwegian market. The pace of new establishments increased in the 1970s and in 1975-1977 a total of 16 new Norwegian companies were set up in Singapore. The Norwegian Trade Council opened an office in Singapore in 1977, improving the flow of information between the two countries. The Norwegian industrial investments increased sixfold in the 1970s, from 6,1 million (NOK) in 1970 to around 33 million (NOK) in 1979.

The early industrial investments, by Dyno and shortly after by Mustad, were localized in Singapore because Singapore is strategically placed in the Asian market. Singapore's advantages in terms of infrastructure, good communications, political stability and a good-qualified workforce were also strongly influencing the decision. According to Gismås (1995), the 5-year tax holiday granted by the Singapore government was less important.

EDB had made several attempts to attract Norwegian industry to Singapore, both shipbuilding industry and production of goods that were not already produced in Singapore. Interesting to note is that even though more Norwegians established themselves in Singapore, none of the establishments were direct results of EDB's effort. The companies realized the need to be closer to the huge market, and Singapore was for many companies a careful step into an unknown region.

The oil-crisis in 1973 increased the offshore activity in South East Asia. Norwegian offshore industry had not worked towards the offshore market in South East Asia in the boom years from 1967; at that time the activity in the North Sea was challenging enough. The Norwegian shipowners were the pioneers in the Norwegian offshore industry's orientation towards South East Asia, and later the Norwegian offshore industry realized the potential of the offshore markets in the region.

3.3.5 Changes in the shipping activity

The oil crisis had enormous consequences, and Norwegian shipping entered a huge crisis from 1974. The Norwegian tonnage was reduced from 8 percent of the world fleet in 1976 to 2 percent in 1987; the year NIS (Norwegian International Ship Register) was introduced.¹⁵ The reduction of the fleet was due to bankruptcies, sales and flight of tonnage to more convenient registers with different requirements and lower operation costs, taxes and other charges.

A very large share of the total Norwegian export to Asia and other developing countries in the 1970s and 1980s was export to Singapore, and this export consisted mostly of vessels. Some of these vessels were sold to Singaporean shipowners, but a large share of the new vessels in the Singapore register was still owned by Norwegians. Some of these vessels were sold to independent actors, like Jan Petter Røed, but most of them were sold to companies where the former Norwegian owners had interests (flagging out). In 1987, when NIS was introduced, there were at least 40 Norwegian shipowners in Singapore. Some of these were solely ownership companies or "mailbox companies" without employees. As a consequence of the opening of NIS some of these companies closed, while others still exist. However, other Norwegian shipowners have come to Singapore after this; the shipowning company Westfal-Larsen transferred a large share of the fleet to Singapore in 1995.

The Norwegian vessels flying the Singapore flag were contributing to the development and growth of the ship-management companies that based their business on Norwegian and Scandinavian customers (though most of them also operated vessels in other registers). The establishment of such ship management-companies represented the largest change in the shipping activity from the 1970s and onwards. The Norwegian ship management-companies and mailbox-companies differed from the early Norwegian shipping establishments in the sense that they were defensive and they were undertaken to maintain profits or to avoid setback, by taking advantage of Singapore's competitive advantages as far as tax-, crewing- and flag-policy is concerned. The earlier establishments were of a much more offensive character.

¹⁵ "The establishment of the Norwegian International Ship Register (NIS) was a means through which the (Norwegian) authorities sought to maintain and develop Norwegian maritime competence, while at the same time counter the flight of Norwegian tonnage to foreign flags" (Tenold, 2000a:6).

The companies *behind* the management-companies, some of them mailbox shipowners, owned many of the vessels that were operated on management, but the ship-managers also operated vessels for other shipowners and Norwegian limited partnership companies (“kommandittselskaper”).

The establishment of these ship management-companies contributed largely to the increase in the market potential for the Norwegian suppliers of goods and services to the shipping industry.

3.3.6 A “Little Norway”

The increase in the investments from the 1970s resulted in a growing Norwegian colony. From 1967 to 1974 the number of Norwegians increased threefold; 192 Norwegians were said to live in Singapore in 1974. Today, according to the Norwegian Seaman’s Mission, about 600 Norwegians, children included, live in Singapore. The church was and still is a very important institution for the expatriates and their families, and other organizations like the Norwegian Business Association in Singapore (NBAS) are also important meeting arenas.

3.4 “LITTLE NORWAY” TODAY

Today, the Norwegian companies in Singapore represent the highest concentration of Norwegian business interests in any city in the world outside of Norway. Close to 120 Norwegian companies are now established in Singapore, and more than 70 Norwegian companies are represented through agency agreements with Singapore companies (NTC, www.ntc.org.sg). Most of these companies use Singapore as their hub for expansion to other markets in the region. More than half of the Norwegian establishments are in the maritime/oil & gas sector, there are today only eight in manufacturing, and the rest are regional offices or engaged in general trading (Norway in Singapore, 2000).¹⁶

There are two Norwegian banks, Christiania Bank and Den Norske Bank ASA, and the Nordic Investment Bank also has Norwegian ownership interests. The Norwegian Seamen’s Mission, The Royal Norwegian Embassy, The Norwegian Trade Council, the Norwegian

¹⁶ The appendix contains a complete list over the Norwegian companies in Singapore today.

Business Association in Singapore (NBAS) and the Norwegian Supplementary School are also important actors in the Norwegian society in Singapore, or the “Little Norway”.

As far as trade is concerned, Singapore is Norway’s second largest export market in Asia after Japan. In addition, the service sector, covering shipping, banking and other consulting services also contributed significantly to the bilateral business trade. In shipping, Singapore continues to be the most important regional port for the Norwegian fleet, and about 700-800 Norwegian ships call at the Singapore port annually.

3.4.1 The shipping cluster

Norway’s overall maritime community – an expanding cluster of industries linked to shipping – has been called the most comprehensive in the world (www.nortrade.com). The Norwegian maritime sector has a large presence in Singapore, and represents the lion’s share of the Norwegian activity on the island.

The interplay between the many competing or cooperating actors; shipowners, management companies, brokers, shipbuilders and suppliers of goods and services etc., results in positive synergies, and the competence and knowledge is continually upgraded. The Norwegian maritime activity in Singapore has contributed to maintaining and strengthening this overall Norwegian maritime cluster. In fact, agents in Singapore claim that the Norwegian maritime community *in Singapore* represents a cluster of its own, with rivalry and cooperation, and strong positive synergies.

