NORWEGIAN FOREIGN DIRECT INVESTMENT:
DESTINATION SINGAPORE INC.

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Abbreviations

B2B: business to business
CEO: Chief Executive Officer
CIS: Commonwealth of Independent States
CPF: Central Provident Fund, Singapore

EDB: Economic Development Board, Singapore
EOI: export-oriented industrialization

FDI: Foreign Direct Investment

GDP: Gross Domestic Product
GLC: government-link company

HFDI: Horizontal Foreign Direct Investment

IDP: Investment Development Path
ISI: import-substitution industrialization

JTC: Jurong Town Corporation, Singapore

K-economy: Knowledge-based economy

M&A: Mergers & Acquisitions
MAS: Monetary Authority of Singapore
MIDA: Ministry of Industrial Development Authority, Malaysia
MNE/MNC: Multinational Enterprise/Corporation

NIC: Newly Industrialized Country
NTUC: National Trades Union Congress, Singapore
NUS: National University of Singapore
NWC: National Wages Council, Singapore

OECD: Organisation for Economic Co-operation and Development
OLI: Ownership, Location and Internalization

PAP: People’s Action Party, Singapore
PV: Photovoltaic (solar energy)

REC: Renewable Energy Corporation

SME: small and medium (sized) enterprises
SSB: Statistics Norway
SWF: Sovereign Wealth Fund

TNC: Transnational Corporation

UNCTAD: United Nations Conference on Trade and Development

VFDI: Vertical Foreign Direct Investment

WIR: World Investment Report
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Abstract
The growth and spread of FDI during the 20th century has been described as a significant economic-geographic development. Norwegian FDI has been increasing since the 1980s, but the large scale of it is a new phenomenon. Singapore is now the third most important host country for Norwegian FDI. This thesis is a study of Norwegian FDI in Singapore, and the research question is: Which economic and political factors do Norwegian companies regard as important when investing abroad, and to what degree have they been deciding in the process of choosing Singapore as the investment location?

The analysis is based on two types of information: statistics on Norwegian FDI to Singapore in the period 1998 to 2006 and interview data. The investment decisions of three Norwegian companies are analyzed. The selected companies are Pareto Securities, Renewable Energy Corporation (REC) and Jotun, operating in the financial services sector, the solar energy industry and the chemicals industry, respectively.

The results indicate that both economic and political factors influence the investment decision of the companies. The most decisive economic factors were access to new markets, access to skilled labor and cost savings. In addition, political factors such as control of corruption and an efficient bureaucracy seemed to be of great significance. The statistics show that the largest sectors of Norwegian FDI in Singapore are oil and gas, shipping, production of paper and telecommunications. It is suggested that Singapore functions as a gateway for Norwegian FDI to Asia.
1. INTRODUCTION

1.1 Economic Globalization and FDI

Economic globalization can be defined as “the increasing cross-border interdependence and integration of production and market for goods, services, and capital” (Benito et al. 2002: 61). One element of economic globalization is the increase in foreign direct investment (FDI). Dicken (2000: 275) regards the growth and spread of FDI and other forms of international economic involvement as one of the most significant economic-geographic developments of the twentieth century. How is FDI different from other kinds of investment? The UN definition is: “…FDI refers to an investment made to acquire lasting interest in enterprises operating outside of the economy of the investor. Further, in cases of FDI, the investor’s purpose is to gain an effective voice in the management of the enterprise” (UNCTAD 2009a). An effective voice is considered at least 10 percent equity ownership. The keyword is control; investments made purely for financial reasons, such as purchasing of stocks/shares below the 10 percent limit, are portfolio investments. Portfolio investments are not made to gain control of an enterprise.

The process of international investment has taken place through the medium of transnational corporations (TNCs). “A transnational corporation is a firm that has the power to coordinate and control operations in more than one country, even if it does not own them” (Dicken 2007: 106). There are about 790,000 TNCs in the world today with a total of 790,000 foreign affiliates (WIR 2008). The size of these TNCs’ FDI is one way to measure their activity, but collaborative ventures and alliances are becoming increasingly common (Dicken 2007: 36). There are two kinds of FDI: horizontal and vertical (Schatz and Venables 2000: 129-132). FDI is classified as horizontal (HFDI) when companies decide to establish a new production plant abroad, duplicating the whole production process. HFDI often substitutes for trade since exports are replaced with local production (Brainard 1997). Vertical FDI (VFDI) is to

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1 The terms multinational enterprise (MNE) and multinational corporation (MNC) are also common, but the concept transnational corporation will be used in this thesis.
invest in production that enables the firm to move only a part of the production process abroad. This division of the production chain is usually trade creating since production takes place in several countries (Hummels et al. 2001). An FDI project can also be described as a greenfield investment; which involves the creation of an entirely new plant (Navaretti et al. 2004: 299).

The spread of FDI accelerated after the Second World War and since the mid 1980s FDI has grown much faster than trade (Dicken 2007: 37-38). Between 1985 and 1990, the trend growth of FDI and exports diverged, and FDI stocks grew at an average annual rate of 25%, FDI flows grew at 18% and world exports at 12.7%2. With the exception of a few recession periods, the strong growth in FDI has continued at a fast pace. Dicken (2007: 38) argues that this might indicate that the primary mechanism of interconnectedness within the global economy has shifted from trade to FDI. Economic competition in today’s world is global; firms are competing with other firms from across the world. In such a competitive environment, instead of asking why transnationalize, Dicken (2007: 108) rather asks; why not transnationalize?

1.2 Economic Globalization and Norwegian FDI
Norwegian FDI is not an entirely new phenomenon, but the increasing scale of it is a recent development (Hveem et al. 2008a). If one thinks of economic globalization as a puzzle, Norwegian FDI is one small piece of the big picture. Norway used to be a net importer of inward FDI; the country received more FDI than it invested abroad. Norwegian outward FDI started to grow during the late 1980s. From 1995 onwards, outward FDI stock became larger than inward FDI stock. The Norwegian outward FDI stock has continued to increase; from NOK 240 billion in 1998 to NOK 754 billion in 2006 (SSB 2009a). Norway has become a home country for sizeable amounts of FDI – but which countries are the hosts of Norwegian outward FDI? According to the latest

2 FDI flows comprise capital provided by a foreign direct investor to an FDI enterprise, or capital received from an FDI enterprise by a foreign direct investor. That is, FDI flows refer to those cross-border transactions which qualify as direct investments recorded during a reference period (year, quarter, month). FDI stock is the value of the share of capital and reserves attributable to the parent enterprise; the stocks represent the value of the stock of direct investments held at the end of the reference period (OECD 2008, WIR 2008).
statistics from 2006, the most important host countries are Sweden, USA, Singapore, Netherlands, Denmark, Germany, Great Britain and Belgium/Luxembourg, respectively (SSB 2009a).

The developed countries are still the largest recipients of both inward and outward FDI – reflected by the top eight recipients of Norwegian FDI (Dicken 2007: 39). The only ‘surprise’ is Singapore as a newly industrialized country (NIC). From a mere NOK 2.6 billion in 1998, Singapore had a Norwegian FDI stock of NOK 61.4 billion in 2006 (SSB 2009a). Asia receives 15% of Norwegian FDI and Singapore is now the host of about 8% of this, over half of Norwegian FDI to the region. Some or even a large part of this capital may be channeled to other countries since Singapore often functions as an offshore financial center for companies (Dicken 2007: 406). However, it is a challenging task to identify the ultimate host country for an increasingly large number of FDI transactions every year. I will come back to this theme in the analysis. At the other hand, there must be some reason for Norwegian TNCs to invest in and ‘channel’ such a large amount of capital to Singapore.

In this thesis, I investigate the case of Norwegian FDI in Singapore. I am focusing on the relationship between firm and host country. Host countries are both containers of distinctive business practices and regulators of business activity – states are therefore one of the most important ways in which location-specific factors are packaged (Dicken 2007: 234). I want to explore which factors are important for Norwegian companies when they decide to invest in Singapore, and, what the companies’ main motives for investing are. The research question is:

Which economic and political factors do Norwegian companies regard as important when investing abroad, and to what degree have they been deciding in the process of choosing Singapore as the investment location?
1.3 Theory and Empirical Results

To answer the research question, the theory considers the nature and motivations of firms, and also the interrelations between firms and states. This way, it is possible to investigate both the significance of the economic factors and the significance of the political factors in attracting FDI. Political factors, and especially the role of institutions and organizations, are critical to the relative success of economies (North 1990: 69). Dunning’s (1988) eclectic paradigm is used as a framework to explain Norwegian firms’ investments abroad. There are three conditions that lead to FDI: ownership-specific advantages, location-specific advantages and internalization advantages. The focus will be on the location-specific advantages which are divided into two main motives: market and asset oriented investments (Dicken 2007). The asset oriented investments are further explored by including new motives such as agglomerations and clusters (Krugman 1998, Porter 2000). The role of the government and the bureaucracy are discussed in a separate part of the theory chapter, emphasizing the importance of policy towards FDI, industrial policy and the role of an efficient bureaucracy.

On the basis of the theory, twelve hypotheses are suggested; economic factors such as a large market size, a skilled work force, low wages, access to suppliers and a well developed infrastructure will have a positive effect on FDI. A highly unionized work force and a low level of investment will have a negative influence on FDI. In addition, economic institutions in the form of a stable political system characterized by control of corruption, rule of law and property rights, and an efficient bureaucracy will have a positive effect. Last, general policy and sector specific policy are assessed; low corporate tax and other government cost-reducing incentives, sector-specific industrial policy and clusters will attract FDI.

Three companies and their investment decisions were analyzed: Pareto Securities, Renewable Energy Corporation (REC) and Jotun. Both Pareto and REC decided to

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3 In this thesis, firm, company, enterprise and corporation will be used interchangeably.
invest in Singapore, while Jotun decided to invest in Malaysia instead. In addition, the companies belong to different sectors and industries; Pareto is in the services sector providing financial counseling while Jotun and REC are both manufacturers, but in the chemicals industry and the solar energy industry, respectively. To be able to understand what kind of location advantages Singapore has to offer, it is useful to compare the country to Malaysia. Over the last few years Malaysia has become more of a competitor to Singapore in terms of attracting FDI. The data analyzed in the thesis support the hypotheses, except for the union system and the level of investment where the results are inconclusive. The decisive motive for investing was found to be market access in the case of Pareto and Jotun. REC’s motive on the other hand was asset oriented; access to skilled labor and cost savings were regarded as the most decisive factors for this company. In addition, it is proposed that Singapore functions as a gateway to Asia for Norwegian FDI.

1.4 Structure
After the theory discussion, two background chapters about Norwegian FDI and Singapore lay the foundation for the analysis. Norway as a home country and Singapore as a host country both influence Norwegian FDI (see comparison in Appendix 1). Norwegian companies invest in specific sectors and industries, for example shipping and oil, and in certain countries. Additionally, the Singapore economy has been transformed since the 1960s: from labor abundant and capital scarce to labor scarce and capital abundant (Siow Yue 2005). The industry changed from labor-intensive manufacturing to capital- and technology-intensive manufacturing and high value added services. Today Singapore is an export manufacturing base, the country hosts regional headquarters of many transnational companies (TNCs), the city is a financial center and a trading, transportation and telecommunications center.

The design and method of the thesis are discussed in chapter five. The main emphasis is on case design and the corresponding choice of method. The first methodological discussion revolves around the selection of companies. Subsequently, the interview
method is assessed including the major strengths and weaknesses. The interviews were supplemented with a questionnaire that is presented briefly before going through the quantitative data and method. The quantitative data was collected by Statistics Norway (SSB) in the period 1998-2006.

The analysis starts with the statistical results regarding the share of Norwegian FDI stocks in Singapore during the period 1998-2006. It is followed by a presentation of the three companies before analyzing the questionnaire and the interviews according to four categories: economic factors, economic institutions, general policy and sector-specific policy. The results are reviewed at the end of the analysis. The conclusion provides a brief summary. I start with the firm-level and try to widen the perspective by bringing it up on a state-level. At the end, some possibilities for future research are suggested.
2. THEORY

The first part of this chapter is an explanation of some of the basic structures of the economy – firms and institutions and why they exist. The next sections are centered on firm-level theory about FDI. Dunning’s eclectic paradigm is presented before focusing on localization factors and the motives for investing abroad. There are two main motives: market oriented and asset oriented investments, where ‘new’ motives are associated with agglomerations and clusters. After exploring the motives, Dunning’s concept of the investment development path is introduced to emphasize the role of the government and the bureaucracy in attracting FDI. Hypotheses are introduced in connection with the relevant theory. At the end, the theory is operationalized into four categories: economic factors, economic institutions, general policy and sector-specific policy (see Figure 2.1 and Table 2.1). Table 2.2 provides a summary of the 12 hypotheses derived from the different theories. The four categories and the 12 hypotheses will later guide the analysis.

2.1 The Firm: Cost and Profit

The most fundamental ‘rule’ of capitalism is the drive for profit (Dicken 2007: 107). Business firms may have other motives, such as becoming the industry leader or increasing their market share, but in the end, economists argue that the most important is the maximization of expected profits. The economic definition of profit, \( \pi \), is revenue minus cost (Varian 2006: 335):

\[ \pi = r - c \]

Cost includes all of the factors of production used by the firm valued at market price. These are also referred to as opportunity costs, what labor or production factors would be worth on the competitive market.

According to Coase (1937: 388-389), the distinguishing mark of a firm is its supersession of the price mechanism. The price mechanism coordinates the economic system, or in other words, the market. Outside the firm production is coordinated through a series of exchange transactions on the market, but within a firm, the same market transactions are eliminated. The market structure is substituted by the
entrepreneur who directs production. The coordination of the various factors of production, or the degree of vertical integration, varies greatly between industries and firms (Coase 1937: 389).

In the article, Coase (1937: 390-393) is explaining why a firm emerges in a specialized exchange economy. The main reason is the costs connected to using the price mechanism. The existence of the firm reduces these transaction or information costs. One example is the costs that arise when negotiating and concluding a contract; these can be avoided to a certain degree by the integration of factors of production. Another is the difficulty of knowing what a supplier will do, especially for long term contracts. These reasons explain why organizations such as firms exist in a market economy. Coase (1937: 393) states that: “A firm, therefore, consists of the system of relationships which comes into existence when the direction of resources is dependent on an entrepreneur”.

On the other hand, there are also costs involved when internalizing activities. A large firm reduces transaction costs, but why isn’t there only one big company that produces everything? A firm will stop expanding when the costs of organizing an extra transaction within the firm is equal to the costs of carrying out the same transaction by exchange on the open market, or by another firm (Coase 1937: 394-395). Varian (2006: 338) calls this the boundaries of the firm, the choice between ‘make or buy’ everything from physical goods to services. What is typically inside the firm changes with technology, and today many firms tend to outsource parts of their operations.

2.2 Institutions and Transaction Costs
As seen above, transaction costs are central to understanding whether exchange takes place on the market or within a firm. However, transaction costs are not exogenous. They are affected by institutions. According to North (1990: 3), “Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction.” Institutions can be both formal and informal, and they affect the economy by their effect on the costs of exchange and production (North
North (1990: 68) agrees with Coase (1937) that vertical integration offers a partial solution to transaction costs. On the other hand, firms may reduce transaction costs to a certain degree, but institutions exist because of transaction costs. “The costliness of information is the key to the costs of transacting, which consists of the costs of measuring the valuable attributes of what is being exchanged and the costs of protecting rights and policing and enforcing agreements” (North 1990: 27). The total production cost to a firm is the sum of transformation costs and transaction costs (North 1990: 28). The institutional framework therefore plays a major role in the performance of an economy; some institutional constraints increase efficiency and some decrease efficiency. Nevertheless, institutions are critical to the relative success of economies (North 1990: 69).

In a hypothetical world where markets are perfectly competitive and there are no increasing returns to institutions, institutions do not matter (North 1990: 95, 108). However, neither of these assumptions is empirically true. First, information is costly and asymmetrically held by the parties to the exchange. This creates transaction costs. Also, regardless of how institutions are developed, they result in some degree of imperfection of the markets. Second, institutions matters because of increasing returns. Both institutions and economic production are marked by increasing returns where four self-reinforcing mechanisms apply (Pierson 2000: 254):

1. Large set-up or fixed costs – creates a high pay-off for further investments in a given technology or for further development of an already established institution.

2. Learning effects – continuing use because of gained knowledge in the operation of complex systems or institutions.

3. Coordination effects – occur when the benefits an individual receives from an activity increase as others adopt the same activity, or when organizations cooperate.

4. Adaptive expectations – this derives from the self-fulfilling character of expectations, both in the economy and in institutions.
Due to increasing returns and imperfect markets, institutions have consequences for economic analysis (North 1990: 110-112). First, institutional constraints provide incentive structures; there is interaction between the rules of the game and the behavior of the actors. Formal constraints like tax structure, regulations and statute laws shape the policies of firms, trade unions and other actors. Second, institutions make it possible to explore the implications of the costly and imperfect processing of information for the behaviors of the actors. Third, the polity and economy are interlinked and the institutional constraints define the exchange relationship between the two. An integration of political and economic aspects is therefore often necessary, also for analysts studying the behavior of economic actors, like firms.

2.3 Dunning’s Eclectic Paradigm
The eclectic paradigm, as John H. Dunning (1980) has named it, is an attempt to synthesize different theories into one framework. The paradigm seeks to understand and explain the ‘where’, ‘why’ and ‘how’ of international production. The purpose is to explain the international production of all firms from a particular country or group of countries (Dunning 2001: 186). Dunning has many forerunners, including Stephen Hymer’s (1971) contribution concerning corporate hierarchy, FDI and unequal distribution and Raymond Vernon’s (1966) work about market size and product cycle.

An enterprise’s capability of supplying a domestic market depends on possessing certain assets, both tangible and intangible assets such as natural resources and knowledge (Dunning 1988: 19). The assets are available to all firms, but can be location-specific in origin and use, and they also include government legislation and policies. According to North (1990), institutions like government legislation affect the relative success of economies, and this will be discussed in the section concerning the role of government and bureaucracy. Three types of factors or conditions that lead to FDI are identified in the paradigm (Dunning 1980, Dicken 2007: 108-110):

1. Ownership-specific advantages (O) – a firm must possess certain advantages that are not possessed by other firms or nationalities, advantages that are
internal and owned by a firm. Some examples are types of knowledge, technology, marketing and human skills.

2. Location-specific factors (L) – these factors make it more profitable for the firm to exploit its assets in foreign locations; the assets also have to be used at these locations. Some of these factors are markets, resources, production costs, political conditions and cultural/linguistic attributes. The significance will vary according to the type of activity involved.

3. Internalization (I) – the advantages must be exploited by the firm itself, and it will therefore internalize the use of its ownership-specific advantages. An uncertain environment will lead to more internalization, especially in the case of knowledge. If a company uses a large amount of capital on research and development, it has a strong incentive to retain the technology for in-house use by setting up its own production facilities and exploiting the technological advantage directly.

The two first factors may explain which firms will supply a certain market and whether it will do so by exporting, or by local production. However, they cannot explain why the firm itself chooses to do it and not sell or lease the ownership advantages to another firm. To explain this, one has to bring in the third factor, the internalization of ownership-specific advantages. The greater these advantages are, the greater the inducement to internalize them, and the greater the likelihood for the firm to engage in international production (Dunning 1980: 9-11). Dunning does not agree with Coase that reduction of transaction costs is the only reason for internalization of production (Dunning 1988: 6). Other reasons might be to improve a company’s value-adding capabilities, and/or exploit a monopolistic position. According to Dunning (1988: 33), internalization is the distinctiveness of the eclectic paradigm.

L-specific endowments are external to a firm while O-specific endowments are internal. An imperfect market, or market failure, is a prerequisite to strategies based on O advantages. In an imperfect market it is possible to exploit differences. Dunning (1988: 45) distinguishes between two kinds of market imperfections which influence
the location decisions of TNCs; structural and transactional. Transactional market failure relates directly to transaction costs, while structural market failure includes those arising from some kinds of government intervention that may encourage or discourage FDI. Both of these market failures may affect the choice of location since some transactional market failures are country-specific. The two activities that offer the greatest gains from internalization are the production and marketing of intangible assets and those of essential location-specific resources, areas where TNCs are particularly involved. L advantages are important; a country’s resource endowments have a large impact on resource-based investment, but the economic environment also matters for investment decisions (Dunning 1988: 141-145). In the economic environment, there are three factors of crucial importance:

(a) the level of economic development like education and infrastructure
(b) the structure of the economy, pattern and size
(c) and the role of national governments in fashioning political and economic systems, attitudes, entrepreneurship and business strategy

Briefly put, Dunning’s (1988: 26) hypothesis says that firms will engage in international production if and when three conditions are satisfied:

1. The firm possesses O advantages which are exclusive or specific to the firm, at least for a period of time.
2. If (1) is satisfied, it is beneficial for the firm to use these advantages itself through an extension of the existing value added chains or new ones; these are called internalization advantages.
3. If (1) and (2) are satisfied, it must be in the firm’s interest to use the O and I advantages in combination with some factor inputs outside its home country. If not, the foreign markets would be served by export; these are the locational (L) advantages of countries.

To test Dunning’s hypothesis, it is necessary to distinguish between three structural variables which influence enterprises’ OLI configuration; those that are specific to particular countries, to particular types of activities or industries and to particular firms
or enterprises. All of these three levels need to be taken into consideration. The configuration of the OLI advantages is likely to be context-specific, and it will therefore also be country-specific differences in the ownership advantages of firms from different countries (Dunning 2001: 176). Further, Dunning (2001) has argued that the paradigm works best when regarded as a framework for analyzing the determinants of international production, rather than a predictive theory of different TNCs. In line with Dunning, it is the determinants I am analyzing in this thesis with focus on the location-specific factors. Two examples are access to markets and access to resources. The L advantages are presented more in-depth in the next few sections.

