Aalto University
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Compensation committee composition and CEO compensation - Finnish evidence

Finance

Master's thesis

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Abstract
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COMPENSATION COMMITTEE COMPOSITION AND CEO COMPENSATION - FINNISH EVIDENCE

PURPOSE OF THE STUDY

The purpose of this study is to examine the effect of compensation committee composition on the level of CEO compensation. The composition of the compensation committee is analyzed by using five variables which are: 1) the proportion of non-independent directors, 2) the proportion of long-serving directors, 3) the proportion of CEO-directors, 4) the proportion of busy directors and 5) the presence of a blockholder on the compensation committee. CEO compensation is measured by using three instruments which are base salary, cash compensation and total compensation.

DATA

Data set consists of the companies that were listed on the NASDAQ OMX Helsinki in September 2011 and used a compensation committee in their internal governance at some point between 2006 and 2009. After the necessary eliminations the final sample comprised of 177 firm-year observations. All the independent variables are from the years 2006-2009, while the dependent variable is from the years 2007-2010.

RESULTS

The results point out that the proportion of non-independent directors has a statistically highly significant negative effect on the level of CEO base salary and CEO cash compensation. The proportion of long-serving directors has a statistically significant negative effect on CEO cash compensation and especially on total CEO compensation. Finally, the proportion of busy directors has a statistically significant negative relationship with CEO base salary. The proportion of CEO-directors and the presence of a blockholder on the compensation committee have no statistically significant relationship with CEO compensation.

KEYWORDS

Compensation committee, compensation committee composition, CEO compensation

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PALKITSEMISVALIOKUNNAN KOOSTUMUS JA TOIMITUSJOHTAJAN PALKITSEMINEN – SUOMALAINEN AINEISTO

TUTKIELMAN TAVOITTEET

Tutkielman tavoitteena on tutkia palkitsemisvaliokunnan koostumuksen vaikutusta toimitusjohtajan palkitsemisen tasoon. Palkitsemisvaliokunnan koostumusta on analysoitu käyttämällä viittä muuttujaa, jotka ovat: 1) ei-riippumattomien hallituksen jäsenten osuus, 2) pitkään palvelleiden hallituksen jäsenten osuus, 3) hallituksen toimitusjohtajajäsenten osuus, 4) kiireisten hallituksen jäsenten osuus sekä 5) merkittävän osakkeenomistajan läsnäolo palkitsemisvaliokunnassa. Toimitusjohtajan palkitsemista mitataan kolmella instrumentilla, jotka ovat peruspalkka, käteispalkitseminen sekä kokonaispalkitseminen.

LÄHDEAINEISTO

Lähdeaineisto koostuu yrityksistä, jotka olivat listattuna NASDAQ OMX Helsingissä syyskuussa vuonna 2011 ja jotka käyttivät palkitsemisvaliokuntaa sisäisessä hallinnossaan jossakin vaiheessa vuosien 2006 ja 2009 välillä. Tarvittavien eliminointien jälkeen lopullinen otos koostuu 177:stä yritysvuosihavainnosta. Kaikki riippumattomat muuttujat ovat vuosilta 2006-2009, kun taas riippuvainen muuttuja on vuosilta 2007-2010.

TULOKSET

Tulokset osoittavat, että ei-riippumattomien hallituksen jäsenten osuudella on tilastollisesti erittäin merkitsevä negatiivinen vaikutus toimitusjohtajan peruspalkkaan sekä käteispalkitsemiseen. Pitkään palvelleiden hallituksen jäsenten osuudella on tilastollisesti merkitsevä negatiivinen vaikutus toimitusjohtajan käteispalkitsemiseen sekä erityisesti kokonaispalkitsemiseen. Lopuksi, kiireisten hallituksen jäsenten osuudella on tilastollisesti merkitsevä negatiivinen yhteys toimitusjohtajan peruspalkkaan. Hallituksen toimitusjohtajajäsenten osuudella sekä merkittävän osakkeenomistajan läsnäololla palkitsemisvaliokunnassa ei ole tilastollisesti merkitsevää yhteyttä toimitusjohtajan palkitsemiseen.