Section 2: Norway in Singapore – Experiences

3.5 INTRODUCTION

Based on information from some of the Norwegian shipping companies, engaged in different areas of the shipping sector, I will try to highlight the advantages of being located in Singapore. Why was Singapore chosen initially and which localization factors still make Singapore a preferred location? This analysis will provide the platform for a general discussion on the determinants of localization in Part 4. Again, “*what determines localization*” is the focus, exemplified by Norwegian shipping establishments in Singapore.

It should be noted that the information gathered by Stokke & Hauge (1999) is based on a different interview structure than the interviews conducted by myself, resulting in a slightly different focus and structure. Further, some of the information in Stokke & Hauge (1999) was gathered from the people who made the actual decision of undertaking the FDI, while the other information was gathered from people employed in Singapore *today*.

3.6 ODFJELL ASA¹⁷

3.6.1 A short presentation

Odfjell ASA was established in Norway in 1916 and is today a fully-integrated shipowning company. The company has since the 1960s become more and more focused on transport of specialized cargo. Industrial shipping, and especially chemical freight, has since then been the main target area for Odfjell Tankers. The shipowning company focuses on owning *and* operating advanced chemical tankers in global trade routes, and on offering a holistic and customized service to the petrochemical industry.

In 1997, Odfjell increased the activity in Asia through the opening of Odfjell Tankers Asia Pte. Ltd. in Singapore. Odfjell Tankers Asia Pte. Ltd. is responsible for the intra-regional freight, and also operates the feeder service for Odfjell’s Deep-Sea-fleet.

¹⁷ The presentation of the first three companies is based on Stokke & Hauge (1999).

3.6.2 Why Singapore?

During the 1990s, South East Asia has experienced an explosive growth in the petrochemical industry, and Singapore is trying to position itself as an export center for the region. The increased demand for freight services in South East Asia was the reason for Odfjells increased attention towards the region, and in 1996 the decision was made to establish Odfjell Tankers Asia in Singapore. The establishment took place in 1997 because Odfjell found it necessary to operate the regional transport service from Asia; continued export of freight services from Bergen was not an option.

While deciding *where* in Asia to establish Odfjell Tankers Asia, several locations were considered, but it was early obvious that Singapore would be the best alternative. Due to the concentration of customers in Singapore, Odfjell already had a marketing office on the island, and was thus familiar with the local conditions. The main reason why Singapore was chosen was the closeness to customers, as Singapore has become a center for petrochemical industry. To be competitive in intra-regional freight it was necessary for the company to be localized close to the customers.

Access to a stable and skilled workforce was also important for the localization decision, and the political stability gives the necessary safety and predictability for Odfjell. The attractiveness of Singapore as a recipient of shipping FDI has increased as a result of the government policy towards foreign investment (especially AIS), but also because of the maritime cluster, the shipbuilding industry and the development of Singapore as a service center for ships in the region. These were important factors influencing the choice of location.

At the time Odfjell Tankers Asia Pte. Ltd. was established, the taxation policy in Norway could match that of Singapore, and Stokke & Hauge (1999) emphasize that the FDI was not undertaken to achieve taxation advantages.

Since the establishment took place, Odfjell has experienced further advantages of being localized in Singapore. The government attitude towards the industry is viewed as very positive, and the government has a good understanding of the shipping industry. Mr. Gudmund Valen, President of Odfjell Tankers Asia Pte. Ltd., says that the fact that incentive-

programs became even more generous during the regional crisis shows the commitment of the Singapore government in attracting FDI.

3.7 MASTERBULK/WESTFAL-LARSEN

3.7.1 A short presentation

Westfal-Larsen is an integrated shipowning company from Bergen, and has been, and still is, a significant actor in the Norwegian maritime industry. The company has concentrated its activity on industrial shipping, mainly OHBC-shipping (Open Hatch Bulk Carrier) and transport of chemicals.

A tax reform in Norway, effective from January 1st 1992, severely affected the profitability of Norwegian shipowning companies. The tax burden increased, and the reform also increased the unpredictability and insecurity for the shipowners, many of whom are dependent upon stability and predictability due to long-term customer relationships. The altered operating environment was an important determinant when the company chose to re-localize part of their activity. In 1995 the entire OHBC-fleet was sold to the newly established shipowning company Masterbulk Pte. Ltd. in Singapore, which was an FDI undertaken by the Westfal-Larsen shareholders.

3.7.2 Why Singapore?

The FDI was undertaken by the Westfal-Larsen owners to increase the stability and find a more favorable business environment to operate within. A continued export of shipping services from Norway was thus not an option, and the remaining decision was where the establishment was to take place.

The development in the market for forestry products follows to a large extent the economic development. Due to the rapid economic growth in Asia, the area was interesting for this segment of the shipping industry and contributing to the choice of location for the establishment of Masterbulk.

The main reason why *Singapore* was chosen was that the country could offer a favorable tax-policy and a stable business environment. The AIS-incentive offered an initial ten-years tax-holiday with possibilities of extension, and these were far more favorable conditions than those offered in Norway at the time. The stability and predictability inherent in the AIS-scheme was highly valued by the investors, as this segment of the shipping industry is of a very long-term nature. According to Mr. Ragnar Nielsen, President of Masterbulk Pte. Ltd., the security and predictability in the Singapore business environment increases the competitiveness of the company. Weight was also put on the infrastructure and the strong maritime milieu in Singapore. There are advantages of being localized in an industrial cluster, and Mr. Nielsen says that Masterbulk is benefiting from the positive effects. However, the maritime cluster in Singapore was not the reason for undertaking FDI.

Masterbulk experienced some problems finding qualified employees as they had no established contact network in Singapore and were not familiar with the local conditions.

With continued economic growth in the region, the continued development of Singapore as a trade-hub, and the anticipated growth in the demand for transport services, the company sees great advantages of being localized at the heart of the region. However, Nielsen underlines that the favorable and predictable operating conditions in Singapore are the most important determinants of the localization.

3.8 STRØMME SHIPS SERVICE

3.8.1 A short presentation

Strømme Ships Service was established in Norway in 1971, and soon became an important equipment supplier for the maritime industry in Norway, offering provisions/supplies, maintenance equipment, laborsaving equipment, safety equipment etc. Strømme Skips Service focuses on adapting to customer needs, and the broad specter of goods and services offered today is a result of an increasing demand for package deals from the customers.

