Stock Price Reactions to CEO Turnover

– An event study of the Nordic markets

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ABSTRACT

This thesis examines the short-term effect of CEO turnover on company performance. Previous studies based on American data have shown mixed results, hence the interest to test if the same would apply in a Nordic setting. The analysis was performed on a clean sample of 133 CEO turnover announcements from companies listed on the OMX Nordic exchanges in Stockholm, Copenhagen and Helsinki and on the Oslobørs exchange between January 2005 and December 2010. Using an event study approach and the market model, statistically significant positive abnormal stock returns of, respectively, 0,57%, 1,14% and 1,27% of stock return are found for [Event day +/- 1 trading days], [Event Day + 3 trading days] and [Event day + 5 trading days]. The data analysis shows a statistically significant positive effect from voluntary CEO turnover (i.e. retirement or resignation). Further, underperforming companies (measured via ROA) experience a statistically significant negative influence of -0,84% on stock return on the day of the announcement, whereas company size with significance plays no role (0,00%) in company valuation. Lastly, promoting a succeeding CEO from within the company negatively influences stock return by -1,12% on the day of the announcement. No statistically significant support was found for the hypotheses that the gender of the succeeding CEO, the tenure of the departing CEO or involuntary CEO turnover influences company valuation. Our findings, though inconclusive, lean towards compliance with 'the Event Views', which regard the occurrence of CEO turnover as non-attributable to the CEO as a person, but rather as a consequence of a more complex set of circumstances.

Key words: *Event study, Executive succession, CEO turnover, abnormal stock return, company performance*

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1. INTRODUCTION

1.1 BACKGROUND

In the early weeks of 2011 it became publically known that Steve Jobs, former CEO and later chairman of Apple Inc., was again taking a sick leave. With this announcement came a 8,4% drop in Apple's stock price, devaluating the company by billions of dollars. Simultaneously, and on more familiar grounds, Stine Bosse announced that she would be leaving her position as CEO of the Danish pension fund TRYG. Within hours of this announcement TRYG's stock price was up by 4%. Accordingly, it seems that CEOs influence the valuation of public companies and having the right or wrong CEO can make a difference worth billions.

Terms like *executive succession* and *CEO turnover* capture what have, in recent years, become topics of widespread interest. In media one can frequently see headlines saying who has been appointed or left an organization. Also among academics the interest seems to have skyrocketed with more and more researchers turning their attention towards the topic. While this allows for new angles to be explored, increased relevance and rigor it has, at the same time, led to a somewhat confusing and inconclusive stream of research. The results often go in mixed directions and it can therefore be hard to interpret the meaning of them. Although researchers seem to agree that executive turnover is a significant event for an organization they do not yet seem to have reached a shared opinion about neither the extent nor the severity of which such an event influences organizational performance.

1.2 PURPOSE AND RESEARCH QUESTION

A vast amount of research has been conducted on "the iconic CEO" and the long-term effects, whereof most have had a North American point-of-view. Further, most studies have – so far – refrained from further investigating and exploring their findings. It is the intention of this thesis to add more general conclusions to how (if at all) CEOs - whether iconic or not - influence how companies are valued in the short-term in the Nordic societies where equality has deep roots and hierarchy and iconization struggles.

Through an investigation of abnormal stock returns around announcements of CEO turnover we will seek to determine the general level of abnormal stock return in public Nordic companies. This

will be done through investigating all companies listed on one (or more) of the Nordic exchanges that have experienced CEO turnover in the time period 01.01.2005-31.12.2010.

The expectation is that CEO turnover will be reflected in stock prices, and adding depth to this conclusion we will seek to identify factors attributable to the conclusion of the first part. By placing our results in the light of various relevant leadership-, managerial- and strategic frameworks we will seek to draw out general conclusions on what factors the market reacts to when a company is subject to CEO turnover. This structure will seek to address the different levels of the research question stated below in a coherent, natural and logical manner.

> **Is company market value influenced by CEO turnover within public Nordic companies and, what are some of the factors attributable to any changes in valuation?**

1.3 TERMS AND CLARIFICATIONS

The research question raises a number of questions and clarification is found beneficial before proceeding. By the term 'market value' is meant the *"the amount that investors are willing to pay for the shares of the firm"* (Brealey, Myers and Allen, 2007, p.149). This, in other words, influences the market capitalization of the firm, which will be used as a measure of the market value of the companies under investigation. A distinction should be made between *book value*, *liquidation value* and *market value* of the company; shares are rarely traded at book or liquidation value, as investors trade these on the basis of expectations to present and future earning power (Brealey, Myers and Allen, 2007). This, further, makes market value the best measure of the impact of CEO turnover as: *"Changes in the capital market value of the firm may more accurately measure the impact of management change, than changes in current accounting earnings, because the capital market value captures the changes in both current and future earnings."* (Reinganum, 1985, p.50). These expectations are, in turn, influenced by the amount of information available to the investor – an issue that will be returned to later in the thesis.

However, acknowledging that the market value of a company is, partly, based on the subjective expectations of investors leads us to another part of the research question that needs clarification. This thesis will investigate the role of the CEO as influential on company market value, through investigating how investors, generally, react to CEO turnover. What is meant by 'CEO turnover' then becomes a relevant question. Simply put, CEO turnover occurs when the CEO, the highest-

ranking corporate officer or administrator in charge of the daily operations of an organization that typically reports to the board of directors, is exchanged. There are several potential explanations for such an event, which will be returned to in a later chapter. For clarification, in the studied Nordic countries, the CEO is called *Administrerende direktør* (adm.dir, Denmark and Norway), *Toimitusjohtaja* (TJ, Finland) and *Verkställande direktör* (VD, Sweden), respectively.

1.4 CONTRIBUTION

As already explained, this thesis will examine the relationship between CEO turnover and company performance with an intention of increasing the understanding of the link between the two. In addition, this thesis aims to add to previous research and increase the robustness and generality of earlier results by studying an area that has not yet been widely studied, namely the Nordic region. With this study we also hope to contribute by making an attempt to structure and connect the areas of previous research together with the goal of tying the different fields of research, the studies done in finance and management, together. By linking the fields together we hope to offer the reader a perspective on this important and interesting topic.

1.5 DELIMITATIONS

The results and implications of this thesis should be considered in light of its limitations. To begin with, the study is a purely Nordic study in the sense that the sample is restricted to companies listed on Nordic stock exchanges. The sample is further restricted to the 5-year period between 2005 and 2010. Consequently, the results of the study may neither generalize to other areas nor time periods, wherefore further empirical studies and replications across different populations are called for. Further delimitations will be touched upon in chapter 0 Research Quality.

1.6 OUTLINE

The thesis is divided into 11 chapters including this one. In the following chapter, an overview of CEO succession is presented followed by a brief introduction to the research field, giving the reader a chance to better understand from where the succession research has developed and how it has evolved. Chapter 3 lays out the theoretical framework and includes a review of some of the key

studies within the field. Thereafter, in chapter 4, the reader will get acquainted with our methodological approach and data. In the subsequent chapter the independent variables in the study are identified and explained, setting the ground for our hypotheses, which are presented in the end of the chapter. Chapter 6 contains an explanation of the computation of abnormal returns. The empirical results of the tests are reported and analyzed in chapter 7-8. The main findings are summarized in the conclusion presented in chapter 9, followed by concluding chapters in which we discuss the quality of our study and give suggestions for future research.

2. SETTING THE SCENE

2.1 CEO SUCCESSION: AN OVERVIEW

There is no question the CEO has an especially important role in organizations. In strategic leadership theory it is widely argued that organizations can be seen as reflections of their top managers and the decisions they make (see e.g. Hambrick and Mason, 1984). Accordingly, a change of an organization's CEO not only implies that a new individual, with a different set of skills, experiences and perspectives takes over charge but also means that the changes will have a specific impact for the organization. Succession tends to trigger change in the operations of the organization, which in turn sets off a shift of the prevailing norms and expectations of the employees. In this way, CEO succession provides an opportunity for existing power structures to be altered, for new strategic approaches to be introduced and for change to take place (Boeker, 1997). This is by no means a simple process; on the contrary, it is a quite baffling and traumatic event for any organization. It affects not only the employees but also the organization's economic and political climate (Brady and Helmich, 1984).

CEO succession differs from the succession of other types of key executives in several respects. Kesner and Sebora (1994) describe these in a perspicuous way. To begin with, they highlight *the pervasiveness of the CEO's impact on the organization* and *the symbolism of succession* as two things that clearly separate CEO succession from turnover at other levels. As captured by Beatty and Zajac (1987, p.309) CEOs have *"a high internal and external visibility, and are generally considered to be the key strategic decision-makers in large corporations. In other words CEOs are the individuals most likely to 'make a difference'"*. Speculation often occurs after the news of turnover has been spread, and it is common for CEO succession to trigger other changes (e.g., further executive departures or alterations in a firm's strategy). To that end, few turnover events at other organizational levels have as deep impact both inside and outside the organization. Another difference emphasized by Kesner and Sebora is *the differences between the natures of the jobs*; the CEO's tasks are substantially different from those of other organizational positions, with a larger extent of idiosyncrasy and less routines and structure. For someone holding this position, no two days may ever be the same. Yet another difference is *the relative frequency of turnover events*. While turnover at lower levels in the organization occur on a regularly basis, CEO turnover is still a rather unusual event. However, a screening by Favaro, Karlsson and Neilson (2010) shows that times are changing; the tenure of CEOs is becoming shorter and more intense. The global mean

tenure of departing CEOs has dropped from 8,1 years to 6,3 years during the past decade. Even so, the relative infrequency of CEO succession has implications for the decision-makers, namely the Board of Directors. The relative infrequency of CEO turnover combined with the time gap between the decision and the evaluation of the outcome limits the degree and impact of the directors' experiences, often resulting in an intricate selection process. Unlike at lower levels in the organization, *the succession decision falls under the directors' competencies*, which have another background with different, not seldom more limited, views of the organization and its operations. For all the above mentioned reasons (in addition to a number of others) CEO turnover is an important and unique event, separate from succession at lower levels, for any organization.

2.2 SHORT VS. LONG TERM

As mentioned in the introducing paragraphs to this thesis, a number of studies have been carried out to highlight the long-term effects of CEO turnover on company performance. This has been done through investigating the initiating actions of a newly appointed CEO. These have been found to often include asset write-offs, income-reducing accounting method changes, income-reducing accounting accruals, and divestitures of previous acquisitions (Elliott and Shaw, 1988; Pourciau, 1993; Strong and Meyer, 1987; Weisbach, 1995). This is commonly referred to as incoming CEOs taking a "bath", as they in practice 'wash away' unwanted divisions and unprofitable operations in an attempt to boost future earnings, and keep the termination costs in the year of turnover. This has two implications – they reduce earnings in the short-run, but would most likely improve the assessment of future company performance, and thus lead to rising stock prices in the long run. Yet, the implications for short-term effects on stock prices are more blurry and unclear. The financial perspective, thus, has two streams – the short-term and the long-term investigations. This thesis is concerned with the effect of CEO turnover in the short-term.

2.3 FROM SPORTS MANAGEMENT TO STOCK PRICE REACTIONS

The first studies of the effect of management turnover on performance are focused on American sports teams and found in the sociology literature. Grusky (1963), for example, found that a coach change lead to lower subsequent performance, which he attributed to the disruptive effect of change, in a study of professional baseball teams in the periods 1921-1941 and 1951-1958. Further

evidence of negative performance due to succession was found by Allen, Panian and Lotz (1979) who followed the performance of baseball teams in the period 1921-1973. Other researchers, however, find no relationship between succession and subsequent performance when studying sports teams (Brown, 1982; Eitzen and Yetman, 1972; Gamson and Scotch, 1964).

Though the sports industry is still a great example of the dynamics that lead to CEO turnover, their effect and their influence, more recent studies have mostly been concerned with stock price announcements. Thus, finance came into the management equation. Yet, after many years of research, scholars have not reached consensus on the question of whether leaders have an impact on organizational performance. Three contradicting views of CEO succession events' effect on performance are found in the organization literature. According to the *Great Man View* succession events represent a means of reorganization; they take place as adaptive responses to changes in environmental conditions. Proposers of the *Disruptive Event View* however mean that succession events are a source of disruption, which results in a decline in performance. Lastly, the *Inconsequential Event View* claims that CEO successions are insignificant for organizations and result in no predictable performance changes or survival rates changes (Boeker, 1992; Friedman and Singh, 1989; Hannan and Freeman, 1977; Leker and Salomo, 2000; Reinganum, 1985). The fundamentals of these views will all be elaborated in the following chapter, adding a finance perspective to the discussion.

