

### A study of foreign acquisitions in Norway

How does a takeover of a Norwegian company by a foreign entity affect the location of the headquarters of the acquired company?



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October 2012

Number of Pages: 76

Number of Characters: (no space) 89 628.

Number of characters: (with space): 105 68

## **EXECUTIVE SUMMARY**

Although relocation of headquarter-functions in northern Europe has received increased attention the past decade, there is limited research on headquarter relocations resulting from acquisitions. The present thesis aims to contribute to fill this gap.

The present thesis examines how foreign acquisitions affect the location of Norwegian companies' headquarter. The study analyzes to what extent headquarters are relocated following an acquisition and factors that lead to this outcome. The study is concerned with acquisitions taking place in the time frame of 2007 to 2010.

In the course of the research six variables are empirically tested for their impact on headquarters relocation. We find that age of the acquired company has a positive relationship with location of headquarters in Norway. We also find that acquired manufacturing companies are more likely to have their headquarters relocated than the other companies in the sample. The direction of the latter was interestingly enough the opposite of what was predicted. Finally, although not significant we find tendencies towards positive relationship between cultural distance and relocation of headquarters. As for internationalization, size and the nature of the acquisition no significant relationship was found. This implies that other variables that have impact on headquarters relocation are not accounted in the model or that characteristics with the sample are biased by time and region specific idiosyncrasies for example the 2007 – 2010 financial crises.

## **ACKNOWLEDGEMENTS**

We would like to express our gratitude to Lars Håkanson for guiding us during the process of finalizing our master thesis.

We would also like to thank Professor Gabriel R.G Benito for helping us in the beginning phase of the thesis and helping us with the necessary theory. Hartmark with Jan Henry Fosse were also great help in formulating our problem statement and finalizing our outline.

We would also like to thank Pål Magnus for helping us with the statistical obstacles of this work.

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### 1. Introduction

#### 1.1 BACKGROUND

The increase in foreign direct investment in industrialized countries since the mid 1980s has largely been a result of mergers and acquisition (M&A). Norway has a long history of 'inward foreign direct investment' (IFDI). Foreign capital, technology and skills played key roles in the industrialization of the Norwegian economy in the last part of 19th century. This can especially be seen in resource based industries such as metals, paper and pulp and electro technical installations and equipment (Benito and Grünfeld 2011, p.4). Foreign companies have also been central to the development of the oil and gas sector in the 1970s (Nyggard and Dahlström 1992).

Norway is a high income country with an open economy and a long term current account surplus. These characteristics, in conjunction with the fact that Norway is a stable society with well established legal traditions and the ability to secure intellectual property rights, makes Norway especially attractive to IFDI. Norway has a well educated local population and the necessary level of entrepreneurship to offer local services to new production facilities (Benito and Grünfeld 2011, p.4). Norwegian IFDI has increased rapidly since 2000. A stock of US \$30 billion in 2000, grew by almost 300% to US \$116 billion by 2009; a growth stronger than most other OECD member countries. The composition of Norwegian IFDI largely follows the structure of Norway's private sector economy, with a clear dominance of oil and gas sector (Benito and Grünfeld 2011, p.4).

The largest share of IFDI in Norway has come from Sweden, Denmark, UK, the Netherlands, France and Germany. However recently there has been a clear increase in the level of investment from outside Europe. In 2008, the Swedish Finish company OMX (Now part of the NASAQ/OMX Group) acquired Nord Pool, a key player in energy trading in Northern Europe. This resulted in debates concerning the rapid off shoring of large companies in important sectors in Norway. In the early 1990s the acquisition of Freia-Marabou by Philip Morris and Viking-Askim

by Continental bothin both cases led to closures and relocation of production. Likewise, the merger of Amersham and Nycomed in 1977 quickly led to a relocation of HQ to the UK and further sell-offs in 1999 of Nycomed . As a result the Norwegian authorities introduced concession laws. The concession laws welcomed foreign investment but only to the extent that such foreign investment resulted in net social and economic benefits for Norway (Benito and Grünfeld 2011, p.5).

#### 1.2 THE CASE

Birkinshaw, Braunerhjelm and Terjesen (2006) argue that foreign owners are likely to change the focus of a target organization from a national agenda to an international one. Important functions of target organization may also be moved abroad (Birkinshaw et al. 2006).

While several studies have examined the internationalization of organizations, the decision to relocate headquarter (HQ) across borders has attracted less attention. We want to examine the relocation of HQ of Norwegian companies (Acquired Companies) that have been acquired by foreign companies (Acquiring Companies), in particular where the Acquiring Company obtains full control. We will also explore the reasons behind such relocation. By relocation we are referring to the act of moving the HQ away from its current location and establish it in a new location.

To measure the movement of HQ it is necessary to identify the location of top management of the Merged Companies. Top management is responsible for the company's overall failure or success and holds a high degree of autonomy and decision-making authority.

Foreign acquisition of full control will always lead to loss of authority for the Acquired Company. If the HQ remains in Norway, then this implies that the Acquired Company retains responsibility for a specific part of the Merged Company. Examining the location of the HQ of Merged Companies will therefore indicate whether or not the Acquired Company is still in control of strategy and activity.

## 1.3 RESEARCH OBJECTIVES AND QUESTIONS

The following are our research questions that are designed to answer the above stated research problem and research objectives.

How does a foreign takeover affect the location of HQ of the Norwegian companies after the acquisition?

- How many Norwegian companies were taken over by foreign companies (through an acquisition of majority ownership), from the beginning of 2007 to the end of 2010?
- Of the companies identified, how many had their HQ located in Norway or relocated abroad?
- How can this behavior be explained theoretically? What factors determine the location of HQ of Acquired Companies post-acquisition?

#### 1.4 DEFINITIONS

Important definitions used in the thesis are presented below.

Acquisition(s)	A corporate action in which a company buys	
	most, if not all, of a target company to assume	
	control of the target company. A company	
	gains majority ownership if it buys more than	
	51 percent. <sup>1</sup>	
Acquired Company/Companies	Norwegian company/companies that have been	
	acquired by an Acquiring Company.	

<sup>&</sup>lt;sup>1</sup> http://www.mergermarket.com/info/

<b>Acquiring Company</b>	The foreign owned company that has/will	
	acquire(d) the Acquired Company.	
Autonomy in acquisition	The amount of the day-to-day freedom	
	management is given to manage its business.	
Business Unit HQ	Management responsible for day-to-day	
	management. As defined in paragraph 2.1	
	below.	
Corporate Headquarters (CHQ)	The entity at the top of a corporation, which	
	takes full responsibility for the overall success	
	of the corporation. CHQ generally cover	
	different a number of corporate functions such	
	as strategic planning, corporate	
	communications, tax, legal, marketing, finance,	
	human resource and information technology	
	(Wanner, 2006).	
Decision making authority	The functions that are responsible for, and	
	which control, the strategy and activity of the	
	Acquired Company.	
	Division of the Month	
Divisional Headquarters (DHQ)	Division is an organizational term. Most large	
	western companies are characterized by a	
	corporate office and more or less autonomous	
	divisions. A division represents a specific part	
	of the business. DHQ coordinates the activities	
	within this part, for instance a product or	
	geographical market. CHQ take responsibility	
	for corporate strategy, whereas DHQ are	
	responsible for the business strategies (Collis	
	et al. 2007).	

Headquarters (HQ)	Consist of top management. HQ has a number	
	of functions including human resources, tax	
	and legal, financial management and/or	
	investor relations. The number and type of	
	functions depends on the size and type of HQ.	
Headquarter function	Consist of a top management, financial	
	management, purchasing and logistics and HR	
	management	
Manufacturing company	A company engaged in the mechanical,	
	physical, or chemical transformation of	
	materials, substance, or components into new	
	products (GICS 2010).	
Merged Company/Companies	The entity which results as a consequence of	
Wergen Company/Companies	•	
	the acquisition of the Acquired Company by the Acquiring Company. The Merged	
	Company is at the post-acquisition phase.	
	Company is at the post-acquisition phase.	
MNC	Multinational corporation	
Regional Headquarters (RHQ)	Collis, Young and Goold (2007) define RHQ	
	as an office where business for a particular	
	geographic area is handled, the office typically	
	reports back to CHQ.	
Time perspective	Restructuring a company is a complicated	
	process and changes as a result of an	
	acquisition take time to implement. We have	
	chosen to look at acquisitions that took place	
	before the end of 2010. We assume that the	
	companies acquired before this date have gone	
	through the strategic changes resulting from	

the acquisition. The time perspective for the	
thesis will therefore be between the beginning	
2007 and the end of 2010.	

## 1.5 STRUCTURE OF THE THESIS

The aim of the thesis is to examine the relocation of HQ following foreign acquisitions of Norwegian companies. We aim to provide the reader with an understanding of the importance of the location of HQ and explain why some foreign companies choose to relocate the Norwegian HQ abroad after the acquisition.

Main Parts	Key subject	Summary
1. Theoretical background	<ul> <li>Organization structure</li> <li>Theoretical terms</li> <li>Hypotheses developments</li> </ul>	Covers the most relevant theories applicable for the current research context.  Develops hypotheses based on the already mention research.
2. Methodology	<ul> <li>Choice of method and design</li> <li>Empirical basis and sample</li> <li>Variables</li> <li>Data collection</li> <li>Sample test</li> </ul>	Elaborate the choice of method for the research and illustrate the variables that are included in the research model. Provide a detailed description of the data collection and sample test.
3. Empirical findings and analysis	Descriptive data	Test our variables.

	<ul><li>Correlation</li><li>Binary logistic regression</li></ul>	
4. Discussion	<ul> <li>Key findings</li> <li>Weaknesses in the research model</li> <li>Future research</li> </ul>	Discuss our main findings. Elaboration of weaknesses in the research model.

We begin with an introduction of organizational structures and the terms and definitions used to describe different management functions within an organization. Thereafter we will describe how such terms are used in this thesis, demonstrate how this study has been performed and how our results have been interpreted.

Second, we will hypothesize what influences the location of the Norwegian HQ after the acquisition. We will address aspects regarding both the Acquiring Company and the Acquired Company.

We will introduce methodology by first explaining the choice of method. Namely, explaining why binary logistic regression is a suitable choice for examining the location of the Norwegian HQ after the acquisition. We will describe how data was collected, the limitations of bias and the variables chosen to test the hypothesis.

The empirical part of the thesis begins with a description of the variables converted into SPSS format in order to make them suitable for the regression. We then present the results after having run them in the binary logistic regression.

In the final part of the thesis we will be discussing and summarizing the results from the regression. We discuss whether our hypothesis has any significance in explaining the location of HQ of the Acquired Company.



## 2. THEORETICAL BACKGROUND

#### 2.1 Organization structures

The literature concerning the make-up of Business Unit HQ is limited. Birkinshaw, Braunerhjelm and Terjensen (2006) describe it as follows:

"In our experience, the Business Unit HQ is typically much smaller than the corporate HQ, in that it consists of a management team who collectively represent the different operations and activities performed by the business unit, and a number of support activities, such as HR, finance and strategic planning. However, the size and scope of these support functions vary enormously from case to case". (Birkinshaw, Braunerhjelm and Terjensen (2006) p.683).

Inspired by Birkinshaw, Braunerhjelm and Terjensen (2006) we define Business Unit HQ as having two essential elements; a top management group that typically has an official location in which it meets and a number of HQ functions, each of which has an identifiable physical location. HQ functions can include a number of things, such as HR management, logistics, legal etc. (Birkinshaw et al., 2006. p 684), but for the purposes of this thesis, are limited to HR management, financial management, purchasing and logistics.