3.8.2 Why Singapore?

The economic growth in Asia, the increase in transport demand and the subsequent development of Singapore as a service station and a center for maintenance- and supply services, led to the establishment of Strømme Ships Service (Singapore) Pte. Ltd. Strømme Ships Service wanted be a part of the development that was taking place, and initiated the joint venture with the local company Orient Marine. In 1993-1994 the cooperation ceased, and since then Strømme Ships Service has operated on an independent basis.

Norwegian shipowners' increased focus on Asia led to an increase of Norwegian ships in the region and the distance made it more difficult for Strømme Ships Service to supply equipment to these ships from the headquarters in Norway. According to Mr. Gulliksen, Director/General Manager of Strømme Ships Service (Singapore) Pte.Ltd, the main motive for the establishment in Singapore was that the company wanted a foothold in a large market outside of Norway, where Norwegian ship owners had many calls. "The actions of the Norwegian suppliers are to a large extent a reflection of what the shipowners have done", says Mr. Gulliksen. The company focused on closeness to the market when determining localization, and Singapore was considered the most attractive location because the large port constituted a huge market.

The orderliness and professionalism in the business environment in Singapore was another reason why Singapore was chosen. Singapore is very structured, and the laws and regulations are easy to understand and operate within. Corruption is absent, and the company has seldom problems with the government. Mr. Gulliksen also characterizes the infrastructure in Singapore as impressive. The company did not focus much on the potential synergy effects of being established within a maritime cluster when the location-decision was made, and the company does not benefit from any special investment incentives from the government.

3.9 BARWIL AGENCIES/WILH. WILHELMSSEN ASA¹⁸

3.9.1 A short presentation

Wilh. Wilhelmsen ASA was founded in 1861 and ranks as one of Norway's leading shipping companies. The business embraces a wide spread of maritime activities, including international liner traffic, tanker and bulk carriers, car carriers, ship agencies and ship management.

In the early seventies Barwil established offices throughout the Middle East and Far East. From being an exclusive agent for Wilh. Wilhelmsen-owned liner vessels, Barwil slowly and steadily developed into being an independent agency organization. Today Barwil is one of the leading worldwide agency chains, serving more than 1500 bulk/tank/gas/chemical/cruise principals and insurance companies as well as a large number of liner-operators. The company is fully owned by Wilh. Wilhelmsen ASA, but the agency offices are independent companies. Barwil Agencies Pte. Ltd. was established in Singapore in 1974.

The foundation for Barwil is thus the port agency function, and there have long been Wilh. Wilhelmsen offices in the important ports for the Wilhelmsen fleet, but through Barwil these operations have been copied and transferred to other ports and other customers. The office in Singapore was opened as a Wilhelmsen Lines office many years ago and still regards itself as the Singapore office of the Wilhelmsen group, even though Barwil is an independent Singapore company.

The Wilhelmsen group has defined five different areas for their operations, and the headquarters for the Asia-region is in Kuala Lumpur, Malaysia. According to Mr. Christian Due, Managing Director of Barwil Agencies Pte. Ltd., this is a result of both historical and cost-reasons. Wilhelmsen had developed a large organization in Kuala Lumpur through Barber International, another company in the Wilhelmsen group, and this was the main reason why the group's headquarters in Asia were established there. Costs were the reason why Malaysia was chosen for Barber International initially. Barber International employs a large

¹⁸ Based on a personal interview with Mr. Christian Due, Managing Director of Barwil Agencies Pte. Ltd.

number of expatriates, Norwegians, Indians etc, and it is twice as expensive to employ expatriates in Singapore as in Malaysia.

3.9.2 Why Singapore?

The main reason for the opening of the office in Singapore was clearly the geographical position of the country and Singapore's role as a trading hub. Today there are two reasons for Barwil's large activity in Singapore. Firstly, much activity is based on all the tramp ships that use the Singapore port as a bunkering port and call on the port for crew changes, supplies etc. Secondly, a large number of liner ships call on the port because Singapore is a large transshipment port for Asia-cargo, coming from Europe or other places in Asia to Singapore to be shipped on to the final destination as well as cargo gathered from i.e. Indonesia and Malaysia to be passed on from Asia. Singapore's continuing position as a major entrepot is reflected in the large amount of transshipment undertaken.

According to Mr. Due, in addition to the geographical position that makes the port attractive for both short calls (for service and bunkering) and transshipment, there are other advantages of operating in Singapore. Firstly, Singapore is a center for a large amount of shipping activity, and there is a strong self-reinforcing effect of this concentration. There is a large pool of competence on ships and ship operation, as well as related services like lawyers etc, says Mr. Due. Secondly, Singapore is a very regulated society, and the government regulations and activity is easy to relate to and very well and orderly run. Thirdly, this discipline ensures effectiveness and efficiency and there are no delays or problems with port calls or loading and unloading operations. This efficiency and level of precision is a clear advantage of Singapore. Mr. Due characterizes the PSA and MPA as super-efficient, and says that the government fear of Malaysia catching up increases the focus on the cost-efficiency combination.

The government encouragement of foreign activity and foreign establishment is noticeable in the positive attitude towards the industry, but Barwil does not enjoy any of the investment incentives offered by the government.

Political stability is not a critical factor for Barwil, mainly because the company has few assets, but Mr. Due underlines that a country with political stability will attract more and more

activity, a factor making the location even more interesting for Barwil. He says that the political stability is thus an important factor contributing to Singapore's growth as a shipping nation.

Barwil has no problems getting qualified employees, and Mr. Due mentions the government focus on education. He says, "One can almost say that a local worker in Singapore costs twice as much as a Malaysian equivalent, but sometimes the impression is that the Singapore local does twice as good a job".

Mr. Due characterizes the Norwegian cluster in Singapore as large and active, and an extensive part of the activity is concentrated around shipping and maritime activity. "In Singapore, there exists an attitude for cooperation that is atypical for Norwegians, and the positive "drive" between the Norwegian companies is stronger than in Norway". The shipping industry in Norway has suffered, he says, because many elements in the Norwegian cluster have problems: The shipbrokers are suffering because a lot of the business activity takes place abroad, the shipbuilders for the same reason and many shipowners have moved out. Even though the Norwegian government has done a great job through the changes in the taxation policy ("Rederiskatteordningen"), the conditions in Singapore are even better. This is true for both relations with the government as well as the relations between companies in the shipping cluster. The Norwegian shipping cluster in Singapore is small, but the different attitude here is a great advantage according to Mr. Due.