3. THEORY

This thesis operates in smudgy overlap between two different well-developed fields and paradigms; finance and management. This has clear implications for the collection of relevant theory and literature, as dominant findings in both fields should be presented in the light of each other. The following literature review will attempt to do exactly that, through combining the dominant views within management theory on CEO influence and pair them with relevant, and empirically grounded, findings from the field of finance.

3.1 THE EVENT VIEWS

The inconsequential event view and the disruptive event view are in practice very closely related, as they both emphasize that any changes in valuation comes from the occurrence of an event, rather than from the CEO in question.

According to the inconsequential event view, CEO turnover events have an insignificant, unpredictable effect on organizations' performance and survival rates due to the generally loose coupling between leaders' agendas and organizational outcomes. From this view, performance is affected solely by environmental factors and, consequently, changing the CEO will have little influence on the company's actual performance (Bommer and Ellstrand, 1996). The theory of ritual *scapegoating*, as firstly discussed by Gamson and Scotch (1964), is related to this view. It argues that the main purpose of succession is to provide a target for the frustrations of an organization's leading constituencies when performance is declining. It is assumed that while managers do not substantially affect performance, the replacement of a manager calms down a public that falsely believes in his or her power in determining performance. In other words, the theory of ritual scapegoating proclaims that the replacement of a CEO acts as a *symbolic* action that sends a positive signal to the external world, in spite of its actual insignificance. Accordingly, the inconsequential view would, in this case, predict short-term positive returns (Boeker, 1992; Weick, 1976).

According to the disruptive event view, any change in organization form will automatically lead to a higher likelihood of organizational death and performance decline. The explanation lies in the strong inertial forces that all organizations are bound to, which prolong the response time to threats

and opportunities in their environments. From this view, an organization's original form is the one that has the best prospects for long-term survival and thus any interference with that should be avoided. The theoretical position, which is in line with the ways of reasoning within population ecology, assumes that environments are relatively stable over time and that CEO turnover is enough noteworthy, in itself or as an indication of a more fundamental structural change, to result in misalignment with the organization's environment (Friedman and Singh, 1989; Hannan and Freeman, 1984; ibid., 1977).

More specifically, two types of disruptions, with the same consequences of performance decline and increased likelihood of organizational death, can be identified. Firstly, the fit between an organization and its environment will be altered by the structural change that results in an organization's selection out of its population. Secondly internal authority relations will be negatively affected by disturbed work patterns and the interference with the unity of command that follows from CEO turnover (Friedman and Singh, 1989).

Summarizing, both the inconsequential event view and the disruptive event view emphasize the event of CEO turnover rather than the CEO in question. It is the disruption of daily business that will influence company valuation and not the fact that a specific CEO leaves the company. However, cases (such as the ones mentioned in the introduction) indicate that CEO turnover announcements are received very differently, and how is this explained, if the CEO as a person has no influence?

3.1.1 THE EVENT VIEWS IN A FINANCE PERSPECTIVE
Turning to studies carried out in the field of finance, there is a number of works that support the inconsequential event view. Among these are the works of Denis and Denis (1995), Furtado and Rozeff (1987) and Warner, Watts and Wruck (1988). However, these have all observed different general abnormal results, and their works will, thus, be presented in more detail in the following paragraphs.

3.1.1a Denis and Denis, 1995

Studying 908 nontakeover-related top management changes in the period 1985 to 1988, Denis and Denis (1995) find significantly positive (but economically small) abnormal returns for forced resignations. No statistically significant abnormal returns are observed around announcements of normal retirements. The top management team is defined as the CEO, the chairperson of the board,

and the president. The interpretation of the findings is difficult; a management change can signal that firm performance is worse than expected, that performance will improve as a result of the management change, or that the firm is "in play" as a takeover target. Furthermore, top management changes are likely to be partially anticipated due to the poor performance in the period before the turnover. Though this work takes the entire management team (rather than merely the CEO alone) into consideration, alignment can be found to the event views in the shared finding that the CEO in itself might not be the determining factor, but that the change of CEO is an indication of overall poor company performance.

3.1.1b Furtado and Rozeff, 1987

In the study "The Wealth Effects of Company Initiated Management Changes" from 1987, Furtado and Rozeff examine changes in equity values when the Board of Directors appoints and dismisses top-level managers (in which they include the CEO, the president, the chairman of the board and the vice-chairman). Thus, the authors do not examine the effects of resignation and retirement, which they explain can lead to different wealth effects.

The data consists of samples of 1406 appointments and 62 dismissals in companies listed on the New York Stock Exchange and the American Stock Exchange in the period 1975-1982. An event window of two days surrounding the announcement was used and the data was cleaned from contamination, which reduced the final sample to 323 events. The results show a significant average positive abnormal return of 0,95%, which can be interpreted in several ways. Firstly the authors explain that it is in line with the wealth-maximizing goals of the Board of Directors and that it indicates that managers and stockholders share in the returns to firm-specific human capital. It also indicates that hiring of new personnel is linked to favorably perceived real changes within the firm such as shifts in the investment opportunity set or in the production function, or reveals new efforts to minimize costs or maximize returns. Finally, the authors interpret the result not to convey bad news such as information about poor performance on average.

Again these interpretations are in line with those of the event views delegating less importance to the CEO, but emphasizing that CEO turnover is more likely to be an indicator of other events.

Author	Exchange	Change studied	Time frame	Event window (0=ED)	Sample	AR (%)	Significance (α=0,10)
Furtado & Rozeff (1987)	NYSE AMEX	Internal and external appointments and dismissals	1975-1982	2 days around the announ-cement	323 total sample 220 internal hires 103 external hires 62 dismissals 11 dismissals "under pressure"	0,95 1,05 0,72 1,03 3,17	Significant Significant Insignificant Significant. Significant
Denis & Denis (1995)	NYSE AMEX Nasdaq	Top executive changes	1985-1988	(-1;0)	328 total sample 69 forced dep. 43 normal retirements	0,63 2,5 0,61	Significant Significant Insignificant

Table 1 Summarizing table of financial works supporting the Event Views

3.2 THE GREAT MAN VIEW

The Great Man View, which also is known as the Rational Adaption View or the Common Sense View, argues that CEO turnover constitutes a possibility for organizations to better align resources to suit altering environmental demands. Closely linked to the resource dependence perspective this view implies that coalitions inside the organization have access to power, and that the coalition leaders can act upon critical environmental events. Consequently, a shift in the holder of power signifies adaption. Salancik and Pfeffer's findings from 1980 were among the first support the notion of successions as potentially adaptive responses to poor performance. More specifically, poor performance is typically accompanied by changes in company policy and changes in the composition of the management team. The board of directors, who is responsible for controlling the management's activities, triggers these changes with the aim of improving the prospects of meeting the goals of the shareholders. When these goals are failed to be met, CEO replacement is a possible action taken by the board of directors as a means to signal fulfillment of its responsibility to effect strategic redirection, or adaption, in the interest of the shareholders. The Great Man View's line of reasoning that leadership changes improve the fit between the organization and its environment indicate that frequent performance changes are beneficial. Managers have the possibility to control organizational outcomes and thus a new CEO seemingly will be able to avoid some of the mistakes made the predecessor and by this means boost performance (Friedman and Singh, 1989; Reinganum, 1985).

The Great Man View is, further, backed by the findings of Collins (2001) and his book 'Good to Great', which has been cited as "one of the most influential business books of recent years". Collins investigates 11 companies having made the transition from 'good' to 'great' in terms of stock performance. These 11 companies have been selected from a total sample of 1.485 companies from the criteria of 15 consecutive years of 'average performance' (stock returns following those of the general market) and 15 consecutive years of 'great' performance (stock returns equal to or more than 3 times the market). The identified 11 'good-to-great'-companies were Abott-Laboratories, Circuit City, Fannie Mae, Gillette Co., Kimberly-Clark Corp., the Kroger Co., Nucor Corp., Philip Morris Cos. Inc., Pitney Bowes Inc., Walgreens, and Wells Fargo. These were then analyzed in direct comparison to companies with similar resources, characteristics, possibilities, industries and growth-opportunities. These comparison companies then laid the grounds for an identification of factors that led to 'great performance'. The book identifies 'Level 5 Leadership' as one crucial factor for company performance, underlying the importance of CEOs in companies, and clearly demonstrating that CEOs have an impact on stock performance.

3.2.1 THE GREAT MAN VIEW IN A FINANCE PERSPECTIVE

Turning to studies carried out in the field of finance, there is a number of works that support the Great Man View. However, both positive and negative abnormal returns have been recorded as general (and statistically significant results), and the works will thus be presented in more detail in the following paragraphs.

3.2.1a Dahyaa, Lonie and Power, 2000

In the study "Changes in Corporate Management: Do They Have an Impact on Share Prices and Company Earnings?" the authors Dahyaa, Lonie and Power test the effect of management changes in Great Britain in the period 1989-1994. Using the market model with the Financial Times all share index as a proxy for the market portfolio and analyzing a total number of 420 changes, the authors find insignificantly positive share price abnormal returns (Mean AR 0,14%) on the announcement day of a departure or an appointment of a top-level executive (in which they include nine top-level positions).

The authors suggest that the relatively small stock price reaction observed in their study, and in others', could be related to three factors. Firstly, there can be an uncertainty whether the performance of the new executive team members will improve on the efforts of the predecessor.

Secondly, the small reaction can be related to an anticipation of the change by the stock market so that share prices respond some time before the announcement. Finally, the incremental gains of a management change may be conceived to be exceeded by the additional costs of the recruitment and advertisement needed to find suitable replacements.

Implicitly it lies, that Dahyaa, Lonie and Power (2000) do believe that management matters, as they question the predictability of the beneficiality of the new management's actions, yet anticipate that companies will gain from CEO turnover (though this gain might be off-set by additional replacement costs). These finding are, thus, in line with the Great Man View.

3.2.1b Warner, Watts and Wruck, 1988

The study "Stock Prices and Management Changes" by Warner, Watts and Wruck spans from 1962-1980, and has a sample consisting of 269 firms listed on the New York and American Stock Exchanges.

The result indicates that individual securities have a very small stock price reaction, with an average effect of zero, at the announcement of a top management change. The authors explain that there is a difficulty with observing stock market reactions to announcements in this case – the predictions about the sign of the abnormal stock price effect at announcement are not precise even if the change is a response to poor performance, in the interest of the shareholders, and unanticipated. One reason is that the announcement of a change can express other information. The authors mean that the abnormal stock return is the sum of two components. One of these is an information component, which will be negative if the change signals worse management performance than previously anticipated. The second component is a real component that is positive in case the change is in the interest of the shareholders. Thus, a positive net effect can be anticipated only if the real component is larger in absolute value than the information component. Summarizing, Warner, Watts and Wruck (1988) explain abnormal returns observed is the sum of, on one hand, public perception of performance and, on the other hand, actual performance, underlining their support for the Great Man View.

3.2.1c Beatty and Zajac, 1987

In the study "CEO Change and Firm Performance in Large Corporations: Succession Effects and Manager Effects" Beatty and Zajac test the stock market reaction to the announcement of a CEO

change in large firms. The sample of firms experiencing such a change was identified from examination of the Wall Street Journal "Who's News" section, where 429 CEO changes were identified in the period 1979-1980.

The results suggest that announcements of CEO changes typically are associated with a reduction in the value of the firm (both for insider and outsider succession events), as reflected in the perceptions of the stock market. For the period in advance of the announcement the t-tests of the prediction errors are not statistically significant, however, in the post announcement period, statistically significant changes in the market value of the firms are observed. The results suggest that CEO successors tend to significantly influence the production and investment decisions of their organizations, and thus, share the basic assumptions of the Great Man View.

3.2.1d Reinganum, 1985

In the study "The Effect of Executive Succession on Stockholder Wealth", published in 1985, Reinganum explores the effects of executive succession on the stock prices of firms that traded on the New York and American stock exchanges in 1978 and 1979. The author states that the predictions about succession effects must be tempered by the organizational context of the change, where in particular, the size of the firm, the origin of the successor and the disposition of the predecessor should be analyzed. More precisely, statistically significant (positive) succession effects were found around the announcement of a change only for external appointments in small firms with a simultaneous announcement of a departure of the previous officeholder. When the departure of the previous officeholder was not announced in the same press release no abnormal stock price behavior was observed. The reason that no significant abnormal returns could be seen around turnover announcements in large firms could be due to more constrained leadership influence – implicitly indicating, that leadership influence does matter, and, thus supporting the Great Man View.