The top management is held responsible for the company's (or business units) overall failure or success and holds a high degree of autonomy and decision-making authority. The other HQ functions are held responsible for their respective business areas, such as for instance HR or logistics. According to Barner- Rasmussen and colleagues (2007) HQ often include key decision-makers. The HQ – including top management and other functions - for an acquired unit may be handled by the corporate headquarters (CHQ), assigned to a divisional headquarters (DHQ), or retained as they were (Benito et al. 2011, p 378).

There is no definite way of measuring HQ locations (Birkinshaw et al. 2006, p 690). In measuring the Business Unit HQ, Birkinshaw et al (2006) used the location of the top management team, the location of various HQ functions and the legal domicile of the company as indicators. They used respondents from corporate management to identify the location of the top management team, whereas representatives from the respective business unit identified the other functions. The companies examined in this thesis are very different and the top management does not necessarily make a team. Neither do they include all the functions described by Birkinshaw et al (2006). In spite of this, they do all have top management (comprised of a team or a single person) and some other important functions are also common. Inspired by Birkinshaw et al (2006) we have chosen to use top management in combination with three HQ functions as indicators for the location of HQ.

It is difficult to identify the location of the top management because different companies place different meanings/values in respect of 'top management'. Due to time and resource constrains, we were unable to get in touch with corporate representatives. We have therefore chosen to consider the acquired company's location in the overall organizational structure as indication of whether or not the top management is located in Norway or abroad.

The overall organization structure gives a picture of the reporting system of the organization and the distribution of control, autonomy and responsibility. Top management is responsible for the company's overall failure or success and therefore holds a high degree of autonomy and decision-making authority. By looking at the placement of the Norwegian company within the structure we get an indication of the degree of autonomy, control and responsibility the company holds. This may in turn serve as an indicator of whether top management is relocated, as the top management is responsible for the company's overall failure or successes and autonomy, control and responsibility are likely to follow the top management. A case where the placement of the Norwegian company implies that such power is lost thus indicates that top management has been relocated from its former physical location in Norway. In contrast, we consider top management to have remained in cases where the Norwegian company has retained autonomy, control and responsibility.

A number of basic organizational structures exist. We have chosen to highlight five different organization structures in our thesis:

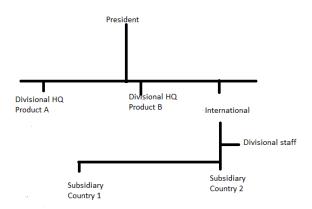


Figure: 1

International Division: The international division structure (see Figure 1) separates domestic management from international management. In this structure, control of international operations is centralized to one division. This has the benefit of grouping international expertise in one place (Wild et al. 2008). The foreign subsidiaries will typically report directly to the international division. In larger organizations however, the international division might be divided further into regional divisions. The subsidiaries would report to RHQ which in turn report to the international division HQ (Håkanson, 09.03.11). Being acquired by a company with this structure generally indicates loss of top management for the Acquired Company. Because international operations are centralized to one international division HQ, top management is more likely to be relocated away from Norway.

However, there may be some cases where the international division is placed in Norway. Top management will then be physically located in Norway, operating as part of the international division which controls all international operations. There may also be cases where the Acquired Company represents the only foreign operation of the Merged Company, thus constituting the

entire international division. In such case the Acquired Company will represent the foreign expertise of the Merged Company. Moreover as domestic and foreign operations are separated, the management of Acquired Company will be separated from management of the Acquiring Company. Such a scenario implies that the top management will remain located in Norway.

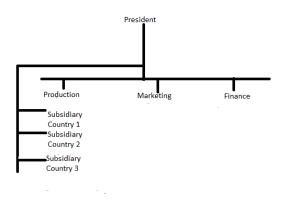


Figure: 2

Mother-Daughter structure: In the mother-daughter structure, management practices are kept relatively informal (Franko, 1976). The relationship between the CHQ and subsidiaries are personalized and less attention is paid to written rules and standardizations (Hedlund, 1984). The modest size and narrow product sortiment of such organizations allows close connection and control of subsidiaries. However, independence of the subsidiaries is large and they report directly to the CHQ. The top management of the Acquired Company is therefore likely to remain in Norway under a mother-daughter structure.

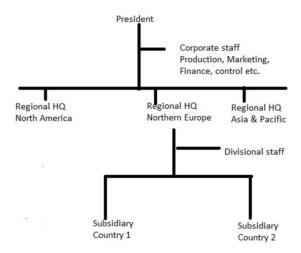


Figure 3.

Area Division: Area division is a structure where global operations are organized on a geographic basis (see Figure 3). Each region manager is responsible for the operations within the region he is responsible for. Regional knowledge is therefore more important than product expertise (Wild et al. 2008). Regional division managers are familiar with the cultural environment, government regulations, and business transactions of the region. Under an area division structure, the Acquired Company will become part of a regional division and will report to the RHQ. The RHQ will in turn report to the CHQ. The top management of the Acquired Company is therefore most likely to be relocated to the RHQ.

Although RHQ include several countries there might be cases where RHQ is placed in Norway, for instance RHQ for the Scandinavian region. Top management will then be physically located in Norway, but then as part of the RHQ who controls all operations within its respective region

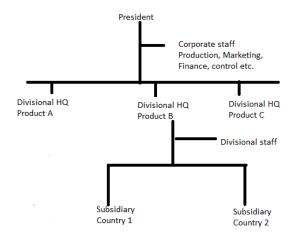


Figure 4

Global product divisions: This structure divides the company based on the products it produces (see Figure 4). A general manager heads each division, which is responsible for its own production and sales functions (Wild et al. 2008). The global product division structure places strong emphasis on global integration (Bartlett et al.1998). Oversight, coordination and global efficiency require a high degree of central control (Håkanson 09.03.2011). An Acquired Company acquired by an Acquiring Company with a global product division structure will normally become part of a product division and report to the DHQ. The top management of the Acquired Company is therefore likely to be relocated.

An alternative scenario is where the Acquired Company's product is new to the Acquiring Company. The Acquired Company may therefore become a new division. The DHQ and the top management of the Acquired Company will therefore remain in Norway.

An even more complex case is one where a global product division has RHQ. The situation is similar to the first described, but with an additional RHQ which is placed under the DHQ. The top management of the Acquired Company is then likely be relocated out of Norway and become part of a RHQ.

Finally DHQ could be placed in Norway for other reasons. The top management will therefore remain in Norway as part of the DHQ.

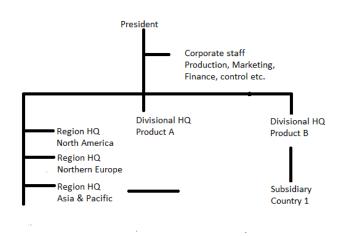


Figure 5

*Matrix structure*: The matrix structure groups the company in respect of both geography and products (see Figure 5). This structure emphasizes dual (sometimes triple) responsibilities and a dual chain of command. Although the purpose of the matrix structure is greater flexibility and better coordination the reporting system is complicated. Matrix structures can also lead to bureaucratic bloat and decision-making processes can get bogged down. The matrix structure implies that top management of the Acquired Company is likely to be relocated out of Norway.

There may be cases where RHQ or DHQ is placed in Norway. Top management will therefore remain in Norway, as part of RHQ, DHQ or both.

## 2.2 THE POST-ACQUISITION INTEGRATION

There has been extensive research in respect of acquisition performance. The success of mergers and acquisitions is often greatly influenced by the ability to successfully integrate the target. Each

target is unique. Integration plans must be specifically designed to address each individual target. The degree of post-acquisition success largely depends on how effectively an acquisition is implemented (Grant, 1988). Implementation requires a number of critical decisions, including the degree of autonomy that should be provided to the Acquired Company's executives in the management of post-acquisition operations and the physical location of the Acquired Company's HQ. This decision is often reflected in the continuation of a leadership team and independence of decision making for the Acquired Company (Grant, 1988).

### 2.3 LOCATION OF HQ; INFLUENCING FACTORS AND PREDICTORS.

#### 2.3.1 Internationalization of MNC

Generally the responsibilities of a MNC are shared in the following way: CHQ are responsible for administrative and strategic functions, and for handling operative responsibilities. CHQ develop long term strategies and allocate the resources needed to pursue those strategies (Chandler, 1991 sited through Benito et al 2011). CHQ decide what to do and how to do it (Foss, 1997, p. 326 cited through Benito et al 2011). The day-to-day management is done by the DHQ (and subsidiary HQ). The CHQ delegates responsibilities to DHQ, which in turn delegates to subsidiary HQ. This is done in a typical principal/ agent structure (Benito et al.2011. p 377). CHQ may also delegate responsibilities directly to subsidiaries if there is no DHQ. The latter is typical for smaller companies with simple organizational structures, (which occur frequently in the sample of this thesis).

The 'principal-agent problem' arises when the principal and the agent have different perceptions of risk or when their goals/desires are in conflict. Consequently the agent does not act in the principal's best interests (e.g. Hennart, 1991; Nohria and Ghoshal, 1994). Information asymmetry between the principal and the agent may result in high agency costs for the principal. Agency cost is the deviation between the interest of the agent and the principal (Laffont and Martimort, 2002).

In this thesis we argue that relocation of Acquired Company HQ will increase agency costs. Relocation of HQ may lead to asymmetric information and differences in interests. It can also become difficult to motivate the agent (the Acquired Company) to act on behalf of the principal

(HQ). Relocation of HQ in itself may generate negative reactions from the Acquired Company's employees and cultural differences between the two entities may grow. Changes in strategy, goals and interests and less interaction with management could also decrease the motivation of the Acquired Company's employees. An Acquired Company that loses its HQ may therefore become less motivated to act on behalf of new management.

In addition, the HQ are relocated abroad they loose important knowledge and insight about the operations of the Acquired Company. It also becomes more difficult to unveil shirking (avoidance of duties and responsibility), which increases agency costs. Because an acquisition is likely to introduce the Acquiring Company to unfamiliar territory, it is also likely to increase information asymmetry and shirking. Retaining existing management may secure more efficient coordination and control of local resources; thereby reduce agency costs (Benito et al 2011, p 378)

According to Benito et al (2011) the principal-agent problem increases with geographic and cultural distance. Interests, goals and attitude towards risk may be highly affected by the physical location of the company. Information asymmetry may also increase with greater geographical distance, making it more difficult for the principal to discover shirking and other agency problems (Foss,1997). Companies that are highly internationalized are therefore exposed to greater agency problems and consequently agency costs. To avoid such costs we argue that internationalized companies have an interest in keeping Business Unit HQ close to their respective foreign operations.

It should be mentioned that agency problems may also occur between the CHQ and the HQ of the Acquired Company in the case where the Acquired Company's HQ remain in Norway. The Merged Company have to weigh the costs and benefits of retaining HQ in Norway.

Benito et al (2011) examined HQ location as part of an internationalization process. They argued that the degree of internationalization of MNC was positively related to the share of DHQ located abroad, but did not found support for their hypothesis. In contrast to Benito et al (2011), this

thesis examines HQ locations as part of an *acquisition* process. Because the Acquired Company may have an unfamiliar market, combined with potential agency problems (as addressed above), we argue that Merged Companies have an interest in keeping HQ in Norway. Because both market uncertainty and potential agency problems increase with internationalization, we argue that this interest becomes stronger the more the Merged Company becomes internationalized. It should also be noted that the sample used by Benito et al (2011) had little variation in the degree of internationalization; in contrast to the sample of this thesis.