AVAINSANAT

Palkitsemisvaliokunta, palkitsemisvaliokunnan koostumus, toimitusjohtajan palkitseminen

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1. INTRODUCTION

1.1. Academic and practical motivation

The subject of executive compensation generates significant interest among the people and the media. High rewards enjoyed by the top executives are, time after time, discussed in the media. For example, in 2006 the earnings of the chief executive officer (CEO) of the energy company Fortum were over 11 million euros (Taloussanomat 1.11.2007), which triggered considerable critique both in the media and amongst the masses. More recently Finnair paid its senior executives approximately 2,7 million euros of "loyalty" bonuses in 2011 for staying in the company during the CEO transition period (YLE Uutiset 7.3.2012). The arrangement was put into effect in 2009, at the same time when the company was cutting personnel costs (Helsingin Sanomat 28.3.2012). When the arrangement finally came to light in March 2012 it caused public outcry and was criticized even at the minister level. As an outcome of the crisis the majority of the board members of Finnair were dismissed (Helsingin Sanomat 21.3.2012). From the discussion above it can be seen that executive compensation spawns strong reactions among the general public which can, if taken to the extreme, result in dismissals on the highest level of the company.

Executive compensation has also received a great deal of attention within the academic circles. As a testimony of this, there are roughly speaking hundreds of studies investigating the different aspects of executive compensation. However, among the academics the object of interest is usually not whether the compensation, as such, is too high or not. Instead, the academics typically aim to identify the factors affecting the level and/or structure of executive compensation.

Executive compensation has a salient function in the internal governance of the company. First, by using appropriate compensation the executives can be motivated to work harder and take actions that are in the interests of the shareholders (e.g. Jensen and Meckling 1976; Jensen and Murphy 1990). Second, executive compensation is a key to retain and attract talented executives (e.g. Anderson and Bizjak 2003; Conyon 2006). Third, proper remuneration reinforces the implementation of the company strategy and goals (e.g. the Finnish Corporate Governance Code 2010). Based on the reasoning above, it is easy to

understand the significance of executive compensation in the internal governance of the company.

The task of designing and preparing the remuneration of executives usually belongs to the compensation committee (e.g. Anderson and Bizjak 2003; Bender and Porter 2003). In this sense, it is of the essence and intriguing to examine how the structure of this organ affects CEO compensation. In the compensation literature there exist several studies about the effect of compensation committee structure on CEO compensation. For example Daily, Johnson, Ellstrand and Dalton (1998), Newman and Mozes (1999), Vafeas (2003a) and Conyon and He (2004) have investigated this relationship.

The findings of the earlier papers exploring the connection between compensation committee composition and CEO compensation vary considerably. Anderson and Bizjak (2003), for instance, discovered that the fraction of outsiders on the compensation committee had no effect on the level of CEO compensation. Conyon and Peck (1998), on the other hand, detected that a higher percentage of outsiders on the compensation committee, in fact, increased the amount of CEO compensation. In relation to CEO-directors, Conyon and He (2004) found that the proportion of CEOs of other companies on the compensation committee had no effect on the level of CEO compensation, while Sapp (2008) identified it to increase the level of CEO compensation. These examples reflect the general situation in compensation committee study. There is no consensus about the effects of the different components of compensation committee composition on CEO compensation. Consequently, casting additional light on this ambiguous subject is essential.

The majority of existing studies about the relationship between compensation committee composition and CEO compensation have been conducted with U.S. data. For example, Conyon and He (2004), Newman and Mozes (1999) and Vafeas (2003) have investigated this relationship with U.S. data. In addition there exist some papers performed with U.K. companies (e.g. Conyon and Peck 1998). Finally, I discovered investigations about the association between compensation committee composition and CEO compensation, conducted with Australian data (Capezio, Shields and O'Donnell 2011), Canadian data (Sapp 2008) and New Zealand data (Boyle and Roberts 2010). However, I'm not aware of any study completed with Finnish data that focuses exclusively on the compensation committees and examines, in depth, the impact of compensation committee composition on CEO

compensation. As a result, an investigation about this relationship in Finland, where also the corporate governance landscape is different from the above-mentioned countries (e.g. higher ownership concentration and less active external market for corporate control), would contribute substantially to compensation committee literature.