Author	Exchange	Change studied	Time frame	Event window (0=ED)	Sample	Abnormal returns (%)	Significance (α=0,10)
Reinganum (1985)	NYSE AMEX	Internal and external appointments	1978-1979	(0;0)	158 paired changes 353 unpaired changes	-0,06 0,13	Not available
Warner, Watts & Wruck (1988)	NYSE AMEX	Any change in a random sample of 269 firms	1962-1980	(-1;0)	270 total sample 92 CEO changes 46 outsider changes 56 forced departures	-0,31 -0,26 0,34 0,14	Insignificant Significant
Beatty & Zajac (1987)	The US	429 CEO change announcements with external and internal appointments	1979-1980	(-1;0)	209 total sample 184 insider changes 25 outsider changes	0,00 0,01	Insignificant Insignificant
Dahyaa, Lonie & Power (2000)	LSEX	Departure or appointment of top level executive	1989-1994	(0;0)	420 total sample 337 appointments 14 routine dep. 69 non-routine dep.	0,14 0,23 -0,09 -0,25	Insignificant Insignificant Insignificant Insignificant

Table 2 Summarizing table of financial studies supporting the Great Man View

3.3 SUMMARY AND INTERPRETATION OF THE STUDIES

When summarizing the findings of previous research, it is evident that the stock price effect is generally found to be inconclusive (regardless of which managerial view the authors seem to support) when analyzed in the aggregate: the abnormal return on the announcement day tends to be small with varying significance. However, if the changes are structured according to the post of the executive and according to the circumstances surrounding the changes, a statistically significant share price movement is observed. More specifically, two of the reviewed studies found significant (positive) results for their entire sample and when analyzing subsamples, these found significantly positive reactions to forced turnover too. Thereto, another study found a significantly positive reaction but only for external appointments in small firms. An insignificantly positive reaction as well as an insignificantly negative were observed for the entire sample in two studies, whilst the rest of the reviewed studies show insignificant results with abnormal returns close to zero. The inconclusive and contradicting results can be due to differences in the designs of the studies, the

varying definitions of top management change or the selection of the samples (Furtado and Karan, 1990).

Another interesting note should be made on the differences between the studies that fall under, respectively, the Great Man View and the Event Views. In general, the articles that seem to support the Event Views experienced more extreme and significant results, than the articles whose reasoning was more in line with the Great Man View.

Overall, it is hard to sympathize with one stream over the other as solid research support both. The social democratic structure of the Nordic societies and the resulting flat society structure could indicate that the Event Views provide a more accurate picture of the Nordic cases. The 'Great Man' simply is not very Nordic; it is rather unusual for a person to be praised for his or her individual accomplishments. However, several cases have demonstrated the contrary, serving as support for the Great Man View, even in the Nordic setting. Any clear-cut expectations to how the Nordic markets react are, thus, not present.

4. METHODOLOGY AND DATA

4.1 RESEARCH APPROACH

To best answer the research question presented above in section 1.2 Purpose and Research Question, we will seek to develop a middle-range theory, which has been defined as being intermediate between general theories that are either too remote from particular cases to account for what is observed (e.g. leadership theory) or too detailed in their description of particulars to be generalized at all (e.g. identification of a CEOs ability to create value in a given company) (Berton, 1969).

To position a study like the current on the quantitative-qualitative continuum we find it beneficial to clarify the meaning of either extreme. *Quantitative* research is defined as explaining phenomena by collecting numerical data that are then analyzed by using mathematically based models, in particular statistical methods (Aliaga and Gunderson, 2002), and *qualitative* research is defined as a research strategy that usually prefers words rather than quantification in the collection and analysis of data and which predominantly emphasizes an inductive approach to the relationship between theory and research, where emphasis is put on the generation of theories (Bryman and Bell, 2003). This study will lean more towards a quantitative research method than a qualitative, but we will attempt to associate collected data in the form of numbers to behaviors, events and objects - in other words; social events.

As briefly touched upon already, the chosen research approach will have implications for the path of reasoning applied – deductive or inductive reasoning. With an inductive stance, theory is the outcome of research, and the process of induction leads to the establishing of general truths out of observations. On the other hand, a deductive theory represents the contrasting, though yet most common, view of the nature of the relationship between theory and research. Based on what is already known and the theoretical considerations in a particular scientific field a hypothesis is identified and this hypothesis will then be the subject for empirical scrutiny. Implicitly it lies that the hypothesis contains concepts that will need to be translated into researchable and measurable entities. Hence, it lies at the core of the deductive method that the hypothesis is translated into operational terms, and that it is specified how data can be collected appropriately (Bryman and Bell, 2003; Fisher, 2010).

In this study we will apply a method that is most closely related to the deductive theory, but as in many other studies the deductive approach entails a modicum of induction. Upon collecting the

initial set of data and investigating the characteristics pertaining to it, we will rely on already existing theory in the attempt to clarify which factors that possibly contribute to the CEO value creation. This will then lead us to the deductive path where further data is collected in order to establish the extent to which and in what conditions the theory will and will not hold. This approach has been called 'iterative' as it involves a weaving back and forth between data and theory (Bryman and Bell, 2003).

4.2 DEFINING THE RESEARCH SCAFFOLDING

Taking on and structuring a research field covering such broad and diversified fields as management and finance proposes a challenge in collecting appropriate literature. Operating in the grey-zone between the two fields requires strict discipline in the collection of literature in order not to drown the research scaffolding in a swamp of interesting (though not 100% relevant) works.

As a starting point we turned to journal databases such as JSTOR, ABI/INFORM global and Business Source Premier to narrow down the search. Using keywords as "CEO turnover", "management turnover", "abnormal stock returns" and "event study", standing alone and in various combinations, we managed to narrow the scope of our literature review. The articles we found then laid the ground for further research as we followed citations and references to other works.

This search strategy ultimately painted a clear picture of the two streams within in the field of management turnover, which were presented separately and in more detail in chapter 3.

4.3 THE EVENT STUDY

This thesis follows the *event study methodology* developed by Fama, Fisher, Jensen and Roll (1969) and as later outlined by MacKinley (1997) among others. An event study is an econometrical method to evaluate the effect of an event on the value of a firm. The event study has, in fact, become the standard methodology to examine stock price reactions to announcements and events (Binder, 1998). Such a study examines the abnormal returns to shareholders during a time window surrounding the announcement of the event (in our case the news of turnover). Abnormal return is typically measured as the raw return less a benchmark of what investors required that day. This benchmark is mostly seen in the form of the return dictated by the CAPM or, today more commonly, the return on a large market index. The raw return for one day is the change in share

price and any dividends paid divided by the closing share price the day before (Fama, Fisher, Jensen and Roll, 1969; MacKinley, 1997).

The event study methodology has typically been used for two purposes: (1) to test the hypothesis that the market incorporates information efficiently (also known as *the efficient market hypothesis)* and (2) to study the impact of an event on the wealth of a firm's security holders (under the assumption that the efficient market hypothesis holds). Amongst the second category, there are several applications. The method has been widely applied in finance research to examine security price behavior surrounding events such as mergers and acquisitions, debt or equity issues and earnings announcements. Then again, the event study approach has also been applied in the fields of law and economics when measuring the impact of changes in the regulatory environment and in management research in which the method became popular during the 1980s when for example examinations of the effects of corporate restructuring and changes in leadership were of high interest (Binder, 1998; MacKinley, 1997; McWilliams and Siegel, 1997).

An event study is a scientific measure that has advantages as well as disadvantages. First, it is a direct measure of the value created to shareholders. Second, it is forward looking as stock prices, in theory, dictate the present value of all expected future cash flows, and thirdly, it controls for general market movements. However, this only applies when assuming high stock market efficiency and rationality, meaning that the market incorporates all publically known information immediately (MacKinley, 1997; McWilliams and Siegel, 1997).

4.3.1 STOCK RETURN AS A PERFORMANCE MEASURE

There is no common agreement between scholars on the best way of measuring performance when studying CEO turnover effects (Lausten, 2002), however stock return is a potential measure (Warner, Watts and Wruck, 1988; Brown and Warner, 1985). The argument for the use of stock returns is that they reflect the true value of listed firms as they incorporate relevant value influencing information and reflect the discounted value of future cash flows (McWilliams and Siegel, 1997). It is a responsibility of the CEO to maximize shareholder value, and consequently when he or she succeeds or fails to deliver in that measure, the investors' perception will be affected and reflected in the price of a company's common stock.

The use of daily stock returns is however not completely free from problems. For example, the returns tend to depart more from normality than monthly returns and non-synchronous trading complicates the estimation of parameters from daily data. Nevertheless, according to a study by Brown and Warner, neither the possible non-normality nor the autocorrelation seem to have a distinguishable effect on event studies' results (Brown and Warner, 1985). Moreover, for using stock returns as a measure, an underlying assumption is that the market processes information about the event in an efficient and unbiased manner. *The theory of efficient markets* predicts that available information will be reflected in the price of a given security. It distinguishes between weak-form, semi-strong form and strong-form market efficiency, where these categories are based on the extent to which markets reflect available information. The weak-form asserts that past returns "dictate" prices; the semi-strong form asserts that all publically available information, which includes fundamental company information, historic stock price development and company announcements, is reflected in prices; and finally the strong form states that all information will be reflected in stock prices (Bodie et al., 2008). Since studies of the Nordic markets, albeit few in numbers, have found the Nordic markets relatively efficient (Claesson, 1987; Schwab, 2011) it seems reasonable to regard the semi-strong form market efficiency as corresponding to the actual market efficiency on the Nordic stock markets.

4.3.2 CHOICE OF MODEL FOR DETERMINING RETURNS

There are several approaches available for calculating the normal return for a security. These approaches can be categorized into *economical* and *statistical* models, where both types have their benefits and drawbacks. Economical models such as the Capital Asset Pricing Model (CAPM) and Arbitrage Pricing Theory (APT) rely on assumptions concerning investors' behavior, in contrast to statistical models, which are solely based on statistical assumptions. Some statistical assumptions are however usually needed for the economical models too, why their potential advantage do not lie in the independence on assumptions but in their potential in more accurately estimating measures of the normal return with the use of economic argumentation. Statistical models, such as the Constant Mean Return Model, Multifactor models and One Factor models including the Market Model, on the other hand follow from statistical assumptions regarding the behavior of asset returns and do not depend on any economic arguments. The typically imposed statistical assumptions are that asset returns are jointly multivariate normal and independently and identically distributed through time. While these assumptions are strong, difficulties using the statistical models are seldom encountered

since the assumptions are empirically reasonable and inferences using the normal return models tend to be robust to deviations from the assumptions (MacKinlay, 1997).
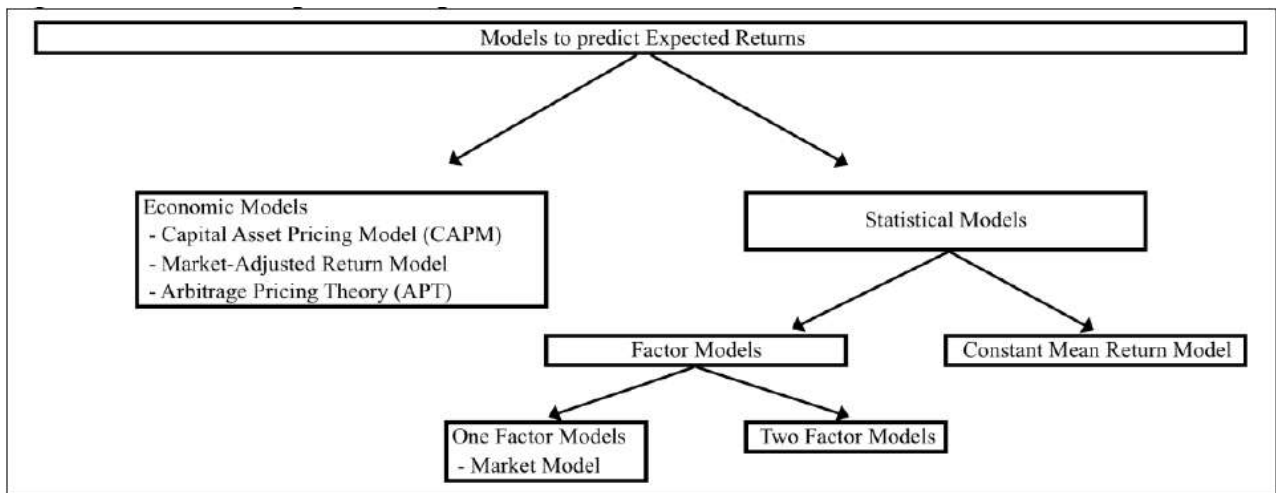
Figure 1 Models to predict expected returns based on MacKinley (1997), adapted from: Rydman and Grädtke (2011)

The above figure is a summary of the models usable for the prediction of expected returns as proposed by MacKinley (1997). We have chosen the Market Model, which as previously mentioned is a statistical model, for estimating the normal returns. The market model is constructed to reduce the variance of the abnormal return by removing the portion of the return that is related to variation in market return. The logic implies an increased ability to detect event effects, which explains why it is such a widely used approach in event studies. The fact that the model is so popular amongst researchers is another argument in its favor; it allows for easy comparison. The market model has a larger potential to detect event effects than the simpler Constant Mean Return Model, and, as multifactor models have been shown to only have a small marginal explanatory power, the gain of using such models is small. Likewise, the gains of using an APT motivated approach tends to be small depending on the fact that the most important risk factor in the model behaves as a market factor while the other factors add relatively little explanatory power. Nowadays the CAPM, which was frequently used in the 1970s, is seldom used in event studies due to the possibility that the results may be sensitive to the specific model restrictions (Brown and Warner, 1985; Campbell, Cowan and Salotti, 2010; MacKinlay, 1997).