Birkinshaw et al (2006) argue that Business Unit HQ moves overseas *in pursuit of* the sales and activities that have already moved. The business unit HQ is relocated to be closer to sale and activities. As this thesis only examines acquisitions; the real question is whether or not the Merged Company will keep HQ in Norway. To relocate HQ out of Norway would contradict Birkenshaw and colleagues (2006) findings that MNCs want to keep Business Unit HQ close to sales and activities. Birkinshaw et al (2006) also argue that MNC locate Business Unit HQ overseas to enhance the development of firm-specific advantages and knowledge linked to the overseas location. Having HQ overseas can also be a symbolic value that demonstrates the MNC's global outlook. In the context of this thesis, such advantages are lost if HQ are relocated. A relocation of HQ might have a negative symbolic value and stakeholders may react very negatively if HQs are relocated out of its local environment. We believe that the benefits of having Business Unit HQ together with the Acquired Company's operations increases proportional to the increase of geographical and cultural distance between the Acquired Company and the Acquiring Company.

An internationalized MNC will be familiar with the advantages of having HQ located abroad and together with operations. Such an MNC will also have a more international outlook than a less internationalized MNC. We believe that the more internationalized the MNC is, the more positive it will be to have HQ located abroad (in Norway).

Forsgren et al (1995) argue that it is more important to locate HQ abroad in respect of highly internationalized MNC. This however does not take into consideration the effect of power

relations on HQ location. The physical location of DHQ is regarded by Forsgren et al (1995) as a consequence of power relations between the actors in a MNC. Corporate management is responsible for distributing corporate recourses. They therefore need reliable information from the business units and have an interest in keeping HQ close. International distance makes it more difficult to strategically direct business units; from this perspective the location of HQ is even more important for corporate management. Based on this argument Forsgreen et al (1995) concluded that the centralization of HQ increases correspondently to the level of internationalization of the MNC. It is interesting that Forsgreen et al (1995) argue that internationalization may have the opposite effect on HQ location political perspective is not taken into account: "It should be noted that this proposition is contrary to what can be expected if power relations did not affect location. It could be argued that executives in a highly internationalized MNC have an international outlook and consequently are more positive to foreign location of division HQ" (Forsgren et al.,1995, p 480.) This thesis does not analyze power relations and therefore in the context of this thesis; internationalization of MNC is positively linked to the likelihood of HQ remaining in Norway.

According to Venaik, Midfley and Devinney (2005) there is an increasing emphasis on internal collaboration and joint capability development within MNCs (Laamanen et al., 2011, cited in Venaik et al., 2005). Despite an increasing use of virtual communication and collaboration, ensuring global learning in MNC also requires physical face-to-face meetings (Meitu, 2006). Based on this argument, Laamanen et al (2011) suggest that the remoteness of a HQ location increases the likelihood of relocation. However, when examining relocation of CHQ and RHQ (where both the home and target countries varied), they did not find support for this hypothesis.

#### *Hypothesis 1:*

The more internationalized the operations of the Merged Company is, the more likely it is that the HQ of the Acquired Company will remain in Norway.

#### 2.3.2 Size of acquiring company:

In a MNC, CHQ sets the overall strategic direction between the subsidiaries and the mother company. DHQ works as the middleman between the CHQ and the Acquired Company. An important element for this to work, is reliable, complete and unbiased communication between DHQ and CHQ (Forsgren et al.,1995, cited in Benito et al 2011). It is also important that the CHQ have the necessary information regarding Acquired Company's markets and products (Forsgren et al.,1995, cited in Benito et al 2011) The bigger the MNC gets, the more complex it is to obtain reliable information. Moreover travel and coordination between time zones costs both time and money. Such cost tends to increase with the number of units and hieratical levels. In some situations it is therefore more efficient, to locate DHQ and CHQ close together (Barner-Rasmussen et al., 2007) When the division delivering information is closer to HQ, the flow of information is freer and the level of trust is greater. The benefits of co-locating DHQ and CHQ therefore increase with size.

Benito et al (2011) states that: "An MNC's share of DHQ located abroad is negatively related to its size". This study shows that larger companies, measured by number of employees, demonstrate a lower propensity to locate DHQ abroad. In light of this and earlier results and theory, we believe that:

#### Hypothesis 2:

The size of the Acquiring Company is negatively related to the likelihood that the HQ of the Acquired Company will remain in Norway.

#### 2.3.3 AGE OF ACQUIRED COMPANY:

According to Garnier (1982) age is an indicator of a company's experience. The older the Acquired Company is the more experience it has and the less risk associated with its management. The age of the Acquired Company is therefore an important factor in determining the degree of the Acquired Company's autonomy post-acquisition; the older the company the

greater autonomy it will enjoy (Garnier, 1982). Garnier (1982) argues that the age of the Acquired Company correlates positively with decentralization of management. Welge (1987), Van den Bulcke and Halsberghe (1984) and Harzing (1999) also support this argument by demonstrating that older subsidiaries tend to be less controlled by their parent companies, than younger subsidiaries. Gates and Egelhoff (1986) later retested Gates hypothesis and also found it to be correct.

The age of the company may also be associated with other competitive advantages. Older company may possess a strong culture, brand name or a good reputation. These take time to build and that are important for the success of companies (Garnier, 1982). Relocation of HQ is important because it may imply broken culture, new strategic directions and/or disloyalty to a city or country.

In light of the above arguments we believe that age of the Acquired Company is important in determining the location of HQ. The older the Acquired Company the more likely the Acquired Company can retain HQ in house. The older the company, the more environmental changes it has survived, the more knowledge it has of its operating environment and the greater competitive advantages it has achieved. Relocation of HQ may lead to loss of understanding, knowledge and competitive advantages. This is especially critical in the case of a newly acquired subsidiary.

#### Hypotheses 3:

The older the Acquired Company is, the more likely the HQ will remain in Norway.

#### 2.3.4 Type of company:

Birkinshaw et al (2006) argue that MNCs often relocate Business Unit HQ so HQ can get closer to their existing activities and operations. This is especially the case in respect of manufacturing companies (Henderson & Ono 2008). Such companies prefer short distances between HQ and manufacturing operations because of coordination costs. The costs of transportation and communication are especially important for companies with multiple production sites (Lavey 1974). Manufacturing companies often need to closely monitor their operations, which is why

transportation and communication costs are relatively high. Because as Norway is a high cost and remote located country we believe that transportation and communication costs are relatively high. We therefore believe that Merged Companies have an even stronger incentive to locate HQ located close to operations.

Furthermore, Benito et al (2011) argue that if the core advantages of a company come from manufacturing operations, value creation is less dependent on location and more dependent on interaction with customers, suppliers and competitors. It is therefore beneficial for the HQ to be located where these are also located.

Based on Thompsons (1967) idea of 'sequential dependence', Benito et al., 2011 argue that interaction between subsidiaries in manufacturing companies is often sequential. An acquisition of a manufacturing company may therefore aim to outsource or offshore activities (e.g. Mudambi, 2008; Pyndt &Pedersen, 2006). Outsourcing of activities to a high-cost and remote location like Norway is little likely. Nevertheless, it could suggest that in the case of a foreign manufacturing acquisition the Acquiring Company may already have operations in the Acquired Company's home country. A substantial share of the Merged Company's value-creating activities is then located abroad, which may increase the incentive to keep HQ located abroad.

#### Hypotheses 4:

If the Acquired Company is a manufacturing company it is likely that HQ will remain in Norway.

#### 2.3.5 The nature of the acquisition:

An acquisition may take one of two forms: related or unrelated. A related acquisition implies that the products or services that are being produced or sold by the Acquiring Company and the Acquired Company are identical or similar, i.e., the companies are operating in the same industry. Related acquisitions are also referred to as 'horizontal acquisitions' (Green and Cromley, 1982). Related acquisitions eliminate competition between the two firms. The main aim is to enhance economies of scale by eliminating duplicity of operations and processes (Fluck and Lynch, 1999).

An unrelated acquisition involves two companies whose products are not related. Unrelated acquisitions can either take the form of 'conglomerate acquisitions' or simply 'unrelated acquisitions' (Fluck and Lynch, 1999). In a conglomerate acquisition, the companies belong to different lines of business. The products or services are not being highly related but exist within the same industry. In an unrelated acquisition the Acquiring Company is moving in to a new industry. The main aim of unrelated acquisitions is to reduce risk through diversification. It also enhances the stability of the Acquiring Company by providing a more diversified portfolio of products and processes (Besanko et al., 2003).

Vertical acquisitions have become quite common for a number of reasons. Many companies aim to reduce uncertainty regarding the availability and quality of supplies and to ensure a stable demand for their output. Others seek to take advantage of available economies of integration by avoiding tariffs or taxes, or preventing monopolistic behavior from suppliers or buyers (Williamson, 1989). Finally, vertical acquisitions may also generate more efficient use of resources (Williamson, 1989).

According to Datta & Grant (1990) the degree of autonomy of the Acquired Company depends on whether the acquisition is related or unrelated. A major aim of most related acquisitions is to realize synergies through the consolidation of operations. The result is often a lower level of autonomy for the Acquired Firm because most decisions are unified and made at a corporate management level. On the other hand, unrelated acquisitions provide limited opportunities for consolidation and are more likely to result in a higher level of autonomy for the Acquired Company (Datta and Grant, 1990). Different products require different functions and/or employees. When a company enters new and unfamiliar markets top decision makers are therefore likely to draw on experience employees for expertise (Hage and Aiken,1967). This implies that management is likely to be more decentralized, increasing the likelihood that the Acquiring Company will retain HQ in Norway. Dundas and Richardson (1982) go on to state that in unrelated acquisitions, acquired units should be kept strictly independent and given a high level of autonomy. Based on these theories, we formulate the hypothesis:

#### *Hypothesis 5:*

*If the acquisition is unrelated it is likely that the HQ will remain in Norway.* 

#### 2.3.6 NATIONAL CULTURAL DISTANCE BETWEEN ACQUIRER AND ACQUIRED COMPANY

Researchers (e.g. Buono and Bowditch, 1989; Chatterjee et al., 1992; Datta, 1991) have argued that acquisition failures are often the result of fractures between workplace cultures during the integration phase. A great deal of research has explored the impact of cultural differences on acquisition outcomes. A substantive part of the studies have suggested that organizational and national cultural differences can create major obstacles (e.g. Buono and Bowditch, 1989; Chatterjee et al., 1992; Datta, 1991).

Cultural distance can be evidenced in differences in the norms, routines and repertories for organizational design, new product development and other aspects of management (Kogut and Singh, 1988). Specific routines and repertoires have shown to be critical to post-acquisition performance, particularly when such routines/repertories are significantly different and are not easily imitated (Barney, 1986). Clashes of organizational values and practices can create an "us versus them" mindset among the employees and may hinder collaboration and inter-unit learning (Björkman et al 2007). Literature shows that if the cultural distance is large then uncertainty about the Acquired Company's market is higher for the CHQ. To address such problems the Acquiring Company may choose to place management with the Acquired Company. This could increase the Acquired Company's degree of autonomy and the likelihood that HQ will remain in Norway.

Information asymmetry also increases when cultural distance is large (e.g. Hitt et al., 1994; Roth & O'Donnell, 1996). To reduce agency costs, corporate management must have a thorough knowledge of subsidiaries and of their environments (Hennart, 1991). The latter is difficult unless management is highly involved in the Acquired Company, which often requires physical presence of management.

Based on the above discussion we make the hypothesis:

## Hypothesis 6:

The larger the cultural gap between the Acquiring Company and the Acquired Company, the more likely the Acquired Company's HQ will remain in Norway.