1.2. Research problem and purpose

The research problem of this thesis is how compensation committee composition affects the level of CEO compensation. To analyze the composition of a compensation committee, I employ five commonly used variables which are: 1) the proportion of non-independent directors, 2) the proportion of long-serving directors 3) the proportion of CEO-directors, 4) the proportion of busy directors, and 5) the presence of a blockholder on the compensation committee.

In order to measure the level of CEO compensation, I use three instruments which are: 1) base salary, 2) cash compensation and 3) total compensation. First, base salary consists of regular salary and perquisites. Second, cash compensation instrument includes base salary, perquisites and bonuses. Third, total compensation is comprised of base salary, perquisites, bonuses, stock options, performance shares and other long term incentive plans (LTIPs).

The purpose of this thesis is to present Finnish evidence about the association between compensation committee composition and the level of CEO compensation. More specifically, I aim at providing evidence of the effect of non-independent directors, long-serving directors, CEO-directors, busy directors and the presence of a blockholder on the compensation committee on the level of different CEO compensation measures.

1.3. Contribution

First, the results of the studies investigating the relationship between compensation committee composition and CEO compensation vary considerably, as turned out already in Section 1. In this light it can be seen how this research contributes to the existing literature, by providing new evidence on this controversial subject.

Second, the papers exploring the relationship between compensation committee composition and CEO compensation are mainly conducted with U.S. and U.K. data, as discussed earlier in Section 1. In particular, I'm not aware of any study performed with Finnish data that studies this relationship thoroughly. In this sense, this research contributes to compensation committee literature by providing novel evidence from Finland, where also the corporate governance landscape is different.

1.4. Limitations of the study

This thesis has certain limitations as is customary in comparable studies. First of all, the measure of total CEO compensation does not include pension plans. According to the managerial power theory, the managers have an incentive to camouflage their extraction of rents. One way to execute this is through pension plans, because the companies are not required to report a dollar value of the pensions of their executives (Bebchuk and Fried 2003). Additionally, the significance of pension-benefits in total compensation of the CEO has been stressed, for example, by Ikäheimo, Kontu, Kostiander, Tainio and Uusitalo (2007) in their report and by the Finnish Corporate Governance Code 2010 (Recommendation 46). In this sense, it would have been important to include the value of pensions in total CEO compensation. However, in Finland the companies are not required to report the sum of the pensions of the CEO and accordingly, the information about pensions is mainly scarce and insufficient. As a consequence I have excluded pension plans from the analysis.

Secondly, this study focuses to investigate the effect of compensation committee composition on the level of CEO compensation. However, it is well-known that it is not only the level of compensation that matters, but also the structure of compensation. In other words, the mix between, for example, fixed and variable remuneration is an important factor when analyzing the suitability of the compensation arrangement. However, the linear regression model does not function properly if the dependent variable is a proportion, and especially so if the proportions are concentrated at zero or one (as is the case with this data set), as explained by Grace-Martin (2012). For this reason and because I wish to keep this study concise, I have not included the structure of CEO compensation in the analysis.

Finally, it is important to clarify (even though it is not a limitation as such) that the objective of this study is not to analyze if CEO compensation is on the appropriate level or not. Similarly, my intention is neither to criticize nor to praise the remuneration of the CEOs. Instead the plain objective of this thesis is to investigate how the composition of the compensation committee affects the level of CEO compensation.

1.5. Structure of the study

The thesis is structured in the following fashion. In Chapter 2, I explain the role of the compensation committee in the internal governance of the company. In Chapter 3, two well-known theories about executive compensation are discussed. Chapter 4 presents relevant literature concerning the relationship between compensation committee composition and CEO compensation. In Chapter 5, I introduce the hypotheses. Chapter 6 goes through the data and methods employed in this thesis. In Chapter 7, the results are presented and discussed. Finally, Chapter 8 concludes.