4.3.3 CHOICE OF INDEX AS PROXY FOR MARKET RETURN

In order to be able to estimate the abnormal return for the stock of each announcement an index had to be chosen as a proxy for the return of the market portfolio. The use of an index is a fair representative of the market as a whole, as indices will eliminate company specific risk, as they are averaged out by diversification (Brealey, Myers and Allen, 2007). The OMXNORDIC index *"includes all the shares listed on the Nordic Exchanges. The aim of the index is to reflect the current status and changes in the market."* (OMX, 2011) and, thus, seemed as an appropriate index to reflect the general return on the Nordic market, as it will reflect regional market trends and, thus, add to a more accurate prediction of abnormal return on the stock prices in question. And finally, using an index that has its roots in the same region as the companies under investigation means that they to a great extent share the same calendar; that is are subject to the same bank holidays and, thus, trading days.

4.3.4 DETERMINING THE EVENT WINDOW

When applying the market model to estimate returns an event window has to be determined. The event window can be explained as the chosen period surrounding the announcement of turnover for which the corresponding abnormal return observations are aggregated over time (see figure 2 further down). It is standard procedure to extend the event window to, at least, a few days before and after the event date. By choosing an event window longer than only the event day the risk of data errors if the announcement e.g. was publicized on a Sunday or on a late afternoon is minimized (MacKinley, 1997). An event window which also includes a couple of days before the event day captures possible insider trading and the value of the 'buzz' around the company in the days leading to the announcement (Keown and Pinkerton, 1981; MacKinley, 1997).

In practice however, researchers views' on the optimal event window tend to go apart, which could have its roots in the differing views regarding market efficiency (see section *4.3.1 Stock Return as a Performance Measure*). For example, Reinganum (1985) and Dahyaa, Lonie and Power (2000) only examined the event day while Furtado and Rozeff (1987) focused on the two days surrounding the event day and Beatty and Zajac, (1987), Warner, Watts and Wruck (1987) and Weisbach (1988) analyzed cumulative abnormal returns for several event windows ranging between ten days before the event day and ten days after.

Based on the above information, several event windows have been chosen in order to provide stronger evidence of abnormal returns with the aim of increasing the robustness and reliability of the results. Hence, we have chosen T_1 to vary between -5 and 0, and T_2 to vary between 0 and +5. Accordingly, the following 6 intervals have been tested:

$$[-5;5], [-2;5], [-1;+1], [0;0], [0;+3], [0;+5]$$

where 0 is the day of the announcement of turnover, "-" depicts days prior to the announcement and "+" depicts days post the announcement. As a result the length of the estimation window varies between zero and eleven days.

4.3.5 DETERMINING THE ESTIMATION WINDOW

It is the purpose of an estimation window to predict the correlation between the market return and the return on the given stock, and it is therefore paramount that the estimation window is long enough to be applied as a general tool, whilst being short enough to not predict static stock prices. We therefore followed the recommendations by MacKinlay (1997) and determined our estimation window as the 120-day time span leading up to the turnover announcement.

| {Estimation window} | {Event window} | {Post-event window} |

| T_0 | T_1+1 | τ | T_2 |
| -120 | (-5;0) | 0 | (0;5) |
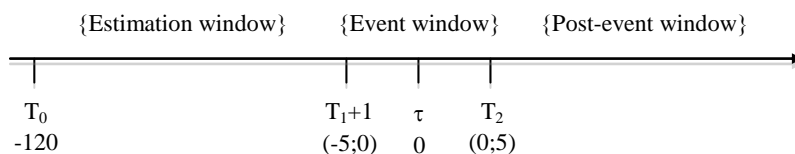
Figure 2: Time line illustrating the chosen event and estimation windows.

Where $\tau=0$ is the event day, i.e. the day of public announcement. τ_1+1 to $\tau=T_2$ represents the event window, which we have chosen to vary as explained above. τ_0+1 to $\tau=T_1$ is the estimation window and has been chosen to the 120 days leading up to the event window.

4.4 SAMPLE SELECTION AND DATA FILTERING

In order to obtain as balanced, symmetrical and homogenous a sample size as possible, so that our arguments are controlled for noise and disturbing factors and thus is based on a strong supporting background, it was found necessary to set some initial boundaries to the data collection. We limited the collection of data in several ways; we decided to analyze firms with origins from the same geographic area within the same period of time. The companies were, further, required to be of a

specific size. Based on these requirements, the data was limited from more than 20.000 announcements of CEO-turnover worldwide from 01.01.2005-31.12.2010 to 174 announcements that all fit into the frames presented below. In the following we will seek to explain the dynamics that led to the decisions regarding the sample selection and data filtering.

4.4.1 GEOGRAPHIC LIMITATION

When choosing our sample size we decided to only examine companies listed on the Nordic stock exchanges in Denmark, Finland, Norway and Sweden. Looking only at this fairly homogenous region enables us to, to at least to some extent, eliminate possible macroeconomic, microeconomic, cultural, institutional or regulative differences affecting financial transactions. This is also the explanation to why we excluded Island, whose economy suffered from more severe consequences from the financial crisis during the later half of our sample period. The countries share strong similarities in terms of law enforcement, political stability, government effectiveness, rule of law, control of corruption, voice and accountability (Sinani et al., 2008). In addition, the countries share similarities on the corporate level; hierarchies are typically low and a management style with key components of planning and order, delegation of responsibility, friendship with subordinates, and orientation towards innovation, characterize all countries (Lindell and Arvonen, 1996).

Our initial sample size consisted of all Nordic companies in which there had been CEO turnover during the 5-year time period from 01.01.2005-31.12.2010. This sample size was constructed using the Capital IQ database, that allowed us to filter company information, using "Executive Changes – CEO" as the filtering parameter. Having a list of all companies – worldwide – that had experienced CEO turnover in the specified period, then allowed us to filter out relevant Nordic companies. This final filtering was done manually, only accepting announcements from companies listed on Nordic stock exchanges – these include the Oslobørs in Norway and Nasdaq-OMX Stockholm, Copenhagen and Helsinki stock exchanges (prior to 2006: the Copenhagen Stock Exchange).

4.4.2 FIRM SIZE

In order to obtain a collection of data that is homogenous, it is important that the companies chosen are comparable in size. Many measures exist to evaluate company size; turnover, value, net assets and number of employees to name a few. Following the works of Hart and Oulton (1996) we chose number of employees as an indicator of firm size. Conducting an empirical study covering close to 100,000 companies, they found that this measure has the least value of standard deviation (Hart and Oulton, 1996). Having decided the appropriate measure of firm size, we needed to recognize the

appropriate limit – the limit that determines what size is relevant to evaluate when pursuing abnormal returns. We set this limit to 50 employees as this eliminates small company transactions. Very small companies may suffer from thin trading, which can result in an inaccuracy in the transaction valuations (Tse and Soufani, 2001).

Time period	Announcements made from 01.01.2005-31.12.2010
Event window	The [(-5;0)-(0;5)] surrounding the announcement day
Estimation window	The 120 days leading up to the event window

Geographic area	The Nordic region – companies listed on:
	• Nasdaq OMX
	   - Copenhagen Stock Exchange
	   - Stockholm Stock Exchange
	   - Helsinki Stock Exchange
	• Oslobørs

Firm size	+50 employees

Table 3 Summary of data boundaries

4.4.4 CONFOUNDING EVENTS

To further filter our data set from noise we manually checked all companies for confounding events – some companies would announce CEO turnover at the exact same date of e.g. their earnings announcements, which – as predicted by the semi-strong market form – would influence stock prices, and, thus, influence returns, abnormal returns and harm the clarity of the value creation from CEO turnover. All companies that confounding events on the same day (23 companies) were, thus, eliminated from the data set, reducing the sample from 174 to 151 announcements.

4.4.5 STOCK PRICE DATA

Stock price data was retrieved from the Thompson Reuters Datastream (Datastream) database. Thus, in order for an announcement to be included in the sample, stock prices had to be available through Datastream. The daily stock returns retrieved from Datastream are already adjusted for splits and dividends. In total, two companies were eliminated due to lack of stock price availability, leaving the sample at 149 announcements.

5. VARIABLE EXPLANATION AND HYPOTHESES

As mentioned in the introducing paragraphs to this thesis, most research on CEO turnover has been conducted in the light of either management or finance, and often with a stance in turnovers in the United States. As indicated in chapter 3, two main views dominate when investigating if 'CEO's matter. On the one hand, the Event Views argue that the CEO him/her-self does not matter much and that it is, rather, the disturbance of daily operations (the event of CEO turnover) that causes any fluctuations in stock returns. On the other hand, the Great Man View argues that the CEO personally influences stock returns in the event of management turnover. It was in the light of this we set out to uncover factors that empirically could support or reject either view, to be able to investigate if the great man view or the event views are better applicable for the Nordic markets – if any of them at all.

5.1 PRE-STUDY

As mentioned, most theory in this field has been developed in the United States, and we are, thus, threading into unexplored territory – to add more Nordic perspective to the analysis we turned to local experts within the field. In a pre-study, both researchers and practitioners were approached to ensure a more thorough coverage of the Nordic issue. In an informal setting, the respondents, which included a stock analyst, an economic journalist and an economics professor (see appendix II. List of Interviewees for a list of their names, a short bio and the date of the interview), were asked to answer a number of open-ended questions. The semi-structured interviews, which were not recorded, took place at the interviewees' respective offices and lasted between 30 and 60 minutes. The questions are presented in detail in appendix III. Interview Guide.

5.2 INDEPENDENT VARIABLES

Based on the experts' insights and on a thorough literature research we identified six independent variables that seemed interesting to test for. These include the *pre-announcement performance, the force of the change, the gender of the CEO, the origin of the successor, the tenure of the CEO and the size of the company,* which will be explained in detail in the following section.

5.2.1 PREVIOUS PERFORMANCE

According to empirical evidence, poor stock price performance leads to an increase in top-management turnover (see e.g. Coughlan and Schmidt, 1985; Warner, Watts and Wruck, 1988; Weisbach, 1988; Parrino, 1997). Whereas this relationship is widely trusted, the one between pre- and post-turnover performance remains more unexplored. Denis and Denis (1995) build on this relationship and argue that management changes in poorly performing firms will lead to performance improvements if internal control is efficient. Likewise, Denis and Kruse (2000) and Huson, Malatesta and Parrino (2004) claim that while incoming CEOs are associated with large performance improvements in firms that previously had a poor performance, they seem to only have a minor effect in firms with normal performance prior to turnover.