2.4 Motives and Localization
Motives for engaging in transnational operations are closely connected to the choice of location. Porter (2000: 265) emphasizes that location is part of the firm’s overall strategy and the choice of location is not always about obtaining low total cost, but also the highest value. Motives are tied to the location-specific factors; after all, these factors most often constitute the motive.

2.4.1 Main Motives
There are several ways of classifying the motives for transnationalizing a company; Dicken (2007: 110) provides a good starting point with two categories, namely market orientation and asset orientation. More or less all motives can be included in one of the two categories. Dunning (2001: 183) has highlighted four FDI motives: natural resource-, market-, efficiency- and strategic asset-seeking motives. All of these motives, except for market-seeking FDI, may be placed in the asset orientation category. Schatz and Venables (2000: 129-132) find two motives for firms to go transnational: to better serve a market and to get lower-cost inputs. They supplement Dicken’s categories by stating that market access is often the reason for horizontal FDI, while access to cheap inputs is more prominent in vertical FDI. Dicken’s (2007: 110-114) overall framework is:
I. Market orientation

Most FDI is designed to serve a specific geographical market by locating inside that market. These market-oriented investments are a form of horizontal expansion across national boundaries, and three aspects of the markets are important:

a. The size of the market. A common measure is per capita income and indicates how the level of demand will vary from place to place.

b. Structure of demand. Different income levels create different demand structures. Increased demand does not affect all products equally, for instance, people in countries with high income spends a high proportion of their income on ‘higher-order’ manufactured goods and services and less on basic necessities.

c. Accessibility. In the past, transport costs played a major role. It is not unimportant today, but not significant for all products since different technologies have reduced transport costs. Political constraints like trade barriers remain essential.

II. Asset orientation

A firm needs various assets to produce and sell its products and services, and these assets are usually unevenly distributed geographically. The most obvious example is the natural resources industry. At the same time, there has been technological change in production processes and transportation, a development that has diminished the significance of the traditionally important factors of production. Access to knowledge and access to labor are now considered the two most important location-specific factors. The trend is apparent in high technological geographical clusters. The knowledge may be based in certain institutions, but much of the attraction of these locations derives from the skills and knowledge embodied in labor. Dicken (2007: 111-112) emphasizes five attributes of labor that show large geographical variations:

a. Knowledge and skills. Depends on the breadth and depth of education and the area’s history of development. One indicator is the variation in educational levels (extent of literacy, enrolment in various stages of
education, public expenditure on education etc.), and education often has a high correlation with the distribution of per capita income.

b. Wage costs. Wage levels differ considerably between countries.

c. Labor productivity. The productivity varies enormously and reflects influences like education, training, skill, motivation and the machinery and equipment in use.

d. Labor ‘controllability’. There are geographical differences in the degree of labor militancy and the extent of labor unions. Union membership has declined markedly in some countries and most firms are wary of highly organized labor.

e. Labor mobility. Labor is less geographically mobile than capital, it is strongly place bound. The strength of these ties varies between different types of labor. Skilled workers are usually more mobile than unskilled workers.

Variations in production costs are significant in the investment-location decision, both for asset-oriented and market-oriented investments (Dicken 2007: 113). There is always a trade-off between the benefits of market proximity and locational variations in production costs, or between input prices and transportation costs. An important consideration is the uncertainty of the level of the future production costs at different locations. In addition, the investment level of a host country may be of significance to investors. According to Solow (1956), economic growth is very strong when countries begin to accumulate capital, but the growth will slow down as the process of accumulation continues. A high level of capital stock in a country will therefore reduce the marginal returns to investment. This will affect the willingness to invest; a firm would want to increase its returns to maximize profits. Dunning (1988: 27) emphasizes a few other important aspects for FDI:

- infrastructure provisions in the host country
- psychic distance
- economies of centralization (clusters)
- the economic system and policies of government
The motives of market orientation and asset orientation lead to a number of hypotheses concerning favorable location-specific factors for FDI. Based on the above discussion of the two main motives, these factors will have a positive effect on FDI: access to a large market, an educated work force, low wages and access to suppliers. A highly unionized work force will have a negative impact on FDI. As Dunning (1988) points out, infrastructure provisions in the host country will affect production costs. A well developed infrastructure will therefore have a positive effect on FDI. The capital density was mentioned last; if one accepts Solow’s (1956) arguments, a high level of investment will have a negative effect on FDI.

2.4.2 The ‘New’ Economic Geography and New Motives

Location advantages, the main focus of the thesis, forms a part of what is called economic geography. Despite globalization, the world is divided in many ways, and we still talk about advanced countries, developing countries and the newly advanced or newly industrialized countries. Whether you call it agglomerations as Krugman or clusters in Porter’s words, the development towards certain centers of business, ‘high-tech’ or not, affects firms’ strategies and adds yet another dimension to the choice of location. To describe these new motives, it is necessary to understand what new economic geography is really about.

*The New Economic Geography*

The ‘new economic geography’ is developed by Paul Krugman. His model was seen as a new departure for this field of study. Many economic activities are concentrated geographically, and Krugman (1998: 8) imagines a tug of war between opposing forces: centripetal and centrifugal forces. Centripetal forces tend to promote concentration, and centrifugal to oppose it. There is no comprehensive list of these forces, but market-size effects (linkages) and thick labor markets are examples of centripetal forces, and immobile factors and land rents are examples of centrifugal forces. All examples of agglomeration reflect both forces; it is merely a question about which force has the upper hand. The assumption of economies of scale or increasing returns, which enforces the geographic concentration of some activities, is central
Production is often seen as taking place in a manufacturing ‘core’ and in an agricultural ‘periphery’, both within a country and between countries.

Even though the market-size effects and immobile factors are emphasized, the market-size effects may not be as important as a source of agglomeration as presumed, at least in urban areas (Krugman 1998: 15). Plants and firms in large cities are usually smaller than those in small cities. Big cities may be sustained by increasing returns because of thick labor markets or knowledge spillovers, rather than those that emerge from the interaction of transport costs and scale economies. So far, empirical work in this area has not been very widespread.

High localization of industries was a striking feature of the process of industrialization. In his book, Krugman (1991: 36-67) calls attention to three reasons for localization, all of them reflecting increasing returns:

- Labor market pooling: a market for workers with specialized skills arises when a number of firms in an industry is located the same place. This benefits both workers and firms in terms of risk minimizing.

- Intermediate inputs: an industrial center allows provision of non-traded inputs specific to an industry in greater variety and at lower costs, and it can support more specialized local suppliers.

- Technological spillovers: information locally flows more easily than over large distances, especially between nearby firms. There are also many non-technological industries with high localization. Spillovers play an important role in some industries, but one should not assume that this is always the main reason, even in the high technology industries.

These cumulative processes are pervasive, and labor pooling and the supply of specialized inputs play a large role in localization (Krugman 1991: 62). Silicon Valley is not unique; it is just the new version of something old. In addition, high technology clusters are often the result of visionary bureaucrats. One of these visionaries is Fred Terman, vice president of Stanford University and ‘the creator’ of Silicon Valley.
Singapore may be another example. I will come back to this in the chapter about Singapore and in the analysis.

Services are part of the localization story; during the last century the labor force employed in services have increased significantly (Krugman 1991: 65-67). Many services are non-tradable, for example daycare providers, while other services are traded non-stop. Some of the largest localizations in the world today are based on financial services, one example is London. Transportation of goods has not become significantly cheaper, but, the ability to transmit information has grown at unprecedented speed.

Krugman (1991: 98-100) emphasizes two points: there are costs to transactions across space and there are economies of scale in production. Economies of scale give the producers an incentive to concentrate production in a limited number of locations, and the costs of transacting influence the choice of location where there is either a large demand or a convenient supply of inputs. Economic geography offers a rethinking of economics, from behavior determined by tastes, technology and factor endowments, to believing that important aspects of an economy are contingent, determined by history and accident, but also by policies.

New Motives

While Krugman writes about agglomerations and localization, Porter presents his view in terms of clusters. Clusters are especially evident in economically advanced areas. Porter (2000: 253) claims that clusters are something different than the traditional agglomerations. Instead of opposing these two views, I would rather like to stress their similarities and view clusters as a kind of extension and complementation of the new economic geography. As with agglomerations, labor market pooling and low-cost intermediate inputs have an important role in clusters: “A cluster is a geographically proximate group of interconnected companies and associated institutions in a

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4 Economies of scale are the cost advantages that a business obtains due to expansion; the concept refers to reductions in unit cost as the size of a facility, or scale, increases.
particular field, linked by commonalities and complementarities” (Porter 2000: 254). It can range from a single city or state to a country or even a group of neighboring countries. Most include end product or service companies, suppliers of specialized inputs, components, machinery and services, financial institutions and firms in related industries. A cluster can also involve a number of institutions, governmental and private, that provide support functions as specialized training and education. Most cluster participants serve different industry segments, but share common needs and opportunities.

Porter (2000: 259) argues that economic agglomerations have shifted in nature, from urban areas and narrowly defined industries to clusters where the advantages rest on external economies or spillovers across firms and industries. Location therefore needs to be integrated in a company’s global strategy. Many firms decide to outsource activities to locations with low wages, low taxes and low utility costs, but, they have lost sight of the importance of location in competitive advantage; it is not just about deciding where to build factories or offices. Two elements are important (Porter 2000: 265-267):

- Locational choices should weigh overall productivity potential. The aim is low total cost or highest value. A shift back toward clusters is beginning among companies who once believed in the cost savings of highly dispersed activities.
- The location determinants vary markedly for different activities. To capture the cost advantages of spreading activities, choice of location should be driven by factor costs and market access. To harnessing the advantages of clusters, choice should be driven by total systems costs and by innovation potential.

Dunning has taken the new motives into consideration in the location decisions of firms. During the 1990s FDI intended to augment O advantages, or competitive advantages, became an important form of cross-border activity (Dunning 2001: 182). This can be seen in the growth of inter-firm strategic alliances. It is not only about exploiting O advantages, it is more frequently also about augmenting these advantages. TNCs are crossing national borders to create or gain access to resources
and capabilities which complement their core advantages. Dunning (2001: 183) calls attention to the fact that some recent studies have

…suggested that the locational requirements of strategic asset-seeking FDI are different from those of natural resource-, market- or efficiency-seeking FDI, in as much as the former is attracted less by the need to reduce production costs, overcome trade barriers, and exploit economies of scale, but more by the presence of high-quality physical and human infrastructure and a favorable political and commercial ethos towards M&As and cooperative alliances.

How do these new motives in the form of agglomerations and clusters affect FDI? According to both Porter and Krugman, a high level of FDI in certain sectors, combined with other institutions and firms, will have a positive effect on FDI in the relevant sectors. Technological spillovers are important for some industries, but the presence of skilled labor (labor market pooling) and a wide range of suppliers (intermediate inputs) are essential elements in clusters. This also strengthens the hypotheses about the positive effect of skilled labor and access to suppliers proposed in the previous section concerning asset oriented motives. On the other hand, according to Solow (1956), a high level of FDI should rather act as a deterrent on FDI. Nevertheless, I keep both hypotheses since clusters focus on a high level of FDI in specific sectors, while the other hypothesis focuses on the general level of investments.

2.5 The Investment Development Path: The Role of Government and Bureaucracy

So far, there has been a particular focus on the firm-level and how the firm views the location advantages. The L factors are not isolated elements; many of them are influenced by policies. A skilled workforce presupposes a high-quality education system. Tax policy affects companies’ cost calculations and hence FDI. It is time to take a wider perspective to see how FDI may fluctuate between countries and across time, and to explore the role of government and bureaucracy in attracting FDI.
Dunning (2001: 180) has developed a theory named the Investment Development Path (IDP) to explain how structural change is connected to FDI patterns:

The basic hypothesis of the IDP is that as a country develops, the configuration of the OLI advantages facing foreign-owned firms that might invest in that country, and that of its own firms that might invest overseas, undergoes change, and that it is possible to identify both the conditions making for the change and their effect on the trajectory of the country’s development.

According to the IDP theory, a country may pass through several development stages, the first one being pre-industrialization where it has no inbound or outbound investment because of insufficient locational attractions and its firms have few or no O advantages (Dunning 2001: 181). The locational attractions will increase by creating a satisfactory legal system, commercial infrastructure and business culture, human resources, and it also depends on the government’s policy towards FDI. By improving the L advantages, one may help indigenous firms to improve their O advantages. The situation can change into one where outward investments become larger than inward investments, but this is a dynamic process depending on the specific OLI configuration. The final stage is reached when there is a fluctuating balance between inward and outward direct investment (Dunning and Narula 1996).

The IDP is based on two premises: there are consistent patterns of structural change in development and these changes have systematic relations with patterns of FDI (Lall 1996: 423). The effects of FDI depend largely on how each country, or its government, is able to improve its market, develop skills and technological resources and extract spillovers from the presence of TNCs (Lall 1996: 425). Taking into consideration initial endowments like size, location and natural resources, the most important influence seems to be that of government policies. Policies can influence the underlying determinants of OLI factors, which in turn determine how and how much each country participates in international production. Dunning and Narula (1996: 25) trace systematic differences between countries to three variables:
1. The extent and nature of the country’s created and natural assets
2. The strategy of economic development
3. The role of government

While institutions are the rules, organizations are defined as the players according to North (1990: 5). Organizations are shaped by institutions, but also shape institutions. They include political bodies, economic bodies, social bodies and educational bodies – groups of individuals bound by some common purpose to achieve objectives. The government is one organization which role has been emphasized as decisive for country’s development, along with choice of strategy. Choice of strategy can often be understood as policy towards FDI and also industrial policy in general. Lall (1996: 440) indicates that there are three broad approaches to FDI: the passive open door policy, pro-active policies to attract and guide FDI to beneficial activities for local development and selective policies to enhance national capabilities. The best example of the pro-active policy is Singapore. Singapore has the highest level of dependence on TNCs in the world and has used many measures to ensure that the country’s development objectives are met. Even though industrial policy is a controversial issue, Rodrik (2004) has argued that one should not reject industrial policy totally, nor consider it a universal remedy. Industrial policy should be viewed as “…strategic collaboration between the private sector and the government with the aim of uncovering where the most significant obstacles to restructuring lie and what type of interventions are most likely to remove them” (Rodrik 2004: 4). Singapore has combined pro-active FDI policy with industrial policy; “Note that these policies were often highly selective and targeted, building up infant industries and promoting indigenous enterprises, and not just ‘market supportive’ in the sense of being non-selective strengthening of market institutions” (Lall 1996: 426). Part of the industrial policy might even be directed towards creating agglomerations and clusters to attract more FDI to specific sectors, and to achieve the economic benefits associated with these types of structures.
At the macroeconomic level, social relational capital is an important factor influencing the location of economic activity by TNCs. The social relational capital is measured by the lack of crime, bribery, corruption and terrorism (Dunning 2001: 186). Corruption can be defined as “the sale by government officials of government property for personal gain” (Schleifer and Vishny 1993: 599). Corruption and political instability negatively affect expected profits and is therefore harmful to business. Decentralized corruption is even worse than centralized corruption – it can lead to a situation where a foreigner must bribe every agency involved in the investment process and increases the risk significantly. Corruption is also highly distortionary because of the necessary secrecy; this secrecy can shift a country’s investments away from the highest value project into potentially useless projects where there are better opportunities for corruption (Schleifer and Vishny 1993: 616). It is essential to avoid corruption among bureaucrats, and politicians, to attract FDI.

The role of the government has been stressed, but the bureaucracy is another important organization. The bureaucracy is the agent who is going to see to that the strategy of the principal, in this case the government, is carried through. Industrial policy is one example where bureaucratic competence is absolutely necessary (Rodrik 2004). It is also an agency of considerable significance for foreign investors. Establishing local production usually involves a variety of additional costs where some are the costs of dealing with foreign administrations, regulations and tax systems (Schatz and Venables 2000: 129). The bureaucracy is the regulator, the enforcer of rules. Firms cannot operate efficiently under massive amounts of red tape or under a court system that fails to resolve disputes quickly and fairly (Porter 2000: 257). With an efficient bureaucracy, a host country is better prepared for dealing with investors, and this is a location advantage in itself.

Max Weber argues for the bureaucracy’s value as one of the institutional foundations of capitalist growth, and a clear separation of public and private property is one of the characteristics of the bureaucracy (Whimster 2004: 245-249). Other characteristics of Weber’s ideal model of bureaucracy include: fixed jurisdiction, a clear hierarchical
organization, written and organized files, specialized training, meritocratic recruitment, full-time career jobs and the existence of general rules. These measures are to ensure competent and motivated people working as bureaucrats and to avoid corruption. The ideal bureaucracy optimizes efficiency and pursues impartiality in place of favoritism. Evans (1995) builds on Weber’s analysis and looks at how the structure of bureaucracy and state-society relations influence the effect of industrial policy. Evans (1995: 40) argues that it is the lack of bureaucracy that undermines development. It is crucial that the bureaucracy has autonomy; that is the ability to shape and implement its own goals. However, to be able to do this, the bureaucracy also needs to keep in touch with the rest of the society through a process of information feedback. On the basis of this, Evans (1995: 50) defines the expression ‘embedded autonomy’ as combining “…Weberian bureaucratic insulation with intense connection to the surrounding social structure, offering a concrete resolution to the theoretical debate over state-society relations…”. It is about keeping a fine balance between independence and social ties to achieve development and economic growth.

Singapore and the other East Asian newly industrialized countries (NICs) are used as examples of the correct ‘developmental state’. If there is no autonomy, the result may be corruption that is harmful to FDI, and without embeddedness, there might not be an interest in promoting development (Evans 1995: 59).

It is a multifaceted picture, from where I will propose a few hypotheses. Policies influence FDI both through general policy like tax, but also through industrial or sector-specific industry (Dunning and Narula 1996, Rodrik 2004, Lall 1996). Low corporate tax and other cost-reducing government interventions will have a positive influence on FDI, and sector-specific industry policy will also have a positive effect on FDI. According to the discussion above, a system characterized by enforcement of property rights, rule of law and of control of corruption and crime will have a positive effect on FDI (Dunning 2001, Porter 2000, Schleifer and Vishny 1993). Last, but not least, an efficient bureaucracy will have a positive effect on FDI (Rodrik 2004, Evans 1995).
2.6 Operationalizing Theory and Summary of Hypotheses

I argue that all the theoretical frameworks presented above are relevant for the research question raised in this thesis. They all contribute to the understanding of why investors seek out specific locations, and what governments conversely must do to attract FDI. How is it possible to combine all this knowledge and theories? How do the different factors affect each other? The focus of the thesis is location-specific variables in the shape of political and economic factors. These factors are highly interconnected and the direction of causality may go either way. I have decided to concentrate on a few relationships:

Figure 2.1: Causal Model

According to North, institutions are ‘the rules of the game’ (1990). Political and economic institutions therefore comprise laws and regulations, both concerning politics and the economy. These institutions affect the economic factors and policy, which again affect FDI. Policy also influences FDI directly and indirectly. Education policy affects FDI indirectly through the workers’ level of skills, defined as part of the economic factors, while tax policy affects FDI directly.

To operationalize this model, the two categories business environment and policy environment provide a good starting point. Business environment has been divided into economic factors and economic institutions. Economic factors comprise the traditional motives of market and asset orientation. Economic institutions include rules and laws, but also level of corruption and the bureaucracy. Even though the bureaucracy is considered an organization, I have placed it as part of the economic institutions. Organizations like the government and the bureaucracy affect institutions,
and the bureaucracy is the enforcer of many rules and regulations. The economic institutions therefore decide the rules of the game in the marketplace. Policy environment is made up of general policy and sector-specific policy. General policy encompasses regulations such as tax and customs, while sector-specific policy includes industrial policy and R&D policy. In Table 2.1, it is possible to see the operationalizing of the factors.

Table 2.1: Operationalizing Political and Economic Factors

<table>
<thead>
<tr>
<th>Business Environment</th>
<th>Economic Institutions</th>
<th>Policy Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Factors</td>
<td>Economic Institutions</td>
<td>General Policy</td>
</tr>
<tr>
<td>Market size: national and regional</td>
<td>Rule of law</td>
<td>Tax and government incentives</td>
</tr>
<tr>
<td>Labor: wages, unions and education level</td>
<td>Property rights</td>
<td>Customs</td>
</tr>
<tr>
<td>Input prices: access to suppliers</td>
<td>Control of corruption and crime</td>
<td>Investment treaty</td>
</tr>
<tr>
<td>Level of investment/capital scarcity</td>
<td>Bureaucracy</td>
<td></td>
</tr>
<tr>
<td>Infrastructure and access to land</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sector-specific Policy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Industrial policy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R&amp;D (cluster effects)</td>
</tr>
</tbody>
</table>

Singapore has very few natural resources; some would say none while others would point to the advantage of location. There is no investment treaty between Singapore and Norway. These two relationships are therefore not considered. The theories presented earlier in the chapter are the basis for the hypotheses, and the hypotheses are structured according to the operationalization of the political and economic factors. The hypotheses will be used to evaluate the case of Norwegian FDI in Singapore. In the thesis I will investigate the 12 hypotheses already presented: seven for economic factors, two for economic institutions, one for general policy and two for sector-specific policy in Table 2.2.
### Table 2.2: Hypotheses

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Factors</td>
<td>I</td>
<td>A large market size will have a positive effect on FDI.</td>
</tr>
<tr>
<td>Economic Factors</td>
<td>II</td>
<td>A highly educated work force will have a positive effect on FDI.</td>
</tr>
<tr>
<td>Economic Factors</td>
<td>III</td>
<td>Low wages will have a positive effect on FDI.</td>
</tr>
<tr>
<td>Economic Factors</td>
<td>IV</td>
<td>A highly unionized work force will have a negative impact on FDI.</td>
</tr>
<tr>
<td>Economic Factors</td>
<td>V</td>
<td>Access to suppliers will have a positive effect on FDI.</td>
</tr>
<tr>
<td>Economic Factors</td>
<td>VI</td>
<td>A high level of investment will have a negative effect on FDI.</td>
</tr>
<tr>
<td>Economic Factors</td>
<td>VII</td>
<td>A well developed infrastructure will have a positive effect on FDI.</td>
</tr>
<tr>
<td>Economic Institutions</td>
<td>VIII</td>
<td>A system characterized by enforcement of property rights, rule of law and of control of corruption and crime will have a positive effect on FDI.</td>
</tr>
<tr>
<td>Economic Institutions</td>
<td>IX</td>
<td>An efficient bureaucracy will have a positive effect on FDI.</td>
</tr>
<tr>
<td>General Policy</td>
<td>X</td>
<td>Low corporate tax and other cost-reducing government interventions will have a positive effect on FDI.</td>
</tr>
<tr>
<td>Sector-specific Policy</td>
<td>XI</td>
<td>Sector-specific industrial policy will have a positive effect on FDI (in the targeted sectors).</td>
</tr>
<tr>
<td>Sector-specific Policy</td>
<td>XII</td>
<td>A high level of R&amp;D in certain sectors, along with other institutions and firms (clusters), will have a positive effect on FDI in the relevant sectors.</td>
</tr>
</tbody>
</table>

The firms must always balance the maximization of expected profits against the risk of investing. The risk of investing depends on the factors in Table 2.2. Although there are many factors that influence the choice of location, different firms have different motives and will rank the factors according to the individual firm’s perception of risk and profit.
3. **NORWEGIAN FOREIGN DIRECT INVESTMENT**

As mentioned in the introduction, Norway has become a home country for sizeable amounts of FDI. In this chapter I will briefly sketch recent developments in FDI according to UNCTAD’s World Investment Report 2008. Increases in Norwegian outward FDI is not an isolated incidence, it is part of increasing FDI flows on a global scale. After an overview of the global FDI pattern, focus turns to Norwegian FDI and earlier findings and research on this subject. First, the overall size and the trend of the investments are presented, including the geographically distribution of Norwegian FDI in regions and host countries. Second, the pattern is broken down into sectors, industries and companies to identify the characteristics of Norwegian TNCs. This information will be used in the analysis to see if the data in this thesis is in agreement with previous research, and what this may tell us about Norwegian FDI.