## 3. METHODOLOGY

#### 3.1 METHODOLOGY CHOICE

This thesis uses a 'deductive research approach', i.e., the use of established theory and earlier research to deduct hypotheses about the relationship between two or more variables (Collis & Hussey 2003). The sample studied is Norwegian companies acquired in the period between 2007 and 2010. The research is inspired by a study by Benito, Lunnan and Tomassen (2011) "Distant Encounters of the Third Kind: Multinational Companies Locating Divisional Headquarters Abroad". Benito et al (2011) examined the drivers behind foreign relocations of DHQ of companies originating in Norway, where foreign relocation is part of an internationalization process. Foreign ownership was included as one of the explanatory variables, on the hypothesis that an MNC's share of DHQ located abroad is positively related to the extent of its foreign ownership<sup>2</sup>. They argue when foreign owners dominate they bring with them a change of focus from a national agenda towards an international one. Benito et al (2011) therefore expected MNCs to relocate HQ functions to core markets or international hubs. However, the study did not support this hypothesis. As Benito et al (2011) were not able to support their hypothesis regarding foreign ownership, it was suggested that a similar test could be performed examining wholly owned companies only.

Prior to choosing our topic, we reviewed the existing body of research. Established literature and research on this topic is relatively limited. Yet, the wealth on the field is sufficient enough to provide us with a solid theoretical framework. We were therefore able to base our hypotheses upon established theories. Combined with limited time and recourses, the above-mentioned factors made a deductive approach a natural choice for the research.

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<sup>&</sup>lt;sup>2</sup> Ownership concentration is by Benito t al. (2011) measured as the percentage of equity held by the five largest owners.

The unit of our analysis is MNC. Our aim is to identify factors influencing the location of HQ of Merged Companies post-acquisition. We start our data collection, by charting what type of organizational structure Acquiring Companies belongs to. Based on theory by Håkanson (2011), we have chosen to divide the organization structures into five different structures. To better understand the process after the acquisition, we have also asked the acquired company to place themselves within the structure of the acquirer.

#### 3.2 RESEARCH DESIGN

This thesis is a descriptive-explanatory study. The descriptive method is used to give a picture of the consequences of foreign acquisitions, while the explanatory method is used to explain the drivers behind the relocation of HQ. As the thesis uses description as a precursor it is defined as a descriptive-explanatory study.

#### 3.3 RESEARCH STRATEGY

In this thesis we have used a survey strategy. The survey strategy allowed us to collect a large amount standardized data, which we can analyze in a quantitative way using descriptive and inferential statistics.

#### 3.4. RESEARCH METHODS

We decided to use multiple data collection techniques and corresponding analysis procedures. We used both quantitative and qualitative techniques and procedures, as well as primary and secondary data.

Our data was collected through annual reports, websites, questionnaires and structured interviews, which were analyzed by a statistical and quantitative procedure. Tashakkori and Teddlie (2003) argue that multiple methods are useful if they provide better opportunities for the researcher to answer the research question and better evaluate the extent to which the research findings can be trusted (Saunders 2009, p 153). Different sources of data employ different terms,

concepts and definitions. Several variables of data were also difficult to measure. Different collection methods suit different data, therefore using different methods to answer specific questions is preferable.

#### 3.5 TIME HORIZON

This thesis is cross-sectional, meaning it is study of a particular phenomenon at a particular point in time. To get a representative and reliable sample, the oldest acquisition included in the sample is from the beginning of 2007. We recognized that implementation of an acquisition takes time, so we excluded acquisitions after the end of 2010. All the companies included in this analysis have therefore had time to implement changes. However, it should be noted that an implementation may not be definite and there may be disagreement as to whether or not an acquisition is fully implemented.

We chose a cross-sectional time horizons largely as a result of time and information constrains. We recognized that measuring change in authority is not unproblematic. Barner-Rasmussen et al (2007) argue that HQ units are mobile and that the relocation of HQ over country borders is a complex, context-specific and dynamic phenomenon.

#### 3.6 DATA COLLECTION METHOD:

As mention earlier, we used both primary and secondary data in this thesis.

#### 3.6.1 SECONDARY DATA

#### MergerMarket

MergerMarket (MM) is a database especially developed for the merger and acquisition (M&A) sector. It is maintained by an international company with locations in 65 countries and is owned by the Financial Times group. MM contains information about corporations' corporate strategies, ongoing deals and M&A transactions, both historical and current transactions. It is available via

subscribed access. Data is gathered on a daily basis from over 3,000 global media sources. The database is relatively detailed and it is possible to select companies that meet predefined criteria. MM is a survey based secondary data source and the data is collected for professional use. Based on the company's management team, (and the current vacancies available on its website), it seems that the employees – and thereby the collectors and analysts of the data – are highly educated within the business field<sup>3</sup>. The geographic scope, the wide customer range and the size of the database, implies that the information available from MM is of a high quality.

A typical disadvantage associated with the use of secondary data, is that the data was originally collected for a different purpose. MM however, is primarily used to identify the population.[I don't understand what you mean here. A problem we faced was defining an 'acquisition'. Often the terms 'merger' and 'acquisition' become synonymous, but according to the definition used by MM, an 'acquisition' occurs when one company obtains majority ownership in another company. Majority ownership is defined as over 51 percent. However, it is important to note that in some cases, for example, if none of the other shareholders own a significantly high percentage, effective control may be acquired with much less than 51 per cent.

Another problem could be that the population is incomplete. As we have no precise information about the collection methods of the MM, we can never be completely confident about the latter. Yet, given the size, the customer base and reputation of MM we consider the information to be trustworthy and satisfying our requirements of this thesis.

#### Annual reports and companies' websites

Annual reports and websites fall into the category 'documentary secondary data'. In conjunction with official websites, annual reports were used to collect information about the companies' age, number of domestic employees, number of foreign employees, industry, country of origin and the Acquiring Companies. Websites and annual reports of both Acquiring Companies and Acquired Companies have been used.

<sup>3</sup> Information is taken from MMs own website

Websites and annual reports are produced by the companies themselves, which may lead to measurement bias. To reduce measurement bias as much as possible we used several sources where available.

#### Other documentary secondary data sources

The amount of information provided by annual reports varies. The same is true for company websites. There are a number of companies that do not publish their annual reports and some companies do not have websites. It was therefore necessary to use a combination of documentary secondary data sources, for example acquisition announcements.

#### 3.6.2 Primary data

#### **Questionnaires**

We also used Internet questionnaires and structured interviews as part of data collection. The Internet questionnaire made it possible to visually present the organization structures to the companies and introduce them to the purpose of our study. The structured interviews made it possible to clarify any possible misunderstandings stemming from the Internet questionnaires and also allowed us to address missing responses.

#### **Internet questionnaires**

We used email to contact the companies. The size of the sample made it easy to administrate by email. It was important that the "right" respondent answered the questionnaire, i.e., a person who had actually experienced the acquisition. To find the "right" respondent we looked at annual reports dated post-acquisition. To avoid the respondent receiving multiple copies of the questionnaire, (which might reduce a person's willingness to answer), we only sent the questionnaire to one mail address. It was difficult to identify suitable employees by looking only at websites. In most cases the questionnaire was sent to a general email address.

To control respondents' status and ability to answer we started out questionnaire by asking for the person's position and time spent at the company. We had the opportunity to correct and supplement any uninformed responses during the structured interviews. The questionnaire was

designed to correspond to the independent variables and it was pre-coded so that the answer could be easily transferred to the SPSS file.

The design of a questionnaire affects the response rate and the reliability and validity of the data collected. A valid questionnaire will enable accurate data to be collected and a reliable questionnaire will collect data consistently. "The question must be understood by the respondent in a way intended by the researcher and the answer given by the respondent must be understood by the researcher in a way intended by the respondent" (Foddy 1994, p.372). Because the data was to be tested through statistical analysis it was important to clearly state what detail would be measured when designing the questionnaire.

With this in mind we designed our own questions and measured both behavior and attribute variables (Dillman 2007). Ensuring that the respondents understood the questions in the way intended we intended was challenging, especially because we sent the questionnaires by email. Because there was no dialog between the researcher and respondent, respondents had no way of confronting the researcher with any doubts. Some of the research questions therefore needed to be subdivided into more detailed questions to ensure that we got the right information. The questions asked were a combination of rating questions and category questions.

There is disagreement about the appropriate length of Internet questionnaires. We followed DeVaus (2002) advice to not make the questionnaire longer than was necessary to meet our research questions and objectives. Our questionnaire is comprised of only two questions, one of which was divided into three sub-questions.

Before sending out the questionnaires we had it pilot tested and critiqued by Jan Henry Fosse, Head of Strategy Consulting of the Norwegian consulting company Hartmark.

Prior to sending questionnaire we sent a preliminary email to the companies, advising them about the questionnaire. This was done to increase the likelihood that they would answer. The questionnaire was sent out with a cover letter explaining the purpose of the thesis and why it was important for the companies to answer. The questionnaire was sent as an attachment. Attaching documents in this way poses a risk of viruses and some companies may not open attachments when they are uncertain of its contents. However, in light of the risk that the respondents would

not be able to plot their answers directly via mail and time limitations, we considered this to be the best method.

Saunders recommends sending the first follow-up email one week after sending the questionnaire (Saunders 2009 p. 398). We sent reminders to the companies who had not answered after one week. Saunders recommends sending the second follow-up email after three weeks of sending the questionnaire. Saunders (2009) even recommends sending out a third email if time allows. Because we were short of time we decided not to send second or third follow-up emails and instead continued directly to the phone interviews. The response rate from the email questionnaire after the first reminder mail was 23%. According to theory this is a good respond rate, however it is rather poor, considering our small sample of only 50 companies.

#### Phone interviews

Interview administered questionnaires enables the researcher to ensure that the respondents are the target respondents, which improves the reliability of data. Contacting the right person is much higher via phone than email. Phone interviews allowed us to contact the person we wanted to talk to directly. If this person (identified through annual reports and websites) was not available it was relatively easy to find another person within the company who could answer our questions. The response rate also tends to be much higher using telephone interviews than email questionnaires (Saunders 2009, p.364). Structured interviews allowed for both open and closed questions and the questions could be more complicated than the questions in an email questionnaire. This is because phone interviews allow respondent participation and the researcher can help to guide the respondent through the questionnaire. However, this form of data collection is more time consuming and requires more resources.

Because we had a poor respond rate from the Internet questionnaire, we decided to call the whole sample. Because we had already sent the questionnaires out by email, all of our respondents had been warned prior to the telephone interview. We did not record the conversations but we did note everything that was said.

Respondents to telephone questionnaires are more likely to answer to please, due to their direct contact with the interviewer. Interviewer administered questionnaires will usually have a higher

response rate than self-administered questionnaires. In addition we got better insight into the processes that took place post-acquisition, which made us better able to interpret the answers. Despite a number of failed attempts we finally succeeded to get 48 respondents and continue our analysis.

## 3.7 VALIDITY/RELIABILITY

A characteristic of a deductive approach is that the researcher should be independent of what is being observed. This has been a challenge in the thesis, especially because we used phone interviews as part of data collection.

#### 3.8 Data Analysis Method

#### 3.8.1 SAMPLE:

Our analysis was based on the population of all Norwegian companies acquired by foreign companies from the beginning of 2007 until the end of 2010, with the exception of financial holding companies. Financial companies were excluded because the nature and the objectives of acquisitions involving financial companies are very unique. Including these companies would give extreme and misleading values, making it difficult to draw accurate inferences. The population comprised 120 companies.