The cluster is not limited to shipping activity, and other Norwegian activity is pulled in; high-tech companies and industrial companies like Norsk Hydro and Jotun due to their need for transport services. Mr. Due says that it is possible that a similar milieu exists in Hong Kong, but underlines that there are few locations in which a similarly concentrated activity exist.

3.10 NORTRANS¹⁹

3.10.1 A short presentation

In 1982 the ship owning company Seatrans from Bergen established Nortrans Shipping & Trading Far East Pte. Ltd. in Singapore. This establishment represented an offensive market extension for Seatrans. The motivation for Seatrans was to replace some of the fleet in the North Sea with newer and more advanced ships. Instead of selling the fleet to competitors in Europe, they chose to transfer the old fleet to South East Asia, and by this action the company also expanded their market significantly.

Today Nortrans Pte.Ltd functions as the holding company of the Nortrans Group of companies, providing essential services for logistics, crewing, freight forwarding and technical and commercial ship management. Nortrans emphasizes the management of own vessels as well as third party vessels, and ship management is a central part of Nortrans' business activity.

3.10.2 Why Singapore?

Seatrans saw a large potential in Asia due to the rapid economic growth in the region and the huge market it represents. Singapore was chosen, compared to its neighboring countries, because of its position as a trading hub and the fact that this was where "the activity" was taking place. Singapore had a far better infrastructure, stable political conditions and a very favorable environment for business.

These factors are important today as well, but according to Mr. Trond Kyrkjebø, the problem with Singapore is the high costs. However, he says that even though it might be less costly to operate from a country like Malaysia, other factors are more important and the infrastructure and general efficiency makes Singapore more attractive. The business environment is more important than costs, he says. "Singapore is costly, but you get quality" and he adds that government operations are far more flexible than in both Malaysia and Norway. He also

¹⁹ Based on a personal interview with Mr. Trond Kyrkjebø, Director of Nortrans Shipping Pte. Ltd.

underlines the important fact that the customers are in Singapore, and says that the convenience of traveling from Singapore to other countries in the region or to Europe has an impact.

For Nortrans, engaged in local activity, it is necessary to be present in the region, because of the market and closeness to the customers. The attractiveness of Singapore today is determined by the good infrastructure; in terms of roads, communication etc. but even more important is the pro-business government. The business environment is very favorable, and “the government makes it possible for companies to earn profits”. The corporate tax rate is only slightly lower than in Norway, but as far as shipping is concerned conditions are good. Mr. Kyrkjebø mentions the tax exemption for ships flying the Singapore flag, like Nortrans’ Asia Express that runs between Singapore and Thailand. The predictability, for instance in taxation policy, is *by far* better in Singapore than in Norway, and he says that the most frustrating feature in the Norwegian environment is uncertainty.

The Norwegian cluster in Singapore is definitely present, and Mr. Kyrkjebø says that the Norwegians talk to each other and share ideas and experiences. “It is clearly easier to talk to other Norwegians, especially when we also get together on a private basis, but I’m not sure if this has any effect on our business”.

3.11 THOME SHIP MANAGEMENT GROUP²⁰

3.11.1 A short presentation

Fridtjov Thome, the founder of the company, came to Singapore from Hong Kong in the 1950s to open and run the Wallem & Co. office. He left Wallem in 1963 and established the agency company Thome & Co. in partnership with Egil Paulsen. The company was engaged in ship-agency and -broking, based on local activity through Karlander’s fleet. At the end of the 1960s, Thome bought Paulsens share of the company, and in 1967 he established himself

²⁰ Based on a personal interview with Mr. Morten Jaer, Senior Manager of Thome Ship Management Pte. Ltd.

as a shipowner by purchasing his first vessel. At this time Thome also started operating ships for other ship owners.

When Norwegian shipowners started registering their vessels under the Singapore flag and placing their fleet under management, Thome got “a piece of the pie”, and was by the end of the 1970s one of the largest shipping agents in Singapore. In 1976/77, the company activities were separated into a holding company, a ship management company and ship broking. Thus, Thome Ship Management Pte. Ltd. was established.

Fridtjov Thome withdrew about five years ago, sold his operative interests and the vessels; the partners bought the ship broking-company, and the CEO and Managing Director, Mr. Olav Eek Thorstensen, later bought the ship management part. Today, Thome Ship Management is fully owned by Mr. Thorstensen, and is Singapore’s largest independent ship management company, with 50 vessels on full management, 30 on crew management and they also handle about 50 vessels through their crew agencies.

3.11.2 Why Singapore?

The explanations for why Singapore was chosen go way back, and it started when Thome came from Hong Kong to run the Wallem-office. The reason for the opening of the office was the very busy and strategically important Singapore port. Over the years the company has become very well established, and Mr. Morten Jaer says that when taking all factors into consideration, Singapore is one of the most attractive investment-locations for shipping activity. He underlines the importance of looking at the entire “package”; infrastructure, geographical position, accessibility to vessels, the services available like ship repairing facilities, docking capacity, bunkering etc. Singapore has a facilitated infrastructure, and a pragmatic attitude towards understanding the different industries based on the island. Practical things like banking, remittance of profits and international travel are never a problem, he says, but adds that for a company engaged internationally, America is far away.

“The last years, it is probably less costly to operate out of Malaysia or other places, but the drawback is the lack of availability and shipping milieu. This is underlined by the fact that more and more shipowners and management companies have moved to Singapore the last

years”, says Mr. Jaer. He believes that the tax incentives for the shipowners are important, but Thome is not covered by any of these incentives. “It might even be less costly to operate out of Oslo or Sandefjord, especially the last years Singapore has become more expensive, but Sandefjord is too far away and in Singapore you are in the middle of it and where things happen”, says Mr. Jaer.

He mentions all the “competitive advantages” of Singapore, and points to the fact that living conditions are important and that Singapore is by far the best place compared with other countries in the region.

Relations with the government are problem-free, and Mr. Jaer says that the government is very efficient. “This is exemplified by the simplicity of the tax system”. Singapore needs foreign investors; Mr. Jaer claims that the government through political stability, security through a strong defense, and other incentives that increase the convenience (work permits, profit remittance etc.) achieve this goal. The predictability in government policy, says Mr. Jaer, resulting from the fact that the same party has been in power for the last twenty-five years, is strong. “It does not change, like for instance the shipping policy in Norway.” The predictability is exemplified by the long-term plans, and the goals are usually achieved – on time and on budget. Mr. Jaer says that the result of Lee Kuan Yew’s policy can be seen today, the middle class in Singapore has a better standard of living than the middle-class in Norway.