In our opinion, the relationship between pre- and post-turnover stock performance is highly interesting, and as it both has been highlighted by the interviewed experts and by a considerable amount of researchers, we decided to include it as an independent variable. The variable was constructed from the 3-year development of ROA prior to the announcement of CEO turnover. For example, if an announcement was published in February 2010, the return on assets was measured from the annual figures from 2007-2009. If this development was negative the company was regarded as an underperformer and vice versa.

In addition, we decided to include absolute return on assets to see if the magnitude of the return would have any influence at all. Return on assets was measured as EBIT/Total assets and this information was withdrawn from Bureau Van Dijk's database Orbis. ROA is a traditional financial accounting measure of performance and is used by several other researchers including Leker and Salomo (2000), Parrino (1997) and Dimopoulos and Wagner (2011) and thus seemed like an appropriate way to estimate previous performance.

5.2.2 THE FORCE OF THE CHANGE

Both empirics and the consulted experts suggest the force of the turnover to be a likely predictor of the post-event stock returns (see e.g. Denis and Denis, 1995; Reinganum, 1985; Khurana and Nohria, 2000). Researchers seem to agree that announcements of *retirements* typically are accompanied by *small* stock price reactions, where the explanation could lie in the fact that retirements can be anticipated ahead of time (thus enabling the information to be incorporated into stock prices at an earlier stage), or that such a change does not signal anything about the current state of the company but is simply a natural step in a CEO's career and in the life of a stable

organization (Weber, 1946). As regards *self-elected resignations*, as for example when a CEO leaves for a position with another company, this category does not allow for a prediction of whether the successor is better or worse than the predecessor and should thus lead to smaller stock reactions compared to dismissals (Huson, Malatesta, and Parrino, 2004). If however, the force of the change is involuntary as in the case of a *dismissal*, the reaction is expected to be larger (Denis and Denis 1995; Khurana and Nohria, 2000). Denis and Denis (1995) interpret their findings of positive abnormal stock returns following the announcement of forced turnover as the event either signals that performance is worse than expected, that the performance now will improve (because it enables the organization to find a more appropriate leader) or that the firm is "inplay" as a takeover target. The second interpretation is supported by Gamson and Scotch (1964), Ocasio (1994) and Salancik and Pfeffer (1980) whom agree that forced turnovers generate a mandate for organizational change.

The variable was constructed as a dummy variable, where each event was classified into *voluntary* (retirements and self-elected resignations) or *involuntary* (dismissals). In order to gain information about the force of the turnover we screened through company press releases from the time surrounding the announcement. In most of the cases the force behind the turnover events could be identified. However, it should be mentioned that, even though we have done our foremost to accurately identify the force behind turnover, the fact that firms may leave out or not report the precise reason for the turnover persists. This has been found to be especially true for the release of news concerning dismissals, as these events typically are handled as delicate and sensitive matters (James and Soref, 1981; Leker and Salomo, 2000; Warner, Watts and Wruck, 1987). In our case, we were unable to find the explanation for four announcements, which consequently were removed from our dataset, leaving us with a sample of 145 announcements.

5.2.3 THE GENDER OF THE CEO

While the proportion of female to male managers becomes less skewed over time, women holding CEO and other top-management positions are still scarce, even in the Nordic countries known for their high focus on gender equality (Hausmann, Tyson and Zahidi, 2011; Niskanen, 2011). This is perhaps part of the reason to why researchers have dedicated relatively little attention towards investigations of how the gender of the CEO affects stock returns in companies that are experiencing CEO turnover. A study by Lee and Hayes shows interesting results: investor reactions to the announcements of female CEOs are significantly more negative than those of their male

counterparts. Furthermore, the results show that women promoted from within a firm are viewed more positively than women hired externally (Lee and Hayes, 2007).

We found these results intriguing and decided to include gender as an independent variable. In practice the variable was constructed as a dummy variable, where we classified the CEOs into male or female based on the name as withdrawn from the Capital IQ database. The small female subsample in this study implied that distribution assumptions may be violated, and hence a risk that standard techniques for assessing statistical significance may be invalid. Efron (1979) and McWilliams and Siegel (1997) recommend bootstrapping standard errors to produce more robust standard errors for very small samples. However, as our overall sample size is relatively large (145 announcements), we will abandon the comparison to a bootstrap distribution for a note of caution.

5.2.4 THE ORIGIN OF THE SUCCESSOR

Several researchers point out the importance of separating between *external* and *internal* succession, that is if the successor is hired from outside the organization or promoted from within the organization (e.g. Boeker, 1997; Furtado and Rozeff, 1987; Khurana and Nohria, 2000; Reinganum, 1985; Warner, Watts and Wruck, 1988) The relationship between successor origin and post-succession performance was of great interest during the 80s and 90s, with notable studies made by Reinganum (1985), Warner, Watts and Wruck (1988), Furtado and Rozeff (1987) and Beatty and Zajac (1987). While the results of the first two mentioned studies indicate that there is a significant relationship for external successions in small firms, Furtado and Rozeff, contradictory, found positive market effects for internal promotions and no significant effects for external hires while Beatty and Zajac concluded that both types of successors where followed by negative market reactions.

Amongst management researchers it has been argued that external successors are more likely to be agents of change compared to insider successors; they do not only tend to introduce and carry out necessary organizational changes to a larger extent than internal successors but also have a greater possibility to reconfigure existing communication relationships and established political coalitions (Boeker, 1997; Hambrick and Mason, 1994; Shen and Cannella, 2002). They are furthermore believed to bring new competencies and knowledge to the executive group. Internal successors, on the other hand, have the advantage of possessing firm-specific knowledge and are more likely to face a supportive executive team (Favaro, Karlsson and Neilson, 2010; Shen and Cannella, 2002). On this line of reasoning, while external successors tend to be selected when organizations perform

poorly and require a strategic change, internal successors typically tend to be selected when organizations desire continuity and have a successful internal development program in place (Boeker, 1997; Furtado and Rozeff, 1987; Hambrick and Mason, 1984; Helmich, 1974; Zajac, 1990).

The reported inconsistent evidence aroused our curiosity to include the origin of the successor as an independent variable in our model. Data about the origin of the successor was gathered from company press releases and was, when necessary, complemented by a screening of annual reports. The successors were then classified into either external or internal, allowing the variable to be constructed as a dummy variable.

5.2.5 THE TENURE OF THE CEO

The results of previous research suggest that the tenure of the leaving CEO could be an interesting factor for further examination. It appears that organizations should strive for certain balance when it comes to tenure. While too frequent CEO successions can be harmful to an organization's performance as they may disrupt organizational continuity (Kesner and Sebora, 1994; Grusky, 1963), overly long tenures are neither optimal as they have been found to be linked to top management's commitment to *status quo*, meaning "the belief in the enduring correctness of current organizational strategies and profiles" (Hambrick, Geletkanycz and Fredrickson, 1993, p. 3) and to be inversely related to success in achieving fit between firm strategy, structure, and environmental demands (Hambrick, Geletkanycz and Fredrickson, 1993; Miller, 1991). Albeit not testing for effects on financial performance, several other works within change management research support the view that lengthy top management tenure lowers the likelihood of strategic and organizational change, indicating that there indeed could be an interaction between CEO tenure and performance (see e.g. Finkelstein and Hambrick, 1990; Katz, 1982).

Accordingly, it seems like the tenure of the departing CEO can be an important predictor for firm performance, and it was therefore included into our model. The variable was measured as the total number of years a firm's departing CEO had held the position at the time of the announcement. In order to gain information about this, screenings of press releases and annual reports were conducted.

5.2.6 COMPANY SIZE

As indicated by both literature (Reinganum, 1985; Warner, Watts and Wruck, 1988) and the consulted experts, company size could have an impact on the stock return of companies that have

announced CEO turnover. Warner, Watts and Wruck (1988) argue that larger firms tend to have somewhat higher 'normal' management turnover than small firms, which they explain by the fact that these have larger management teams (and thus a higher likelihood of at least one change) and have constructed their promotion and retirement programs to prevent overly long tenures. Reinganum (1985) only found statistically significant (positive) succession effects following the announcements of external appointments in small firms with a simultaneous announcement of a departure of the previous officeholder, where he found a potential explanation to the influence of the size of the company in Pfeffer's findings from 1977; in large and complex organizations, leadership effectiveness can be limited by social and environmental constraints.

With the presumption that company size could have a role in the determination of stock returns following CEO turnover announcements, we included size as an independent variable. As noted in section 4.4.2 FIRM SIZE, we decided to limit our initial sample to only include companies with more than 50 employees in order to ensure liquidity. The variable was constructed as the total number of employees, measured in the year of turnover. Data was collected from Bureau Van Dijk's database Orbis. In a handful cases, when unable to find the numbers through Orbis, data was collected through screenings of annual reports.

5.2.7 SUMMARY

In total we identified six different independent variables as interesting for further testing. These were *previous performance, the force of turnover, the gender and the origin of the successor, the tenure of the departing CEO* and *company size*.

Drawing back on earlier paragraphs in this thesis, two streams dominate the field of management turnover – the Event Views and the Great Man View. The first highlight the effect of the event in itself, whereas the latter focuses on the person behind the event. In an attempt to determine which stream more accurately applies to the Nordic cases, the factors identified in the above paragraphs were categorized as pertaining to either the event or the CEO, to allow for statistical testing. This categorization is elaborated in the following: (see next page)

CEO RELATED VARIABLES	*EVENT RELATED VARIABLES*
Gender of the succeeding CEO	*Previous performance*
Tenure of the departing CEO	*Origin of the succeeding CEO*
Force of change	*Company size*

Table 4 Table illustrating how the independent variables can be separated into CEO related and event related.

CEO related factors

These factors are those that are unbreakably connected to the CEO in question. Replacing the CEO would completely alter the event, as these factors are 100% determined by the CEO, and would, thus, inevitably change with the CEO. The CEO is solely accountable for his or her own gender, tenure and force of resignation (as it either is a personal decision taken by the CEO him/herself or a consequence of not fulfilling the requirements he or she was accountable for).

Event related factors

These factors would not necessarily change if replacing the CEO. They are, thus, more related to the event. The previous performance of the company (not of the CEO!) is not necessarily a product of only the CEO's actions and decisions (e.g. scapegoating), the origin of the successor is ultimately determined by the Board of Directors that is responsible for finding a replacement, and finally the size of the company is not necessarily linked to the CEO.

5.3 HYPOTHESES

Summarizing, the Great Man View has strong links to CEO iconization - think Steve Jobs, Donald Trump, President Obama etcetera. These are all strong foreign examples – but what are the Nordic equivalents? Do such iconic leaders even exist in societies were equality and humility is at the ground of national culture? And if not, are the arguments of the event views view then applicable in a Nordic context? Regardless, both views establish that something *does* happen and that abnormal stock returns are to be expected. Two questions thus remain; *how much* and *why*? These questions are reflected in the hypotheses presented below:

H_0: CEO turnover does not affect short-term public company valuation in Nordic companies

H_1: CEO turnover affects short-term public company valuation in Nordic companies

> *H_{1a}: The tenure of the departing CEO influences short-term public company valuation in Nordic companies*

> *H_{1b}: The gender of the succeeding CEO influences short-term public company valuation in Nordic companies*

> *H_{1c}: The force of turnover (involuntary) influences short-term public company valuation in Nordic companies*

> *H_{1d}: The force of turnover (voluntary) influences short-term public company valuation in Nordic companies*

> *H_{1e}: An internal successor following CEO turnover influences short-term public company valuation in Nordic companies*

> *H_{1f}: The size of the company influences short-term public company valuation in Nordic companies*

> *H_{1g}: Previous performance of the company influences short-term public company valuation in Nordic companies*

6. COMPUTING ABNORMAL RETURNS

Abnormal returns are the difference between fictive returns we would expect to have seen had there been no event and the actual recorded returns. Abnormal returns are, thus, no more than an estimation based on historic returns. This estimation is computed through a regression, subject to the assumptions explained in the appendix, and was carried out to estimate the market model parameters α and β. Again, it is important to remember that when we use the equations [2] to [4] (please see Appendix I. Explanation of the Market Model) to find assessed values of normal return on different values of market return, we are not calculating the *actual* value of return – or what we would call the actual return. We are only making *predictions* about the value of it. Therefore there is bound to be some error *(ε)* in our predictions about the values of the normal return at given values of the market return. The stronger the relationship (or correlation) between the dependent and independent variables, the less error the predictions will yield. We included the r-square statistic in the regression analysis to measure this correlation, and hence, to make some predictions about the accuracy of our findings.