### 3.1 FDI: World Pattern

FDI reached a new record high in 2007 with inflows of $1,833 billion, corresponding to 30% growth, surpassing the all-time high set in 2000 by some $400 billion (see Figure 3.1). All three major economic groupings, as classified by UNCTAD; developed countries, developing countries and the transition economies of the Commonwealth of Independent States (CIS), experienced growth (WIR 2008: 3). The rise in FDI reflected a general high economic growth from 2006 to 2007 and strong economic performance, especially increased corporate profits of both parent firms and foreign affiliates. The growth was driven by cross-border mergers and acquisitions (M&As) and greenfield projects. M&A activity expanded while the number of greenfield projects decreased from 12,441 in 2006 to 11,703 in 2007 (WIR: 2008: 4). In the first quarter of 2008, the crisis and therefore the subsequent more cautious lending behavior of banks hampered M&A financing. The number of greenfield projects stayed at the same level as the first quarter of 2007 (WIR 2008: 5). The economic crisis has led to liquidity problems, and this will affect FDI flows at the macroeconomic level (WIR 2008: 18).
Even though all regions saw record inflows and outflows in 2007, the high growth rates reduced the share of *developing countries* of FDI inflows from 29% to 27% and their share of FDI outflows from 16% to 13% (WIR 2008: 7-8). FDI inflows to South, East and Southeast Asia and Oceania increased 18% to $249 billion, half of all FDI going to developing economies. This region has also become a significant source of FDI outflows with outward FDI of $150 billion in 2007. FDI inflows to *developed countries* reached $1,248 billion, 33% more than in 2006, and FDI outflows grew with 56% to $1,692 billion. The United States retained its position as the largest FDI recipient country and the largest source of FDI. The European Union continued to be the largest host region within the group of developed countries (WIR 2008: 7).

Sovereign wealth funds (SWFs) have recently emerged as direct investors. These funds have about $5 trillion under management, but FDI amounts are relatively small. In 2007, FDI by SWFs was only $10 billion; 0.2% of their total assets and 0.6% of total FDI flows (WIR 2008: 20-21). Their acquisitions are normally portfolio investments, less than 10% ownership – the threshold for FDI investments. Almost 75% of the funds’ FDI has been invested in developed countries, usually into the services sector. The Government Pension Fund of Norway, one of 70 government
funds, is considered the “gold standard” of governance of SWFs because of its concern and achievement within accountability, transparency and professionalism (WIR 2008: 26).

If one looks at the world sectoral pattern, there has been an increase in FDI flows to the primary sector, mainly the extractive industries, but the services sector still accounts for the largest share of global FDI stocks and flows. The share of manufacturing has continued to decline. The services sector’s share is 62% of estimated world inward FDI in 2006. Trade, financial services and business activities continue to account for a large proportion of FDI in the services sector, but infrastructure have begun to attract increasing shares of FDI (WIR 2008: 9).

3.2 FDI: The Norwegian Pattern
Grünfeld emphasizes that Norwegian ownership abroad takes place primarily through portfolio investments, different kinds of loans and FDI (2005: 8). The Government Pension Fund of Norway (also known as the Petrolum Fund of Norway) is worth over NOK 2,000 billion (NBIM 2009). When one looks at Norwegian investments from 1995 to 2003, about 2/3 of Norwegian capital invested abroad was portfolio investment and 1/3 FDI (Grünfeld 2005: 10).

3.2.1 Overall and Regional Pattern
Norwegian outward FDI, on a large scale, is a relatively new phenomenon. In the 1980s Norwegian outward FDI started to grow mainly due to the offshore oil industry producing a capital surplus (Hveem et al. 2008a: 1-2). In 1995, outward FDI stock overtook inward FDI stock, and during the period 1998 to 2005 outward FDI stock grew by 179% and reached USD 98 billion (NOK 665 billion, 36% of GDP). In the period 1998-2005, outward Norwegian FDI increased by 16% on average annually (Hveem et al. 2008a: 4). The growth was weak in the period 2001-2004, but the strong increase continued in 2005 (SSB 2009a). On the other side, the interest in Norway from foreign investors has begun to fade (Heum 2004: 58). The total number of Norwegian affiliates abroad is about 5,200. Even though a large part of Norwegian
FDI has gone to M&As, the numbers indicate that Norwegian FDI are relatively more oriented towards greenfield investment than the OECD average (Grünfeld 2005: 11). The oil sector makes up about one third of total FDI from Norway.

The growth of Norwegian companies abroad is a development that has also taken place in Sweden, Denmark and Finland (Heum 2004: 57). This is demonstrated in Table 3.1. Despite the increase, Norwegian companies lag behind its neighboring countries when comparing FDI stocks; the other Nordic countries have invested abroad in an even larger degree than Norway.

Table 3.1: FDI Stock abroad – a comparison of Norway, Denmark, Finland and Sweden 1990-2007

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway</td>
<td>9.4</td>
<td>27.7</td>
<td>36.2</td>
<td>34.1</td>
</tr>
<tr>
<td>Denmark</td>
<td>5.4</td>
<td>45.7</td>
<td>54.1</td>
<td>53.3</td>
</tr>
<tr>
<td>Finland</td>
<td>8.0</td>
<td>42.8</td>
<td>45.1</td>
<td>46.2</td>
</tr>
<tr>
<td>Sweden</td>
<td>20.9</td>
<td>50.2</td>
<td>66.7</td>
<td>67.8</td>
</tr>
</tbody>
</table>

Numbers as a percentage of gross domestic product (UNCTAD 2009b).

The regional distribution of Norwegian FDI stock has been highly concentrated, but the trend has been towards less concentration; in 1997, 92% of the stock was located in OECD countries, while at the end of 2005 the share was reduced to 75%. The share of Western Europe dropped from about 70% in 1999 to just above 50% in 2005 (see Table 3.2). This decline was driven by a substantial investment surge in other regions, for example Asia (Hveem et al. 2008a: 6).
Table 3.2: Regional Shares of Outward Norwegian FDI Stocks 1969-2005

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Europe</td>
<td>73.3</td>
<td>67.2</td>
<td>68.3</td>
<td>65.5</td>
<td>72.4</td>
<td>61.9</td>
<td>51.3</td>
</tr>
<tr>
<td>Eastern Europe/Former Soviet Union</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6.7</td>
<td>1.8</td>
<td>3.2</td>
<td>7.4</td>
</tr>
<tr>
<td>Middle East/North Africa</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>0.6</td>
<td>0.6</td>
<td>2.2</td>
</tr>
<tr>
<td>Africa South of Sahara</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>2.9</td>
<td>2.9</td>
<td>3.6</td>
</tr>
<tr>
<td>North America</td>
<td>16.7</td>
<td>15.3</td>
<td>19.6</td>
<td>14.4</td>
<td>15.3</td>
<td>16.9</td>
<td>19.9</td>
</tr>
<tr>
<td>Central and South America</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>3.2</td>
<td>3.7</td>
<td>3.2</td>
</tr>
<tr>
<td>Asia</td>
<td>6.7</td>
<td>10.3</td>
<td>9.5</td>
<td>16.6</td>
<td>2.5</td>
<td>4.8</td>
<td>8.2</td>
</tr>
<tr>
<td>Oceania</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.3</td>
<td>3.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Caribia</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>1.0</td>
<td>2.1</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Table taken from Hveem et al. (2008a).

Norwegian FDI is also concentrated in certain host countries; in 2005 the five largest host countries made up about 49% of total FDI and the 10 largest 73% (Hveem et al. 2008a: 6). Norway’s neighboring countries have continued to be among the most important destinations of outward FDI. The trend though, has been toward less concentration also at the national level. New host countries include Singapore which experienced an annual average growth of 47% of Norwegian FDI between 1998 and 2005 (Hveem et al. 2008a: 7). Other countries that experienced a large influx of Norwegian investments were Canada, Angola and Azerbaijan, but these can be explained as petroleum-related investments. In addition to geographical proximity, Selfors (1999: 47) calls attention to the role of economic proximity or similarity, in line with the convergence hypothesis; FDI tends to be more important relative to trade between relatively similar countries with respect to size, relative endowments and technologies.
3.2.2 Sectors, Industries and Companies

Norwegian internationalization has been characterized by natural resource extraction and exports and of international shipping (Hveem et al. 2008a: 10). This makes Norway different from other typical Western European countries where banking, insurance and financial services make up a large share of outward FDI. Norwegian companies in these sectors have made small investments abroad, but outward Norwegian FDI has grown by an average of 29% annually in the finance branch during the last couple of years. In 2001, FDI in the industry sector constituted 40% of Norwegian FDI, oil 20% and services 40% (Grünfeld 2005: 12). The 40% share of total Norwegian FDI abroad in the services sector is noticeably less than the global average of 62%. Industries like pulp and paper, ship building, oil and gas, chemical products, shipping and telecommunications represent the greater part of the investments. This suggests that Norwegian companies are following a niche strategy, and that they are very active in certain market segments (Hveem et al. 2000: 27). These investments are also characterized by a few large investors, mostly small and medium sized enterprises (SMEs) since the largest Norwegian companies are not controlled by foreign owners, but the state. The outward FDI of state-owned companies has grown at 18.4% annually (Hveem et al. 2008a: 10).

In Western Europe there are three dominant industry groups among the Norwegian subsidiaries: wholesale and retail trade, manufacture of consumer goods and manufacture of engineering products (Selfors 1999: 45). In North America and Asia, engineering industries and commercial activities account for the major part of Norwegian FDI. Benito et al. (2002) describe the top 10 privately owned Norwegian companies as an “eclectic collection”; most of the companies are rather “old-fashioned” conglomerates that operate in a variety of industries and product categories. Selfors (1999) also finds it difficult to distinguish a Norwegian pattern among the 70 companies included in her survey; the variety of sectors is quite large.

If one goes from looking at sectors to looking at the firm level; what characterizes Norwegian TNCs? First and foremost, Norwegian corporations remain large in
Norway, but they are quite small in a global perspective (Hveem et al. 2000, Selfors 1999). The ten largest Norwegian companies (excluding state-owned), compared to other small countries like Sweden and the Netherlands, are predominantly small (Benito et al. 2002: 72). Second, FDI is heavily concentrated among a few large Norwegian companies. The five largest corporations account for about 70% of Norwegian FDI, the 20 largest make up more than 85% (Grünfeld 2005: 13). Very few of these have foreign majority ownership and none of the top five. The five largest companies’ are either majority owned by the state or have a dominant Norwegian owner. Third, the companies are also characterized by belonging to capital intensive industries, which again explains their high volumes of FDI. Fourth, Norwegian companies have also become transnationalized (Heum 2005: 56). The development of the 30 largest industry corporations in Norway in the period 1980 to 2000 was studied, measuring share of sales and employment abroad as indicators of transnationalizing. Both indicators show considerable increases: share of the companies’ sales abroad rose from 53% in 1980 to 78% in 2000, while share of employees abroad rose from 9% in 1980 to 59% in 2000. The change is especially evident in the share of employees abroad. In 1980, most companies had more than 90% of their employees in Norway, but in 2000 over half of the companies’ employees were workers abroad.

It is also worth mentioning that a large share of Norwegian TNCs’ operations are undertaken abroad, and a major part of foreign sales takes place in their subsidiaries (Selfors 1999: 73). R&D and headquarters are primarily localized in Norway, but there is a development toward internationalizing strategic activities (Benito et al. 2002: 75). For example, the number of division or business area headquarters located abroad increased from 1 to 27 for Norwegian companies in the period 1990-1999. The main motive for FDI seems to be market access (Selfors 1999, Benito et al.2002, Heum 2004). Other important motives are lower costs and access to resources. In Selfors’ (1999: 70) study, 88% of the companies stated that market access was an important motivation factor behind the establishment of the subsidiaries. In comparison, access to skilled labor was important in 32% of the establishments. The significance of market access is also clearly stated in the case of Singapore; the city-state is described
as the gateway to Southeast and East Asia for Norwegian companies, an entrance to a giant market which is rapidly developing (Gisnås 1995).

3.3 Summary
Norwegian outward FDI increased 16% on average annually in the period 1998-2005. The period 2001-2004 was characterized by a weaker growth in Norwegian FDI, reflecting the global FDI pattern where FDI again began to increase in 2004 (see Figure 3.1). Global M&A activity has expanded, but Norwegian FDI is relatively more oriented towards greenfield investment than M&As. Another difference is the sector composition; the service sector accounts for the largest share of global FDI stocks and flows, about 60%, while Norwegian FDI consists of 40% manufacturing, 20% oil and 40% services. Norwegian investments abroad have been characterized by natural resource extraction and exports, and of international shipping, not services as in many other European countries. In addition, Norwegian FDI is very concentrated in a few regions and a few countries, but the trend is towards more diversification geographically. Norwegian companies are large in Norway, but rather small on a global scale, and FDI is heavily concentrated among a few large companies. The predominant motive for Norwegian companies to invest abroad seems to be access to markets.
4. **SINGAPORE: HISTORY AND DEVELOPMENT**

How did Singapore manage to achieve a growth rate of 8.5% per annum from 1966 to 1990 – was it truly an Asian miracle or only a myth as Krugman (1994) argues? In less than 30 years the employed share of the population went from 27% to 51%, the educational standards were heavily upgraded and Singapore made an enormous investment in physical capital. Krugman (1994:80) compares the Asian growth with the growth of Warsaw Pact nations in the 1950s and describes Singapore’s development as based on “…a mobilization of resources that would have done Stalin proud”. The growth is according to Young (1995) mainly due to the increase in inputs, such as labor, physical capital and human capital, and not due to increased economic efficiency. This does not mean that increases in economic inputs of the scale witnessed in Singapore are easy to achieve; it is based on one-time changes and an impressive mobilization of resources.

This chapter gives an overview of Singapore’s history with focus on the economic development and an assessment of the situation today. First, I will present Singapore’s economic development starting in the 1870s. This is to show that development in Singapore is not an entirely new phenomenon, but has roots further back in time than the 1960s (Huff 1994). Second, I will briefly review the country’s current situation and take a look at challenges ahead, both internal and external. The purpose is to understand how Singapore has been and still is able to attract FDI, and what kind of location advantages the country has to offer Norwegian companies.

4.1 **A History of Location**

In 1819 Singapore was incorporated under the British Empire. Sir Stamford Raffles, known as the “Father of Singapore”, described the position of the British station as combining the best geographical and local advantages (Huff 1994: 8). Singapore developed first as an entrepot port for the Malayan region, a trading post where merchandise can be imported and exported without paying import duties. The port was considered ‘the gate of the East’, and the combined role of entrepot and a port of call led to an explosive growth; the average trade growth between 1870 and 1937 was
3.3% (Huff 1994: 11-12). Singapore’s growth until the 1960s depended largely on three staple exports from the Malayan region; tin from Malaya, rubber from Malaya and Indonesia (Netherlands India) and petroleum exports from Indonesia. Huff (1994: 14-22) argues therefore that the development of Singapore is best analyzed as that of a staple port, at least until the beginning of the 1970s. Singapore was one of only a few ports that grew due to economic specialization, and was transformed into a commercial center. Business interests in Singapore became intertwined with the interests of the hinterland producers, in contrast to entrepot ports like London with only weak links to producers.

Singapore was rather detached from its hinterland, both politically and ethnically – it grew as a Chinese city under British rule (Huff 1994: 26). The Japanese occupation of Singapore during World War II was an embarrassing defeat for the British and was followed by independence in 1959 (Store Norske Leksikon 2009). The People’s Action Party (PAP) won Singapore’s first election as a self-governing state (Huff 1994: 28-30). The PAP is still in power today, and Singapore can therefore be described as a one-party state. In 1963 the Federation of Malaysia was formed comprising the Malayan Peninsula, Singapore and Sarawak and Sabah (former British Borneo except for Brunei). By including British Borneo, the federation prevented a Chinese dominance. The new state was a compromise involving recognition of Singapore’s economic position and its Chinese population (76%), but political differences and mistrust escalated. In August 1965, the federation between Malaysia and Singapore came to an end.

Economically, Singapore faced two problems in the 1960s: lack of capital formation and unemployment (Huff 1994: 33). The World Bank recommended a program of import-substitution industrialization (ISI) led by private capital investment, and an extensive role for the state in attracting and supporting that investment (Rodan 2001: 143-145). The subsequent development plan followed the recommendations and led to

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5 Staple denotes a raw material or resource-intensive good central to the exports of a region (Huff 1994: 14).
6 Lee Kuan Yew was prime minister from 1959 until 1990, followed by Goh Chok Tong to 2004. In 2004 Lee Hsien Loong, the son of Lee Kuan Yew, took over (Store Norske Leksikon 2009).
the introduction of the Economic Development Board (EDB). However, the unemployment continued to rise and the situation resulted in a re-evaluation of the ISI strategy. The solution seemed to be export-oriented industrialization (EOI), a strategy already embarked upon by Hong Kong and Taiwan (Rodan 2001: 145). An EOI strategy would require close attention to labor costs. The government set about to blunt independent labor by marshalling the PAP-affiliated National Trades Union Congress (NTUC). The institutionalizing of government intervention in the labor market continued in 1972 with the adoption of the National Wages Council (NWC). The EDB assumed a greatly enhanced role in coordinating the government’s investment drive and a range of specialized institutions were established: the Jurong Town Corporation (JTC) in 1968 to take responsibility for the industrial estates, the Development Bank of Singapore (DBS) to provide finance, and the Central Provident Fund (CPF) and the Post Office Savings Bank to support domestic savings. A great part of the compulsory domestic savings was invested in physical and social infrastructure. All of these institutions would continue to assist in Singapore’s development. The government had set about a conscious effort to affect the costs of the different factors of production; “…the government was helping to shape Singapore’s comparative advantage in the production of labour-intensive manufactures” (Rodan 2001: 146).

The EOI strategy was a success, manufacturing became the economy’s leading sector, and Singapore could no longer be described as a staple port (Huff 1994: 34). The contribution of manufacturing to GDP increased from 15% in 1965 to about 23% in 1974, the unemployment rate fell to 4% and the economy experienced double-digit growth during the same period (Rodan 2001: 146). The industrialization of Singapore was the key to economic growth, and it was helped by drawing FDI to the country. Government owned enterprises engaged in alliances with TNCs, and the alliance formed the crucible of *Singapore Incorporated* (Haley et al. 1996: 18). The process was fostered by transnational companies mainly from the United States, United Kingdom and Japan. Higher costs in these countries made companies look for cheaper production sites overseas, something Singapore could offer (Kai-Sun et al. 2001: 6).
By 1978 labor shortages posed a serious problem and the government shied away from increasing the number of guest workers (Rodan 2001: 146-148). The choice fell on a two-pronged strategy: to increase technological sophistication and raise the contribution of manufacturing to the economic growth. Measures to discourage unskilled, labor-intensive production were implemented through the ‘corrective wages policy’ of NWC that led to large wage cost increases. At the same time, the companies were encouraged to technological upgrading through incentives and training schemes. The process led to a further dismantling of the unions’ power, the two largest trade unions were divided into nine industry-based unions. The high wage policy brought with it some significant gains (Rodan 2001: 148-150). Singapore became a global center for the computer disk-drive industry, but there were also structural limits to the expansion of the manufacturing sector. When the economy contracted with 2% in 1985, the first negative growth since the independence, a move towards the services sector was recommended.