According to Mr. Jaer there is a strong Norwegian cluster in Singapore, and a large share of the Norwegian activity is somehow related to shipping. “All the large Norwegian shipowning companies have something here”. However, he states that the cluster in Singapore is not stronger than Bergen and Oslo combined, and it does not have the heavy weight as a shipping cluster as London does. But this is one of the government goals, and Singapore has an advantage not present in London or in Norway: the port.

PART 4: THE DETERMINANTS OF LOCALIZATION

4.1 INTRODUCTION

The experiences explored in Part 3 give valuable insights to understanding the attractiveness of Singapore as an investment location, and the relative importance of the different location factors for different segments of the shipping industry. The companies weight the factors differently, and a search for *one* all-embracing location advantage has never been my intention. However, from the previous part it can be seen that *a set* of advantages together, from uncontrollable factors like geographical position to highly targeted and government created factors like tax schemes create a favorable investment climate and indirectly contribute to answering *what determines localization*.

This part will draw on the insights from Part 3 and thus identify the most important determinants of localization. In the following I will also try to comprehend whether, to what extent and at what level of involvement the government has influenced the localization decision.

4.2 GIVEN FACTORS

4.2.1 Strategic location

Mr. Jaer of Thome Ship Management states that “Singapore’s most important asset is the geographical position”. The importance of being located in the middle of this large region and along the traditional shipping routes, early highlighted the potential of the island. The British knew to take advantage of this when they started challenging the Dutch trade monopoly in the region in the beginning of the 19th century and started trading out of Singapore. The existence of Singapore was thus from the beginning based on the strategic location and the function as an entrepot port.

However, even more important has been the strategies aimed a taking advantage of this asset, seen through the free-trade and free-port policies that have been carried out from Raffles’ time. The location of the country is an uncontrollable factor, but the capitalizing on the

possibilities offered by this factor is not. The island, when expelled from the Federation of Malaya, was left with almost no natural resources and a very limited domestic market. Through strong and pragmatic governance and the valuable location resulting in the position as a trade hub, the government attracted foreign investors and the spin-off process had started. In that sense, the uncontrollable factor of geography, through a strong impact on the development of the country and on its role today as a transshipment- and trade hub, is the source of great location advantages in Dunning-terminology. It is far more profitable for companies like Odfjell Tankers Asia, Strømme Ships Services and Nortrans to operate close to their market and their customers than from a location without trade, shippers, shipowners and ship arrivals.

According to Mr. Due (Barwil) there are two reasons for Barwil's large activity in Singapore and they are both connected to the geographical position of the country and the large port. The first arises from the tramp tankers calling on Singapore for bunkering-, crew-, and other services and the other from liner ships calling at Singapore for transshipment.

4.2.2 The Norwegian cluster

Another advantage of Singapore for Norwegian shipping companies that at first glance seems out of government control, is the strong Norwegian shipping cluster. The Singapore government cannot influence the extent to which Norwegians talk to each other and exchange experiences and ideas. "The whole point of the cluster- idea, the way I see it, is that people contribute with thoughts and ideas, and knowledge transfer and even cooperation results", says Mr. Due (Barwil). In Dunning's language Singapore has a location-specific advantage in the generation of knowledge related to the shipping industry. In part this advantage comes from the sheer concentration of intellectual talent and in part it arises from informal contracts that allow firms to benefit from each other's knowledge generation activities (Hill, 1999:208). This is not only limited to the Norwegian part of the maritime industry, but it is clear from the interviews above that a distinct *Norwegian* cluster exists. Like Mr. Trond Kyrkjebø (Nortrans) puts it "Norwegians like to do business with Norwegians, like Chinese like to do business with Chinese".

Self-enforcing as it might seem, this cluster has to some extent seen some government influence. The Singapore government has through its open-door policy and aggressive policies to attract FDI strongly affected the direction of the economic activity. Shipping was seen as a means to improve the nation's competitive advantage resulting in very favorable conditions for important segments of shipping industry. By attracting the shipowners, other segments of the industry followed and eventually a cluster developed.

Most of the companies see the cluster-effects as a location advantage, and see the value of the positive synergies that can result from being located in such a shipping milieu. Nevertheless, Strømme Ships Service has according to Mr. Gulliksen small benefits from the cluster effects, and Mr. Kyrkjebø says that the cluster has no large effect for Nortrans. Further, none of the remaining companies stated the cluster effects as a main reason for why Singapore was chosen, and the cluster should thus be regarded as one of several factors making Singapore an attractive location.

4.3 MACRO-LEVEL ATTRACTIVENESS

4.3.1 Political stability

The political stability is the backbone of the Singapore phenomenon, and Mr. Lee Kuan Yew, Singapore's founding father, has decisively led the country to not only prosperity, but also social harmony. Singapore's People's Action Party (PAP), a single multiracial party currently holds all but two of the elected seats in parliament (The Economist, Feb. 2000). The country claims to be a democracy, although few voices are ever raised in opposition. The PAP, like the Malaysian UMNO coalition party, tends to deal with potential opponents either by co-opting them or by crushing them. For most Singaporeans, that has been the price of prosperity and stability. As a result, the city-state has prospered by offering what the rest of South East Asia did not: an honest and professional administration; a modern, clean and efficient environment; a highly trained workforce; and a big welcome to foreign investors.

Political stability was emphasized as important for most of the Norwegian shipping companies, as it is for investors in general. Mr. Due of Barwil says that Barwil is not necessarily concerned with the political stability because they have few physical assets, but he

underlines an important aspect: A country with political stability will attract more activity through foreign investment and trade. This increased activity will lead to increased transport demands and is thus contributing to Singapore growing as a shipping nation. In that sense, a company like Barwil benefits from the political stability, but it was not a factor determining the localization of the office.

The political stability was the most important determinant for the investors when choosing where to establish Masterbulk, in the sense that the political stability in Singapore has ensured a stable and predictable operating environment. Masterbulk depends on long-term relations with customers, and takes on long-term obligations vis-à-vis the customers. If government policy (for instance tax-policy) keeps changing, forcing the company to adapt, it becomes difficult for the company to act in along-term manner towards the customers.

An environment with sudden policy changes and changes in attitudes towards an industry, creates uncertainty and unpredictability, and Singapore's guarantee of and 35 year track record of stability and predictability is then a great location-advantage for investors in general as well as for Norwegian shipowners.