Summarizing, the expected normal return is predicted to follow the relationship between observed company returns and the return on the market over the time period measured by the estimation window and is computed based on the regression statistics. This allows for the abnormal return to be identified as the difference between the values of the observed return and the predicted return.

6.1 IDENTIFYING AND ELIMINATING OUTLIERS

Pynnönen (2005) advocates that "*Cumulative abnormal returns of individual companies are […] usually pretty noisy which may deteriorate reliable inference.*" (p.333). However, removing outliers has both advantages and disadvantages. Taking out outliers can severely change the statistical properties of the data set and caution should, thus, be applied. According to Grubbs (1969, p.1) "*[a]n outlying observation, or outlier, is one that appears to deviate markedly from other members of the sample in which it occurs*". Outliers can be extreme or mild, and they often arise from measurement errors (Newbold, Carlson and Thorne, 2010). Researchers' views on how to deal with outliners differ, however common methods are the ones based on the interquartile range of the dataset. The range often used is

$$IQR = [Q_1 - k(Q_3 - Q_1); Q_3 + k(Q_3 - Q_1)]$$

where k is a constant. Common values of k are 3 (extreme outliers) and 1,5 (mild outliers) (Grubbs, 1969; Newbold, Carlson and Thorne, 2010).

Applying this method we identified 12 extreme outliers in the data set that fell outside the interquartile range, which were subsequently removed. This left us with a dataset containing 133 companies.

Company	Event Day	AR
NAVAMEDIC	03-04-2009	10%
NORDIC TANKERS	05-01-2009	-9%
SAMPO 'A'	17-03-2008	-7%
CENCORP	14-04-2008	-10%
AKVA GROUP	22-10-2010	14%
GABRIEL HOLDING	27-07-2010	8%
OBDUCAT 'B'	28-05-2010	-16%
M-REAL 'B'	18-09-2006	12%
CATELLA 'B'	26-04-2010	14%
CATENA	23-08-2010	10%
SPECTRUM	04-10-2010	11%
WENTWORTH RESOURCES	31-07-2009	8%

Table 5 List of extreme outliers

The above is a table over the 12 companies identified as extreme outliers in the dataset. The companies marked blue are companies that experienced extreme declines in stock return on the event day and the remaining companies are companies that experienced extreme positive abnormal returns on the event day. As previously mentioned, confounding events have been removed from the data set – there is, thus, no other apparent reason for these extreme results than the announcement of CEO-turnover. The question, thus, remains – are extremities a part of reality or merely noise in the search of a general truth? Answering this question is unfortunately out of scope for this thesis, and we will therefore follow what seems to be the empirical norm and remove extreme outliers, leaving our sample at 133 announcements. We do, however, accept the consequence of this uncertainty and will analyze results with due reservations.

7. TESTING FOR SIGNIFICANT ABNORMAL RETURNS

7.1 STATISTICAL PROPERTIES OF CARS

The null hypothesis in this study is that CEO turnover does not affect short-term public company valuation, which means that $\gamma_{i,T} = 0$ for all $T = t_T, t_1 + 1, \ldots, t2$, and consequently, $\mu_{i,T} = 0$. Where T denotes the event day, t the estimation window in its entity, t_1 the beginning of the estimation window and t_2 the end of the estimation window. Hence, under the null hypothesis

$$CAR_{i,T} \sim N(0, \sigma^2)$$

This is, further, backed by Pynnönnen (2005, p.330) who states that: *"In order to evaluate the statistical properties of the abnormal returns we need to make an assumption about the distribution of the returns. The standard assumption is that the returns are serially independent and normally distributed. Under this assumption the abnormal returns (...) are again normally distributed. Nevertheless, they are strictly speaking not independent, because the market model parameters (...) are estimated and, hence, contain estimation error."*

In order to compute the variance, the traditional assumption is that the abnormal returns are independent over firms, which is the case if the event days are different for the firms. Otherwise, if the event days are overlapping, the contemporaneous return correlations should be taken into account in the computations.

In our sample, there are only a very limited number of cases where the announcement of CEO turnover have occurred on matching days – generally the CARs are independent, and we, thus, decided to follow the general assumption that any possible effects of contemporaneous return correlation are diminishing towards 0, if present at all (Pynnönnen, 2005).

7.2 DOES CEO TURNOVER GENERATE SIGNIFICANT RETURNS?

Having constructed an appropriate model for the investigation of the general influence on above average stock returns from CEO turnover in Nordic companies, it was sought to test the generality of these factors. This was done through a multiple regression across all event windows.

These regressions were conducted on the cleaned sample consisting of 133 turnover announcements, taken from the original sample size of more than 20.000 based on a) the framework presented previously in this thesis and b) availability of the data needed. The regression showed a statistically significant correlation for some event windows between CAR, a number of the

independent variables and the occurrence of CEO turnover. These results will be further elaborated and summarized in the following sections, and, further interpreted in chapter 8.

The table below summarizes the regression results of the different event windows subject to test. The top row illustrates how the event windows are constructed; -1/+1 is the event day and one day prior, as well as one day, post the event day. In other words; "+" illustrates the number of days included AFTER the event day, and "–" illustrates the number of days included PRIOR to the event window. "0" or Event Day marks the day of the announcement itself.

	Event Day	*[-1;+1]*	*[-2;+5]*	*[-5;+5]*	*[0;+3]*	*[0;+5]*
Effect on stock return	0,01%	0,57%	0,81%	1,14%	1,14%	1,27%
P-value	0,9787	0,0997	0,2309	0,1124	0,0229	0,0335

Table 6 Summary of regression results of CAR and the occurrence of an event, as well as, the corresponding P-values.

The tests show that we can reject H_0 for 3 of the event windows at a 90% confidence level out of the sample, where significant returns of respectively 0,57%, 1,14% and 1,27% are recorded for the event windows [-1;+1], [0;+3] and [0;+5]. The latter two can even confirm H_0 at a 95% confidence level. However, for the event day itself, [-2;+5] and [-5;+5] we were unable to reject the null hypothesis, which means that the event did not cause significant abnormal returns for them on a stand-alone basis.

7.3 ADDING INDEPENDENT VARIABLES TO THE MODEL

Having been able to confirm H_1 for some of the event windows, the following will be an attempt to explain this finding through the testing of hypotheses $H_{1a\text{-}g}$. These tests were performed by adding the independent variables to the model. The independent variables, as reasoned previously in this thesis, were the force of change (involuntary or voluntary), CEO tenure, company size, underperformance, ROA, the gender of the successor and internally promoted successor.

In praxis the independent variables were added to the model using a mix of dummy variables and actual values according to the following table: (see next page)

Involuntary	1
Voluntary	1
CEO Tenure	No. Years
Company size	No. Employees
Underperformance	1
ROA	Value of CROA
Gender of successor	1
Internal successor	1

Table 7 Adding independent variables to the model

The number "1" is a confirmative dummy variable that depicts those cases were the CEO was dismissed, the CEO retired/resigned, the company was underperforming, the gender of the succeeding CEO was a woman, and finally, the cases when the succeeding CEO was internally promoted.

For CEO tenure and company size the actual values measured in years and number of employees were used as independent variables and, lastly, cumulative ROA across the three preceding years to the announcement was used for measuring previous performance.

Control variables	Event Day		[-1;+1]		[-2;+5]		[-5;+5]		[0;+3]		[0;+5]	
	CAR	P-Value	CAR	P-Value	CAR	P-Value	CAR	P-Value	CAR	P-Value	CAR	P-Value
Involuntary	-0,43%	0,518	0,85%	0,434	-3,27%	0,178	0,87%	0,424	-0,95%	0,588	-0,83%	0,720
Voluntary	-0,02%	0,975	1,81%	0,084	0,41%	0,858	1,84%	0,080	-1,12%	0,505	-0,69%	0,754
CEO Tenure	-0,01%	0,867	0,03%	0,594	-0,06%	0,668	0,03%	0,576	-0,06%	0,545	-0,05%	0,708
Company size	0,00%	0,249	0,00%	0,498	0,00%	0,053	0,00%	0,481	0,00%	0,218	0,00%	0,182
Underperformance	-0,84%	0,090	-0,62%	0,448	1,64%	0,366	-0,66%	0,420	1,26%	0,341	0,84%	0,630
ROA	0,00%	0,832	0,00%	0,848	-0,01%	0,771	0,00%	0,848	0,00%	0,868	0,00%	0,868
Gender of successor	0,54%	0,484	-0,20%	0,872	-1,81%	0,519	-0,16%	0,898	-2,70%	0,187	-3,39%	0,210
Internal successor	-1,12%	0,008	-0,05%	0,942	-0,14%	0,926	-0,02%	0,980	0,65%	0,557	0,17%	0,906

Table 8 Summary of regression results including independent variables. For each event window the effect on company performance is found in the first column and the corresponding p-value is found in the second column.

The above table summarizes the outcome of the regressions adding the independent variables to the model. At a confidence level of 90% we can confirm H_{1d} "The force of change (voluntary) influences short term public company valuation in Nordic companies" for the event windows [-1;1], as well as, [-5;+5], where a positive influence of, respectively, 1,81% and 1,84% of stock return was found from voluntary change.

At the same confidence level we can reject H_{1f} "The size of the company influences short term public company valuation in Nordic companies" for the event window [-2;+5] where no influence (0,00%) is found on company valuation.

Finally, at the 99% confidence level we can confirm H_{1e} "An internal successor following CEO turnover influences short term public company valuation in Nordic companies" for the event day, where a negative influence of -1,12% of stock return is found.

We were unable to confirm H_{1a} "The tenure of the departing CEO influences short term public company valuation", H_{1b} "The gender of the succeeding CEO influences short term public valuation in Nordic companies", H_{1c} "The force of change (involuntary) influences short-term public company valuation in Nordic companies" and H_{1g} "Previous performance of the company influences short term public company performance in Nordic companies".

8. INTERPRETATION OF RESULTS AND FINDINGS

In our regression analyses we wanted to investigate if CEO turnover in Nordic companies generally leads to changes in company valuation in the short-run. We found that CEO turnover positively influences company valuation with statistical significance for event windows [0;+3], as well as, [0;+5]. We, thus, wanted to further 'break down' this event, and investigate if any abnormal returns were influenced by a number of CEO related factors or, rather, a number of event related factors – if at all. However, as many researchers before us (as highlighted in the literature review), we experienced only small influence with varying significance. We will, thus, start our analysis of our findings with a note on statistical significance to then proceed to an analysis of our findings in CEO-related factors and Event-related factors.

8.1 STATISTICAL SIGNIFICANCE VS MARKET EFFICIENCY?

In statistics, the amount of evidence required to accept that an event is unlikely to have arisen by chance is known as the significance level or the p-value. The p-value is the probability of observing data at least as extreme as that observed, given that the null hypothesis is true, or in other words, the probability of an observed result arising by chance. If the obtained p-value is small then it can be said either the null hypothesis is false or an unusual event has occurred. If a test of significance gives a p-value lower than the significance level (which typically is set to α=0.10, 0.05 or 0.01) the null hypothesis can be rejected, and the results can be deemed 'statistically significant' (Newbold, Carlson and Thorne, 2010).

When analyzing our results it is evident that our findings to a large extent are statistically insignificant. Why did stock markets not react as we had expected and why were the p-values so high? One explanation could be that, generally, most cases of CEO turnover go unnoticed. Looking at all the announcements of CEO turnover in our sample during 2010, the majority of the turnover announcements were not noted by the countries' largest daily newspapers (Berlingske Tidene, Helsingin Sanomat, Aftenposten or Dagens Nyheter) nor by the leading business press (Børsen, Kauppalehti, Dagens Næringsliv or Dagens industri). For example, out of the 55 announcements that occurred in 2010, 24 received no such medial attention at all, 15 announcements were noted by one of the press types while only 16 announcements were noted by both the daily press and the

business press. To understand the potential consequences of this we have to go back to *the theory of efficient markets*, as presented in section 4.3.1 STOCK RETURN AS A PERFORMANCE MEASURE. As described there, the theory predicts that any available information will be reflected in the price of a given security. We initially assumed Nordic stock markets to be semi-efficient, meaning that shareholders would react to any publically available information about their securities. This could be where a problem lies; it is possible that the lack of medial attention hinders the Nordic stock markets from being semi-efficient. If shareholders (not traders in this case) do not get access to the news, they will not have the chance to react to them properly, resulting in (at least for some time) inaccurately valued stocks. As already mentioned, if the efficient market hypothesis does not hold, the market model is no longer a suitable method to estimate abnormal returns. Thus, it would be of interest to test if other models would yield the same results as ours, and we recommend other researchers to further investigate how the lack of media coverage influences short-term stock performance following turnover announcements.