Singapore’s new vision for the 1980s was to become ‘a total business center’ and new incentives were introduced. According to Huff (1994: 38), international services became the third growth component along with staples and manufacturing during the 1980s. Financial and business services were the most important aspect of services sector diversification. Comparative advantage in the provision of international services derived from location advantages in linking regional and global markets, just like for the staple port (Huff 1994: 40). To maintain competitiveness into the 1990s, Singapore aimed to promote alliances with knowledge intensive firms and institutions. The goals for 2000 were to strengthen Singapore’s industry clusters, to make the country a node between Asia and the rest of the world, to make local enterprises into successful TNCs and promote regionalization (Haley et al. 1996: 19). To expand Singapore’s regional and global horizons, new government-linked companies (GLCs) were created and offshore initiatives became an important part of the operations of state companies (Rodan 2001: 152-154). The establishment of economic zones in Malaysia and Indonesia was part of the regionalization strategy; the government was creating ‘mini-Singapores’ abroad.
Singapore was affected negatively by the Asian crisis of 1997/98, growth dropped from 8.4% in 1997 to 0.4% the following year (Rodan 2001: 154-156). One cost-cutting measure was the reduction of wages, especially for the lowest-paid workers. The crisis was also seen as an opportunity to enhance regional economic supremacy and extend restructuring. The new vision was to transform Singapore from a regional financial center into an international financial center, which again promoted complementary state initiatives and market reforms to achieve this. The crisis led to the conception of a new economy, a ‘K-economy’ (Knowledge-based economy). However, it was the manufacturing sector that kept Singapore afloat during the recession, particularly the semiconductor industry (Rodan 2001: 156).

### 4.2 Singapore Today and Challenges Ahead

Singapore has been a regular “growth engine” since the 1960s, but what are the main challenges for Singapore in the beginning of the 21st century? As a starting point, a summary of the current situation in Singapore’s business and policy environment is presented in Table 4.1.

#### 4.2.1 Internal

The overriding objective of Singapore is still growth. To grow the economy, there are three options: enlarge the pool of manpower, accumulate capital and improving knowledge, skills and technology (Kai-Sun 2001: 40). Singapore has made extensive use of the two first sources of growth; the work force participation is high (80% of males and 52% of women), the wages are relatively high compared to other countries in the region, the growth of the population is low, the return rate of investment is low and the savings rate high (50%). The cost advantages of Singapore are rapidly eroding due to rising land prices, wages and business costs (Siow Yue 2005: 32). The government is now betting on the third source of growth, namely improving knowledge through the K-economy and the promotion of R&D (Kai-Sun 2001, Rodan 2001).
Table 4.1: Business and Policy Environment in Singapore

<table>
<thead>
<tr>
<th>Business environment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic factors</td>
<td></td>
</tr>
<tr>
<td>Market size: National and regional</td>
<td>The national market is limited with a population of 4.5 million people, but Singapore has an advantageous location in Asia and Southeast Asia – in a fast growing region made up of Malaysia, Thailand, Indonesia and Vietnam.</td>
</tr>
<tr>
<td>Labor: Wages, labor standards, unions and education levels</td>
<td>Wages are controlled through the NWC and NTUC (Pinkney 2005: 134). Wages for skilled workers are relatively high, but lower than in Western Europe (Dicken 2007: 113). Education levels are rising; in 2004 16% of the population had university qualifications (Siow Yue 2005: 39).</td>
</tr>
<tr>
<td>Input prices: Access to suppliers</td>
<td>Access to suppliers is very dependent on type of industry and sectors. The largest manufacturing clusters are electronics and chemicals (Siow Yue 2005).</td>
</tr>
<tr>
<td>Level of investment/ Capital scarcity</td>
<td>Singapore has been investing heavily for decades and with an internal savings rate at 50% and large inward FDI there is no capital scarcity (Kai-Sun et al. 2001: 40). The rate of return for the individual investments in Singapore depends on the industry and the project.</td>
</tr>
<tr>
<td>Infrastructure and access to land</td>
<td>Singapore was ranked as number three in the world in achieving good road standards (Hultgren and Bentzrød 2009). It also has one of the busiest container ports in the world and a large and efficient airport (Changi). Land is scarce in Singapore, but through government agencies as the EDB and the JTC it is possible to find suitable locations. There is also some privately owned property.</td>
</tr>
<tr>
<td>Economic institutions</td>
<td></td>
</tr>
<tr>
<td>Rule of law</td>
<td>The legal system is based on English common law, and Singapore is known for its strict laws and regulations (CIA Factbook 2009).</td>
</tr>
<tr>
<td>Control of corruption and crime</td>
<td>Singapore is ranked at 4th place in the corruption perception index (Transparency International 2009). The government has minimized corruption through control of opportunities and incentives for corruption.</td>
</tr>
<tr>
<td>Property rights</td>
<td>The state is the largest land owner in Singapore; land is leased to companies and inhabitants.</td>
</tr>
<tr>
<td>Bureaucracy</td>
<td>Singapore’s bureaucracy is based on meritocracy and very efficient. The EDB has been described as a “one-stop” service to foreign investors (Kai-Sun et al. 2001).</td>
</tr>
<tr>
<td>Policy</td>
<td></td>
</tr>
<tr>
<td>General policy</td>
<td></td>
</tr>
<tr>
<td>Tax and government incentives</td>
<td>The corporate tax in Singapore is 17% (EDB 2009). There is also a wide range of incentives to encourage foreign investment and research and development activities; a company may be granted tax-free status for a certain period and also lower tax (pioneer and post-pioneer status), double deduction, R&amp;D reserve and Operational Headquarters Scheme (Kai-Sun et al. 2001).</td>
</tr>
<tr>
<td>Customs</td>
<td>All goods imported into or manufactured in Singapore are subject to duties and/or Goods and Service Tax, but also there are various exceptions through customs schemes (Singapore Customs 2009). GST is 7%.</td>
</tr>
<tr>
<td>Sector-specific policy</td>
<td></td>
</tr>
<tr>
<td>Industrial policy</td>
<td>The government intends to maintain a sizeable share of industry in the economy (about 30%) in addition to services (Kai-Sun et al. 2001). The leading industries are electronics, chemicals, precision and transport engineering and biomedical manufacturing. In 2004 services made up 63% of the economy (financial services 11.3%), and manufacturing 27.7% (Siow Yue 2005).</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Singapore wants to strengthen R&amp;D and have identified electronics, chemicals, engineering and alternative energy among many others as industries to be nurtured (EDB 2009).</td>
</tr>
</tbody>
</table>
The major political issue is the unequal distribution of material rewards and the sense of marginalization among the working class and the lower middle class (Rodan 2001: 161-164). Singapore’s ministerial salaries are among the highest in the world and have been repeatedly criticized by the public. This may cause some social unrest in the future. Another related challenge is the future structural unemployment that will affect older less-educated workers in an economy requiring a high level of skills. The NTUC’s capacity to mobilize workers behind the government’s reform agenda will also be put to the test now that opposition calls for more autonomy to trade unions and to minimize inequalities (Rodan 2001: 164).

4.2.2 External

“Without any doubt, the most significant global shift in the geography of the world economy during the past 40 years has been the resurgence of Asia – especially East Asia” (Dicken 2007: 43). After the East Asian financial crisis, it seems like the future is China, and possibly India. China’s growth has made Northeast Asia the most dynamic part of Asia, and this may cause problems for smaller countries in Southeast Asia like Singapore (Dicken 2007: 45). Here, I will concentrate on Malaysia, one of the ‘tiger cubs’, as a possible competitor to Singapore. Malaysia is especially important with regard to Jotun’s investment decision, which will be analyzed later.

Malaysia’s development can be considered both a challenge and an opportunity to Singapore (Kai-Sun 2001: 45). Singapore can invest and help TNCs to invest in Malaysia, but many Singaporeans regard Malaysia as a competitor (see Appendix 2 for a comparison of Malaysia and Singapore). Malaysia has experienced rapid growth at an annual rate of 8.6% since 1990 and manufacturing has been a major driving force. The manufacturing sector is driven by foreign companies. Major industries are electrical and electronic products; food, beverages and tobacco; and chemicals and chemical products – many of the same sectors as in Singapore. In addition, Malaysia has a number of incentives to offer companies; some examples are tax exemption, R&D allowance and tax deduction for export promotion. The manufacturing plants’ operations are based on assembly, while design and research are undertaken elsewhere. Higher wage rates and geographical limitations have forced Singapore to
upgrade to higher value-added activities. The country can no longer remain an offshore manufacturing site for TNCs (Kai-Sun et al. 2001: 46). Malaysia has emerged as a strong competitor in attracting manufacturing. The development of a large container port (Port Klang) that makes shipment of Malaysian exports via Singapore redundant, and the stock exchange in Kuala Lumpur that is several times larger than the one in Singapore, are other examples of business that might be drawn away from Singapore to Malaysia.
5. **DESIGN, DATA AND METHOD**

The purpose of this chapter is to explain the choice of design and to describe the method used to collect the data. Both the qualitative and the quantitative data and methods will be presented and discussed.

5.1 **Case**

The thesis is a case study of Norwegian FDI, more specifically, a case study of Norwegian FDI in Singapore. To find out *why* Norwegian companies decide to invest in Singapore, I have chosen a case study strategy (Yin 2003). Gerring’s (2004: 342) definition of a case study is “an intensive study of a single unit for the purpose of understanding a larger class of (similar) units”. The unit of analysis is Norwegian FDI in Singapore, and by studying this case, I also hope to extend some of the findings to the broader class of Norwegian FDI.

Norwegian FDI in Singapore is a spatially and time bounded phenomenon. It is not a new phenomenon, but the increasing scale of both Norwegian FDI in Singapore and outward Norwegian FDI in general is a recent development. Taking this into consideration, the study is limited to the time period from 1998 until today. In this study the primary unit of Norwegian FDI is broken down into subunits or within-unit cases as defined by Gerring (2004: 344). Such a strategy involves a change in level of analysis; from Norwegian FDI in Singapore to Norwegian companies investing in Singapore. To be able to answer the research question, I analyze the investment decisions of Norwegian companies. When determining what to observe, it is important to have variation on the dependent variable (King et al. 1994: 129). The dependent variable here is the investment decision. By selecting only on the basis of the dependent variable, one may end up with a type of selection bias where it is assumed that any characteristic the selected cases share is a cause (Geddes 2003: 92). To get variation on the dependent variable, I chose to investigate three companies’ investment decisions where two decided to invest in Singapore, while the third company decided not to invest.
The selected firms’ investments are analyzed in light of previously developed theory. The theory functions as a tool for interpreting the analysis (Andersen 1997:68). Singapore’s policies and economy make up the context. There are many variables of interests; I have chosen to divide them into four categories to represent the economic and the political factors. By investigating different firms, I hope to be able to find out something about the cause of Norwegian FDI in Singapore, or in Yin’s (2003: 32) words, I am aiming for analytic generalization. Three firms in different sectors have been analyzed for this purpose. These subunits offer both similar and contrasting situations; similar since the location evaluated for the investments are more or less the same, but different since the companies belong to distinct sectors where the most important factors for investing may differ. In case studies, there is always the danger of making faulty inferences; the relationships between variables within the selected set of cases may not reflect relationships in the entire population of cases (Geddes 2003: 92). This is important to remember when trying to generalize both from the subunits to the case in question, and from the case of Norwegian FDI in Singapore to Norwegian FDI in general.

Methodological and data triangulation are highly recommended by Yin (2003: 97) to improve reliability and validity. I have tried to include both in this study by analyzing descriptive statistics based on a data set, and carry out interviews combined with questionnaires. The two main data sources are interviews and documentation, in form of annual reports, press releases, news articles and other written material. The next sections will deal with this topic in-depth.

5.2 Qualitative Data and Method

Selection

The selection of companies was based on five criteria:

- Nationality
- Investment location (Singapore)
- Time of the investment decision
- Privately owned
- Sector

Based on the discussion in the previous section, the three first criteria had to be designed to include Norwegian companies investing in Singapore after 1998. I decided to focus on privately owned companies and not state owned companies. Much of the earlier research of Norwegian FDI has been done on privately owned companies, and this makes the results of my study easier to compare with earlier results and easier to compare the subunits of my case also. In addition, I was interested in getting companies from different sectors to be able to compare across sectors in the analysis.

The selection involved quite a bit of research on the internet and in annual reports – the Norwegian Business Association Singapore has a very useful register of more or less all Norwegian companies in Singapore at their web site (NBAS 2009). The choice ultimately fell on Pareto, REC and Jotun. Why were these firms and these industries selected? Of course, the time perspective narrows the choices. First, by choosing these three companies both the secondary sector (manufacturing) was represented with REC and Jotun, and the tertiary sector (services) with Pareto. Since there is hardly any primary sector in Singapore, these companies reflect the industry and business in Singapore. Second, financial services account for a large share of global FDI stocks and flows. Norway stands out with a much smaller share of services accounting for outward FDI. Grünfeld (2005: 12) emphasizes that bank and insurance services dominate the FDI statistics in Europe, while constituting a very small part of Norwegian outward FDI. This lack of investment may be due to foreign ownership in the financial business in Norway. In Selfors’(1999: 39) study, the financial sector is not included. Even though financial services are not typical Norwegian FDI, it is part of a global trend and deserves some attention. Third, Norwegian FDI in manufacturing has been characterized by investments in the pulp and paper industry, ship building and chemical products. Jotun as a chemical company is part of the ‘traditional’ pattern, while REC represents a new ‘high-tech’ industry. It is interesting to take a closer look at what kind of interaction there is between these two manufacturing industries and Singapore as host country.
5.2.1 Interview

In a case study, the interview is a very important source of information and it often takes the shape of a guided conversation (Yin 2003: 89). During March I conducted three interviews, one for each of the selected companies. Time, access and resources restricted my interviews to one person per company. This may be a weakness for the validity of the data, but, these persons were key informants. According to Yin (2003), key informants are critical of a study’s success. The interviewees fulfilled the requirements about being both experienced and knowledgeable about the research problem (Rubin & Rubin 2005: 65). They all had a very solid background; experienced with a good overview of the business strategy and business model of the respective companies, and also in possession of extensive knowledge of the investment decisions (see Appendix 3 for detailed presentation of the informants).

The interviews were focused or semi-structured interviews (Thagaard 2002: 85). The interview guide was based on the four categories presented in the theory chapter: economic factors, economic institutions, general policy and specific-sector policy (see Appendix 4). During the interviews, all the topics were covered even if the order was not always followed. This leads to flexibility and a better flow in the interview (Thagaard 2002). In line with Rubin & Rubin’s (2005: 158) advice, I tried to avoid questions that encourage a yes-or-no answer and to focus on questions about how and what instead of the more abstract question of why. The interviews were not recorded, but thorough notes were taken. Recording has its advantages and disadvantages; no information is lost, but, some people find electronic recording distractive and obtrusive (Rubin and Rubin 2005: 111). In these interview situations I decided not to record in order to achieve trust and to have a conversation where the informants felt they could speak openly and freely. To minimize the inevitable loss of information, I always read the notes as soon as possible after the interviews and typed them out while memory was still fresh. In Pareto there were only one employee still working in the firm that had been involved in the investment decision, the CEO in Singapore. The interview was therefore done over the phone by making one introductory call, one interview call and one follow-up call. In addition, some follow-up questions were answered by mail.
Interviews are verbal reports that give targeted and insightful information, but they are subject to common problems of bias, poor recall, and poor or inaccurate articulation. Bias can accrue from poorly constructed questions; there is always a risk of response bias and also of reflexivity. Reflexivity means that the interviewee only gives what the interviewer wants to hear (Yin 2003: 86, 90-92). As an interviewer, I tried to conduct the interviews in an unbiased and reliable way as described in the previous paragraphs. There is always the risk of poor recall, but because of the selection criteria, all of these decisions were made recently. The oldest one was Pareto’s investment decision from 2005/2006, followed by both REC and Jotun in 2007/2008. To strengthen the data, I tried to triangulate with other sources where possible. Especially REC received a lot of attention and therefore I could supplement with press releases and articles.

During the interviews I received some confidential information about the companies, and I also had to take this into consideration when writing the analysis. The confidential information was not pivotal to the main factors I was investigating – it was information at a very detailed level which the companies did not want to make public. To protect the confidentiality, the informants reviewed the presentation of the company data. Another reason for reviewing was to strengthen the accuracy of the study (Yin 2003: 159). Essential facts and evidence are corroborated by letting the informants review the information. The comments I received were useful clarifications of facts and procedures. The informants spoke on behalf of the company, and, with permission, neither are anonymous. This is the most desirable option since the reader is able to recall any previous information about the case and because the case can be reviewed more readily (Yin 2003: 158). In the analysis, the interview data and my interpretation are presented in separate sections to enhance reliability. This allows the reader to draw his/her own conclusions on the basis of the interview data, at the same time as my interpretation is clearly distinguished from that of the informants.

5.2.2 Questionnaire
To triangulate data as recommended by Yin (2003), the interviews were combined with questionnaires. In this study, the questionnaire was only answered by those that
also were interviewed. Unfortunately, I did not get the opportunity to ask other employees in the companies about their assessment of the investment decisions, nor contact other companies to carry out a larger survey like Selfors (1999) did in her study. However, the respondents of the questionnaires occupy key positions in the companies and were fully capable of answering the questions. The respondents were asked to state the main reasons for investing and to rank 14 factors according to how important they were to the investment decision. The ranking made it easier to compare the different companies, and during the interviews, it was possible to follow up the answers and ask the informants for more information as basis for the analysis (Mordal 1989: 41, 112). The questionnaire became a useful complementary instrument to the interviews.

The questionnaire is very short, it simply asks about the respondent’s position in the company, role in the investment decision, the main motives for the investment, how they would describe the business climate in Singapore and ranking of 14 factors. The ranking question was inspired by Selfors’ (1999) work. I expanded the number of questions about motives according to my own research question to include all four categories (economic factors, economic institutions, general policy and sector-specific policy). The market motive was divided in access to national and regional market because of Singapore’s position as a regional center. The scale was divided into 0-4, where 0 meant no significance while 4 meant great significance for the investment decision (see Appendix 5).

5.3 Quantitative Data and Method

5.3.1 Quantitative Data: Collection and Classification
The statistics on outward FDI stock has been compiled annually by Statistics Norway (SSB) since 1998 (SSB 2009a). The figures are based on a survey conducted by the Directorate of Taxes, and supplemented with and compared to information from annual accounts submitted to the Register of Company Accounts. The survey covers foreign enterprises in which a Norwegian investor has direct ownership of 10 percent
or more of the equity, or indirect ownership of 50 percent or more. The definition of FDI is in line with international guidelines (SSB 2009a): “A direct investment is a cross-border investment where an investor intends to establish a long-term financial interest and exert an effective influence on the activities of the investment object.”

The stock statistics on Norwegian direct investment in foreign countries cover 1,300 Norwegian units, with investment in about 5,000 foreign objects. Industrial classification is in accordance with the revised Norwegian Standard for Industrial Classification (SN94) (SSB 2009b). Companies with businesses in several industries are grouped according to the activity that contributes the most to the company's overall value added.

5.3.2 Quantitative Data: Sources of Error and Uncertainty

There are several reliability and validity issues that might affect the analysis. The quality of the statistics is affected by the quality of the register, and the quality of the reported data (SSB 2009a). First, there is always the risk that completed forms contain errors. Second, errors may occur due to the processing of the data at SSB. Third, there may be non-response errors. The statistics are based on both SSB’s data collection through surveys and company reports, but some entities might fail to conform to the reporting obligation. Another difficulty with using surveys is that the format may lead to systematic biases in reporting. One example is underreporting of investment in tax havens (Hveem et al. 2008b: 33). Fourth, not all investments are registered. Full disclosure requirements only apply to comparatively high amounts, and this procedure is implemented to lessen the burden of reporting and processing.

The most central data issue is related to the so-called “intermediate” affiliates, a problem emphasized by Hveem et al. (2008a and 2008b). UNCTAD recommends that FDI data should be compiled on the basis of ultimate host and home economy in addition to those on the immediate basis (WIR 2008: 7). Despite the recommendations, it is common practice to base the compilation on immediate host and home economy,  

### Notes

7 The standard is based on the EU industrial standard NACE Rev. 1 and UN Industrial Standard ISIC Rev. 3.

8 Missing values are coded as zero.
mostly due to feasibility. SSB gathers complementary data from annual reports to at least try to alleviate the problem. Still, this particular data problem will lead to a systematic bias in the statistics; it might look like a specific country is receiving a lot of Norwegian investment, but this is just a temporary stop on its way to the final destination. This issue is taken into consideration in the analysis.

5.3.3 Quantitative Method

The data set includes all Norwegian outward FDI stocks to Singapore in the time period 1998 to 2006\(^9\). By using FDI stocks, the same investment project may be registered over several years. The data is at the firm level, anonymous, but sorted into different categories based on industry classification numbers. During the nine years in question, 873 cases of FDI stocks were registered. 135 of these investments were registered with the value zero\(^{10}\). In total, 738 investments or registered FDI stocks with a value other than zero were made by Norwegian companies in Singapore from 1998 to 2006. The investments were divided into years, and for each year, in different categories according to the classification numbers. There were 61 categories, ranging from one decimal to three decimals, three decimals being the most detailed level. I chose to categorize the data into 26 main industries, corresponding to the industry classification numbers without decimals. The 26 industries were divided into 12 sectors, and in the end, into three. For a comprehensive summary of the categorizing with the 26 industries as a basis, see Appendix 6\(^{11}\). When choosing how to categorize, it was important to balance practicality and the need for keeping companies anonymous. There are at least 130 Norwegian companies registered in Singapore.

I chose to divide the industries into three sectors: manufacturing, services and “offshore”, including both shipping and oil activities. The offshore category is very suitable for Norway as an old shipping nation and a younger oil nation. In addition, the

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\(^9\) The FDI stock statistics are calculated using the formula:
\[ \text{FDI} = \text{Capital stock affiliate} \times (\text{indirect} + \text{direct share of ownership for Norwegian parent}) + \text{net loans from parent to affiliate}. \]

\(^{10}\) 29 missing values were replaced with the value zero, in addition to the already existing 106 entries with the value zero.