4.3.2 Economic growth

The economic growth in the region, offering huge opportunities and a growing market has also influenced the localization decision. Countries like Singapore, Hong Kong, and South-Korea, Taiwan and also Malaysia has experienced impressive growth rates for decades, and before the outbreak of the regional crisis in 1997 outlooks were good. The governments in all the Asian NICs played important roles in economic affairs, by providing capital (often at very subsidized rates) for investment projects, bearing costs of activities that generated positive externalities, intervening in product and factor markets etc. This increased economic activity in the region led to an increased transport demand, forcing an increased attention towards the area. "We saw an enormous potential in Asia and the huge market here", says Mr. Kyrkjebø (Nortrans) about the establishment of Nortrans in 1982, underlining that this was the main reason why a presence in South East Asia was necessary. *Singapore* was chosen because of its role as a trading center and because the customers were located here, as well as for having the best infrastructure. When the decision was made by the Westfal-Larsen owners to relocate

some of the activity, the economic growth in Asia was one of the reasons why the region was considered attractive, and can thus be considered a location advantage for the company. The growing Asian petrochemical industry forced a reaction from Odfjell. If the growth in the petrochemical industry in the region is connected to the general economic growth, this growth can be considered a location advantage for Odfjell.

Maritime suppliers are dependent on closeness to the customers, and when the economic growth attracts the shipping industry to the area and increases the shipping activity, this growth is indirectly a location advantage for Strømme Ships Service. The same is true for Barwil, and Thome also has benefited from the increased economic activity in the region.

4.3.3 Infrastructure

High quality infrastructure seems to be a very important determinant of localization. All the companies in question put great emphasis on the infrastructure in Singapore, both when explaining why Singapore was chosen initially and what makes Singapore a preferred location today. A well-organized infrastructure was also emphasized by Mr. Due (Barwil), Mr. Kyrkjebø (Nortrans) and Mr. Jaer (Thome) when asked which localization factors are most important for the shipping industry *in general*. A high quality infrastructure increases the efficiency and according to Mr. Due, makes it easier to “get the job done”. The combination of a well-established road-system, a well-developed telecommunications network, efficient administration and the well-managed and “super-efficient” port thus contributes strongly to explaining the Singapore advantages. The port is the center point in the dynamical and growing shipping cluster and constitutes a location advantage for the actors. Further, Mr. Kyrkjebø of Nortrans points to the fact that international travel is very convenient from Singapore, due to Changi Airport’s position as a regional air hub. He also underlines another aspect; that the use of business infrastructure is costly compared to the rest of the region. Still, he is predicting that the ongoing deregulations, for instance in telecom, will reduce costs.

4.3.4 Workforce

“The only thing they have is people, and Singapore has invested enormously in education”, says Mr. Jaer (Thome). Singapore does have a highly educated workforce, but the tight labor

market has made it hard to get qualified employees. Thome reported some problems with getting qualified employees, blaming this on the tight labor market and Mr. Kyrkjebø (Nortrans) said that employees in Singapore lack initiative and creativity compared to employees in Norway. Masterbulk had problems recruiting qualified people, but Odfjell and Barwil claim to have no problems in finding employees, and say that it is an advantage that “everyone” speaks good English. In general, it seems like the availability of qualified and effective employees is an advantage in Singapore compared to other countries in the region, but not necessarily if a comparison is made with Norway. An explanation for this is might be that in Norway shipping is high on the list of business prestige (Reve, Lensberg & Grønhaug, 1992:192), and the more people finding the industry attractive, the easier it is to find good employees (Stokke & Hauge 1999). Compared to the conditions in Norway, it might be more difficult to attract employees to the shipping industry in Singapore.

4.3.5 Favorable business climate

Another very important factor, highlighted to a large extent by the respondents, is the very favorable business climate in Singapore, exemplified by the pro-business government. “The government is very positive towards foreign investment and activity, and everything is organized and laid out”, says Mr. Due of Barwil. This accommodating attitude is a result of the fact that Singapore would be sentenced to poverty if the government did not open for foreign investment. Mr. Jaer (Thome) underlines the government’s pragmatic attitude towards understanding the needs of the different industries, and says that the government is very receptive to feedback from the shipping industry. Mr. Kyrkjebø (Nortrans) also says that the pro-business environment is an important advantage of Singapore, underlining that “the government really makes it possible for companies to earn profits”.

4.3.6 Living conditions

The comfortable living environment in Singapore is also a favorite among the interview objects, but it does not seem to be a primary determinant of localization. Mr. Kyrkjebø (Nortrans) says, “It is of course important that the expatriate and the family are comfortable and satisfied, but that is not what keeps the business going”. Compared to other countries in the region, living costs are high. Major costs are housing and car; however, schooling for

children can also be a significant expense. Even though many companies cover such costs fully or partially, many find living in general expensive, even when compared to Norway. Nevertheless, Singapore gets the best grades: "As far as living conditions are concerned, Singapore is definitely on the top", says Mr. Jaer (Thome), having lived in Asia for 21 years, 12 of which in Singapore. He says that for continuity and long-term engagement such things are important, and underlines the convenience of English being the business language in Singapore. "You can get by on your own, you do not need a secretary or an interpreter to help you out."

4.4 MICRO-LEVEL INCENTIVES

An interesting observation from this study is the relative low importance of the different investment incentives. Apart from the shipowning companies, none of the companies were benefiting from any of the government investment schemes²¹, and they are regarded as "regular" Singapore companies. The shipping industry has been one of the areas the government has wished to build up, and the favorable incentive schemes probably have contributed to the establishment of the strong shipping milieu of today. The tax incentives offered through the AIS scheme seemed to be the most important factor for the Masterbulk-establishment, mostly because of the predictability inherent in the scheme. However, when shipowner Odfjell decided to establish Odfjell Tankers Asia in Singapore, the tax-conditions in Norway were the same as in Singapore, and according to Mr. Valen, tax conditions were not the reason for the FDI. Still, the company appreciates the predictability of the AIS scheme.

When looking at the economic history, it is clear that Singapore's investment incentives had a large impact on the level of FDI in the country, but factors like political stability, absence of corruption and work conflicts and the economic growth were also important. For *industrial* investments, the political stability and the disciplined and educated workforce were even more important than the tax- and investment incentives. As mentioned above, the tax- and investment incentives have not been the most important localization determinants in the maritime sector either.