8.2 CEO RELATED FACTORS

We classified the longitude of a CEOs office, the force of turnover and the gender of the CEO as CEO related factors. The following will be an elaboration on the results found in the statistical analysis and will seek out to uncover some of the explanatory factors and dynamics that led to our findings.

8.2.1 THE TENURE OF THE CEO

We saw very little influence from the tenure of the CEO across the event windows averaging at -0,02% of stock return across the event windows. The results of previous research suggest that the tenure of the leaving CEO shows that both overly short and overly long tenures can be harmful for an organization's performance. Furthermore, albeit not testing for effects on financial performance, a number of additional studies within change management support the view that lengthy top management tenure lowers the likelihood of strategic and organizational change (see e.g. Finkelstein and Hambrick, 1990; Katz, 1982), which we interpreted as an indication of a potential correlation between tenure and stock return. However, we were unable to support these findings and did not find any noteworthy nor significant results. This could indicate that the market generally has a hard time determining if a CEO has held office too shortly or too lengthy.

8.2.2 THE GENDER OF THE CEO
As mentioned in some of the introducing paragraphs to this thesis, one of the cases that sparked our curiosity in this field was the case of the announcement of Stine Bosse's departure from Danish TRYG and the following stock plummet. Gender equality has been a buzzword in the Nordic region for decades and with suggested board quotas and the eternal debate on how to make women take on the CEO title, we found this variable highly relevant to investigate. Lee and Hayes (2007), who are two of the few researchers that have examined the role of the gender of the CEO in stock price reactions to CEO turnover, found investor reactions to the announcements of female CEOs significantly more negative than those of their male counterparts. Furthermore, the results show that women promoted from within a firm are viewed more positively compared to women hired externally (Lee and Hayes, 2007).

We generally observed a negative impact on stock performance from female CEO successors across all event windows. However, no statistically significant correlations between stock performance and female succession were found. This could indicate that the Nordic companies generally have a more feminine approach to management, and is, thus, less apprehensive about female managers, than is the case in other countries. This would also be in line with the cultural works of Hofstede (2001), in which the Nordic countries are categorized as 'feminine societies'.

8.2.3 THE FORCE OF TURNOVER
As for CEO dismissal we wanted to investigate how the stock market would react to cases where the CEO was dismissed by the board. We found inconclusive correlations between the dismissal of the CEO and the stock performance, however, we did confirm H_{1d} "The force of change (voluntary) influences short term public company valuation in Nordic companies" for the event windows [-1;+1], as well as, [-5;+5], where a positive influence of, respectively, 1,81% and 1,84% of stock return, at a 90% confidence level. This shows a positive correlation between the voluntary departure of a CEO and company valuation, yet inconclusive and statistically insignificant results for CEO dismissal.

These results are surprising seen in the light of our interviewees' expectations and the findings of Denis and Denis (1995) whom found a larger positive correlation between CAR and CEO dismissal, rather than voluntary turnover. We had predicted larger market reactions to CEO dismissal, as these would most likely occur within a smaller level of anticipation, and the fact that previous research argues that forced turnover generates a mandate for organizational change (see

e.g. Gamson and Scotch, 1964; Ocasio, 1994). Involuntary turnover is usually a means taken by the board of directors as an effort to improve poor organizational performance when the CEO's performance has fallen short of the requirements he or she was accountable for. A possible explanation to our results could again be found in the Nordic heritage – as mentioned in 5.2.2 THE FORCE OF THE CHANGE CEO dismissal is considered a sensitive topic and, as expressed by one of the interviewees, Nordic boards are generally more hesitant to dismiss CEOs than e.g. their North American counterparts. We found few cases were the force of change was listed as 'dismissal', leading us to but suspect that the actual number is higher – that Nordic discretion keeps the number artificially low, and perhaps especially so in 'high profile cases'. For example, did Stine Bosse really resign or was it rather a case of a 'concealed' dismissal? A high number of such dismissals in our dataset could perhaps be an explanation to why our findings are not in line with those of previous research.

8.3 EVENT RELATED FACTORS

Event related factors include the company's previous performance, company size and the origin of the succeeding CEO. The following will be an elaboration on the results found in the statistical analysis and will seek out to uncover some of the explanatory factors and dynamics that led to our findings.

8.3.1 PREVIOUS PERFORMANCE

Studies by Denis and Kruse (2000) and Huson, Malesta and Parrino (2004) show that incoming CEOs are associated with large performance improvements in companies that have experienced poor financial performance prior to turnover while only a minor effect is seen in companies prior to the event.

As noted in section 5.2.1 PREVIOUS PERFORMANCE, we found the relationship between pre-and post-turnover stock performance interesting and took the decision to include previous performance as an independent variable. Surprisingly, our results were inconclusive and both negative and positive returns were recorded depending on event window. We did, however, find a significant negative influence on the event day itself of -0,84% of stock return. The mere symbolic value of acting on poor performance would expectably lead to increased stock returns. The very small, varying and, mostly, insignificant results could indicate that the Nordic markets, generally, do not regard the

CEO as solely responsible for performance, but that many factors play a vital role in company performance. CEO turnover in itself would then not be enough to influence stock market performance, much in line with our findings.

8.3.2 THE ORIGIN OF THE SUCCESSOR

As previously explained, studies of the relationship between successor origin and post-succession performance have yielded mixed results. Reinganum (1985) and Warner, Watts and Wruck (1988) found a significant relationship for external successors in small firms while Furtado and Rozeff (1987), contradictory, found no significant effect for external successors but instead a positive effect for internal promotions. Beatty and Zajac, on the other hand, concluded that both types of successors were followed by negative stock market reactions.

Since ups and downs were apparent for either case, we found it interesting to investigate this further – to see if we could draw out more steadfast conclusions applicable to the Nordic markets. Our analysis showed a significant negative correlation between internal promotions and stock returns on the event day of -1,12% of stock return. This finding could have several explanations – one could be an expectation that the 'runner-up' in a company is, just that – a runner-up, and that he or she will be unable to fill the shoes of the departing CEO. Furthermore, when promoting an internal successor, some of the main benefits of appointing an external CEO are excluded. As argued by Hambrick and Mason (1994) and Shen and Cannella (2002) external successors not only allow for introduction and implementation of necessary organizational changes but also have a greater possibility to reconfigure communication relationships and political coalitions. They are further believed to bring further knowledge and competencies to the executive group.

8.3.3 COMPANY SIZE

As noted in section 5.2.6 COMPANY SIZE, some empirical evidence shows that the size of the company is of relevance for the stock price reactions following a turnover announcement. For example, Reinganum (1985) and Warner, Watts and Wruck (1988) observed significant correlations between the stock price reactions following turnover announcements of external successors in small firms.

Our analysis, however, found no such support. We found no influence (0% of stock return) across all event windows and this with statistical significance for the event window [-2;+5]. This indicates that Nordic markets make no distinction between small and large companies when evaluating the influence of CEO turnover on company performance. An explanation to this finding could be the fact that the size spread among Nordic companies generally is quite small. There are only a limited

number of very big companies, while the majority of companies are of middle size. This was also reflected in our sample, which had a mean of 3394 employees and a standard deviation of 6797, which compared to global markets intuitively seems quite small.

9. CONCLUSIONS

This thesis operates in grey-zone between two different well-developed fields and paradigms; finance and management. Much research has been conducted on the role of the CEO and even to what extent they influence company valuation. However, not much research has been conducted in a Nordic setting.

Also, when summarizing previous research, it is evident that the stock price effect is generally found to be inconclusive (regardless of which managerial view the authors seem to support) when analyzed in the aggregate: the abnormal return on the announcement day tends to be small with varying significance.

This study found a statistically significant positive effect of, respectively, 1,14% and 1,27% on cumulative abnormal stock returns following the announcement of CEO turnover in Nordic companies for the event windows [0;+3] and [0;+5]. With these findings we confirm H_1: "CEO turnover affects short-term public company valuation in Nordic companies" for the event windows [0;+3] and [0;+5] at a 5% significance level. We were, further, able to confirm H_1 at a 10% significance level for the interval [-1;+1] where significant influence of 0,57% on stock return was recorded.

Adding independent variables to the model we were able to confirm H_{1d} "The force of change (voluntary) influences short-term public company valuation in Nordic companies" at a 10% significance level for the event windows [-1;1], as well as, [-5;+5], where a positive influence of, respectively, 1,81% and 1,84% of stock return was found following a voluntary resignation of a CEO. An potential explanation to this, somewhat surprising finding, was found in the Nordic heritage – CEO dismissal is considered a sensitive topic and we, thus, only recorded few cases were the force of change was listed as 'dismissal', but suspect that the actual number is much higher. Regarding a number of these voluntary turnovers as cover-ups for dismissals would leave us with a positive influence from CEO dismissal, which would be much in line with previous research in the field.

Also at a 10% significance level, we can confirm H_{1f} "The size of the company does not influence short term public company valuation in Nordic companies" for the event window [-2;+5] where an

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influence of 0,00% is found on company valuation. This finding is peculiar in the sense, that we – with significance – can confirm our hypotheses, yet with the finding that influence is 0.

Finally, at the 1% significance level we can confirm H_{1e} "An internal successor following CEO turnover influences short term public company valuation in Nordic companies" for the event day, where a negative influence of -1,12% of stock return is found. This finding was explained through that external appointments are thought to bring new knowledge and competencies to the executive group. Internal promotions are more likely to adhere to already existing communication relationships, as well as, established political coalitions, that might not be very efficient, and, thus, negatively influence company performance.

CEO tenure was found to have close to no influence on short-term valuation across all windows, where we found a negative effect from CEO turnover on cumulative abnormal stock returns for companies in which a female CEO was to take office (up to -3,39% for [0;+5]) and, finally, our findings regarding previous company performance were inconclusive. Underperformance generated both negative and positive influence depending on the event window and absolute value of ROA did not seem to influence at all. However, none of these findings were significant and we were, thus, unable to confirm H_{1a} *"The tenure of the departing CEO influences short-term public company valuation"*, H_{1b} *"The gender of the succeeding CEO influences short-term public valuation in Nordic companies"*, H_{1g} *"Previous performance of the company influences short-term public company performance in Nordic companies"*.

9.1 SUMMARIZING TABLE

HYPOTHESES	Influence	Confirmed for the event windows	Significance level
H_0 : CEO turnover does not affect short-term public company valuation in Nordic companies		Rejected	N/A
H_1 : CEO turnover affects short-term public company valuation in Nordic companies	*Positive*	[-1;+1] [0;+3] [0;+5]	10% 5% 5%
H_{1a} : The tenure of the departing CEO influences	*No influence*	Rejected	N/A
H_{1b} : The gender of the succeeding CEO influences	*Negative*	Rejected	N/A
H_{1c} : The force of change (involentary) influences	*Inconclusive*	Rejected	N/A
H_{1d} : The force of change (voluntary) influences	*Positive*	[-1;+1] [-5;+5]	10% 10%
H_{1e} : An internal successor following CEO turnover influences	*Negative*	Event Day	1%
H_{1f} : The size of the company influences	*No influence*	[-2;+5]	10%
H_{1g} : Previous performance of the company influences	*Negative*	Event Day	10%

Table 9 Summarizing table of findings and hypotheses

The above table summarizes our findings – the hypotheses are, for the sake of readability, listed in a shortened version in the first column, the second column depicts if results were positive, negative or both depending on the event window (i.e. inconclusive). The third column lists if the hypothesis was rejected, or for which event windows the hypothesis was confirmed. The fourth column lists the confidence level at which the hypothesis was confirmed.