2. ROLE AND DUTIES OF COMPENSATION COMMITTEE

In this chapter, I describe the role and duties of the compensation committee in the internal governance of the company. I start by explaining the responsibilities of the board of directors in Section 1. In Section 2, I discuss the function of the board committees generally. Finally, in Section 3, I describe the role and duties of the compensation committee.

2.1. Board of directors

The board of directors is the heart of the internal control systems in organizations (e.g. Fama and Jensen 1983; Jensen 1993). The prime responsibilities of the board of directors are to employ, evaluate, compensate and discharge top executives (e.g. Fama and Jensen 1983; Jensen 1993; Lorsch and MacIver 1989). The board of directors also monitors and ratifies significant decisions of the company (e.g. Fama and Jensen 1983; Jensen 1993). In addition to the control role, the board is expected to provide advising and counseling for the management (e.g. Johnson, Daily and Ellstrand 1996; Mace 1971) and in some cases to give a hand in setting the company strategy (e.g. Adams, Hermalin and Weisbach 2008; Johnson, Daily and Ellstrand 1996).

2.2. Board committees

The Finnish Corporate Governance Codes encourage the companies to establish board committees. More specifically they state that the companies can improve the efficiency of their board work by establishing board committees. In the board committees the directors can focus more thoroughly on the issues allocated to the committee than the entire board.

As stated in the Finnish Corporate Governance Codes, the board of directors selects board committee members among its own members. The function of the board committees is to assist the board by preparing matters the board is responsible for. The board committees, however, have no autonomous decision-making power but instead the board makes the decisions as a whole. In the Finnish listed companies the most typical board committees are the audit committee, the compensation committee and the nomination committee. In this thesis the interest is targeted to the compensation committees, which I discuss next.

2.3. Compensation committee

The task of designing and setting executive compensation is usually passed on to the compensation committee (e.g. Anderson and Bizjak 2003; Conyon and He 2004; Conyon 2006). In order to fulfill this duty the compensation committee must establish a compensation policy compatible with the firm's strategy that helps the committee to construct compensation packages that match the objectives of the shareholders, the managers and the regulators (Bender and Porter, 2003). The board as a whole finally ratifies the propositions of the compensation committee (e.g. Chhaochharia and Grinstein 2009).

The importance of the compensation committee is also reflected in the Finnish Corporate Governance Codes. More specifically, the Finnish Corporate Governance Code 2010 includes three recommendations concerning the compensation committees. These recommendations are presented below. (Note: In the Finnish Corporate Governance Code 2010 the term remuneration committee is applied instead of compensation committee and the term managing director instead of chief executive officer).

Recommendation 31 - Establishment of the remuneration committee

"The board may establish a remuneration committee to improve the efficient preparation of matters pertaining to the appointment and remuneration of the managing director and other executives of the company as well as the remuneration schemes of the personnel."

Recommendation 32 - Members of the remuneration committee

"The majority of the members of the remuneration committee shall be independent of the company. The managing director or other executives of the company may not be appointed to the remuneration committee."

Recommendation 33 - Duties of the remuneration committee

"The board shall define the duties of the remuneration committee in the charter of the committee.
The duties of the remuneration committee may include, e.g.:
• preparation of matters pertaining to the appointment of the managing director and the other executives as well as the identification of their possible successors
• preparation of matters pertaining to the remuneration and other financial benefits of the managing director and other executives
• preparation of matters pertaining to the remuneration schemes of the company
• evaluation of the remuneration of the managing director and the other executives as well as seeing to it that the remuneration schemes are appropriate
• answering questions related to the remuneration statement at the general meeting."