\(^{11}\) It was only necessary to specify two categories further, namely number 35 and 71, by looking at the decimal specification of the Norwegian SN94.
12 subcategories are also presented thoroughly to be able to be even more specific about the Norwegian sector pattern in Singapore. The two sectors manufacture of paper and paper products and publishing, and post and telecommunications and computer and related activities were put together with regard to type of industries and anonymity. Both publishing and computer and related activities make up a very small part of their categories.
6. ANALYSIS

In the following sections I will analyze the connection between theory and the four analytical categories presented earlier: economic factors, economic institutions, general policy and sector-specific policy. First, there will be a mostly descriptive analysis of Norwegian FDI to Singapore from 1998 to 2006. The results are presented in various graphs and tables, and the problem of transshipment countries discussed. Second, a brief presentation of the companies is required to get a better understanding of the different sectors and their priorities. Third, the results from the questionnaire is described and analyzed to form a preliminary impression of the companies’ investment decisions. Fourth, all the analytical categories are analyzed in detail. The data for each company will be presented before the material is interpreted and seen in connection to theory, hypotheses and previous research. Last, there will be a review of the results; a summary of the hypotheses (see Table 6.5) and an assessment of the companies’ main motives before returning to Dunning’s eclectic paradigm and the interaction between home country, firms and host country.

6.1 Statistics

In 2006, Norwegian outward FDI reached NOK 754 billion, a 15% increase from 2005 (SSB 2009a). Looking at the sector composition in 2006, other transport activities and post and telecommunications accounted for 15% of Norwegian FDI, oil and gas extraction 29% and manufacturing and mining industries 30%.

6.1.1 Overall Norwegian FDI Pattern in Singapore

Norwegian outward FDI increased 218% from 1998 to 2006 (SSB 2009a). The development of outward Norwegian FDI to Singapore has been even more impressive with an increase of 2,226%, almost 100% on average annually as seen in Table 6.1:

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual increase</td>
<td>-</td>
<td>-42%</td>
<td>713%</td>
<td>64%</td>
<td>-42%</td>
<td>47%</td>
<td>42%</td>
<td>64%</td>
<td>52%</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 6.1: Norwegian FDI Stocks in Singapore 1998-2006 (in NOK billion)
Singapore received 8% of all Norwegian FDI in 2006, and 55% of the Norwegian FDI going to Asia (SSB 2009a). The development is illustrated in Figure 6.1:

![Norwegian FDI Stock in Singapore 1998-2006](image)

**Figure 6.1: Norwegian FDI Stock in Singapore 1998-2006**

(in NOK billion)

The investments decreased significantly from 1998 to 1999, and 2001 to 2002, which indicate that the investment climate was affected by the economic crises during these two time periods.

6.1.2 Norwegian FDI Sector Pattern in Singapore

As described in the previous chapter, the data were categorized into 12 and then three main sectors: offshore, manufacturing and services. The distribution of the three sectors is shown in Table 6.2 and Figure 6.2. There has been large fluctuations in every sector’s share from year to year; offshore reached a low of 15% in 2001 and a high of 62% in 1999, manufacturing made up only 1% of Norwegian FDI to Singapore in 2000 and 41% in 2002 and 2003, and services’ share was 18% in 1998 and reached 77% in 2000. It is particularly interesting to see that investments in services were particularly large in 2000 and 2001, but diminished with about 30% in 2002 after the burst of the ‘dot-com bubble’. Still, it is hard to distinguish a very clear pattern of
investments in these three sectors since Norwegian investments usually are driven by a few large companies, which makes FDI vary considerably.

Table 6.2: Norwegian FDI Stock in Singapore Divided in Three Sectors

(in NOK billion and percentage in parentheses)

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offshore</td>
<td>1.566</td>
<td>0.953</td>
<td>2.735</td>
<td>3.015</td>
<td>3.438</td>
<td>6.726</td>
<td>7.459</td>
<td>13.848</td>
<td>36.318</td>
<td>76.058</td>
</tr>
<tr>
<td></td>
<td>(59)</td>
<td>(62)</td>
<td>(22)</td>
<td>(15)</td>
<td>(29)</td>
<td>(39)</td>
<td>(30)</td>
<td>(35)</td>
<td>(59)</td>
<td>(40)</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.604</td>
<td>0.036</td>
<td>0.135</td>
<td>5.312</td>
<td>4.806</td>
<td>7.154</td>
<td>7.957</td>
<td>13.663</td>
<td>12.661</td>
<td>52.328</td>
</tr>
<tr>
<td></td>
<td>(23)</td>
<td>(2)</td>
<td>(1)</td>
<td>(26)</td>
<td>(41)</td>
<td>(41)</td>
<td>(32)</td>
<td>(34)</td>
<td>(21)</td>
<td>(27)</td>
</tr>
<tr>
<td>Services</td>
<td>0.464</td>
<td>0.538</td>
<td>9.559</td>
<td>12.070</td>
<td>3.496</td>
<td>3.386</td>
<td>9.093</td>
<td>12.611</td>
<td>12.270</td>
<td>63.486</td>
</tr>
<tr>
<td></td>
<td>(18)</td>
<td>(35)</td>
<td>(77)</td>
<td>(59)</td>
<td>(30)</td>
<td>(20)</td>
<td>(37)</td>
<td>(31)</td>
<td>(20)</td>
<td>(33)</td>
</tr>
</tbody>
</table>

Figure 6.2: Norwegian FDI Stock in Singapore: Three Sectors

(in NOK billion)
According to Grünfeld (2005: 12), in 2001 the industry sector (manufacturing) constituted 40% of Norwegian FDI, oil 20% and services 40%. In Singapore, of total FDI throughout the whole period, offshore accounted for 40% of the investments (oil 20%), manufacturing 27% and services 33%. The services category grows to 53% when including shipping, while manufacturing stays at 27%. Not surprisingly, the service category is quite large – Singapore is characterized as the transportation and communication hub of Southeast Asia. The service category is larger than the usual Norwegian average of 40%, but less than the global average of 62%. The heavy concentration of Norwegian firms in international shipping is exemplified in Norwegian FDI to Singapore.

Table 6.3: Norwegian FDI Stock in Singapore Divided in Twelve Sectors
(in NOK billion)

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Total FDI 1998-2006</th>
<th>Percent Total FDI 1998-2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil and gas extraction and affiliated services</td>
<td>37.364</td>
<td>19.5</td>
</tr>
<tr>
<td>Manufacture of paper and paper products, and publishing</td>
<td>36.654</td>
<td>19.1</td>
</tr>
<tr>
<td>Manufacture of chemicals and chemical products</td>
<td>7.666</td>
<td>4.0</td>
</tr>
<tr>
<td>Manufacture of metal and metal products</td>
<td>0.238</td>
<td>0.1</td>
</tr>
<tr>
<td>Manufacture of machines and instruments, food products and beverages and other manuf. industry</td>
<td>7.028</td>
<td>3.7</td>
</tr>
<tr>
<td>Oil platform and shipbuilding industry</td>
<td>0.742</td>
<td>0.4</td>
</tr>
<tr>
<td>Construction and infrastructure (electricity, gas and water supply)</td>
<td>2.723</td>
<td>1.4</td>
</tr>
<tr>
<td>Wholesale trade and commission trade, excluding motor vehicles</td>
<td>0.715</td>
<td>0.4</td>
</tr>
<tr>
<td>Shipping (water transport and travel agency activities)</td>
<td>38.694</td>
<td>20.2</td>
</tr>
<tr>
<td>Post and telecommunications, and computer and related activities</td>
<td>56.228</td>
<td>29.3</td>
</tr>
<tr>
<td>Financial services</td>
<td>0.832</td>
<td>0.4</td>
</tr>
<tr>
<td>Other business activities</td>
<td>2.988</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>191.872</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>
There are four major sector ‘drivers’ of investment in Singapore: oil and gas extraction and affiliated services, manufacture of paper and paper products and publishing, shipping, and post and telecommunications and computer and related activities (see Table 6.3 and a detailed overview in Appendix 7). In the period 1998-2006, these constituted 88% of all Norwegian FDI stock in Singapore. The dominating sectors are more or less the same as in Grünfeld’s (2005:12) article; he underlines the investment importance of industries like paper and pulp, ship building, oil and gas, chemical products, shipping and telecommunication. Hveem et al. (2008a) find that the petroleum sector’s share in 2005 of Norwegian FDI stocks was 33%, in Singapore this number is 20%. It is also worth noticing that shipping experienced a substantial increase in investment recently, from NOK five billion in 2005 to NOK 22 billion in 2006, more than 1/3 of all Norwegian investments to Singapore in 2006 (see Figure 6.3). On the other hand, the smallest sectors are manufacture of metal and metal products, oil platform and shipbuilding industry, wholesale trade and commission trade (excluding motor vehicles) and financial services. These four sectors comprise only 1.3% of Norwegian FDI stock throughout the whole period.

![Figure 6.3: Norwegian FDI Stock in Singapore: The Four Largest Sectors](image-url)
All of the major investment sectors in Singapore follow the Norwegian pattern. With 29%, telecommunications has the largest share of total FDI in Singapore in the period 1998-2006. The investment in telecommunications decreased significantly in 2002 and 2003, but has increased steadily the last couple of years. The new global trend of increasing FDI in other services like infrastructure is also demonstrated in Norwegian FDI to Singapore. The share of construction and infrastructure is 1.4% of total FDI 1998-2006. Investments in infrastructure make up the major part of this sector, and the first investments occurred in 2004 (see Appendix 7). During three years NOK 2.7 billion was invested in this sector.

All in all, the investments in Singapore follow the usual Norwegian pattern of oil, manufacturing and shipping. The shipping industry has a long history in Singapore, the city became a central port for Norwegian ships already in the 1890s (Gisnås 1995: 70). The largest problem with the data is the one of ‘transshipment’ countries, mentioned briefly in the introduction. According to Hveem et al. (2008a: 8): “The feature of intermediary affiliates, coordination centres and others, further channeling investment to a final destination, is not restricted to the oil sector, and may give a misleading picture of investment patterns”. It is very hard to say anything about the amount of Norwegian capital that might flow from Singapore to its final investment destination. Intermediary affiliates are very common in the oil business, and this might also be the case for the other three dominant Norwegian sectors in Singapore. Many Norwegian shipping companies have offices in Singapore. Another example is the telecommunication sector. In Singapore, this sector has a market penetration of about 100% in all types of telecommunication services (IDA 2009). In addition, the market is dominated by two large companies, the state owned enterprise SingTel and the competitor StarHub (Rodan 2001: 157). Singapore is therefore not an easy market to enter for foreign telecommunication companies. On the other hand, one of Singapore’s goals has been to become both a regional and a global financial center (Rodan 2001). The role of transshipment country may be a consequence of Singapore’s industrial policy, together with attracting TNCs’ regional headquarters. Based on the statistical results, it seems reasonable to assume that Singapore is a preferred intermediate host.
economy for Norwegian capital flowing into Asia, maybe even a gateway for Norwegian FDI to the region.

6.2 Company presentations

6.2.1 Pareto Securities

Pareto was founded in 1986. Since then the company has become the Pareto Group with head office in Oslo and offices in Stavanger, Bergen, Trondheim, Kristiansand, Bryne and in Singapore (Pareto 2008). Pareto also cooperates with Nordic Partners Inc., a partly-owned stockbroking company in New York, and has a total of 365 employees. The operating revenue for the Pareto Group was NOK 3.5 billion in 2007, an increase from NOK 3.3 billion in 2006. Pareto’s aim is “to be the preferred, Norwegian supplier of financial services, based on thorough and detailed knowledge of Norwegian social conditions and businesses and industries in which Norway has particular advantage” (Pareto 2008).

Pareto Securities AS is part of the Pareto Group; its area of business is share and bond brokering and financial counseling. The operating revenue for Pareto Securities was NOK 2.5 billion in 2007 and international clients accounted for over 50% of the revenue. Pareto Securities Asia Pte. Ltd., domicile in Singapore, is a subsidiary of Pareto Securities which has an ownership share of 62.5%\(^\text{12}\). The company offers advisory services to local companies and Norwegian expatriate players in Singapore, mostly in shipping and offshore (Pareto 2008). The official decision about establishing an office in Singapore was taken in January 2006 after a few months of internal discussion in Pareto Securities in 2005 (Leivdal 2009 [telephone interview]). The size of the investment was relatively small, a few million NOK. In 2006 there were two employees in Singapore, in 2007 six employees and in 2009 the number has risen to a staff of 11.

\(^{12}\) Pareto AS is owned by four Norwegian investors. Pareto AS owns 75% of Pareto Securities, which again owns 62.5% of its subsidiary in Singapore (Pareto 2008: 27).
6.2.2 Renewable Energy Corporation (REC)

The corporation was established as a Norwegian private limited company in 1996 with the name “Fornybar Energi AS”, and in 2000 the new holding company REC was formed (REC 2008a, REC 2007b). The REC Group has its headquarters in Oslo, and it has six production facilities and owns 1/3 of the solar company EverQ in Germany. There are three production facilities in Norway (Herøya, Narvik and Glomfjord), one in Sweden and two in the United States that employ about 1,795 people in total. The company also has a smaller operation in South Africa. The REC Group revenue rose from NOK 4.3 billion in 2006 to NOK 6.6 billion in 2007, an increase of 53%. Interim results indicate that the company is experiencing further growth in 2008. The expected revenue will be approximately NOK 8.2 billion (REC 2008c). REC’s vision is to be “The world’s leading provider of highly-competitive solar energy solutions” (REC 2008a).

REC is an integrated solar company with operations throughout the value chain:

- REC Silicon produces silicon materials mainly for the photovoltaic (PV) industry and for some electronic customers.
- REC Wafer produces multi- and monocrystalline wafers for the PV industry, and the wafers are made of the silicon material produced by REC Silicon.
- Wafers are again used by REC Solar to produce solar cells and modules.

REC follows a business to business model (B2B), and this is reflected in the different divisions’ shares of gross revenue: Silicon has a 31% share, Wafer 55% and Solar 14%. REC Wafer is the world’s largest producer of multicrystalline wafers, and these are sold to other producers of solar cells and modules. The PV market grew 62% in 2007 and four countries represented 86% of global PV demand – Germany accounted for 47% of the demand, followed by Spain, Japan and USA. Other key markets are Italy, France, South Korea and India (REC 2008a). To stay ahead, REC is intensifying R&D to create technological advances that lead to lower unit costs and cost efficiency in new expansion projects. Since the solar energy market has grown at a very high rate

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13 The majority of REC shares are Norwegian owned: Elkem AS (23.45%), Orkla ASA (16.28) and Hafslund Venture AS (14.24%). Orkla owns a total of 39.73% of REC through Elkem AS.
the last years, the company has been in an expansionist mode (Wahlstrøm 2009 [interview]). In 2007, there was no more production capacity, and REC started looking into the possibility of building a new manufacturing complex that was eventually described by CEO Erik Thorsen as: “… a critical project for our success and future because this complex, when fully completed, will have a bigger capacity than all of our current capabilities in our various fields combined today” (EDB 2007).

25 October 2007 REC published a press release stating that Singapore had been chosen as location for a new manufacturing complex. The next day the company organized a press conference presenting the new solar site where Singapore was described as “the ideal balance between financial return, risks and future opportunities” (REC 2007a, 2007b). The Singapore complex will produce wafers, cells and modules. The selection process had taken nine months with a screening of 200 possible locations in 18 countries on three continents; Europe, America and Asia. This was followed by due diligence of 20 locations and final negotiations with a handful of sites. Towards the end of the process, a team consisting of experts from areas such as engineering, infrastructure, HR and economy travelled to different locations to choose the main finalists (Wahlstrøm 2009 [interview]). The project received a lot of attention. The final investment decision was released 18 June 2008 with an estimate of NOK 13 billion and production start set to early 2010 (REC 2008b). By the time of the investment decision, the whole project was planned, and “…REC broke new ground two days after the proceedings, or maybe before” (Wahlstrøm 2009 [interview]).

6.2.3 Jotun
In 1920, Odd Gleditsch opened a paint distributor’s shop in Sandefjord and became a supplier to the whaling fleets in the region, and six years later he founded Jotun Kemiske Fabrik A/S (Jotun 2009b). Already in 1962 Jotun started production abroad with a plant in Libya. The first factory in the Far East was established in 1968 in Thailand. Towards the end of the 1960s, Odd Gleditsch Jr. acted as the initiator behind the merger of the four largest paint companies in Norway. The Jotun Group was thus
established in January 1972. Today, head office is still located in Sandefjord and the group has 71 companies and 40 production facilities on all continents, and is represented in more than 70 countries through agents, branch offices and distributors (Jotun 2009a). The Jotun group has four divisions with responsibility for specific products, segments and geographical areas: Dekorativ, Paints, Coatings and Powder Coatings. The number of employees is 7,200 and in 2008 Jotun’s revenue reached NOK 11.7 billion.

Jotun claims to adhere to the strategy of organic growth (Jotun 2009a). The strategy may be different depending on the country, but the process follows a similar pattern: the starting point is usually the company’s strong presence in the shipping industry. Agencies are established to serve the customers in the developing marine coating market. This result in Jotun sales offices and/or small production facilities, and when demand rises, new and large production facilities are built on site (Jotun 2009a). The company also prefers to have a 100% ownership of its affiliates, except for those countries where the government requires shared ownership. In the interview, Mr. Lunde (2009) emphasized organic growth as one of Jotun’s strengths and the key to the company’s success abroad; “We (Jotun) do not have a tradition for M&As”.

Jotun’s Singapore operations belong to the division Jotun Coatings. The division is responsible for the marine and protective coatings markets and also serves some local decorative markets (Jotun 2009a). Jotun Coatings had about 3,000 employees in 2008 and a revenue of NOK 5.56 billion. The largest sales segment in Jotun Coatings is without doubt marine coatings with 66%, while protective coatings take a share of 29% and decorative 5%. Operations in Singapore were established in 1971 and the subsidiary is 100% owned by the parent company. It began as a sales office servicing customers from the marine industry, and as demand increased for the company’s products, mainly in the shipping industry, a paint factory was built in 1976 (NBAS

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14 Jotun is a Norwegian owned and family owned company; the largest shareholders are Orkla with 42.5% and Jotun with 54% (Jotun 2009a).

15 In 2000, Nina Minde wrote the report “Dunning’s Eclectic Paradigm applied on Jotun Thailand” where she analyzes Jotun’s organic growth strategy in Thailand in 1968.
2009). The factory, serving both the local and some foreign markets, went through an expansion in 1991 to increase production capacity. Jotun Singapore has played a major part in the company’s regional expansion; Hong Kong, Korea and China were served from Singapore until it was time to establish a local presence. The Singapore office and factory has also been pivotal in building up competence in Indonesia, Vietnam and India.

In Jotun’s annual report 2006, further investments were expected in the subsequent year, including a factory expansion in Singapore (Jotun 2007). In the company’s annual report 2007, the project had changed; instead of a factory expansion, a new plant for deliveries to Singapore was envisioned (Jotun 2007). During 2008 Jotun decided to invest in a new production facility in Malaysia to be ready by the year 2010 (Lunde 2009 [interview] and Jotun 2009a). Construction is set to start in 2009 and the company is investing about NOK 200 million in the project. When finished, the facility’s capacity will be larger than the factory in Singapore and the old factory in Malaysia combined. Production at the factory in Singapore will be reduced gradually and in the end closed down. Jotun will continue its presence in Singapore by leasing a new area, so-called reclaimed land in Jurong. The new function of Jotun Singapore will be as a warehouse, sales office and transportation hub, including regional managers and a general manager (Lunde 2009 [interview]).

6.3 Results Questionnaire

The key informants ranked 14 economic and political factors by answering a short questionnaire (see Appendix 5). The first seven questions describe the economic factors in Singapore, the four next ones focus on general and sector-specific policy, while the last two questions are about economic institutions. The scale was 0-4; 0 meaning no significance, 1 small significance, 2 some significance, 3 considerable significance and 4 great significance. It is important to remember that the questions were related to the firms’ view of the different conditions in Singapore and how they

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16 Land reclamation is the creation of new land, and part of Jurong is reclaimed land. In addition, Singapore has created Jurong Island, a center for oil, petrochemical and chemical industries.
had been of significance for deciding to invest. In the case of Jotun, conditions in both Singapore and Malaysia were ranked. Most of the conditions were taken into account when deciding to invest, but the ranking emphasizes the most important conditions for each company.

Table 6.4: Company Rank of Economic and Political Factors in Singapore

<table>
<thead>
<tr>
<th></th>
<th>Pareto Singapore</th>
<th>REC Singapore</th>
<th>Jotun Singapore</th>
<th>Jotun Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to national market</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Access to regional market</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Access to suppliers and/or cooperative partners</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Access to lower-cost labor</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Access to skilled labor</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Access to lower-cost inputs</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>High quality infrastructure (transport and communication)</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Advantageous tax policy and regulations</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Advantageous sector-specific policies</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Access to knowledge, technology and R&amp;D</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Control of corruption</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Security of investment property to expropriation and property related crime</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Bureaucratic efficiency</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Regulatory ease of establishing operations in Singapore (or Malaysia)</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Pareto ranked access to markets the highest, both national and regional, and control of corruption was second in importance when deciding to invest. REC ranked several conditions in Singapore very high, but the most important ones were access to skilled labor and high quality infrastructure. In contrast to Pareto, market access to the national market was of small significance to REC and access to the regional market of some significance. Jotun’s rankings of Singapore and Malaysia are very similar – the largest difference is the great significance of access to the national market in Malaysia,
whereas access to the regional market gets a higher score in Singapore. On the basis of these answers, Pareto and Jotun’s investment motives were primarily market-oriented, while REC’s motive was asset-oriented (Dunning 2001, Dicken 2007). As pointed out by several researchers, market access seems to be the main motive for Norwegian FDI (Selfors 1999, Benito et al. 2002 and Heum 2004, Hveem et al. 2008b). In addition, all three investments can be classified as horizontal FDI; the establishment of a new production plant or office abroad. Even though asset-oriented motives are more prominent in vertical FDI, REC is one example of asset-oriented motive in horizontal FDI (Schatz and Venables 2000).