Simple random sampling is best used when there is an accurate and easily accessible sampling frame that lists the entire population (Saunders et al. 2009, p 226), as in the case of this thesis. Statisticians have shown that a sampling distribution of 30 or more will usually result in a sampling distribution that is very close to the normal distribution. Strutely (2003) suggests a minimum size of 30 for the overall sample. To allow for the impact of non-responses, our original sample comprised 55 companies. Some companies were excluded after the selection due to lack of data, contact information, willingness to participate or other circumstances that made it impossible to analyze them using regression.

After excluding the invalid variables, our final sample consisted of 42 acquisitions in model 1 and 48 acquisitions in model 2. Most of the acquisitions were of Scandinavian origin. Our sample included Acquiring Companies from 16 different nationalities. Out of 48 acquisitions, as many as

14 of Acquiring Companies came from Sweden. Table 1 below presents the distribution of the origins of Acquiring Companies.

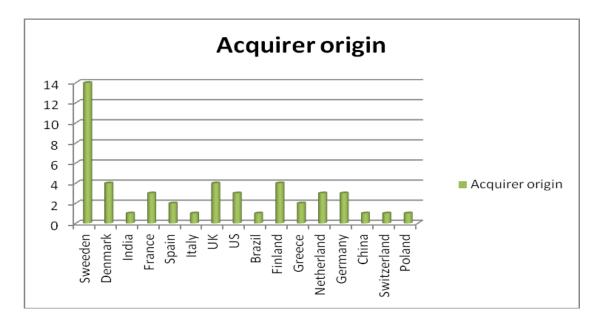


Table 1

The main sector in our sample was the industry sector in respect of both Acquiring Companies and Acquired Companies. In only 10 cases, acquisitions were unrelated. In 11 cases the Acquired Companies were manufacturing companies.

#### 3.8.2 VARIABLES

Based on previous literature and theories we deducted six hypotheses aiming to explain the influences behind the HQ location of Acquired Companies. Corresponding to each hypotheses we have identified an independent variable to test our predictions and to see if there is a relationship between them and the dependent variable.

# **Dependent variable**

Variable	Type of Data	
HQ Location	Categorical	DHQ/RHQ- Subsidiary

Table 2

As previously mentioned, it was challenging to get a univocal answer regarding the degree of autonomy possessed by Acquired Companies post-acquisition. To get an answer as precise as possible we collected information about the dependent variable in two steps, using both email and telephone. To determine the location of HQ of the Acquired Companies post-acquisition, we used organizational structure charts. By placing the Merged Company in one of the five organizational structures and finding the position of the Acquired Company within this structure, we obtained a picture of the distribution of authority. The respondents from the Acquired Companies were asked to choose which organizational structure best fit the Merged Company and where the Acquired Company belongs in the structure. The structures were illustrated graphically. They were then asked about what happened with their freedom to make decisions after the acquisition was implemented. To understand the situation as accurately as possible the question was repeated in respect to financial management, purchasing and logistics, and HR management. The respondents were asked to rate their opinion on a scale of 1-6 (1= lowest degree of autonomy, 6= highest degree of autonomy.) The answers were measured in the following way:

Score 1	0%
Score 2	20%
Score 3	40%
Score 4	60%
Score 5	80%
Score 6	100%

After calculating and summarizing the results, a company with a score below 200% was characterized as an acquisition with relocated HQ.

The answers to our mentioned questions were different for each company. The answers were contextual and there are plenty of grey-zones. The concept of HQ had to be strictly defined. All answers were then fitted into one of two categories, following the concept of reductionism. Reductionism states that a problem as a whole is better understood when reduced to the most simple elements (Saunders 2009, p 125).

In the Binary logistic regression, if HQ of the Acquired Company remains in Norway it is given a numeric value of "1". If HQ are relocated it is given a numeric value of "0". Of all the cases (n= 55) there were 2 missing values.

## **Independent Variables**

Variable	Type of data	Range of values
Age of the Acquired Company.	Continuous	1-82 years old
Number of employees of the Acquiring Company.	Continuous	57-30,400 employees
Numbers of employees of the Acquiring Company working abroad.	Continuous	0-93 per cent working abroad
Is Acquired Company a manufacturing company?	Categorical	YES/NO
Is it a related/ unrelated acquisition?	Categorical	YES/ NO
What is the physical distance between the Acquiring Company and the Acquired Company?	Continuous	9-70
How large is the cultural distance between Acquiring Company and Acquired Company.	Continuous	0,190-6,684

Table 3

The number and type of category varies depending on the variable, (see Table 3).

The variable, *age of the Acquired Company*, was taken directly from the home pages of the Acquired Company. It is the age of the company at the time of the acquisition. It is a numeric value that ranges from 1-82 years old. All cases (n= 55) had a valid entry for this variable.

The variable, *number of employees of Acquiring Company*, was taken directly from the respective companies annual reports. It shows the average number of employees working for the company

in the year of the acquisition. It is a numeric value ranging from 57-30,400 employees. Of the 55 companies (n=55) there was 1 case where data was impossible to obtain.

The variable, *numbers of employees of the Acquiring Company working abroad, is* also collected directly from annual reports. It is the average number of employees working in Acquiring Company in the year of the acquisition. It is a numeric value that ranges from 0-93 percent, where the percentage value symbolizes the share of employees working abroad. Of the 55 companies (n= 55) there were 2 cases where data was impossible to obtain.

The variable, *is the Acquired Company a manufacturing company*, was collected from MM, as well as annual reports and homepages. If the Acquired Company was a manufacturing company, "yes" was recorded and the numeric value of "1" attributed. If "no" was recorded the numeric value of "0" was attributed in the binary regression. All cases (n= 55) had a valid entry for this variable.

The variable, *is it a related or unrelated acquisition*, was collected from MM. The acquisitions were classified as 'related' if the companies operated in the same industry sector. The sample was classified into sectors corresponding to the Global Industry Classification Standard (GICS). The GICS structure consists of 10 sectors, 24 industry groups, 68 industries and 154 sub- industries. However, due to the characteristics of the data and limited information, we limited the division of the companies into the first 10 sectors, see table 4.

Sector	Industry Groups
Energy	Energy
Materials	Materials
Industrials	Capital goods
	Commercial and professional services
	Transportation

Consumer Discretionary	Automobile and components
	Consumer Durables and Apparel
	Consumer services
	W.F
	Media
	Retailing
Consumer Staples	Food and stable retailing
Consumer staples	rood and stable retaining
	Food beverage and Tobacco
	Households and personal products
	Households and personal products
	Health care equipment and services
Health Care	Pharmaceutical, biotechnology and life science
	i manaceutea, oroccimology and me selence
	Banks
Financials	
	Diversified Financials
	Insurance
	Real estate
	Software and services
Information technology	
	Technology hardware and services
	Semiconductors and semiconductors equipment
Telecommunication services	Telecommunication services
	Utilities
Utilities	

Table 4

Unrelated acquisitions were labeled "yes" and were attributed the numeric value of "1". Related acquisitions were labeled "no" and were attributed the numeric value of "0". All cases (n= 55) had a valid entry for this variable.

For the variable, how large is the cultural distance between the Acquiring Company and the Acquired Company, we used MM to find the nationality of the Acquiring Company. To measure the difference between the Acquired Company and the Acquiring Company, we used the Kogut and Singh index (1988) for measuring cultural distance and the Ambos and Håkanson index (2010) for measuring psychic distance.

The psychic distance index by Ambos and Håkanson (2010) is a numeric value ranging from 9-70. Of the entire sample (n=55) there are 6 missing values. This is because the matrix only covers 25 countries and our sample included Acquiring Companies from Finland and Greece.

The cultural distance index by Kogut and Singh (1988) is also a numeric variable, ranging from 0,190 to 6,684. Of the entire sample (n=55) there were no missing values, and since Koguet and Singh matrix also contained Finland and Greece, the missing cases from model 1 could be included.

Sosua and Bradley (2008) argue that the two concepts, cultural distance and psychic distance are conceptually different and should not be confused. The concept of psychic distance is individuals' perception of the difference between the home country and foreign country. In our case, it means the Acquiring Companies perceived distance in respect of the Acquired Company. It is an interpretation of reality and is therefore highly subjective (Sousa and Bradley, 2008). A study done by Ambos and Håkanson (2010) argues that perceived psychic distance is influenced by a range of cultural, geographic, political and economic factors. Among these, absolute geographic distance accounts for the largest share of the explained variance. Ambos and Håkanson (2010) took these influences into account when they constructed the psychic distance index.

According to Kogut and Singh (1988), national culture can be defined as the degree to which the cultural norms in one country are different to those in another country. We used Kogut and Sighs' (1988) index to measure cultural distance. In contrast to the psychic distance, cultural distance should be applied at a national level, not an individual level. Kogut and Singhs' index (1988) estimates cultural distance as a compound index based on the deviation of Hofstedes

(1980) national culture scales: power distance, uncertainty avoidance, masculinity and individualism.

The issue of symmetry between the psychic distance and cultural distance is important when we measure it. Psychic distance between two countries can vary depending on the direction one travels; it is therefore important to look at it from the view of the Acquiring Company. We want to find the perceived distance of the Acquired Company from the perspective of the Acquiring Company. However, the cultural distance is postulated to be symmetric. Cultural distance from Acquiring Company to the Acquired Company is identical to the cultural distance between the Acquired Company and the Acquiring Company.

#### 3.8.3 SOFTWARE AND STATISTICAL ANALYSIS

We used IBM SPSS statistics 19 and Microsoft Office Excel 2007 to statistically analyze our data. With these programs, we produced descriptive statistics and graphical analyses to get an overview of the data. We also included some correlation matrixes to highlight certain aspects in the descriptive statistics. To answer the research question and hypothesis, we used the binary logistic regressions function in SPSS, (in combination with the descriptive statistics analysis).

Because our dependent variable was categorical (HQ Norway/ HQ relocated), we did a logistic regression. More specifically, we used a 'binary logistic regression'. Binary means that the dependent variable can only take values, "0" or "1". The value of 0 should be assigned to whichever response indicates a lack/absence of the characteristic of interest (Pallant, 2010). In our case, if the HQ of the Acquired Company was relocated post-acquisition it was labeled "0". If the Acquired Company's HQ remained in Norway, it was labeled "1". A logistic regression allows you to test models to predict categorical outcomes with two or more categories. In our case we had six independent variables, which are both categorical and continuous variables.

Binary logistic regressions are very sensitive to high correlation amongst the independent variables (multicollinearity) and the results are sensitive to outliers. In order to conduct a binary logistic regression there are a set of assumptions that need to be properly followed, see Table 5 (Agresti, 2002);

Assumption 1: Logistic regressions do not assume a linear relationship between the dependent and the independent variables.

Assumption 2: The dependent variable must be a dichotomy.

Assumption 3: The independent variables need not be interval, or normally distributed, nor linearly related, nor have equal variance within each group and does not assume homoscedastisticity.

Assumption 4: The categories (groups) must be mutually exclusive, a case can only be in one of the groups and every case must be a member of one of those groups.

Assumption 5: Larger samples are needed than for linear regressions because maximum likelihood coefficients are large sample estimates.

Table 5

#### 3.9 LIMITATIONS:

Due to time and recourse constrains it was necessary to make simplifications. We acknowledge the existence of better measuring methods, but chose the best possible methods in light of our contextual limitations. Moreover, the independent variables internationalization and size may be closely connected. However, when we did the regression analysis correlation between the two, it did not turn out to be a problem.

The dependent variable is measured post-acquisition. Because the sample consisted of acquisitions made before the end of 2010 we assumed that there was sufficient time for the acquisition to be implemented. However, it is difficult to determine when these changes are final. Especially in light of the financial crises, companies may have postponed changes that involved increased costs. Relocation of HQ functions is a good example of this.