The recommendations above highlight three important characteristics of the compensation committee. First, the establishment of the compensation committee is optional. Second, the independence of the compensation committee is of high importance, in order to avoid conflicts of interest. Third, the duties of the compensation committee include, in addition to the preparation and evaluation of the remuneration, the preparation of the appointment of the CEO and other executives and also the search for the suitable candidates for these positions.

3. MAIN THEORIES OF EXECUTIVE COMPENSATION

This chapter presents the basics of the two theories that are typically referred to in papers dealing with executive compensation. These theories are the agency theory, which is discussed in Section 1 and the managerial power theory, which is explained in Section 2.

3.1. Agency theory

The separation of ownership and control gives rise to agency problems between the agents and the principals, as stated by Fama and Jensen (1983). To be exact, by the separation of ownership and control Fama and Jensen meant the separation of decision management and residual risk bearing. The problem in this setting is that the decision agents carry only a minor portion of the wealth effects of their actions (Fama and Jensen 1983). In order to control resulting agency problems, corporations separate decision management from decision control (Fama and Jensen 1983). The core of this decision control system in organizations is the board of directors which has the authority to appoint, compensate, dismiss and monitor the executives and ratify their proposals (e.g. Fama and Jensen 1983; Jensen 1993).

The core of the agency theory is establishing the most effective contract to rule the relationship between the agent and the principal under certain assumptions like the conflict of interest between the agent and the principal, self-interest of both parties and managerial risk aversion (Eisenhardt 1989). An agency relationship then, is a contract under which the principals hire the agent to work for them, equipped with necessary decision making power, as stated by Jensen and Meckling (1976). An example of such agency relationship is the corporation with dispersed ownership structure (Jensen and Meckling 1976). In the agency relationship where both the principals and the agents are utility maximizers and differ in their risk appetite, the actions of the agents are likely to differ from what would be optimal for the shareholders (Jensen and Meckling 1976).

In this case, a specific contract defining the actions and decisions conducted by the CEO in each state of affairs, would be a viable solution (Jensen and Murphy, 1990). However, as Jensen and Murphy (1990) point out, entering into such a complete contract would be unfeasible because the investment opportunities of the company and the actions of the CEO

are typically unnoticeable for the shareholders. Additionally, because the CEOs possess specific information about the company and its prospects it would be unreasonable to expect that the shareholders could tell the CEO which projects to take on and which decisions to make (Jensen and Murphy, 1990). In addition, the possibilities and incentives of the diffuse shareholders to contract with the CEO are further undermined by a free-rider problem (Hermalin and Weisbach 2003).

As an answer to this conflict of interest, the principals can offer the agents incentives to pursue shareholder wealth (Jensen and Meckling 1976; Jensen and Murphy 1990). Examples of such incentives are performance based bonuses, salary adjustments and stock options, as stated by Jensen and Murphy (1990). Other mechanisms to alleviate these agency problems, in addition to incentive compensation, are monitoring of managers' actions and bonding by the agent (Jensen and Meckling 1976). By tying the wealth of the CEO to the wealth of the shareholders, the CEOs can be persuaded to take actions in the best interest of the shareholders (Jensen and Murphy 1990). Therefore from the agency theory perspective executive compensation can be seen as an efficient tool to reduce agency costs and thus mitigate the inherent problems with the agency relationship (Jensen and Meckling 1976; Jensen and Murphy 1990).

The use of incentive based compensation to overcome agency problems is not, however, a totally trouble-free solution because of the managerial risk aversion (Beatty and Zajac 1994). Accordingly, risk-averse CEOs who have already invested their human capital in the company would be unwilling to tie their remuneration to the company's success (Beatty and Zajac 1994). As a consequence, the companies have to pay their CEOs more to compensate them for the higher risk (Beatty and Zajac 1994). In the same spirit Holmström (1999) points out that by tying the compensation of the agent to output like stock price, the agent is also exposed to factors that are not under his control, and as a consequence the contract is made riskier. Thus, there is a trade-off between creating efficient managerial incentives and risk-sharing, which must be taken into account when establishing optimal compensation packages (e.g. Beatty and Zajac 1994; Holmström 1999; Jensen and Murphy 1990).