Norwegian FDI has not been as oriented towards M&As as the OECD average; a larger share of FDI has gone to greenfield investments (Grünfeld 2005). Both Jotun’s and REC’s investments are greenfield projects. This pattern is exemplified in Jotun’s strategy of organic growth and fully owned subsidiaries. Mr. Lunde (2009 [interview]) made it very clear during the interview that M&As were not part of Jotun’s tradition, and the company has had some bad experiences with M&As. All of the investments can also be classified as operational internationalization and not strategic internationalization (Benito et al. 2002). Still, there is a future possibility that REC will expand operations in Singapore to also include strategic activity as R&D. Aside from the new plant, Jotun has already established a regional R&D facility in Malaysia.

In the next sections, the data from the interviews are presented together with an interpretation based on both the interview data and the questionnaire rankings.

**6.4 Economic Factors**

The first category of localization advantages is made up of the more typical factors comprising both market and asset oriented motives (Dunning 1980, Dicken 2007). These location factors, with maybe market size being the exception, are often influenced by policies (see Figure 2.1). A total of seven hypotheses were presented:

I: A large market size will have a positive effect on FDI.

II: A highly educated work force will have a positive effect on FDI.
III: Low wages will have a positive effect on FDI.
IV: A highly unionized work force will have a negative impact on FDI.
V: Access to suppliers will have a positive effect on FDI.
VI: A low level of investment will have a positive effect on FDI.
VII: A well developed infrastructure will have a positive effect on FDI.

6.4.1 Pareto
At the beginning of the interview, it became clear that Pareto had not even considered establishing an office anywhere else in Asia – Singapore was the only alternative because of the city’s function as a communication center for Asia and as a center for Pareto’s clients (Leivdal 2009 [telephone interview])\(^{17}\). Both the national and the regional market were therefore of interest to the firm. Pareto’s main clients are large companies operating in the shipping, oil and offshore industries, and most of these firms have offices in Singapore. Pareto’s Singapore office has 11 employees: six Europeans, four of whom are Norwegian and five Singaporeans. According to Mr. Leivdal (2009 [telephone interview]) there are many highly educated people in Singapore, but there is a problem getting labor that functions well within the company due to cultural differences. Pareto has a very flat structure, and the daily management is quite different from the local companies. Workers with education from a Western country are more easily adapted into Pareto’s corporate culture. For recent graduates, wages are more or less the same as in Norway. Singaporeans with seven to 10 years of experience actually have a higher wage level than in Norway, bonuses not included (Leivdal 2009 [telephone interview]).

There is a high level of investment in Singapore, especially within property, banking and finance (Leivdal 2009 [telephone interview]). On the other hand, these are not areas of focus to Pareto – the company concentrates its business in corporate finance (financial counseling). Concerning property, Pareto was able to get an office in Raffle’s Place, an ordinary commercial business building downtown. Mr. Leivdal (2009 [telephone interview]) described Singapore as a hub in Asia; it is possible to

\(^{17}\) From now on Pareto will be short for Pareto Securities.
travel everywhere by going through Singapore; to the Philippines, Australia etc. The infrastructure in general is very good, and the air travel opportunities “fantastic”. Even though Pareto is situated in Singapore, there is quite a bit of travelling around the region for some of the employees.

6.4.2 REC
According to Mr. Wahlstrøm (2009 [interview]), Singapore’s national market was not a decisive factor to REC, neither was the regional market. REC does have Asian customers, especially from Japan, China and Taiwan, but transportation costs are not very high. In the long term though, Asia may become an increasingly important market, and then it will be an advantage to have a regional presence. The new manufacturing complex in Singapore requires a work force of about 1,100, of which the majority is local or regional workers along with 40-50 Norwegians. REC focused on three labor characteristics when considering investing: skills, cost and turnover (Wahlstrøm 2009 [interview]). The financial crisis caused an abundance of skilled labor; REC received 6,000 applications from well qualified workers. Only in Singapore, there is a pool of about 90,000 workers in the semiconductor industry with relevant experience, many of them working for TNCs. Access to skilled workers is of great significance. On the other hand, Singapore is not a low-cost labor country, but skilled labor is cheaper than in Norway (Wahlstrøm 2009 [interview]). The turnover level is also important; it reflects how many superfluous workers a company has at any given time. In Singapore the turnover level is 10 to 20% a year, lower than in many other countries in the region. REC also met the union leader together with other representatives from the government in order to get to know the labor politics and the system.

The solar energy industry is new to Singapore, but has some similarities to the semiconductor industry (Wahlstrøm 2009 [interview]). In addition to exploiting suppliers already in Singapore, REC wanted to bring their own suppliers, and these were incorporated in the negotiations with the authorities. Raw materials to be used in the new factory will be imported. Mr. Wahlstrøm (2009 [interview] and the rest of the team working on the investment decision were worried about the market situation
when entering Singapore, especially the large investment and activity in the construction industry. However, the financial crisis dampened the activity and made it easier to get the construction workers necessary for developing the site. The construction industry in Singapore is extremely efficient, and timing was crucial to REC; regarding the production start, the sooner the better (Wahlstrøm 2009 [interview]).

Singapore is known for being a logistics hub; transportation in and out of the country is not a problem (Wahlstrøm 2009 [interview]). Infrastructure is well developed, but it is a very small country. REC is leasing an area of one square kilometer from the government. Mr. Wahlstrøm (2009 [interview]) points out that the area is approximately 1/600 of Singapore. The factory site is situated in Tuas View in West Singapore, a 30 minute drive from the city center. The government offers basic needs like electricity and water. About half of the area will be developed by 2010; this includes the manufacturing complex, infrastructure, support facilities and an on-site supplier park (REC 2008a). The rest is space reserved for future R&D activities and manufacturing facilities.

6.4.3 Jotun
Jotun established operations in Singapore first and foremost because of the shipping industry and the city’s status as a regional center (Lunde 2009 [interview], NBAS 2009). Operations were extended to protective coating (offshore) and to decorative paints. Due to maintenance of oilrigs from the whole region, the large oil companies are important customers. The decorative market in Singapore is very small compared to the national market in Malaysia where Jotun is a major player. Lunde (2009 [interview]) stated that there are many highly educated workers in Singapore, meaning those with a Bachelor’s and Master’s degree from university. Skilled labor is sought-after and there are numerous TNCs in Singapore, many of them well known and more popular as an employer than Jotun. Social status is very important in Asia, and to get the skilled labor one is looking for may be a challenge (Lunde 2009 [interview]). High skilled labor is very expensive; they require high wages and benefits and top management can be more expensive than expatriates. The regular worker wages in
Singapore are also relatively high compared to the rest of the region, but not “enormously”. The union in Singapore has also been an active part in Jotun’s Singapore operations and was thoroughly informed when the decision about closing down the factory was made. The union has a history of good cooperation with the manufacturing industry (Lunde 2009 [interview]).

Jotun is very acknowledged in the consumer market in Malaysia. It is easier to keep the workers, wages are lower and access to skilled labor with university education is also good (Lunde 2009 [interview]). There is a platform of education and experience in Malaysia which is very useful to Jotun. Many of the workers have received training in Japanese and European industry culture, and “these factors should not be underestimated” according to Lunde (2009 [interview]). It is easy to import raw material to both Singapore and Malaysia, but there are also some local suppliers in Malaysia. In addition, many of Jotun’s regular suppliers have factories in Malaysia.

The infrastructure in Singapore has been considered well developed for many years. Already 20 years ago the transportation sector was very efficient, especially the IT system of the Singapore port. “Singapore is incredibly efficient, they have to be to survive” (Lunde (2009 [interview]). Malaysia’s infrastructure was not that impressive 20 years ago. Now however, “the infrastructure in Kuala Lumpur is amazing compared to how it used to be” (Lunde 2009 [interview]). Transportation opportunities between the two countries have improved because of the new highway between Kuala Lumpur and Singapore, and the Second Link bridge connection that opened in 1998. Access to land is very different in the two countries. In Singapore, most companies have to lease land from the government, but in Malaysia land can be purchased by foreign investors and Jotun owns the property where the new facility is being built. Before the investment decision, there was no surplus capacity left in either of Jotun’s factories in Singapore and Malaysia, and a new production plant became necessary (Lunde 2009 [interview]). It was not possible with further expansion on the same property in Singapore. The Singapore government offered Jotun new land to lease, and about the same time, the government decided to build a monorail which is to pass straight by
Jotun’s old factory site. This meant that a restructuring would have to take place, and Mr. Lunde (2009 [interview]) described the monorail project as “a catalyst” in the company’s decision about whether or not to build a new facility in Singapore. Other advantages related to building one big factory are cost savings, better flexibility and a higher service level (Lunde 2009 [interview]).

6.4.4 Interpretation

Access to market was of great significance to both Pareto and Jotun’s investments as described in the questionnaire section. The regional market may become more important to REC in the future. Access to skilled labor was especially important to the investment decisions of the two manufacturing companies. It seems like the companies separate between multiple levels of skilled labor and wage costs in Singapore. Singaporeans with university education and considerable experience, often part of the top management, have higher salaries than compared with expatriates in the same position. Wages for skilled labor in Singapore is lower than for example in Norway, but higher compared to the region and higher than in Malaysia. All agreed that there is no lack of highly qualified labor in Singapore. In addition, the manufacturing companies have both experienced good cooperation with the unions in Singapore.

Krugman (1994) described the industrialization of Singapore as an impressive mobilization of resources. The mobilization included getting more people into the work force and upgrading the education system. Today, the labor participation rate is about 65% in Singapore with 34% working in professional and technical jobs (EDB 2009). Workers are praised for their strict discipline and work ethics, and the government is flexible in immigration rules and in importing foreign labor (Kai-Sun et al. 2001: 15). The manufacturing sector has a large demand for technicians and engineers, and the education system is biased towards technical training. There are two universities and four polytechnics, all six institutions funded by the government. In 1995, 59% of the graduates were technology graduates from engineering, science and computer studies (Kai-Sun et al. 2001: 20-22). Besides education and training, importation of labor is common. TNCs are allowed to bring in experienced managers and a large number of low-skilled workers have been imported to carry out menial
work. Many low skilled workers in Singapore are from Malaysia (Lunde 2009 [interview]). The unions in Singapore are highly fragmented and tightly controlled by the government (Pinkney 2005: 134). There are 70 registered employees’ trade unions, three employer unions and a federation of employee trade union, the NTUC (the National Trade Union Congress). The NWC (the National Wages Council) advises the government on wage policies, and the council is made up of representatives from the government, employers groups and trade unions (EDB 2009). Both the NTUC and the NWC are organizations that were established in the 1960s and early 1970s to promote the industrialization of Singapore, and they are still of great importance. The consequence of this system is that unions are locked into a corporate bargaining process, leaving little room for independent action (Pinkney 2005).

Hveem et al. (2008b) found that a large domestic market significantly attracts Norwegian FDI. Numerous empirical studies have shown that market size has a very strong and positive effect on FDI (Navaretti et al. 2004: 141). It is also worth noticing that the degree of similarity of the home and host country GDP has a positive impact on the volume of multinational activity, and Norway and Singapore have about the same GDP per capita (see Appendix 1). Access to a large market as described in hypotheses I, has affected the three companies investigated here positively, especially Pareto and Jotun. Countries with a large percentage of highly educated individuals and a low wage level also seem to attract Norwegian FDI (Hveem et al. 2008b). Krugman (1998: 15) points out that market-size effect may not be as important a source of agglomeration, at least in urban areas. Big cities, like for instance Singapore, may instead be sustained by increasing returns because of thick labor markets. Hiring skilled workers is one way of getting access to knowledge. In REC’s case there was definitely a thick labor market with 90,000 potential and experienced workers from the semiconductor industry. Navaretti et al. (2004) expect HFDI to be larger the more similar host and home countries are, and vice versa for VFDI. When taking into consideration that the companies in question decided to invest to reap the benefits of a large skilled work force and these workers’ relatively low wage level compared to other countries – the hypotheses about the positive effects of a highly educated work
force and a low wage level on Norwegian FDI fit the data in this study. It is harder to reach a conclusion concerning hypotheses IV; a highly unionized work force will have a negative impact on FDI. The union system in Singapore is very fragmented and the government keeps strict control. Hveem et al. (2008b) measure labor rights by the number of ratified ILO conventions. They find that labor rights seem to attract Norwegian FDI, but this result is not robust in all models and the results from other empirical studies have also been mixed. At least, a highly unionized work force does not pose an obstacle to investments in Singapore. Nevertheless, one cannot say for certain that the union system in Singapore has a positive effect either.

It is interesting to note that Jotun and REC, both manufacturing companies, rated access to suppliers as being of considerable significance. This specific question was probably not as relevant to Pareto since it operates in the financial services sector. Access to suppliers and cooperative partners is also connected to the new economic geography and different agglomeration and cluster advantages. According to Porter (2000), suppliers of specialized inputs, components, machinery and services are important elements in a cluster. The role of cluster will be discussed more thoroughly in the section about sector-specific policy, but access to suppliers has a positive effect on the companies analyzed here. The general high level of investment in Singapore does not seem to have had a negative impact on the investing companies, but it is hard to tell since the companies actually have decided to invest. Singapore has been attracting FDI since the 1960s and the investment level has become quite high with inward FDI stock reaching $225 billion (see Appendix 1). According to Solow (1956), a high level of capital stock in a country will reduce marginal returns to investment and therefore the willingness to invest. Nevertheless, this is based on maximization of profits, and there are many ways of maximizing profits. As discussed above in connection with access to suppliers, a high level of investment may be an indication of an existing cluster that may lead to many advantages and opportunities for making a profit.

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18 Singapore has ratified 3 out of 4 ILO conventions after 1998 (ILO 2009).
The last hypothesis deals with the infrastructure. Again, there seems to be sector-specific differences between the Norwegian firms; the manufacturing companies rank high quality infrastructure as being of great or considerable significance in the questionnaire. Pareto considered this as being of small significance for their investment decision. Infrastructure has been a prioritized area for a long time by the Singapore government, but Malaysia had done impressive progress the last years (Kai-Sun et al. 2001, Lunde 2009 [interview]). Port Klang was mentioned as a possible competitor to the Singapore port. During the interviews, Singapore was described as a logistics hub with fantastic travel opportunities, even by Pareto. Another element related to infrastructure, not included in the questionnaire, is access to land. Yet again, Pareto stands out. The financial company only needed office space as opposed to Jotun and REC that needed sizeable areas of land for production facilities. Land is scarce in Singapore, and, REC’s representative stated that “Land is not for free in Singapore” (Wahlstrøm 2009 [interview]). The situation was not optimal, but REC decided to invest in Singapore. Contrary to REC, access to land in Singapore was one reason contributing to Jotun’s decision about investing in Malaysia and not in Singapore. All in all, the high quality infrastructure of Singapore has had a positive effect on Norwegian FDI. At the same time, the limited access to land may cause future problems in attracting manufacturing facilities, but this is also dependent on the prioritizing and industrial policy of the government in Singapore.

6.5 Economic Institutions

Doing business in a foreign country entails certain transaction costs or information costs for a company. According to North (1990), institutions play a major role in the performance of an economy. The second set of hypotheses was related to economic institutions:

VIII: A system characterized by enforcement of property rights, rule of law and of control of corruption and crime will have a positive effect on FDI.
IX: An efficient bureaucracy will have a positive effect on FDI.
6.5.1 Pareto
Mr. Leivdal (2009 [telephone interview]) emphasized: “We (Pareto) experience Singapore as extremely safe”. Documentation and adherence to rules and regulations are very important in Singapore, even more than in Norway. There are larger problems regarding these issues right outside Singapore in countries like Thailand, Malaysia, the Philippines and Indonesia. Pareto therefore tries to do most business in Singapore. The banks must be comfortable with the company’s business partners. For example, a company may have operations in Indonesia, but it must be registered in Singapore or some other trustworthy countries where there is rule of law and little corruption (Leivdal 2009 [telephone interview]). Property rights on the other hand are not that important to Pareto; the company only rents an office space in town and their financial services do not include land in Singapore, but rather fixed assets as oil rigs.

Singapore’s bureaucracy is “…very goal oriented, very efficient, very rigid, but very inclined to change routines if necessary. It is an advantageous behavior” (Leivdal 2009 [telephone interview]). Pareto is regularly in touch with the Monetary Authority of Singapore (MAS). There is a large degree of documentation and reporting – the company has to deliver monthly and quarterly reports, and often call and have meetings with the MAS. The reporting corresponds to a half a full-time position. This may seem excessive, but Mr. Leivdal (2009 [telephone interview]) considered the reporting to be in the company’s long term interest.

6.5.2 REC
Corruption, crime and property rights were evaluated by REC at an early stage by making use of the embassy and Innovation Norway’s knowledge of Singapore. It is essential for REC to be in a system characterized by stability and transparency (Wahlstrøm 2009 [interview]). Singapore is considered by many as being a dictatorship, but the country has an excellent track record of keeping their promises within business. Singapore has a zero tolerance policy of corruption and is very clear on this point.
Mr. Wahlstrøm (2009 [interview]) did admit that bureaucracy was not evaluated as an independent factor, but it was taken into consideration because of how it would affect the project’s completion time. REC collected a lot of information about the bureaucracy by doing interviews with other companies, for example of the time span for necessary permits etc. The Economic Development Board (EDB) functioned as REC’s long arm into the bureaucracy and was “incredibly efficient” (Wahlstrøm 2009 [interview]). EDB arranged all the meetings with the different departments and with different ministers, and functioned as facilitator for the negotiations about access to land between JTC and the company. REC also follows up EDB through regular reporting activity and Wahlstrøm (2009, [interview]) said: “It is easy to deal with the EDB, it is a thoroughly regulated system”.

6.5.3 Jotun

Corruption is virtually nonexistent in Singapore, something which makes business easier and more predictable than in many other Southeast Asian countries (Lunde (2009 [interview]). It is a “superefficient” state with a well developed bureaucracy. In Singapore, considered a “democratic dictatorship”, it is easy to deal with the system because of clear rules and guidelines (Lunde 2009 [interview]). Corruption is probably higher in Malaysia. On the other hand, as an international company, Jotun must fulfill very strict requirements regarding corruption. Jotun has been in Malaysia since the 1980s and knows the system, and Malaysia has followed in Singapore’s footsteps by making the bureaucracy easier to handle. However, Malaysia and its Ministry of Industrial Development Authority (MIDA) are still behind Singapore and EDB.

6.5.4 Interpretation

It is hard to do business if the institutional foundation is not present: a rule of law, control of corruption and crime and security of property rights. Singapore may not be a democracy, but so far there has not been any reason to believe that the country’s economic institutions are in danger of being misused and dissolved by the government. It is a very stable political system, often described as an authoritarian regime. Singapore’s good reputation and track record is fundamental for attracting investments, as stressed by all three company representatives. Even though the
rankings of these institutional factors varied in the questionnaire, all of the companies gave a high score to either or both control of corruption and/or security of investment property. In the investment decision process, security of property rights was of considerable significance to REC, while control of corruption was of considerable significance to Pareto and Jotun. This does not mean that control of corruption had no significance to REC, but that other considerations mattered more in the final decision process. It is interesting that control of corruption was very important to Pareto; this shows that the financial sector is highly dependent on trust and transparency. The banks must be comfortable with the financial firms’ business partners and their home countries. Control of corruption was also important to Jotun in Malaysia, but Singapore is still ahead of Malaysia; on the Corruption Perception Index Singapore occupies 4th place while Malaysia is ranked as number 47 (Transparency International 2009, Appendix 2).

Porter (2000) calls the institutional structure the quality of the business environment, and Dunning (2001) stresses the role of social relational capital as measured by lack of crime, bribery, corruption and terrorism. Quah (1993: 320-323) has argued that the civil service in Singapore is managed like a private organization in terms of increasing productivity and excellence. The bottom line has not been profit-maximization, but to minimize corrupt behavior by removing both incentives and opportunities to be corrupt. Two elements of this strategy have been to offer competitive pay and to recruit selectively. Hveem et al. (2008b) also found that in addition to economic and geographical variables, political and institutional variables affect Norwegian FDI. Control of corruption had a robust and positive effect on Norwegian FDI in their models, while the impact of democracy and rule of law were not as robust. On the other hand, these three variables along with labor rights tend to mutually influence each other, and it is therefore difficult to draw clear conclusions about causality due to multicolinearity (Hveem et al. 2008b). Other empirical studies find that government stability and commitment positively affects FDI (Daude and Stein 2007) and that corruption negatively affects FDI (Wei 2000, Busse and Hefeker 2006). The importance of control of corruption is exemplified through all three companies.
investigated in this thesis. A system characterized by rule of law, secure property rights and little corruption seems to have a positive effect on FDI, in accordance with hypotheses VIII.

The bureaucracy is part of the institutional setting and has consequences for company strategy. An efficient bureaucracy is a location advantage according to Schatz and Venables (2000). Both Jotun and REC ranked an efficient bureaucracy as being of considerable importance in Singapore and Malaysia, and all three informants described the Singaporean bureaucracy as efficient and easy to deal with. The Economic Development Board (EDB) has been critical in attracting FDI to Singapore and is regarded as the key to the country’s industrialization (Kai-Sun et al. 2001: 22). The EDB is an entrepreneurial organization with offices in all the major cities of the world, its own salary scale and investment fund. It claims to be non-hierarchical with the possibility of climbing the career ladder for promising officers. It is described as a “one-stop” service to foreign investors that can provide answers and assistance to a wide range of problems, for example construction, recruitment, immigration, labor relations, factory space, housing for employees, taxation, customs, suppliers, security and environment (Kai-Sun et al. 2001: 24). EDB is perceived as a professional organization, and it follows the main pattern of management as described for the civil service; high salaries with incentive schemes, recruitment of the best graduates and also influence in the upper echelons of the government. It has a powerful influence on statutory boards like JTC (responsible for industrial estates), and in certain instances the EDB has been known to even run over the JTC (Kai-Sun et al. 2001: 27-29).