Because we excluded financial companies, our sample became smaller than what was initially. A bigger sample could have given more significant results.

Finally, it should be noted that this area of study is complicated. It would be preferable to combine the present analysis with one or more case studies.



## CHAPTER 4. EMPIRICAL FINDINGS AND ANALYSIS

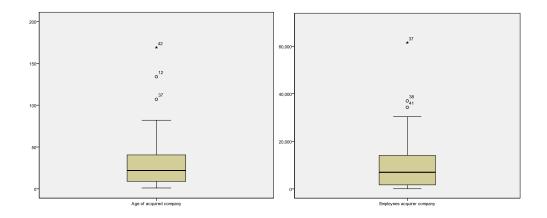
In this chapter we present the results from our descriptive analysis. First we will describe the missing values of data, second we will provide a full descriptive analysis and third we will present the results of the binary logistic regression. A substantial part of the below description and the statistical analysis are based on guidelines from the SPSS Survival manual, Pallant (2010).

#### 4.1 DESCRIPTIVE ANALYSIS

#### 4.1.1 ACQUISITIONS REMOVED FROM THE DATASET.

We started out with 55 cases, but due to lack of information we had to drop 2 of the cases. In respect of model 1, in order to follow Håkanson and Ambos (2010) psychic distance matrix, we had to exclude six acquisitions by Acquiring Companies from Finland and Greece, because the study of Håkanson and Ambos did not cover these two countries. In model 2, when testing for cultural distance, these six cases were included.

In order to conduct a binary logistic regression it is important to check for the presence of outliers and cases that are not well explained by the model (Pallant 2010, P.169). We checked our continuous variables, namely age of Acquired Company, number of employees Acquiring Company and number of employees of the Acquiring Company working overseas, in the SPSS function, "boxplot".



Boxplot 1 and 2(SPPS)

When we look at boxplot 1, there are 3 cases considered outliers. One case, (case 42), was an extreme outlier. In boxplot 2, there are also 3 cases considered outliers. Case 37, was an extreme outlier. There were no outliers in respect of in the variable, *number of employees of the Acquiring Company working overseas*. All together 13 cases were excluded from the data (See Appendix Table 1).

#### 4.1.2 DESCRIPTIVE ANALYSIS OF THE VARIABLES

Categorical		
	Frequency	Percent
Dependent		
HQ Norway	19	54.80%
HQ relocated	23	45.20%
Variable name		
1. Manufacturing		
Manufacturing company	10	23.8%
Not manufacturing company	32	76.2%
2. Nature of the acquisition		

Related	34	81.0%
Unrelated	8	19.0%
Continuous	Mean	Standard deviation
3. Age of the Acquired Company	26.67	22.724
4. Number of employees of Acquiring Company	8240.4	8651.397
5. Number of employees of Acquiring Company working abroad	39.66%	6.10%
6. Psychic distance	26.24	19.029
7. Cultural distance	1.73	1.902

Table 6

# Dependent

Out of the 42 observations, there were 19 cases where HQ remained in Norway post-acquisition (Table 6). In the other 23 cases HQ of the Acquired Company were relocated.

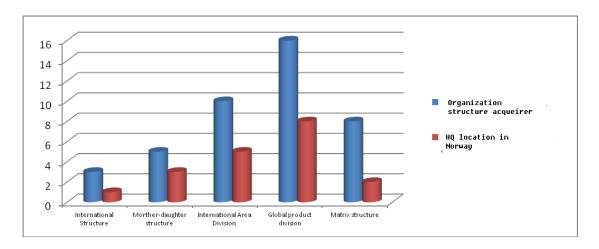


Table 6

In order to determine the HQ location of the Acquired Company, the Acquired Company respondents were asked to select one of five organizational structures which best fits the Merged

Company. They were also asked to identify where in the structure the Acquired Company belonged. Table 7 shows the distribution of the different organizational structures and how likely it is that HQ of the Acquired Company remain in Norway. The *Global product division* structure was the most common structure in our sample. Out of the 16 cases of *global product division* structures, 8 HQ remained in Norway. However, it was the *international area division* structure, in which most HQ remained in Norway.

#### Independent variables

The first part of table 6 presents the frequencies of our two categorical variables: whether the companies are manufacturing companies and the nature of the acquisition (related/unrelated). The last part of the table presents descriptive statistics for our five continuous variables, including the cultural distance variable.

# 4.2 CORRELATION AND MULTICOLLINERARITY

Correlation analysis is used to describe the strength and direction of the linear relationship between two variables (Pallant 2002, p.169). The relationship between our variables was investigated using Pearson product-moment correlation coefficient. Our dependent variable is labeled, HQ location in SPSS.

#### **Correlation matrix**

Model 1/	Age	Manufacturing	Psychis	Nature of	Number of	Number of	Dependent
Model 2			distance/	acqusition	employees of	employees of	variable
			Cultural		Acquring	Acquiring	(HQ
			distance		Company	Company	location)
						abroad	
Age of the	1 / 1	0,337**/ 0,257*	-0,155/ -0,019	-0,055/ -0,28	0,200/0,223	0,090/0,100	0,163/225
Acquired							
Company							
Manufacturing	0,337**/	1/1	0,029/0,179	0,014/0,000	0,057/ -0,006	0,103/0,123	-0,171/ -
	0,257*						0,218

Psychic	-0,155/ -0,19	0,029/0,179	1/1	-0,74/ -0,139	-0,85/-0,054	-0,014/ -0,070	0,233/
distance/							0,174
Cultural							
distance							
Nature of	-0,55/ -0,028	0,014/0,000	-0,074/ -0,139	1/1	-0,137/-0,158	0,309**/	0,168/0,169
acqusition						0,327**	
Number of	0.200/0.222	0.057/0.006	-0,85/-0,54	0.127/0.150	1/1	0,095/0,019	-0,124/-
	0,200/0,233	0,057/-0,006,	-0,83/-0,34	-0,137/-0,158	1/1	0,093/0,019	
employees of							0,003
the Acquiring							
Company							
Number of	0,090/0,100	0,1030,123	-0,014/-0,070	0,309**/0,327**	0,095/0,019	1/1	0,205/0,162
employees of							
the Acquiring							
Company							
abroad							
Dependent	0,163/0,225	-0,171/-0,218	0,233/0,174	0,168/0,169	-0,124/-0,003	0,205/0,162	1/1
variable							

<sup>\*\*</sup> Correlation is significant at the 0.05 level / \* Correlation is significant at 0.1 level

Correlation matrix table 1

# Multicolinearity

Variable	Coliniearity statistics	Coliniearity statistics
	(tolerance)	(tolerance)
	Model 1	Model 2
Age of the Acquired Company	0,826	0,877
Psychic distance	0,956	NO VALUE
Number of employees of the	0,924	0,916
Acquiring Company		
Number of employees of the	0,873	0,867
Acquiring Company abroad		
Manufacturing	0,874	0,855
Nature of acquisition	0,865	0,849

Cultural distance	NO VALUE	0,938

Multicollinearity table 1

Correlation matrix 1 suggests a correlation between 4 variables. Age has a linear relationship with manufacturing companies; with the most positive correlations in the matrix at 0.337. The value is significant at a 0.05 level. Status of acquisition has a positive correlation with employees working abroad, at a 0.309. This value is also significant at a 0.05 level. In correlation matrix 2, when we changed the variable psychic distance with the variable cultural distance, we got a slightly different result. Only status of acquisition had a positive correlation with employees working abroad at a 0.05 level. A correlation, when significant, does not necessarily mean that there is causal relationship. That said, Pearson correlation does indicate the strength between the two variables in a linear context, but this is not sufficient to explain their relationship (Pallant 2010, p 128.). It is also important to mention that we applied a two-tailed test.

## *Multicollinearity*

In order to build a strong statistical model, it is important to check for high inter-correlations among independent variables. Ideally, our independent variables should be strongly related to our dependent variable, but not strongly related to each other. Looking at correlation matrix 1, there is a lack of correlation between some of the independent variables and the dependent variable. There is some correlation between some of our independent variables, which might point towards multicollinearity in the model. However, when we look at multicollinearity table 1, the tolerances are well within our criteria of acceptable values in both of the tables. We have chosen a tolerance level lower that .10 to be critical levels for multicollinearity based on Pallant's (2010) suggestions.

#### 4.3 BINARY LOGISTIC REGRESSION

Direct logistic regression was performed to assess the impact of a number of factors on the likelihood that the HQ remain in Norway. The fist model contained six independent variables: age of the Acquired Company, psychic distance, manufacturing, the nature of the acquisition,

number of employees of the Acquiring Company and number of the Acquiring Company's employees working abroad. In our second model, we changed the variable of psychic distance to cultural distance, to see whether we would get a different result. The full model containing all predictors was statistically significant, x"2(6, N= 42) = 12.151, P<0.1.

Test	Chi-square	Degrees of freedom	Significance
Omnibus Test	12,151	6	0,059
Hosmer and Lemeshow Test	3,841	8	0,871

Table 7(SPSS)

The Omnibus test of model Coefficients, (Table 7), gives an overall indication of how well the model performs, also referred to as "goodness of fit" (Pallant, 2010). We should have a highly significant value, less than .05. Our value was .059, and almost significant at a .05 value and high above 0.1 level. Our chi-square value was 12,151 with 6 degrees of freedom.

The results in Table 7 also support the fact that our model is worthwhile. SPSS states this test as the more reliable test of model fit available in SPSS. Poor fit is indicated by a significance value of less than .05. Our test Chi-square value was 3.841 with a significance level of .871. This value is much larger than .05, indicating support for the model.

	2 log likelihood	Cox & Snell R Square	Nagelkerke R Square
Model summary	45,692	0,251	0,336

Table 8(SPSS)

Table 8 provides an indication of the amount of variation in the dependent variable explained by the model. The model as a whole explained between 25.1 per cent and 36.1 per cent of the variance in HQ location after the cross-border acquisition and correctly classified 45.7 per cent of cases.

Variable	В	Sig.	Exp(B)
Age of the Acquired Company	0,040	0,046	1,0410
Manufacturing	-2,013	0,066	0,134
Nature of acquisition	0,840	0,378	2,316
Employees acquirer	0,000	0,299	1,000
Employees abroad acquirer	2,082	0,214	8,023
Psychic distance	0,039	0,053	1,040

Table 9(SPSS)

Table 9 gives us information about the contribution or importance of each of our predictor variables (independent variables). In our model we only have one significant variable at a 0.05 significant level (age p= .046). But both *manufacturing* (p= .066) and *psychic distance* (p=0.053) are significant at level 0.1. This means that the major factor influencing the location of HQ is the age of the Acquired Company. The older the Acquired Companies are, makes it 1.04 times more likely that HQ remain in Norway. Both *manufacturing company* and *psychic distance* were also influential. *Nature of the acquisition, number of employees* and *number of employees working abroad*, did not contribute significantly to the model.