²¹ Nortrans' Asia Express is registered under the Singapore flag and thus largely exempted from taxation, and the company is covered by "Section 13A" for Singaporean companies but not by the AIS.

For shipowners, taxation might be an important motivation, but with a focus on the land based-operations as well as on other segments of the shipping industry, other factors are more important. However, indirectly, a taxation scheme like the AIS does influence the location-decision of the other segments. The AIS scheme was offered by the Singapore government to increase the attractiveness of Singapore as a location for shipowners. By increasing the concentration of shipowners in Singapore they hoped to encourage other actors in the maritime industry to establish in Singapore. When other companies, like Strømme Ships Service finds it necessary to establish in Singapore to be able to supply the Norwegian (and other) shipowners, the government has to some extent succeeded with their policy. Consequently, the tax incentives indirectly influence the localization, even though it does not cover the other companies and was not considered in their decision making process.

4.5 CONCLUSIONS AND IMPLICATIONS

There has been a rapid increase in the total volume of foreign direct investment over the past decades. Two interesting trends in this context are the change in the importance of various countries as sources of FDI, and the noticeable shift in the direction of FDI. An increasing share of FDI has been directed towards Asia, with Singapore receiving large amounts of FDI relative to the size of the economy.

Several theories have been developed to understand occurrence of FDI, focusing on different aspects of the same phenomenon. To understand why firms prefer FDI to licensing or to exporting, from both an exploratory and a business perspective, the best theories are those that focus on the limitations of exporting and licensing. These theories are useful because they identify how the relative profitability of foreign direct investment, exporting and licensing vary with the circumstances. In addition to this, the location-specific argument associated with John H. Dunning helps explain the *direction* of FDI, and the eclectic paradigm presented by him thus provides a holistic explanation to foreign direct investment.

To understand the localization of foreign direct investment there is a need to understand not only the strategic evaluations of the company, but also the *country-specific advantages* as well

as the strategic thinking behind them. In a world of mobile resources, governments can play a critical role in influencing the competitiveness of locational attractions it offers to foreign investors (Dunning, 1990).

The Singapore government has worked on improving the locational attraction of its own resources and has acted as a shaper of country specific endowments that are viewed by foreign investors in general, and Norwegian shipping actors in particular, as very attractive. Some endowments, like the favorable geographical position of the country, are beyond government control, but the government has nevertheless strategically maximized on this valuable asset. The government has influenced the location decision of firms through strategic investment-incentives policy and through general economic policy. Interestingly, the general efficiency in the operating environment and the predictability inherent in a stable policy-environment seems more important than tax-holidays and other targeted investment incentives.

This can also be seen when acknowledging that the propensity of firms to engage in outward direct investment in particular sectors is dependent on both the home countries of these firms and the country in which the investment is made. The instability resulting from the changes in taxation policy in Norway has disrupted the predictability, and is according to Mr. Rolf Westfal-Larsen the largest problem for the Norwegian shipping industry (Stokke & Hauge, 1999). Singapore provides the necessary stability, and this, in addition to a high quality infrastructure and a pro-business environment seems to be the secret behind the choice of Singapore as a location for FDI.

Even though the different factors constituting the macro-level attractiveness seems to be the most important determinants of localization, micro-level incentives should not be ignored. Countries compete with each other for resources and markets, especially for those that influence their future competitiveness (Dunning, 1990). A strong maritime sector has been one of the means for Singapore to increase its national competitiveness, resulting in favorable conditions for the shipping sector. The AIS scheme should thus be regarded as a strategic and important tool from the government in the international competition for maritime clusters. The resulting strong maritime cluster is adding to the country's economic activity, and is also indirectly a means to increase national competitiveness and welfare.

By a more informed understanding of the reasons for foreign investment, governments are, in fact, in a better position to attract the kind of inward investment they want, and to help influence the level and pattern of outward investment (Dunning, 1990). Dunning (1990:41) states that “when businessmen talk about a favorable investment climate they do not primarily mean government related measures which directly reduce their real factor costs or raise the level of demand for their products, acceptable as these may be. They mean, and increasingly mean in a world dominated by information and technology intensive cross-border activities, the availability of supply capabilities and complementary assets (e.g. a transport and communications infrastructure) associated with these activities”. As can be understood from this paper, these created assets, and the transaction costs associated with them, the Singapore government has influenced to a large extent. This is partly because these assets, or their input, have the characteristics of public goods, partly because they are huge investments with a long-term pay back, and partly because they are risky - but most importantly because these factors contribute strongly to the attractiveness of a country as a recipient of FDI. The emphasis on attracting foreign investors can in addition to other factors be understood from Singapore’s spatial constraints – FDI has been an important factor contributing to the economic growth in Singapore and have thus had implications for the welfare the citizens enjoy today. In fact, the openness towards FDI can be seen as a long-term strategic plan from the government to achieve the highest possible growth rate. The Singapore government has through its different policy measures affected the transaction cost, or ability of firms to operate, either directly through tax schemes or indirectly by providing the infrastructure and efficiency that reduce the costs of doing business. However, costs of doing business are increasing in Singapore. As other neighboring countries are gaining competitiveness, Singapore is working on improving efficiency.

With liberal policy frameworks becoming commonplace and losing some of their traditional power to attract FDI, governments are paying more attention to measures that actively facilitate it. What is likely to be more critical in the future, as indicated by the Singapore case, is the distinctive combination of locational advantages and, especially, *created* assets that a country or region can offer potential investors.

According to Porter (1990:86), government policies that succeed are those that create an environment in which companies can gain competitive advantage. However, creating a favorable investment climate takes time, a factor often lacking in national politics. Consequently, most governments favor policies that offer easily perceived short-term benefits, and their policy determinants are the opinion polls rather than the long-term competitiveness of the country. The one-party dominance in Singapore has provided the platform for developing the competitive advantage. This lack of political volatility and the different policies enabled by it has resulted in a very favorable investment climate, - a price to some extent paid by the Singapore citizens through limited democratic rights.