There has been close ties between the government and the civil service, and the efficient bureaucracy in Singapore is a product of history and strategic planning (Rodan 2001: 141). This finding is supported by an investigation carried out by Evans and Rauch (2000) on the effect of bureaucratic authority structures on facilitating economic growth. They develop a “Weberianness Scale” based on meritocratic recruitment and the opportunity for rewarding and long-term careers, characteristics which fits the bureaucracy in Singapore very well. Not unexpectedly, Singapore
receives a high score on this scale, and the “Weberian” characteristics enhance prospects for economic growth. The quality of the bureaucracy has an important and independent effect on economic growth, and therefore most likely also on FDI. Busse and Hefeker (2006) have also found that the quality of the bureaucracy affect FDI. The result in this thesis indicates that an efficient bureaucracy has a positive effect on FDI, as described in hypotheses IX.

6.6 General Policy
According to Dunning (1998), the policies of government are yet another factor that influences the investment-location decision. The general policy category has been widely defined as tax and other government incentives:

X: Low corporate tax and other cost-reducing government interventions will have a positive effect on FDI.

6.6.1 Pareto
Mr. Leivdal (2009 [telephone interview]) claimed that it is tax efficient for Pareto to do business in Singapore, but, at the same time, the cost of employees is higher than in Norway. The company has made a tax exemption deal with the authorities. Mr. Leivdal (2009 [telephone interview]) emphasized that the tax level was not the main motive for investing in Singapore, it was only one of many elements influencing the decision. Pareto would most probably have invested in Singapore even if the tax level had been the same as in Norway; business opportunities are viewed as more important than low tax rates.

6.6.2 REC
Corporate tax in Singapore is 17% compared to 28% in Norway (Wahlstrøm 2009 [interview], EDB 2009). The government also offers some incentive arrangements. In a press release, REC made public that the company had finalized a comprehensive support package including incentives and grants on three areas: tax, R&D and process improvement and human resource recruitment and training (REC 2007b). Very few of the large multinational companies pay corporate tax in Singapore, but tax is also a part of a company’s economic evaluation – Mr. Wahlstrøm (2009 [interview]) said that
“tax is not paid of zero profit”. Singapore is not the only country offering these incentive packages either. “The incentives are not sufficient in themselves, it is an economic factor, but a lot of other conditions need to be present” (Wahlstrøm 2009, [interview]). Examples of other conditions are skilled labor, political stability, transparency and a high level of R&D.

6.6.3 Jotun

Tax was not a very decisive factor to Jotun, neither in Singapore nor in Malaysia (Lunde 2009 [interview]). The corporate tax in Singapore is 17%, while it is 26% in Malaysia (EDB 2009, MIDA 2009). In addition, Jotun’s products are, in line with rules and regulations, exempted from payment of duties between Singapore and Malaysia.

6.6.4 Interpretation

Singapore has a relatively low corporate tax of 17% and a wide range of incentives and agreements related to tax (Kai-Sun et al. 2001). Only REC ranked advantageous tax policies and regulations as being of considerable significance, but during the interview it was underlined that many other conditions also need to be present – for example skilled labor and political stability. Most TNCs do not pay tax in Singapore, as commented upon by REC’s representative, and both REC and Pareto has done tax exemption deals with the Singapore government. However, all of the companies seemed to agree that tax rates, also other tax than corporate tax, are automatically part of a company’s evaluation of a location. Tax was not a decisive factor in any of the investment decisions, neither in Singapore nor Malaysia. In Jotun’s case, it is also important that the company’s products are exempted from payments of duties between Singapore and Malaysia, which makes transportation back and forth between the two countries very easy.

As described in Table 4.1, the Singapore government offers many fiscal incentives to attract TNCs, and there are also R&D grants and small company grants available (Kai-Sun et al. 2001: 27-28). A company may be granted pioneer status, a tax-free status for five to 10 years, and post-pioneer status with tax rate at 10% up to 10 more years. The
incentives are granted to companies evaluated as qualified, and discretion rests with the government. The tax and subsidy system is becoming increasingly complicated, and it is difficult for foreign investors to decide which subsidies they are qualified for and which taxes they have to pay (Kai-Sun et al. 2001: 37). In addition the government is in need of extra manpower to implement a variety of schemes and to ensure compliance. This observation is supported in other empirical studies; tax payments do not only depend on average corporate tax, but on the details of the tax system (Navaretti et al. 2004, Brainard 1997). Early work reached the conclusion that tax differentials had a negligible effect on the pattern of FDI, but recent work, especially related to VFDI, suggests that responsiveness to tax has increased (Navaretti et al. 2004: 139). There is however little consensus on how strong the tax effects really are on location decisions. Other factors influencing TNCs’ investment decisions are driven by government expenditure and may also have a significant effect according to Navaretti et al. (2004: 246): “There is therefore a trade-off between taxes and the public services that the firms feel they get in different locations, and the overall efficiency of the government may matter more than just the tax levels”. Tax rates and other cost reducing government interventions have had a positive influence on the three companies’ investment decision, but not a very strong one. As exemplified clearly through REC, tax and other incentives are only one economic factor of a total evaluation including a range of conditions.

6.7 Sector-specific Policy
Singapore’s industrial policy was described as moving towards a K-economy; the city-state is a manufacturing center, a financial hub and a popular location for TNCs’ regional headquarters. There is a very close connection between policy and access to knowledge, technology and R&D. These factors reflect the new economic geography and the new motives presented in the theory chapter (Krugman 1991, Porter 2000). The hypotheses related to sector-specific policy were:

XI: Sector-specific industry policy will have a positive effect on FDI (in the targeted sectors).
XII: A high level of R&D in certain sectors, along with other institutions and firms (clusters), will have a positive effect on FDI in the relevant sectors.

6.7.1 Pareto
Mr. Leivdal (2009 [telephone interview]) had the impression that Singapore is very interested in developing the financial sector, that the financial sector is an area of commitment. Pareto regarded this as an advantage; the company has the opportunity to further develop the financial sector together with the government. In addition, there is a large financial environment in Singapore and this has great significance to Pareto. All the well-known banks and brokers are present, and the network is much larger than in Norway.

6.7.2 REC
Mr. Wahlstrom (2009 [interview]) described Singapore as focusing on a triangle strategy of research, development and industry, and this is mirrored in the country’s policy. During the decision process, it was essential for REC to experience commitment on behalf of Singapore’s government. The main contact took place through the EDB where representatives from REC participated at various meetings with different ministers, the union leader and the prime minister. It was important to receive confirmation directly from the top (Wahlstrom 2009 [interview]).

In Singapore, there is a high level of R&D and competency in general (Wahlstrom 2009 [interview]). Even if there is not yet a solar energy industry, the country has a lot of favorable conditions. During the process, REC got the impression that the Singapore government recognizes the enormous potential of the solar industry. The government has already shown their long-term commitment in the biotechnology and the semiconductor industry. REC has also been invited to cooperate in this development along with the National University of Singapore (NUS), and there has been left room for a future opportunity of establishing R&D facilities at REC’s site.

6.7.3 Jotun
Singapore wants to be a hub for R&D in Asia and the government is very interested in developing high technology (Lunde 2009 [interview]). Their goal is to keep a high
level of knowledge and to be the best in the region. Jotun is part of the chemical cluster in Singapore, but as Mr. Lunde (2009 [interview]) called attention to, this cluster consists mainly of oil refineries and services in the chemical sector. Paints are not considered ‘high-tech’ in Singapore anymore. Still, all the large paint companies are present in Singapore, many with production facilities.

The competition is also strong in Malaysia, where many of the international paint companies have chosen to establish a local presence (Lunde 2009 [interview]). The authorities in Malaysia want to raise the standard of living through industrial development, and the country wants companies that employ a large share of people. Jotun could offer just that; employment to many workers through its new production facility. In addition, Mr. Lunde (2009 [interview]) noted that Malaysia has a lot of manufacturing business and a good understanding of a value chain, and is therefore easier to adapt to for Jotun than Singapore is. In Singapore, they are more focused on automation processes in the manufacturing industry, and the country has a dominant financial and services sector (see Table 4.1 for details of the industrial policy and sector composition in Singapore). For Jotun, paint technology is very specialized (Lunde 2009 [interview]). A lot of research on paint, mainly decorative paint, is done in Malaysia. Jotun has a regional R&D center in Malaysia and the scientists are trained in the company’s environment. The company also recruits directly from the universities, sometimes even sponsoring part of the students’ education.

6.7.4 Interpretation
REC ranked advantageous sector-specific policy as being of considerable significance, while Pareto and Jotun ranked it as being of small significance or no significance (see Table 6.4). The effect from industrial policy effect is arguably most evident in REC’s case. Singapore does not have a solar energy industry yet, but alternative energy is an industry the country has decided to develop19. REC’s representative asserted that Singapore had a lot of favorable conditions to support this claim, and the company

19 Another indication of a developing cluster is the Norwegian solar energy company Norsun’s decision in March 2008 to establish a wafer factory in Singapore (Norsun 2009). It is a smaller project than REC’s with investments of $300 million or about NOK 1.9 billion. The factory will employ 300 and start production in 2010.
received proof of Singapore’s commitment on several occasions; REC was actually mentioned in two official speeches after the investment decision had been made. The first speech was held by Prime Minister Lee Hsien Loong and the other speech by Minister Mentor Lee Kuan Yew. In the first speech in October 2007 the Prime Minister presented the company, the project and REC’s motives for choosing Singapore. In the second speech in February 2008, REC was mentioned along with other corporate giants like ExxonMobil, Shell and Novartis (Prime Minister’s Office Singapore 2007 and 2008). The Singapore government’s goal of creating a solar energy industry in the country was yet again confirmed by the managing director of the EDB, Ko Kheng Hwa, when commenting upon the Norwegian investment (EDB 2007):

The REC project will be a ‘queen bee’ to attract a hive of solar activities to Singapore, catapulting the nation into the solar industry world map and accelerate our development of the industry. It also reaffirms, once again, that Singapore continues to be highly competitive in complex manufacturing activities, especially those that are capital-, skill and innovation-intensive.

The authorities have identified a wide range of industries to be nurtured, including chemicals (mainly petrochemicals) and alternative energy\(^{20}\). In REC’s investment process, this commitment through industrial policy had a very positive effect on the decision. It was also hinted at future R&D activities, which can be interpreted as a way for REC to eventually augment the firm’s O advantages through locating in a developing cluster (Dunning 2001). Singapore’s sector-specific policy did not matter that much to Jotun and Pareto in their decision processes according to the questionnaire answers.

While REC is part of an establishment of a new cluster, there are already some industry-specific agglomerations and clusters present in Singapore due to visionary politicians and bureaucrats. These clusters may have started with industrial policy.

\(^{20}\) It is well worth taking a look at the EDB web pages – they are imbued with industry policy aiming at attracting FDI, especially if you look at the industries sections (www.edg.gov.sg).
One example is the semiconductor industry which led to a very good access of skilled labor for REC, so-called labor pooling, and there may also be instances of better access to intermediate inputs and technological spillovers as pointed out by Krugman (1991: 36-37). The electronics industry is still the largest industry in the manufacturing sector of Singapore, and the two most important products have been semiconductor devices and disc drives (Kai-Sun et al. 2001:46-48). The electronics industry was developed mainly through FDI, and government subsidies played a critical role in the process. For both manufacturing companies, access to knowledge, technology and R&D were important in Singapore and Malaysia. Pareto did not consider this to be of importance in the questionnaire, but in the interview, the company’s representative underlined the advantage of the large financial environment and network in Singapore. In addition to a financial cluster, there is also a chemical cluster in Singapore. This chemical cluster is closely connected to petrochemicals and not so much towards the paint industry. In Malaysia, there is more focus on the specialized paint industry and its requirements within production and research. On the other hand, Singapore’s strong position as a center for regional headquarters is recognized through Jotun’s decision to keep its regional headquarters there.

Economists have long recognized the importance of agglomeration benefits for the location of firms, and early contributions concluded that factors like quality of infrastructure, degree of industrialization and the level of inward FDI in specific sectors had a positive effect on FDI (Navaretti et al. 2004: 147). However, these effects are entangled with a tendency to imitate each others’ locations, so-called ‘herding’ or ‘demonstration’ effects. Barry et al. (2004) conclude that both agglomeration economies and demonstration effects are important to FDI. In the article, agglomeration effects seem to be more important than demonstration effects for firms in high-tech sectors. Additionally, the policy implications of government assisted build-ups of agglomerations, and, in attracting a number of companies in a certain sector for demonstration purposes are mentioned.
Even though Jotun did not consider sector-specific policy as very decisive for the investment decision, it seems like Singapore’s focus on ‘high-tech’ industries, had at least a small negative effect on Jotun’s decision, while Malaysia’s prioritizing of the paint industry affected the FDI decision in a positive way. In addition, there was also a certain paint industry cluster present in both countries. REC seems to have been attracted by the future agglomeration effects, while all the companies may also have been affected by demonstration effects. There are at least 130 Norwegian companies present in Singapore. My argument is that the two hypotheses concerning sector-specific industry and access to R&D and clusters have shown to positively influence FDI, and, the study indicates that industrial policy and the presence of clusters are highly interconnected.

6.8 Review of the Results
The above discussion of the interview data and the questionnaire paints a complex picture of all the assessments and evaluations involved in the three investment decisions. My research question was made up of two parts: the identification of economic and political factors considered important for Norwegian investments abroad, and the identification of the most decisive factors in the process towards choosing Singapore. Table 6.5 sums up the results for the twelve hypotheses presented in the theory chapter, to indicate which factors were important to the firms’ investment decisions in Singapore and Malaysia.

Most of the economic factors had a positive effect on the investment decisions, as expected based on theory and supported by other empirical results. The two exceptions were the union system and the level of investment, where the results were very indecisive. A stabile system with clear rule and regulations, an efficient bureaucracy, sector-specific policy and clusters also had a positive effect on the FDI decisions. It is hard to say anything about the strength and robustness of the findings in a case study, but the results are in agreement with earlier empirical research on Norwegian FDI and with research on FDI in general.
<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Hypotheses</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Factors</td>
<td>I</td>
<td>A large market size will have a positive effect on FDI.</td>
<td>Market size had a positive effect, especially to Pareto and Jotun.</td>
</tr>
<tr>
<td>Economic Factors</td>
<td>II</td>
<td>A highly educated work force will have a positive effect on FDI.</td>
<td>Access to skilled workers had a positive effect, especially to REC and Jotun.</td>
</tr>
<tr>
<td>Economic Factors</td>
<td>III</td>
<td>Low wages will have a positive effect on FDI.</td>
<td>Relatively low wages had a positive effect, especially to REC and Jotun.</td>
</tr>
<tr>
<td>Economic Factors</td>
<td>IV</td>
<td>A highly unionized work force will have a negative impact on FDI.</td>
<td>Indecisive results. The unions in Singapore are tightly controlled by the government.</td>
</tr>
<tr>
<td>Economic Factors</td>
<td>V</td>
<td>Access to suppliers will have a positive effect on FDI.</td>
<td>Access to suppliers had a positive effect, especially to REC and Jotun.</td>
</tr>
<tr>
<td>Economic Factors</td>
<td>VI</td>
<td>A high level of investment will have a negative effect on FDI.</td>
<td>Indecisive results. Cluster effects may be of more importance than the negative effect of a high investment level.</td>
</tr>
<tr>
<td>Economic Factors</td>
<td>VII</td>
<td>A well developed infrastructure will have a positive effect on FDI.</td>
<td>A well developed infrastructure had an overall positive effect on all three companies.</td>
</tr>
<tr>
<td>Economic Institutions</td>
<td>VIII</td>
<td>A system characterized by enforcement of property rights, rule of law and of control of corruption and crime will have a positive effect on FDI.</td>
<td>A stable political system had a positive effect; REC emphasized the enforcement property rights, and Jotun and Pareto stressed the significance of control of corruption.</td>
</tr>
<tr>
<td>Economic Institutions</td>
<td>IX</td>
<td>An efficient bureaucracy will have a positive effect on FDI.</td>
<td>An efficient bureaucracy had a positive effect, especially to REC and Jotun.</td>
</tr>
<tr>
<td>General Policy</td>
<td>X</td>
<td>Low corporate tax and other cost-reducing government interventions will have a positive effect on FDI.</td>
<td>Had a positive effect on all three companies, but not very important for the investment decisions.</td>
</tr>
<tr>
<td>Sector-specific Policy</td>
<td>XI</td>
<td>Sector-specific industrial policy will have a positive effect on FDI (in the targeted sectors).</td>
<td>Industrial policy had a positive effect on REC in Singapore and also a positive effect on Jotun in Malaysia.</td>
</tr>
<tr>
<td>Sector-specific Policy</td>
<td>XII</td>
<td>A high level of R&amp;D in certain sectors, along with other institutions and firms (clusters), will have a positive effect on FDI in the relevant sectors.</td>
<td>Had a positive effect on all three companies.</td>
</tr>
</tbody>
</table>
The second part of the research question focused on identifying the decisive factors for each company. As previously described in the questionnaire section, Pareto and Jotun’s main motive was access to market, while REC’s motive was more asset-oriented. Pareto wanted to develop more business in both Singapore and Asia, and Singapore’s strict control of corruption contributed to the decision of establishing an affiliate. REC’s decision was based on a combination of factors; access to skilled labor, cost savings and a well-developed infrastructure. In addition, the government’s focus on R&D and the solar energy industry, tipped the scale in favor of choosing Singapore. Jotun’s main motive for investing in Singapore in the 1970s was to gain access to the regional market. The primary motive for choosing Malaysia as the new production site in 2008 was due to the large national market, but also because of improved access to land, access to skilled and lower-cost labor (lower cost than in Singapore) and the cost savings effect of a large production facility compared to having two smaller plants. In Jotun’s case it seems like the prediction about Malaysia’s challenge of Singapore as a new offshore manufacturing site for TNCs may be correct (Kai-Sun et al. 2001). At the same time, Jotun has decided to keep its regional headquarters in Singapore.

In the FDI literature, chemical products have been identified as a typical industry for Norwegian FDI, an area where Norwegian TNCs are particularly dominant (Grünfeld 2005: 12, Selfors 1999: 53). Contrary to chemicals, the Norwegian finance sector’s share of outward investments has been very small and the solar energy industry is a new area of business that has yet to be explored. What do these three companies have in common? Besides being Norwegian, following the overall Norwegian pattern of FDI and sharing some of the same motives? According to Porter (1990), there are national attributes that foster competitive advantage in particular industries, or what Dunning (2001) termed country-specific differences in the O (ownership) advantages of firms. Jotun is a manufacturer of paint where both marine coatings to protect vessels and protective coatings, often used on offshore structures and energy installations, make up over half of the company’s business segment (Jotun 2009b). Norway has a long history within the shipping and energy (hydro power and oil and gas) business.
Pareto, operating in the financial sector, has specialized in businesses and industries were Norway has ‘particular advantage’ as defined by the company’s goal – like offshore and shipping\textsuperscript{21}. There are certain connections, but what about REC? The solar energy industry is a high technological industry, but, it shares a common characteristic with a traditional sector in Norway: energy. It might not be oil or water, but it is still energy-related. Clearly, home country influences firms’ O advantages.

When a firm possesses exclusive O advantages and it is beneficial for the company itself to make use of these (internalization advantages), it will seek to use the O and I advantages in combination with location advantages of other countries (Dunning 1988: 25). Recent statistics from 1998-2006 indicate that Singapore has important location advantages to offer Norwegian firms. The location advantages include access to markets or different types of assets, as shown in the analysis. In addition, it seems like Singapore is functioning as an Asian financial center for Norwegian companies. As Gisnås (1995: 161) remarked already in the mid 1990s, Norwegian companies have used Singapore as a gateway into South and Southeast Asia, and the country may also be a gateway to the future. So far, the data corresponds with Gisnås’ observation.

\textsuperscript{21} Imarex, my other candidate in the financial sector, is based on the freight derivatives market and have managed to build leading positions in two core markets – shipping and energy. http://www.imarex.com/
7. CONCLUSION

7.1 Summary

It is time to gather the threads and take a quick recapitulation before putting the results in perspective. The research question was:

*Which economic and political factors do Norwegian companies regard as important when investing abroad, and to what degree have they been deciding in the process of choosing Singapore as the investment location?*

Dunning’s eclectic paradigm comprises ownership-specific advantages, location-specific advantages and internalization advantages. The paradigm was used as a framework for analyzing the location-specific factors and how these affect Norwegian FDI. The general pattern of Norwegian FDI to Singapore was investigated by using statistics from SSB (Statistics Norway) containing information on Norwegian investments to Singapore in the period 1998-2006. Interviews and questionnaires were used to collect data at the firm-level. I analyzed the investment decisions of three companies: Pareto Securities, Renewable Energy Corporation and Jotun, operating within financial services, the solar energy industry and the chemicals industry, respectively.

The value of Norwegian FDI stocks in Singapore has increased significantly from 1998 to 2006. The four largest investment sectors in Singapore are oil and gas extraction and affiliated services, manufacture of paper and paper products and publishing, shipping, and post and telecommunications and computer and related activities, following the typical sector pattern of Norwegian FDI. These four sectors accounted for 88% of total investments during the period in question. The largest problem with the statistics is that as a financial center, Singapore often functions as a transshipment country for capital. The small city-state receives over half of all Norwegian FDI to Asia, and most probably not all of the capital remains within the country’s boundaries. It is suggested that Singapore may be conceived as a gateway to Asia for Norwegian FDI.
To answer the question about which location factors were important to Norwegian companies when investing abroad, 12 hypotheses were suggested on the basis of theory, divided into four categories: economic factors, economic institutions, general policy and sector-specific policy. Of the economic factors, access to new markets, an educated work force, low wages, access to suppliers and a well developed infrastructure were found to have a positive effect on the investment decisions of the three companies investigated. The data on the union system and the high level of investment in Singapore were inconclusive; it is hard to tell if it had a positive or a negative effect on the companies’ investment decisions. The economic institutions, defined as a system characterized by enforcement of property rights, rule of law and control of corruption together with an efficient bureaucracy had a positive influence on Norwegian FDI. General policy like tax and customs was also found to attract Norwegian FDI, though not very important – it was considered ‘the icing on the cake’ by the companies. Last but not least, sector specific policy along with clusters had a positive effect on the investment decisions, and these two factors were also found to be highly interconnected.