Model 2

Variable	В	Sig.	Exp (B)
Age of the Acquired Company	0,42	0,035	1,043
Manufacturing	-2,560	0,023	0,77
Cultural distance	0,383	0,055	1,466
Nature of the acquisition	1,114	0,238	3,047
Number of employees of the Acquiring Company	0,000	0,738	1,000
Number of employees of the Acquiring Company abroad	1,502	0,320	4,490

Table 10(SPSS)

Test	Chi-square	df	Sig
Omnibus Test	14,092	6	0,029
Hosmer and Lemeshow Test	7,914	8	0,341

Table 11(SPSS)

	2 log likelihood	Cox & Snell R Square	Nagelkerke R Square
Model summary	51,699	0,254	0,341

Table 12 (SPSS)

In the second model, (Table 10), *psychic distance* was changed with the variable *cultural distance*. In comparison to model 1, model 2 is a stronger model from the perspective of our omnibus test. Significance was at 0.029, chi-square value at 14,092 and 9 degrees of freedom (Table 11). Model 2 explained 25.4% and 34.1% of the variance in HQ location and correctly classified 51.69% of cases (Table 12). This is a better result than model 1. In model 2, two of the independent variables made a statistically significant contribution to the model at a 0.05 level. But when we included cultural distance, which made a significant contribution at a 0.055 level, we got three out of six. The strongest predictor to explaining our dependent variable in this model is also age. An interesting result is our manufacturing variable, which has a negative B value. This tells us the direction of the relationship. This means that if the Acquired Company is a manufacturing company it most likely that HQ will be relocated. This is an interesting finding because it is the opposite of what the theory suggests.



# **CHAPTER 5. Discussion**

In this chapter we will discuss our results against theory. We expect to see deviations in some theoretical areas as a direct consequence of the fact we only tested Norwegian Acquired Companies, during a specific time period.

Hypothesis	Results model	Results model
	1	2
H1: The more internationalized the operations of the Merged Company is, the more likely it is that the HQ of the Acquired Company will remain in Norway.	Rejected	Rejected
H2: The size of the Acquiring Company is negatively related to the likelihood that the HQ of the Acquired Company will remain in Norway.	Rejected	Rejected
H3: The older the Acquired Company is, the more likely HQ will remain in Norway.	Accepted	Accepted
H4: If the Acquired Company is a manufacturing company it is likely that HQ will remain in Norway.	Rejected	Accepted
H5: If the acquisition is unrelated it is likely that the HQ will remain in Norway.	Rejected	Rejected
H6: The larger the cultural gap between the Acquiring Company and the Acquired Company, the more likely the Acquired Company's HQ will remain in Norway.	Rejected	Rejected

Table 13

Model 1 as a whole explained between 25.1 per cent and 36.1 per cent of the variance in HQ location after the cross-border acquisition and correctly classified 45.7 per cent of cases. Model 2,was even stronger and explained 25.4% and 34.1% of the variance in HQ location and correctly classified 51.69% of cases

Of the six hypothesis tested one was proven to be significant, at a level of 0,05 in both models (Table 13). One was significant at a level of 0,05 in model 2, although the relationship showed the opposite of what was hypothesized. It is worth mentioning that we also found one hypothesis to be significant at level 0,1 in both models, although we only accepted 0,05 as a significant level. Certain characteristics of the sample, combined with external macroeconomic factors could explain to some extent why the models did not prove a relationship between the independent variables and the dependent variable. In the following section we will discuss factors we believe impacted our results.

The time frame, (2007-2010), was strongly affected by the global financial crisis, which began at the end of 2007. Uncertainty generated by the crisis caused worldwide financial markets to minimize risk and access to capital decreased significantly.

M&A requires capital, management recourses and involves risk. When capital becomes scarcer, capital intensive M&A become less attractive. Swedish macroeconomist, Carl Motalvo, from SEB Enskilda Corporate Finance, believes that M&A has decreased between 60-70 per cent in Scandinavia. Moreover, the companies that were acquired during this period were often in relatively poor financial shape.

The decrease in the number of acquisitions may have caused less variation in our sample. Although the sample represents a random selection of all acquisitions in this period, it is interesting that most of the acquisitions were made in the industrial sector, (including capital goods, commercial and professional services and transportation). The energy sector was also relatively well represented. It should be noted that these sectors have some of the largest revenue in the Norwegian economy, so it was expected that there would be more acquisitions in these

sectors. That said, the difference was surprisingly large <sup>4.</sup> A strong presence of industrial and energy based acquisitions could be explained by the fact the oil industry is relatively resistant to economic uncertainty. Companies associated with oil production were therefore less affected by the financial crisis and therefore less risky acquisition targets<sup>5</sup>.

Nordic countries have been less affected by the financial crisis than the rest of Europe<sup>6</sup>. This could also help explain the significant number of Nordic Acquiring Companies. Naturally, there are other reasons as to why Nordic countries are well represented. Strong historical ties, small cultural differences, small geographical distances (at least between Scandinavian countries) and a common banking system are some of the factors which make cross-board acquisitions easier.

#### Hypothesis 1:

The more internationalized the operations of the Merged Company is, the more likely it is that the HQ of the Acquired Company will remain in Norway.

Based on the results of the binary logistic regression, hypothesis 1 was rejected at level 0.214 in model 1 and 0.320 in model 2. As most of the Acquiring Companies are Nordic the risk of agency problems and thus agency costs were reduced. Language, distance, national and organizational culture and political systems determines the degree of information asymmetry and it becomes easier to unveil shirking. Moreover, traveling has become easier and cheaper, so it is easier to prevent information asymmetry overseas (including countries located outside Scandinavia). The fact many of the countries in the sample were relatively poor performing may imply that the risk of keeping HQ in Norway undermined the risk of agency cost.

The fact that most of the Acquiring Companies in our sample were Nordic companies may imply that they had a less international outlook, than if the majority of the Acquiring Companies came from more distant countries. The Acquiring Countries in our sample may therefore have been less keen to relocate HQ abroad.

 $^5\ http://www.norge.dk/Embassy/Politikkomrader/Norge-og-finanskrisen/$ 

<sup>&</sup>lt;sup>4</sup> http://www.norgesstorstebedrifter.no/

<sup>&</sup>lt;sup>6</sup> http://www.norge.dk/Embassy/Politikkomrader/Norge-og-finanskrisen/

The degree of internationalization is measured by number of employees abroad, and does not measure how internationally dispersed a company is. This may result in the 'international' part of the company being concentrated to one or only a couple of locations; meaning that the company does not actually have a particularly international outlook.

#### Hypothesis 2:

The size of the Acquiring Company is negatively related to the likelihood that the HQ of the Acquired Company will remain in Norway i.e, the bigger the Acquiring Company, the more likely the HQ will move abroad.

Based on the results from the binary logistic regression, hypothesis 2 was rejected in respect of both models 1 and 2, at levels of 0.294 and 0.738 respectively.

Market uncertainty and reduced access to financial capital, could have highlighted the *costs* of relocating HQ, rather than the potential gains. Companies may have wanted to postpone such changes until a better financial period. The cost of relocating HQ exceeding the benefits of having HQ close could be especially true for Scandinavian companies.

#### Hypothesis 3:

The older the Acquired Company is, the more likely HQ will remain in Norway.

Age was found to be significant in both models at a 0.05 significant level. This confirmed our hypothesis that HQ of young Acquired Companies are likely to be relocated out of Norway and HQ of older Acquired Companies are likely to remain.

#### Hypothesis 4:

If the Acquired Company is a manufacturing company it is likely that HQ will remain in Norway.

Based on the results from the binary logistic regression we found hypothesis 4 to be significant at level 0.1 in model 1 and level 0.05 in model 2. It is interesting that the relationship between the independent variable and dependent variable is negative, which means that if the

Acquired Company is a manufacturing company it is likely that HQ will be relocated. This is the opposite of our hypothesis.

Acquired Companies' reluctance to keep HQ in Norway may be because of the level of costs in Norway. Manufacturing operations are capital intensive and the costs of having HQ located in Norway might outweigh the benefits of being located close to suppliers, customers and competitors. Especially in light of the financial crisis, companies may not be little willing to locate HQ in high cost and remote countries such as Norway.

#### Hypothesis 5:

### If the acquisition is unrelated it is likely that the HQ will remain in Norway.

Based on the results from the binary logistic regression, hypothesis 5 was rejected in respect of both model 1 and 2, at levels of 0.378 and 0.238 respectively.

The unrelated acquisitions in our sample did not examine whether the acquisition of the Acquired Company was the first time the Acquiring Company expanded into a new business lines, or whether it had done this before. If the Acquiring Company is familiar with entering new markets it may be better prepared to handle challenges caused by lack of market knowledge and experience.

#### Hypothesis 6:

The larger the cultural gap between the Acquiring Company and the Acquired Company, the more likely the Acquired Company's HQ will remain in Norway.

Based on the results from the binary regression we found hypothesis 6 to be significant at level 0.1 in both model 1 and 2. In model 1, we measured psychic distance with Håkanson and Ambos' matrix and got level 0.053. In model 2, we measured with Singh and Koguets' matrix and got level 0.055. We only can accept levels over a 0.05 level as significant. Therefore we will discuss factors that could have prevented this variable showing a stronger relationship with the independent variable.

Both the cultural and psychic distances between Nordic countries are limited and most of the acquisitions in our sample were between Nordic companies. The influence of cultural distance on the location of HQ is likely to be smaller than if the sample included more Acquiring Companies from countries with greater differences.

It is interesting that psychic distance and cultural distance are almost at the same level in both the models, despite unequal methods of measuring. The variable cultural distance also includes six more acquisitions than the variable psychic distance. One explanation could be the large number of Nordic Acquiring Companies, and the fact that both methods of measuring national cultural differences gives a low score to Nordic countries.

Because we rejected our hypotheses at levels below 0.05, it could be interesting to further test the hypotheses on a larger sample.



# 6. CONCLUSION

The setting of this thesis is characterized by unrest in the world economy. We assume that such unrest has affected the sample of this thesis. Our study shows that most acquisitions of Norwegian companies between 2007-2010 were done by Nordic companies. More than 30 per cent of Acquired Companies operate in the industrial sector, mainly in the engineering industry. 38 out of 48 acquisitions were related acquisitions, meaning that the companies operate in the same industry.

Model 1 as a whole explained between 25.1 per cent and 36.1 per cent of the variance in HQ location after the cross-border acquisition and correctly classified 45.7 per cent of cases. Model 2 was even stronger and explained 25.4% and 34.1% of the variance in HQ location and correctly classified 51.69% of cases. Our findings suggest that the age and nature of the Acquired Company, in addition to cultural distance, are important factors in determining HQ location. The strong relationship between age and HQ location shows that factors such as experience, culture and brand name increase the likelihood that HQ remain in Norway. Our hypothesis regarding manufacturing companies was surprisingly found to be the opposite result. Our results also show that manufacturing Acquired Companies typically lose HQ when acquired by foreign companies (although this has a lesser degree of influence than age). Despite the fact cultural distance was measured with two different methods, our hypothesis was found to be significant at the almost same level in both models. The level however was not strong enough to be accepted, which may be explained by the small variation in cultural distance among the companies in our sample.

The nature of the acquisition, internationalization and size of the Acquiring Company did not prove to have any effect on the location of HQ.



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# 8.APPENDIX

## 8.1 COVER LETTER TO QUESTIONNAIRE



# Foreign-acquired companies and relocation of authority

Name of company X

Dear ....

We are two students enrolled at MSc in International Business at Copenhagen Business School. We are currently writing our master thesis and will therefore ask for your help.

The attached questionnaire is part of a master thesis project that aim to understand the implications a foreign acquisition might have on a Norwegian company with respect to the location of the Norwegian company's HQ, and whether they get to keep this after the acquisition has being implemented. Moreover we aim to find out more about what might cause any relocation of the HQ. We will examine this by doing a statistical analysis. Your response is therefore important to get the necessary data and enabling us to obtain as full an understanding as possible of this topical issue.

The questionnaire should take you about a couple of minutes to complete. Please answer the questions on the document attached. If you which to add further comments, please feel free to do so. The information you provide will be treated with the strictest confidence. You will notice that you are not asked to include your name or address anywhere on the questionnaire. You are however, asked to state your position and time of employment in the company. We ask you to do

this to get a better understanding of the point of view of the respondents and thereby improve the validity of the study.