APPENDIX

NORWAY IN SINGAPORE – THE COMPANIES²²

BANK:

CHRISTIANIA BANK, SINGAPORE BRANCH
DEN NORSKE BANK ASA, SINGAPORE BRANCH
NORDIC INVESTMENT BANK

MARITIME/OIL & GAS:

AAGAARD BUNKERS BROKERS
ABC ENGINEERING PTE LTD
ABEER MARINE SERVICES (S) PTE LTD
ANGLO-ASIAN SHIPPING PTE LTD
BARWIL AGENCIES PTE LTD
BELDEN SHIPPING PTE LTD
BELSHIPS TANKERS FAR EAST PTE LTD
DACON INDUSTRIAL INSPECTION (S) PTE LTD
DET NORSKE VERITAS
DNV PETROLEUM SERVICES PTE LTD
EVENSEN & CO
FAST MARINE SUPPLY PTE LTD
FRANK MOHN SINGAPORE PTE LTD
FRIGSTAD OFFSHORE PTE LTD
GLAMOX FAR EAST PTE LTD
GOLTENS PROJECT MANAGEMENT PTE LTD
GOLTENS SINGAPORE PTE LTD
HARALD FRIGSTAD ENGINEERING PTE LTD
HØEG LINES
INTERNATIONAL TANKER MANAGEMENT SINGAPORE PTE LTD
IUM SINGAPORE PTE LTD
JEBSENS INTERNATIONAL (SINGAPORE) PTE LTD
JO TANKERS ASIA PTE LTD
KONGSBERG SIMRAD PTE LTD
KOPPERNAES SINGAPORE PTE LTD
KVÆRNER FJELLSTRAND (S) PTE LTD
KVÆRNER E & C SINGAPORE PTE LTD
LORENTZEN & STEMOCO SINGAPORE PTE LTD
MARCO SHIPPING COMPANY (PTE) LTD
MARITIME HYDRAULICS (S) PTE LTD
MARITIME IT SOLUTIONS PTE LTD
MASTERBULK PTE LTD

²² From "Norway in Singapore" (2000:1-4). The companies vary in their shares of Norwegian ownership.

NGC (ASIA) PTE LTD
NH & ST ASIA PTE LTD (TRADEWINDS AND UPSTREAM)
NORDIC MARITIME PTE LTD
NORSE ELECTRONICS REPRESENTATIVE OFFICE
NORTRANS OFFSHORE (S) PTE LTD
NORTRANS PTE LTD
NORTRANS SHIPMANAGEMENT PTE LTD
NORTRANS SHIPPING AGENCIES PTE LTD
NORTRANS SHIPPING PTE LTD
ODFJELL TANKERS (S) PTE LTD
ODFJELL TANKERS ASIA PTE LTD
OSEP ASIA PTE LTD
PACIFIC MARINE CONSULTANTS PTE LTD
PGS ASIA PACIFIC PTE LTD
R S PLATOU (SINGAPORE) PTE LTD
S & P MARINE CONSULTANTS PTE LTD
SCAN-TRANS SHIPPING PTE LTD
SCANA SINGAPORE PTE LTD
SCANDIA GROUP OF COMPANIES
SIEMENS ADVANCED ENGINEERING PTE LTD
SINGA SHIP AGENCIES PTE LTD
SINGA SHIP MANAGEMENT PTE LTD
SMEDVIG OFFSHORE SINGAPORE PTE LTD
SPECTEC PTE LTD
STAR FORREST CARRIER PTE LTD
STATOIL ASIA PACIFIC PTE LTD
STENTO MARINE (ASIA) PTE LTD
STOLT OFFSHORE PTE LTD
STOLT-NIELSEN TRANSPORTATION GROUP PTE LTD
STRØMME SHIPS SERVICE (SINGAPORE) PTE LTD
TELENOR SATELLITE SERVICES A/S
THE MARINER GROUP (ASIA) PTE LTD
THOME & PARTNERS (SHIPBROKERS) PTE LTD
THOME SHIP MANAGEMENT PTE LTD
TSCHUDI & EITZEN (SINGAPORE) PTE LTD
UMOE SCHAT-HARDING (FE) PTE LTD
UNITOR SHIPS SERVICE (S) PTE LTD
VIKING ENGINEERING PTE LTD
WALLENIOUS WILHELMSSEN LINES AS (SINGAPORE BRANCH)

GENERAL TRADING/REGIONAL OFFICES:

ALPHARMA AS
BOREALIS PTE LTD
CROSS CULTURAL INFORMATION (CCI) PTE LTD
EINSTEIN EARTHTREE PTE LTD
ELTEK ENERGY PTE LTD
GOLTENS TRADING & ENGINEERING PTE LTD

HEMPEL CONSULT
HYDRO AGRI ASIA
HYDRO ASIA PACIFIC PTE LTD
KVÆRNER PULPING PTE LTD
MAX MANUS ASIA PTE LTD
NERA TELECOMMUNICATIONS LTD
NORAL (ASIA) PRIVATE LIMITED
NORSE PAPER (S) PTE LTD
NORSK HYDRO ASIA PTE LTD
NORSE TELEKTRON (S) PTE LTD
NYCOMED ASIA PACIFIC PTE LTD
PROXIMA ASIA PACIFIC
ROLLS-ROYCE MARINE SYSTEMS
SCANCEM ASIA PACIFIC PTE LTD
SCANDINAVIAN AIRLINES SYSTEM
SINOMARIS PTE LTD
SNORRE FOOD PTE LTD
SPERRE ASIA PTE LTD
SYSDECO ASIA PTE LTD
TANDBERG DATA (ASIA) PTE LTD
TELENOR ASIA PTE LTD
TRELLEBORG S.E.A. PTE LTD
VESTA FORSIKRING AS

MANUFACTURING:

BORREGAARD SEA PTE LTD
DYNO INDUSTRIES (S) PTE LTD
JOTUN NOF (SINGAPORE) PTE LTD
KVÆRNER OILFIELD PRODUCTS SINGAPORE
LÆRDAL FAR EAST REPRESENTATIVE OFFICE
NERA ELECTRONICS (SINGAPORE) PTE LTD
O. MUSTAD & SON PTE LTD
PAN ASIA PAPER COMPANY PTE LTD

AGENTS²³:

ALL EIGHT MARKETING SERVICES PTE LTD
ASIATIC FIRE SYSTEM PTE LTD
ASSOCIATED TECHNICAL SERVICES (PTE) LTD
AVT (S) PTE LTD
BROSEA PTE LTD
CLARIANT (SINGAPORE) PTE LTD
COMTECH EQUIPMENT & SUPPLIES PTE LTD

²³ These have no Norwegian ownership interests, but are representing different Norwegian companies. For an overview of which Norwegian companies they represent, see "Norway in Singapore" (2000).

DAWN INTERNATIONAL FORWARDER PTE LTD
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