3.2. Managerial power theory

Jensen (1993) stated that the boards of directors have failed in their task of monitoring shareholder interests. This failure can be attributed, at least, to the atmosphere of politeness in boardrooms, the CEO's dominance of the company specific information and the lack of equity ownership by both directors and managers (Jensen 1993). As a consequence, CEOs are able to gain control over the boards (Jensen 1993). Other factors that compromise the integrity of the boards of directors, according to Jensen (1993), are a large board size, insider board members, CEO duality (CEO being also the chairman of the board) and the absence of institutional owners.

Allen (1981) suggested that the managers typically use their organizational power to shield and advance their own privileges. According to Allen, the prime source of managerial power is a substantial equity stake in the company. Consequently, the CEO is more powerful if he owns a substantial block of the shares of the company and less powerful if the board members have blockholdings (Allen 1981). Allen further stated that CEOs use their power to extract higher compensation and as a consequence, CEO compensation is directly linked to his power in a company.

Zald (1969) approached the subject of managerial power by reviewing the power of the boards in relation to the managers, and reached similar conclusions as Allen (1981). According to Zald, the power of the boards of directors depends positively on the external resources they control. In other words, the boards of directors are more powerful the more resources (e.g. shares of the company and detailed knowledge of the company) they have under their control (Zald 1969). As a consequence, in a highly complex organization with a highly dispersed ownership structure, the CEO controls the information, the agendas for board meetings, the nominating processes and internal board processes altogether (Zald 1969).

In a similar vein Tosi and Gomez-Mejia (1989) stated that CEO compensation in the management controlled companies is less tightly tied to performance than in the owner controlled companies. The reason for this is that the executives in the management controlled companies have achieved a greater control over the internal decision mechanisms and processes and thus can influence their own compensation contracts (Tosi and Gomez-Mejia 1989).

According to Mace (1971), the boards of directors and their subcommittees are mainly symbols of the internal control mechanisms, when in reality the CEO makes the decisions concerning, for example, his own compensation and director selection. Loyalties that directors feel towards the CEO who selected them and with whom they work with, constrain their ability to critically evaluate, question or discharge the CEO (Mace 1971). Finally, Mace (1971) argued that the ultimate power enjoyed by the CEO allows him to set the agendas for board meetings.

These ideas and assumptions of the managerial power are bunched together, shaped and advanced in the managerial power theory by Bebchuk, Fried and Walker in 2002. Under the managerial power theory executive compensation is not seen only as a solution to the agency problem, but also as a part of the agency problem itself (e.g. Bebchuk, Fried and Walker 2002; Bebchuk and Fried 2003). According to the managerial power theory, the managers have substantial influence over the boards of directors and as a result over their own compensation, as stated by Bebchuk et al. (2002 and 2003). As a consequence, the boards of directors do not design executive compensation packages at arm's length but rather these compensation packages are biased towards the managers' wishes and thus, are far from optimal (Bebchuk et al. 2002 and 2003)

The assumption under the managerial power theory is that the more power the CEO has the more rents he also extracts (Bebchuk et al. 2002 and 2003). The power of the CEO again depends on the composition of the board of directors, the presence of large shareholders, the stockholdings of the CEO, the proportion of shares held by institutional investors and the use of antitakeover arrangements (Bebchuk et al. 2002 and 2003). Accordingly, a weaker board, the absence of large shareholders, higher CEO stockholdings, lower institutional stockholdings and the use of antitakeover arrangements are all associated with managers having more power (Bebchuk et al. 2002 and 2003).

In a nutshell, the main difference between these two theories is that under the agency theory executive compensation is regarded as a solution to the agency problems between the agents and the shareholders, whereas under the managerial power theory executive compensation is considered as a part of that agency problem.

4. LITERATURE REVIEW

In this chapter, I review literature relevant to this study. The chapter is divided in two sections. In Section 1, I extensively examine the literature which studies the effect of compensation committee composition on CEO compensation. In Section 2, I briefly discuss literature concerning the relationship between the board of directors and CEO compensation.