Your response and others will be used as part of the main data set for our research project for our master degree in International Business and Strategy at Copenhagen Business School. Your company is selected through a random sample of all Norwegian companies acquired by a foreign company between 2007 and 2010.

We hope that you will find completing the questionnaire enjoyable. Please return the complete questionnaire by email. If you have any questions or would like further information, please no not hesitate to telephone us or email us.

Thank you in advance for your help.

Charlotte Lie and Iselin Heffermehl

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# 8.2 QUESTIONNAIRE

# FOREIGN-ACQUIRED COMPANIES AND RELOCATION OF HQ

### **Company Survey 2012**

This survey is being carried out to find out what happens with the decision-making authority and autonomy of Norwegian companies after they have being acquired by a foreign company. Please answer the questions freely. You cannot be identified from the question you provide, and all information about individuals will be held confidential.

The questionnaire should take you between two and three minutes to complete. Please answer the questions at the document attached. Even if you feel the items covered may not apply directly to your company, please do not ignore them, but rather give the answer that fits your company best. Your answers are essential in building an accurate picture of the issues that are important in our understanding of the causes for foreign companies to take authority away from their Norwegian acquired units.

When you have completed the questionnaire, please attach it and return it to us to the same email address as it was sent from.

We hope you find completing the questionnaire enjoyable, and thank you for taking time to help us. If you have any questions or would like further information about this project, please email us.

Thank you for your help.

Charlotte Lie and Iselin Heffermehl

#### **Question 1**

What's your position in the company?

### **Question 2**

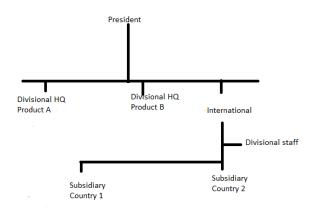
For how long have you been employed in the company?

# **Question 3**

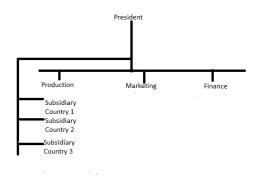
Which of the following organization structures best fits your parent company (name of acquirer) and where is your (name of acquired) top management located within this structure (Divisional HQ, Subsidiary or Regional HQ)? (Please choose the one that is closest to your company's organizational structure)

\*Within top management we are talking about the management responsible for (name of acquired company) overall failures and success, not the corporate head-quarter.

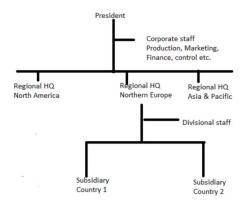
#### 1. International division structure



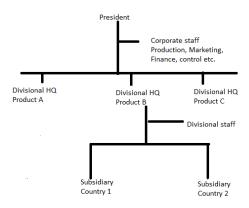
# 2. Mother- daughter structure



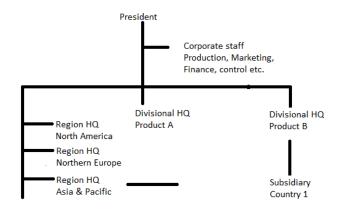
#### 3. Area division structure



# 4. Global product division



# 5. Matrix structure



(Acquires name) organizational structure:
(Acquired companies name) position:
Question 4
After the acquisition was implemented, what happened with the following functions? Did the function (single person or team) remain in Norway or was the function moved abroad? Please rate the following decisions categories on a scale from 1-6 with respect to the question above ( $I = lowest\ degree\ of\ autonomy$ , $6 = highest\ degree\ of\ autonomy$ ).
Please mark your answer with an X.
a) Financial management (Accounting, wages, tax.)
1: 2: 3: 4: 5: 6:
b) Purchasing and Logistics (Purchasing and logistic decisions)
1: 2: 3: 4: 5: 6:
c) HR management (promoting employees to higher positions, hiring new employees, changing salaries etc.)
1: 2: 3: 4: 5: 6:
Comments:

Thank you in advance!

# 8.3 Sample for the binary logistic regression

Target	Acquirer	Nationality acquirer	Org structure	DHQ/RHQ-Subsidary*	DHQ/RHQ-Subsidary * Established Employees acquirer	working abroad acquirer	Manufacuring *	Nature of acquesition *
Rilise Underwater Engineering AS	Fugro N.V.	Netherland	Global product division		1993	13462	2216	0
Belanor AS	Garmin Ltd	S	International structure		2004	8897	6427	0
Esthetique Norge AS	Ahlens AB	Sweeden	Global product division		2001	5000	2000	0 1
Marine Farms ASA (30.2% Stake)	Morpal SA	Poland	Global product division		1997	4255	2808	0
Leteng AS (95% Stake)	Lagercrantz Group AB	Sweeden	Global product division		1989	661	309	0 1
Simrad Optronics ASA	Rheinmetall AG	Germany	Global product division		1948	19766	13889	1 0
Mohive AS	CrossKnowledge Group Ltd	UK	Matrix		2001	12000	8000	0
Isklar AS (50% Stake)	Siva Group	India	Global product division		2005	7000	2000	0 1
Odim ASA (67% Stake)	Rolls-Rayce Pic	UK	Global product division		1974	30400	16160	1 0
Lekang Filtersystem AS	Indutrade AB	Sweeden	Global product division		07.51	3800	2000	1
Heidenreich AS (74.9% Stake)	Cordes & Graefe KG	Germany	Global product division		1901	15000	4000	0
StepStone ASA (67.03% Stake)	Axel Springer AG	Germany	Matrix Structure		1996	11500	3565	0
Element Storage Systems AS	Kardex AG	Switzerland	Global Product Division		1985	1899	800	0
Wega Mining ASA	Avocet Mining Pic	UK	Area Division		2006	3000	200	0
AGR Project Partner AS	Semco Maritime A/S	Denmark	International Division		2004	1379	766	0 1
Wavefield Insels ASA (69.7% Stake)	CGGVeritas	France	Global Product Division		2006	7000	1990	0
Norsk Helikopter AS (51% Stake)	Bristow Helicopters Ltd	8	Area Division		1993	3289	1300	0
InstrumeC AS	Dako A/S	Denmark	Matrix Structure		1986	1050	600	1 0
Immunocorp Animal Health SA	Biorigin	Brazil	Mother-Daughter		2007	12000	4000	0
Awilco Offshore ASA	China Oilfield Services Limited	China	Matrix Structure		2005	9852	#	1 0
Myhre Maritime A/S	Cosalt Pic	UK	Global Product Division		1935	822	752	1
Senter-Bygg Entreprenor AS	Peab AB	Sweeden	Matrix Stucture		1981	1195	1409	1 0
Tollpost Globe AS (50% Stake)	Posten AB	Sweeden	Area Division		1926	30000	17100	0
Edwis Leker AS	BR-legetaj	Denmark	Mother-daughter		1973	2550	890	0
NSLISO Gruppen AS	Norisol A/S	Denmark	Global product division		1975	1500	660	0
SMEFA Entreprenor AS	Peab Industri AB	Sweeden	Matrix		1999	13633	300	0
Objectnet AS (80% Stake)	Know IT AB	Sweeden	Mother-daughter		1950	775	160	0
Star Maling og Lakkfabrikk AS	Stoncor Group Inc	US	Global product division		1972	5000	33	1 0
Bluegarden A/s	Multidata A/S	Sweeden	Mother-daughter		1994	621	110	0
Nacre AS	Sperian Protection SA	France	Area Division		1994	6190	360	0
Tinfos AS (56% Stake)	Eramet S.A.	France	Global Product Division		2000	14540	4923	0 1
Mobyson AB (formerly Mobyson Holding AS)	Onetwocom Sverige Ab - now:Stjärnafyrkant AB Sweeder	Sweeden	Area division		1965	57	5	0
Forma Norge AS (75% Stake)	IP Cleaning s.p.a.	Italy	Matrix Structure		1988	1100	0	0
Molift Group As	Etac AB	Sweeden	Area structure/ Matrix		1996	8000	3000	0
Dinamo &S (Majority Stake)	Everyoris Holding BV	Markadana	Area chouchure		1970	5000	TIT.	5

Fronter AS	Vestpak AS	J. Martens AS	Norsk Hydro ASA	AS Maskin	Outliers	Point Carbon AS	Kino 1 Gruppen AS	Missing Information	* Unrelated = 1 Related =0	* Manufacturing company = 1, Not Manufacturing company = 0	*DHQ/RHQ=1 Subsidiary=0	S. Ugelstads Rederi As	Ocean Rig ASA	Scanbridge AS	Universal Spedisjon Bergen AS	Asfalt remix	Risa Rock	Inculded in Model 2	Christiania Spigerverk AS	Allkopi AS	TusenFryd AS (90.2% Stake)	Siemens Installation AS	ComHouse	Teeness AS (92.55% Stake)	RKC AS (60% Stake)
Pearson PIC	Freudenberg & CO KG	Kuehne &Nage International AG	Benteler Automobiltechnik GmbH	B&B Tools AB		Thomson Reuters Corporation	SF Film	▼ Kolonne1		nufacturing company = 0		Aries Energy Corporation	DryShips Inc	Rautaruukki Oyj	Itella Logistics Oy (formerly Finland Post Logisti Finland	Lemminkainen Oyj	Lemminkainen Oyj		Gunnebo Industrier AB	Service Point Solutions, SA	Parques Reunidos SA	Bravida AB	TeliaSonera AB	Sandvik AB	N.V. Deli Maatschappij
US	Germany	Germany	Germany	Sweeden		SN	Sweeden	▼ Kolonne2				Greece	Greece	Finland	Post Logisti Finland	Finland	Finland		Sweeden	Spain	Spain	Sweeden	Sweeden	Sweeden	Netherland
Global product division DHQ	Matrix	Global product division subsidary	Matrix D	Global product division DHQ		Missing N	Missing N	▼ Kolonne3				Global product division	Global product division	Global product division	Area Division	Global product division	Global product division		Mother-Daughter	Mother-Daughter	Area division	Global product division	Global product division	Globa product divsion	Matrix
)E	DHQ.	ubsidary	DHQ	)HQ		Missing	Missing	▼ Kolonne4 ▼ Kolo				₽	0	0	₽	0	0		0	Ľ	<b>-</b>	0	0	₽	1
1844	1904	1901	1873	1839		1997	2000 missing	▼ Kolonne5 ▼ Kolonne6				1988	1996	1997	1958	2006	2006		1930	1968	1988	1996	2000	1966	1989
37000	34294	61500	23146	18500		55000 Missing	Missing	▼ Kolonne7				22300	1473	14587	32000	8246	8246		1450	2170	350	8050	28945	30028	2850
4800	4800	3300	1400	7206				▼ Kolonne8				1100	300	7578	7000	1936	1936		623	1481	150	4830	22287	2000	1500
0 0	0	0 0	1 0	1 0		0 0	0 0	▼ Kolonne9				0 0	1	0 1	0 0	0 0	0 0		1 0	0 0	0 0	0 0	0 0	0 0	0 0

# 8.4 CALCULATED SCORE CULTURAL DIFFERENCE AND PSYCHIC DISTANCE

Country	Cultural Differences	Psychic Distance
Denmark	0,444	9
Sweden	0,19	10
US	6,684	58
UK	2,856	29
Finland	0,299	0
Germany	2,697	25
Brazil	2,68	70
France	2,161	31
The Netherlands	0,105	19
Greece	4,32	
Italy	3,921	45
China	4,919	61
Switzerland	2,723	30
India	3,047	69
Poland	1,52	32
Spain	1,893	52