All three investments are horizontal investments, made to establish a new office or a new production plant abroad. The three companies considered many of the same factors to be important, but the decisive factors for each company varied. The investments of Pareto and Jotun were overall market oriented, while REC’s investment decision was mainly asset oriented. In addition to access to skilled labor, another significant motive to REC was cost savings. These two factors were also important to the other manufacturing company Jotun, combined with access to the national market in Malaysia. The most decisive factors to Pareto were market access and the control of corruption. Norwegian investments have been characterized by market orientation and greenfield projects, and these three firms are no exception. At the same time, REC shows that even if asset orientation is more common within vertical FDI, it may also be a motive for horizontal FDI. The results indicate that in addition to the economic factors, economic institutions and policy influence Norwegian FDI.
The above results describe a complex picture; some factors are regarded as decisive, some as important and others are more sector- and industry-specific, even firm-specific. When balancing risk and profit, two out of the three firms decided to invest in Singapore. Jotun is still keeping an office and a warehouse in Singapore, but decided to move production to Malaysia. Singapore might experience increased competition from Malaysia when trying to attract manufacturing industry in the future.

7.2 Widening the Perspective

My focus throughout this thesis has been the relationship between firm and host country. Dunning (2001: 176) has argued that his paradigm does not work as a predictive theory of TNCs, but as a framework for analyzing the determinants of international production. The host country has certain location advantages, but on the other hand, the home country influences the ability of its firms to succeed in particular industries; there are country-specific differences in the ownership advantages of firms from different countries (Porter 1990, Dunning 2001: 176). Thus, there may be interaction effect between home and host country. It is possible to discern a certain Norwegian niche strategy, and its foundation can be found in the Norwegian transport and energy sector. The niche strategy identified here is based on industries like oil and gas, offshore and shipping, sizeable industries also in Singapore.

Dunning’s Investment Development Path (2001) describes how structural change is connected to FDI patterns as countries pass through several stages of development. The OLI configuration is constantly changing and therefore affecting FDI. Norway’s outward investment is now larger than inward FDI. Singapore has an even larger amount of inward FDI than Norway, but is starting to invest abroad increasingly. The role of the government in attracting FDI has been described as crucial (Lall 1996). This is especially apparent in Singapore Inc. where the government together with a professional and efficient bureaucracy has managed the country in a very corporate style, combining political and social policies with an effective political paternalism. The result was an impressive mobilization of resources which led to rapid growth and development.
7.3 Where Do We Go from Here?

The purpose with the thesis was to contribute to the research on FDI, particularly to the case of Norwegian FDI due to its large increase the last decade. As a follow-up, it would be interesting to see if these findings are valid on a larger scale by for example conducting a survey about companies’ FDI motives, or through case studies on other host countries. In Norway, some of the largest companies are state owned, but do they have the same motives as privately owned companies, and, which location advantages do they consider important? Privately owned companies seem to value political stability and transparency, but do state owned companies share this view? Already, results indicate that state owned enterprises tend to invest relatively more in countries with poor rule of law and property rights protection than privately owned enterprises (Hveem et al. 2009). Another exciting trend is the emergence of Sovereign Wealth Funds where Norway’s Government Pension Fund is considered the gold standard. These funds’ acquisitions are normally portfolio investments, and accountability and transparency are of great concern to Norway’s fund. Are they succeeding? The questions are many for future research.
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Bergen: Stiftelsen for samfunns- og næringslivsforskning (SNF). Report 
64/2000.

Oslo: Tano.

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M. Falzoni, Jan I. Haaland, Karen Helene Midelfart and Alessandro Turini 
University Press.

96


Wahlstrøm, Einar (2009). Interview. 15 March (REC).


9. Appendix

APPENDIX 1: Singapore and Norway

<table>
<thead>
<tr>
<th></th>
<th>Singapore</th>
<th>Norway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>692.7sq km</td>
<td>323,802sq km</td>
</tr>
<tr>
<td>Population</td>
<td>4,657,542</td>
<td>4,660,539</td>
</tr>
<tr>
<td>Language</td>
<td>English (Language of administration), Mandarin, Malay (National Language) &amp; Tamil</td>
<td>Bokmal Norwegian (official), Nynorsk Norwegian (official), small Sami- and Finnish-speaking minorities</td>
</tr>
<tr>
<td>Ethnic groups</td>
<td>Chinese 76.8%, Malay 13.9%, Indian 7.9%, other 1.4% (2000 census)</td>
<td>Norwegian 94.4% (includes Sami, about 60,000), other European 3.6%, other 2% (2007 estimate)</td>
</tr>
<tr>
<td>Literacy</td>
<td>92.5%</td>
<td>100%</td>
</tr>
<tr>
<td>GDP per capita (PPP)</td>
<td>$ 52,000</td>
<td>$ 55,200</td>
</tr>
<tr>
<td>Inward FDI (stock)</td>
<td>$ 225.7 billion</td>
<td>$ 69.04 billion</td>
</tr>
<tr>
<td>Outward FDI (stock)</td>
<td>$ 142.4 billion</td>
<td>$ 142.3 billion</td>
</tr>
<tr>
<td>Education expenditures of GDP</td>
<td>3.7%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Birth rate (per 1000 population)</td>
<td>8.99</td>
<td>11.12</td>
</tr>
<tr>
<td>Government type</td>
<td>Parliamentary republic</td>
<td>Constitutional monarchy</td>
</tr>
<tr>
<td>Freedom house*</td>
<td>Partly free</td>
<td>Free</td>
</tr>
<tr>
<td>Freedom House Political Rights*</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Freedom House Civil Liberties*</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Corruption Perception Index (rank, score)**</td>
<td>4th, 9.2</td>
<td>14th, 7.9</td>
</tr>
<tr>
<td>Gini Index (distribution of family income)</td>
<td>48.1</td>
<td>25</td>
</tr>
<tr>
<td>Human Development Index (rank, score)**</td>
<td>25th, 0.922</td>
<td>2nd, 0.968</td>
</tr>
</tbody>
</table>

The Gini Index measures inequality where 0 means absolute equality and 100 absolute inequality. All information is from the CIA Factbook except for (CIA 2009):
* Freedom House, scale 1-7, 1 is most free and 7 the least free rating 2009).
** Transparency International, CPI, scale 0-10 where 0 is highly corrupt and 10 highly clean (2009).
*** Human Development Report 2007/2008, scale 0-100 where 100 is the highest rating (UNDP 2009).
### Appendix 2: Singapore and Malaysia

<table>
<thead>
<tr>
<th></th>
<th>Singapore</th>
<th>Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Area</strong></td>
<td>692.7 sq km</td>
<td>329,750 sq km</td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td>4,657,542</td>
<td>25,715,819</td>
</tr>
<tr>
<td><strong>Language</strong></td>
<td>English (Language of administration), Mandarin, Malay (National Language) &amp; Tamil</td>
<td>Bahasa Malaysia (official), English, Chinese (Cantonese, Mandarin, Hokkien, Hakka, Hainan, Foochow), Tamil, Telugu, Malayalam, Panjabi, Thai and several indigenous languages</td>
</tr>
<tr>
<td><strong>Ethnic groups</strong></td>
<td>Chinese 76.8%, Malay 13.9%, Indian 7.9%, other 1.4% (2000 census)</td>
<td>Malay 50.4%, Chinese 23.7%, indigenous 11%, Indian 7.1%, others 7.8% (2004 est.)</td>
</tr>
<tr>
<td><strong>Literacy</strong></td>
<td>92.5 percent</td>
<td>88.7%</td>
</tr>
<tr>
<td><strong>GDP per capita (PPP)</strong></td>
<td>$ 52,000</td>
<td>$ 15,300</td>
</tr>
<tr>
<td><strong>Inward FDI (stock)</strong></td>
<td>$ 225.7 billion</td>
<td>$ 92.76 billion</td>
</tr>
<tr>
<td><strong>Outward FDI (stock)</strong></td>
<td>$ 142.4 billion</td>
<td>$ 50.08 billion</td>
</tr>
<tr>
<td><strong>Education expenditures of GDP</strong></td>
<td>3.7%</td>
<td>6.2%</td>
</tr>
<tr>
<td><strong>Birth rate (per 1000 population)</strong></td>
<td>8.99</td>
<td>22.44</td>
</tr>
<tr>
<td><strong>Government type</strong></td>
<td>Parliamentary republic</td>
<td>Constitutional monarchy</td>
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<tr>
<td><strong>Freedom house</strong></td>
<td>Partly free</td>
<td>Partly free</td>
</tr>
<tr>
<td><strong>Freedom House Political Rights</strong></td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td><strong>Freedom House Civil Liberties</strong></td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>Corruption Perception Index</strong> (rank, score)</td>
<td>4th, 9.2</td>
<td>47th, 5.1</td>
</tr>
<tr>
<td><strong>Gini Index (distribution of family income)</strong></td>
<td>48.1</td>
<td>46.1</td>
</tr>
<tr>
<td><strong>Human Development Index</strong> (rank, score)</td>
<td>25th, 0.922</td>
<td>63rd, 0.811</td>
</tr>
</tbody>
</table>

The Gini Index measures inequality where 0 means absolute equality and 100 absolute inequality.

All information is from the CIA Factbook except for (CIA 2009):

* Freedom House, scale 1-7, 1 is most free and 7 the least free rating 2009).

** Transparency International, CPI, scale 0-10 where 0 is highly corrupt and 10 highly clean (2009).

*** Human Development Report 2007/2008, scale 0-100 where 100 is the highest rating (UNDP 2009).
APPENDIX 3: Presentation of Key Informants

Pareto:
Per Didrik Leivdal started working for Pareto in 1996 as a financial analyst. In 2002 he proceeded to work with corporate finance, or financial counseling. He was the initiator and main driving force behind Pareto’s decision to invest in Singapore in early 2006. Since then he has been based in Singapore and is now CEO of Pareto Securities Asia.

REC:
Einar Wahlstrøm has worked for REC the last eight years, since the company only had a staff of four or five persons. In recent years he has been working with business developments for various projects and has become responsible for early phase or phase I development. This means that Einar Wahlstrøm is responsible for choosing localization for new facilities, and he was head of the process of choosing Singapore during 2007.

Jotun:
Terje Lunde presently works in Jotun’s Business Development Department. He started his career in Jotun in 1971 as a chemistry engineer, and has worked in almost all areas of the company’s operations – in the laboratory, with technology service and with marketing, sales and HR. Terje Lunde has been stationed abroad several times; he returned to Norway only three years ago after leading the establishment of Jotun in Indonesia. With his extensive experience and as a previous member of Group Management, he has a good knowledge and overview of the company and its business strategy.
APPENDIX 4: Interview Guide

Presentation and explanation about the thesis, the interview and the use of information. Refer to questionnaire and explain the “road map” for the interview.

I. General information about the company and the investment
1. How long have you been working for the company? What is your job title? Previous jobs in the same company?
2. What kind of products/services do you offer? Who are your customers?
3. Who owns the company? How is the ownership structure?
4. When did you begin to consider operations in Asia? Only Asia or other parts of the world?
5. Who was involved in the decision making process? Number of people?
6. Concerning the investment decision…
   a. Which locations did you consider?
   b. Why not some of these others locations (c)?
   c. Why did you choose Singapore (main reason)?
7. When was the final decision made?
   a. When did operations begin in Singapore? Size of the investment?
   b. How many employees – when operations started and later?

II. Economic factors
1. Market size (access to customers)
   a. National market
   b. Regional market
2. Labor
   a. Norwegians or locals? Why, education and knowledge?
   b. If Norwegians – is the standard of living satisfying? Was this a part of the assessment?
   c. Salaries? Same/higher/lower than in Norway?
   d. Labor laws and unions? How does this work in Singapore?
3. Input prices – low cost or expensive? Access to suppliers?

4. Investments in general (more for Pareto)
   Did the company think about the general investment level? That there are many who invest in Singapore? Related to customers?

5. Infrastructure – important for the investment decision?
   a. Transport and communication
   b. Access to offices and/or land. Cheap or expensive? State owned or private owned?

III. Economic institutions
1. Corruption and crime
   Any thoughts? Important for the investment decision?

2. Property rights
   Security of investment property to expropriation and property related crime – important for investing? Why/why not?

3. Bureaucracy
   a. What sort of an impression do you have of Singapore’s bureaucracy?
   b. What kind of contact/communication has the company had with the bureaucracy? The Economic Development Board (EDB)? Other agencies?
   c. Was dealing with the bureaucracy considered a major cost?

IV. Policy – general and sector-specific
1. General policy
   a. Taxes and duties, important in the investment decision?
   b. How are taxes and duties compared to Norway? Compared to other countries in Asia?
   c. Financial assistance?
   d. Other incentives?

2. Sector-specific/Industry policy
   a. Impression of industry policy? Specifically for your industry?
   b. Was this taken into consideration in the investment decision?
3. "Clusters"
   a. Not just customers, but also cooperative partners? Networks and business contacts?
   b. A large industry cluster (finance, renewable energy or paint)? Did this matter for the decision?
   c. Access to technology and research?
4. Politics
   a. Did the company have any direct contact with politicians?
   b. Impression of policy to attract investment? Effective?

V. **Concluding**
1. The most important reasons/factors for investing in Singapore – summing up + what is the most important for the company in terms of:
   a. Economic factors
   b. Political factors
   c. Other reasons not mentioned? (language, society, culture…)

Thank you for the interview!
APPENDIX 5: Questionnaire

Please answer in English or Norwegian.

1. Name of the company?

2. What is your position/title in the company?

3. What was your role in the process towards an investment decision in Singapore?

4. What were the company’s main motives behind the investment decision? Mention one or several, preferably in ranking order.

5. On a scale from 0 – 4, which of these conditions in Singapore have been of significance for deciding to invest? Just put an “X” in the right box.

<table>
<thead>
<tr>
<th>Condition</th>
<th>0= no signif.</th>
<th>1= small signif.</th>
<th>2= some signif.</th>
<th>3= considerable signif.</th>
<th>4= great signif.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to national market</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to regional market</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to suppliers and/or cooperative partners</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to lower-cost labor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
On a scale from 0 – 4, which of these conditions in Singapore have been of significance for deciding to invest? Just put an “X” in the right box.

<table>
<thead>
<tr>
<th>Condition</th>
<th>0= no signific.</th>
<th>1= small signific.</th>
<th>2= some signific.</th>
<th>3= considerable signific.</th>
<th>4= great signific.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to skilled labor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to lower-cost inputs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High quality infrastructure (transport and communication)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advantageous tax policy and regulations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advantageous sector-specific policies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to knowledge, technology and R&amp;D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control of corruption</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security of investment property to expropriation and property related crime</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bureaucratic efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulatory ease of establishing operations in Singapore</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. How would you describe the general climate for doing business in Singapore (when compared to other countries in the region and when compared to countries in other regions)?

7. Other comments – motives that have not been mentioned, considerations about Singapore etc. (feel free to use the other side of the page if necessary)

Thank you very much for participating!
## APPENDIX 6: Nace Categories

<table>
<thead>
<tr>
<th>3 SECTORS</th>
<th>12 SECTORS</th>
<th>26 SECTORS</th>
<th>ISIC/sn94</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offshore</td>
<td>Oil and gas extraction and affiliated services</td>
<td>Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction excluding surveying</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Shipping (water transport and travel agency activities)</td>
<td>Water transport</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Shipping (water transport and travel agency activities)</td>
<td>Supporting and auxiliary transport activities; activities of travel agencies</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Shipping (water transport and travel agency activities)</td>
<td>Renting of machinery and equipment without operator and of personal and household goods (water transportation equipment)</td>
<td>71</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Manufacture of machines and instruments, food products and beverages and other manufacturing industry</td>
<td>Manufacture of food products and beverages</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Manufacture of paper and paper products, and publishing</td>
<td>Manufacture of paper and paper products</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Manufacture of paper and paper products, and publishing</td>
<td>Publishing, printing and reproduction of recorded media</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Manufacture of chemicals and chemical products</td>
<td>Manufacture of chemicals and chemical products</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Manufacture of metal and metal products</td>
<td>Manufacture of basic metals</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Manufacture of metal and metal products</td>
<td>Manufacture of fabricated metal products, except machinery and equipment</td>
<td>28</td>
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<tr>
<td></td>
<td>Manufacture of machines and instruments, food products and beverages and other manufacturing industry</td>
<td>Manufacture of machinery and equipment n.e.c.</td>
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</tr>
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<td></td>
<td>Manufacture of machines and instruments, food products and beverages and other manufacturing industry</td>
<td>Manufacture of office, accounting and computing machinery</td>
<td>30</td>
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<tr>
<td></td>
<td>Manufacture of machines and instruments, food products and beverages and other manufacturing industry</td>
<td>Manufacture of electrical machinery and apparatus manufacturing not elsewhere classified (n.e.c.)</td>
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<tr>
<td>Manufacturing</td>
<td>Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacture of machines and instruments, food</td>
<td>Construction and infrastructure (electricity, gas and water supply)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>products and beverages and other manufacturing industry</td>
<td>Construction and infrastructure (electricity, gas and water supply)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construction and infrastructure (electricity, gas and water supply)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wholesale trade and commission trade, excluding motor vehicles</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post and telecommunications, and computer and related activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Financial services</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other business activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post and telecommunications, and computer and related activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other business activities</td>
<td></td>
<td></td>
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</tbody>
</table>
## APPENDIX 7: Norwegian FDI in Singapore – 12 Sectors

<table>
<thead>
<tr>
<th>Sector</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil and gas extraction and affiliated services</td>
<td>1.2202</td>
<td>0.6938</td>
<td>1.3960</td>
<td>1.8034</td>
<td>2.3349</td>
<td>3.6721</td>
<td>3.9820</td>
<td>8.2925</td>
<td>13.9688</td>
<td>37.3637</td>
</tr>
<tr>
<td>Manufacture of paper and paper products, and publishing</td>
<td>0.0288</td>
<td>0.3419</td>
<td>0.0081</td>
<td>3.6523</td>
<td>3.1791</td>
<td>5.6299</td>
<td>5.2318</td>
<td>9.2459</td>
<td>9.3358</td>
<td>36.6536</td>
</tr>
<tr>
<td>Manufacture of chemicals and chemical products</td>
<td>0.1815</td>
<td>-0.6898</td>
<td>-0.1817</td>
<td>1.1890</td>
<td>1.1727</td>
<td>1.0111</td>
<td>1.6428</td>
<td>2.2772</td>
<td>1.0634</td>
<td>7.6662</td>
</tr>
<tr>
<td>Manufacture of metal and metal products</td>
<td>0.0003</td>
<td>0.0002</td>
<td>0</td>
<td>0.0040</td>
<td>0.0006</td>
<td>0.0012</td>
<td>-0.0020</td>
<td>0.1425</td>
<td>0.0908</td>
<td>0.2375</td>
</tr>
<tr>
<td>Manufacture of machines and instruments, food products and beverages and other manufacturing industry</td>
<td>0.2999</td>
<td>0.2801</td>
<td>0.2934</td>
<td>0.3365</td>
<td>0.4146</td>
<td>0.4867</td>
<td>0.9874</td>
<td>1.8844</td>
<td>2.0452</td>
<td>7.0282</td>
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<tr>
<td>Oil platform and shipbuilding industry</td>
<td>0.0933</td>
<td>0.1038</td>
<td>0.0155</td>
<td>0.1303</td>
<td>0.0386</td>
<td>0.0250</td>
<td>0.0974</td>
<td>0.1127</td>
<td>0.1257</td>
<td>0.7423</td>
</tr>
<tr>
<td>Construction and infrastructure (electricity, gas and water supply)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.5665</td>
<td>0.9809</td>
<td>1.1760</td>
<td>2.7233</td>
</tr>
<tr>
<td>Wholesale trade and commission trade, excluding motor vehicles</td>
<td>0.0662</td>
<td>0.0637</td>
<td>0.1202</td>
<td>0.0863</td>
<td>0.0723</td>
<td>0.0464</td>
<td>0.0572</td>
<td>0.1005</td>
<td>0.1024</td>
<td>0.7151</td>
</tr>
<tr>
<td>Shipping (water transport and travel agency activities)</td>
<td>0.3456</td>
<td>0.2592</td>
<td>1.3394</td>
<td>1.2119</td>
<td>1.1028</td>
<td>3.0536</td>
<td>3.4769</td>
<td>5.5555</td>
<td>22.3495</td>
<td>38.6944</td>
</tr>
<tr>
<td>Post and telecommunications, and computer and related activities</td>
<td>0.0099</td>
<td>0.0031</td>
<td>8.6819</td>
<td>11.5105</td>
<td>2.9913</td>
<td>2.9267</td>
<td>8.3088</td>
<td>11.3026</td>
<td>10.4935</td>
<td>56.2282</td>
</tr>
<tr>
<td>Financial services</td>
<td>0.1527</td>
<td>0.1618</td>
<td>0.3502</td>
<td>0.0003</td>
<td>0.0002</td>
<td>0.0004</td>
<td>0.0301</td>
<td>0.0850</td>
<td>0.0516</td>
<td>0.8322</td>
</tr>
<tr>
<td>Other business activities</td>
<td>0.2348</td>
<td>0.3093</td>
<td>0.4062</td>
<td>0.4731</td>
<td>0.4323</td>
<td>0.4123</td>
<td>0.1309</td>
<td>0.1419</td>
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