9.2 THE GREAT MAN VIEW VS THE EVENT VIEWS

Drawing back on earlier paragraphs in this thesis, two streams dominate the field of management turnover – the Event Views and the Great Man View. The first highlight the effect of the event, whereas the latter focuses on the person behind the event. In an attempt to determine which stream more accurately applies to the Nordic cases, the factors identified were categorized as pertaining to either the event or the CEO, to allow for statistical testing. This categorization was summarized in the table presented on the next page:

CEO RELATED VARIABLES		EVENT RELATED VARIABLES	
Gender of the succeeding CEO	No evidence	Previous performance	Evidence
Tenure of the departing CEO	No evidence	Company size	Evidence
Force of change	Evidence	Origin of successor	Evidence

Table 10 Table linking statistical evidence to the 'The Great Man View" and "The Event Views"

The table above links our statistical findings with the two dominating streams of thought within the field. It is evident that our findings are, somewhat, inconclusive as evidence for both streams has been found. We, thus cannot, provide definite support for either stream. However, as this thesis progressed it seemed more and more evident that Nordic markets tend to regard the occurrence of CEO turnover to be more linked to company performance (i.e. the Event Views) rather than CEO performance (i.e. the Great Man View). We generally found little statistical significance, which perhaps could be explained through lack of media coverage – in general, most CEO turnovers go unnoticed and are, as such, nothing the Nordic markets pay particular interest to. Also, the significant results from both previous performance, company size and the origin of the successor could indicate that the Nordic markets, generally, do not regard the CEO as solely responsible for performance, but that many factors play a vital role. CEO turnover in itself would then not be enough to influence stock market performance. This finding would then again, thus, support the Event Views. As a concluding remark to this thesis, we find ourselves leaning towards the Event Views as a better description of how CEO turnover is perceived in the Nordic markets. However, the inconclusive results and the lack of significance prevent us from making any steadfast conclusions.

10. RESEARCH QUALITY

10.1 VALIDITY

McWilliams and Siegel (1997) state that the validity of an event study is dependent on how well the researcher has identified the abnormal returns associated with the event. More specifically, they mean that the inferences of significance rely on how well the needed assumptions are fulfilled and how well the researcher handles critical issues such as sample size, outliers, length of event window, confounding events, market efficiency and explanation of returns. In our study, the above-mentioned issues have been clearly identified, discussed and handled with care, which have ensured a high level of validity. Bryman and Bell (2003) separate between internal and external validity. The first type measures whether or not the study manages to measure what it was intended to measure while the second type concerns the generalizability of the results. As regards internal validity, the relevant question for us is if stock price reactions correctly measure value creation. Thereto, it is of relevance for us to determine if the stock price reaction surrounding the day of the announcement actually is an effect of the announced CEO turnover and not a response to other factors. As an attempt to diminish such uncertainty, we chose to apply quite narrow event windows (ranging between 0 and 11 days) and screened our data for confounding news, with the intention of excluding any abnormal return not attributable to the specific event. Furthermore, the market model is a widely used and well-known model for estimation of returns, and the same applies for the event study methodology, which further strengthen the validity of the study.

The study is however not completely flawless. Something we do want to stress is that our data includes some missing values. In particular, we have a small number of missing values in the data of *force of turnover*. Adding to that, as described in section 8.2.3 THE FORCE OF TURNOVER., we suspect that some of the reported voluntary turnovers were in fact 'concealed dismissals', leaving us wondering if our results for that variable represent the true picture. Another possible bias has arisen due to the low number of observations of female CEOs.

10.2 RELIABILITY

Reliability is concerned with the extent to which the research study can be repeated and arrive at the same results (Bryman and Bell, 2003; Fischer, 2010). We have ensured a high reliability of the study's results by taking several actions. Firstly, we have thoroughly described each step of the study, enabling other researchers to easily follow the chosen methodology when reproducing the study. Moreover, we have relied on respected sources of information; Capital IQ, Thompson Reuters Datastream, OMX Nordic and Orbis are all well known, widely used and respected sources, and thus we have ensured a high quality of our input data while limiting the risk of making manual errors. In addition, we have tried to limit the possibility of data errors by frequently crosschecking our data and using statistical programs when making calculations.

11. SUGGESTIONS FOR FUTURE STUDIES

This thesis has presented some findings in relation to how Nordic companies are publically valuated during the announcement of CEO turnover, and – especially interesting – that female successors influence stock prices negatively. This indicate that, in spite of writing 2012 in our calendars, the market is still dominated by (male?) traders who perceive women as being less qualified and successful leaders. It would be interesting to dwell deeper in this finding – to draw on fields like sociology and gender theory to investigate this result and its underlying causes.

Also, our analysis is based on separated control factors, but it could be interesting to see statistics from bundling our independent variables. Can we detect a significant relationship between abnormal stock return from CEO turnover if the preceding CEO was dismissed AND the succeeding CEO is a woman? If the preceding CEO was dismissed, had tenure of more than 10 years AND the company was underperforming? Bundling opens up for several new interesting conclusions and it intuitively seems more likely that the market reacts to a set of circumstances rather than individual factors.

For future studies it would, as already touched up, also be interesting to further explore our observation of lack of media coverage and its implications for abnormal returns. Moreover, it would be of interest to broaden the scope of organizational performance from looking only at stock returns to also test the influence on other variables such as for example on employee and customer satisfaction, turnover of employees, and the extent of implemented changes in the organization's structure, practices, policies and culture. In addition, we find it interesting to look into the post-succession effect of turnover events of other positions within the organization. For example, it would be interesting to examine the effects following a change of the chairman of the board of directors.

12. LITERATURE

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13. APPENDICES

I. EXPLANATION OF THE MARKET MODEL

The market model relates the return of a given security to the return of the market portfolio. When assuming joint normality of asset returns, the model is specified as

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \tag{1}$$

$$\text{with } E(\varepsilon_{it} = 0) \text{ and } \text{var}(\varepsilon_{it}) = \sigma^2_{\varepsilon_{it}} \tag{2}$$

R_{it} and R_{mt} are the returns on security i and the market portfolio respectively in the period t. εit is the zero mean disturbance term i.e. abnormal return, and α_i, β_i, $\sigma^2_{\varepsilon_{it}}$ and are the parameters of the market model. The return of a broad based stock index, such as for example S&P500, is typically used as a proxy for the market return. (MacKinlay, 1997)

For the estimation of the model parameters, the ordinary least squares (OLS) method is a commonly used method. The OLS method, in turn, relies on a number of assumptions. As stated by Newbold, Carlson and Thorne (2010) among others the following must hold: (1) the model is linear in parameters, (2) the data is a random sample of the population with errors that are statistically independent from each other, (3) the expected value of the errors is zero, (4) the independent variables are not too strongly collinear, (5) the independent variables are measured precisely, (6) the residuals have constant variance and lastly (7) the errors are normally distributed.

For the ith firm in event time, the OLS estimators of the market model parameters (nominated $\hat{\beta}_i$ and $\hat{\alpha}_i$) for an estimation window of observations are:

$$\hat{\beta}_i = \frac{\sum_{\tau=T_0+1}^{T_1} (R_{i\tau} - \hat{\mu}_i)(R_{m\tau} - \hat{\mu}_m)}{\sum_{\tau=T_0+1}^{T_1} (R_{m\tau} - \hat{\mu}_m)^2} \tag{3}$$

$$\hat{\alpha}_i = \hat{\mu}_i - \hat{\beta}_i \hat{\mu}_m \tag{4}$$

$$\hat{\sigma}_{e_i}^2 = \frac{1}{(T_1 - T_2) - 2} \sum_{\tau=T_0+1}^{T_1} (R_{i\tau} - \hat{\alpha}_i - \hat{\beta}_i R_{mt})^2$$

[5]

where the mean on a single stock ($\hat{\mu}_i$) is given by:

$$\hat{\mu}_i = \frac{1}{T_1 - T_0} \sum_{\tau=T_0+1}^{T_1} R_{i\tau}$$

[6]

And the mean on the market ($\hat{\mu}_m$) is given by:

$$\hat{\mu}_m = \frac{1}{T_1 - T_0} \sum_{\tau=T_0+1}^{T_1} R_{m\tau}$$

[7]

$R_{i\tau}$ and $R_{m\tau}$ are the return in event period τ for security *i* and the market respectively (MacKinlay, 1997).

In order to analyze the impact of announcement of the CEO turnover in terms of value creation a measure of abnormal return is needed. Abnormal return can be explained as *"[t]he actual ex post return of the security over the event window minus the normal return of the firm over the event window"* (Campbell et al., 1997, p.151), and is seen as the disturbance term in formula [1]. Rearranging [1] gives:

$$AR_{i\tau} = R_{i\tau} - \hat{\alpha}_i - \hat{\beta}_i R_{m\tau}$$

[8]

The abnormal returns will be jointly normally distributed with a zero conditional mean and the conditional variance $\sigma^2(AR_{i\tau})$ under the null hypothesis, conditional on the event window market returns, where:

$$\sigma^2(AR_{i\tau}) = \sigma^2_{\varepsilon_i} + \frac{1}{T_1 - T_0}\left[1 + \frac{(R_{m\tau} - \hat{\mu}_m)^2}{\hat{\sigma}_m^2}\right]$$

[9]

The conditional variance has two components: the disturbance term $\sigma^2_{\varepsilon_i}$ and additional variance due to the sampling error in α_i and β_i. Sampling errors are common for event window observations and will lead to serial correlation of the abnormal returns even if the true errors are independent over time. The second term of this sampling error decreases as the length of the estimation window becomes large, and thus the conditional variance will approach $\sigma^2_{\varepsilon_i}$ when choosing a large enough estimation window.

Under the null hypothesis that the event has no impact on the behavior of returns the distribution of the sample abnormal return of a given observation in the event window is

$$AR_{i\tau} \sim N(0, \sigma^2(AR_{i\tau}))$$

[10]

When employing a multiday event window, as in the case of this study, abnormal return observations have to be aggregated over time in order to draw overall conclusions for the event. $CAR_i(\tau_1, \tau_2)$ is the sum of the included abnormal returns from τ_1 to τ_2 where $T_1 < \tau_1 \le \tau_2 \le T_2$.

$$CAR_i(\tau_1, \tau_2) = \sum_{\tau=\tau_1}^{\tau_2} AR_{i\tau}$$

[11]

The variance of CAR is estimated as:

$$\sigma^2_i(\tau_1, \tau_2) = (\tau_2 - \tau_1 + 1)\sigma^2_{\varepsilon_i}$$

[12]

Under the null hypothesis the distribution of the cumulative abnormal return is

$$CAR_i(\tau_1, \tau_2) \sim N(0, \sigma^2_i(\tau_1, \tau_2))$$

[13]

which implies that tests of the null hypothesis can be carried out.

In addition to the aggregation over time, the abnormal return observations must be aggregated across securities. Aggregation across securities can only be conducted with the assumption of *no clustering*, meaning that there is no overlap in the event windows of the securities. Then

$$\overline{CAR}_i(\tau_1, \tau_2) = \frac{1}{N}\sum_{i=1}^{N} CAR_i(\tau_1, \tau_2) \quad \text{and} \quad \text{var}(\overline{CAR}_i(\tau_1, \tau_2)) = \frac{1}{N^2}\sum_{i=1}^{N} \sigma_i^2(\tau_1, \tau_2)$$

[14] & [15]

To test the null hypothesis that the abnormal return is zero it is possible to use:

$$\overline{CAR}(\tau_1, \tau_2) \sim N\left[0, \text{var}(\overline{CAR}(\tau_1, \tau_2))\right]$$

[16]

Then H_0 can be tested using:

$$\theta_1 = \frac{\overline{CAR}(\tau_1, \tau_2)}{\text{var}(\overline{CAR}(\tau_1, \tau_2))^{1/2}} \sim N(0,1)$$

[17]

which is asymptotic with respect to the number of securities and the length of the estimation window.

II. LIST OF INTERVIEWEES

Magnus Johannesson, Professor and head of the department of Economics at the Stockholm School of Economics. Interviewed 10 May 2011.

Greger Johansson, chief analyst at Redeye AB. Interviewed 28 April 2011.

Sophie Nachemson Ekwall, awarded economic journalist and PhD student at the Stockholm School of Economics. Interviewed 3 May 2011.

III. INTERVIEW GUIDE

The following questions were asked to the respondents in the pre-study:

1. *Could you please briefly describe your current work and previous experience from analyzing stocks and, in particular, stock return reactions to public announcements?*

2. *From your knowledge and experience, when observing stock return reactions to CEO turnover announcements, what is the general tendency?*

3. *From your experience, what are the most important factors influencing the market value of companies following CEO turnover announcements?*

4. *When studying Nordic markets as compared to American, is there any factor that could be of particular interest?*

5. *Could you please describe the reactions to some specific turnover announcements you remember and elaborate on potential explanations for the reactions?*