4.1. Compensation committee and CEO compensation

The literature about the relationship between compensation committee composition and CEO compensation is, in fact, quite abundant reaching from New Zealand to the U.S. The findings, however, vary considerably. Some papers discover, for example, that higher compensation committee independence results in lower CEO compensation and/or higher pay-performance sensitivity, while some studies cannot find such a relationship and some even uncover opposite results.

Table 1 below provides basic information about the studies investigating compensation committees and their effect on CEO compensation. Here I discuss the findings of these studies more thoroughly, by starting with the papers that have explored the impact of compensation committee existence on CEO compensation.

In the first place, Conyon (1997) provided weak evidence that the introduction of the remuneration committee improved top director compensation practices. Specifically, the results indicated that the adoption of the remuneration committee resulted in a lower growth pace in top director pay, although this result was not robust when using a balanced data set. Further, the evidence indicated that the introduction of the remuneration committee was unrelated to pay-performance sensitivity.

Main and Johnston (1993) and Conyon and Peck (1998) however, could not discover evidence supporting the idea that the remuneration committees design compensation packages that pursue shareholder interests. Instead their empirical findings indicated that the existence of the remuneration committee, actually, increased the level of compensation of the highest paid director. Furthermore, Main and Johnston (1993) could not find a statistically significant link between remuneration committee existence and pay-performance sensitivity.

Table 1. Studies investigating compensation committees and their effect on CEO compensation

This Table presents basic information about the studies investigating compensation committees and their effect on CEO compensation. Basic information includes the authors, the sample, the main issues examined and the key findings.

Study	Sample	Compensation committee characteristics examined	Key findings relating to compensation committees
O'Reilly, Main and Crystal (1988)	105 U.S. companies from Fortune 500 in 1984	Effect of outsider compensation committee members' salaries in their own companies on CEO compensation	Higher salaries of outsider compensation committee members in their own companies were associated with higher CEO compensation
Main and Johnston (1993)	220 large public U.K. companies in 1990	Effect of remuneration committee existence on highest paid director compensation	Existence of remuneration committee increased the level of highest paid director compensation but had no effect on pay-performance relationship
Conyon (1997)	213 large U.K. public companies between 1988 and 1993	Effect of remuneration committee introduction on highest paid director compensation	Introduction of remuneration committee resulted in lower growth pace in top director pay, but had no effect on pay-performance sensitivity
Conyon and Peck (1998)	94 U.K. companies from FTSE 100 Index during the period 1991-1994	1) Effect of remuneration committee existence on CEO compensation 2) Effect of outsider remuneration committee members' percentage on CEO compensation	1) Remuneration committee existence increased the level of CEO compensation. 2) Higher percentage of outsiders on remuneration committee had a positive effect both on the level and pay-performance sensitivity of CEO compensation
Daily, Johnson, Ellstrand and Dalton (1998)	200 U.S. companies from Fortune 500 over the period of 1991-1994	Effect of affiliated, CEO, and interdependent compensation committee members' proportion on CEO compensation	None of the variables measuring proportion of affiliated, interdependent, or CEO-directors on compensation committee, had any effect on CEO compensation, whether measured by the level, structure or change of CEO compensation
Newman and Mozes (1999)	161 U.S. companies from Fortune 250 in 1992	Influence of insider presence on compensation committee on CEO compensation	Insider presence on compensation committee resulted in weaker relationship between negative company performance and CEO compensation, but had no influence on the level of CEO compensation

Table 1. Continued

Study	Sample	Compensation committee characteristics examined	Key findings relating to compensation committees
Anderson and Bizjak (2003)	110 U.S. Public companies between 1985 and 1998	1) Effect of outsider compensation committee members' proportion on CEO compensation 2)Effect of CEO's presence on his own compensation committee on CEO compensation	1) Proportion of outsider had no effect on CEO compensation 2) Presence of CEO on his own compensation committee, was not associated with higher level of compensation or lower equity incentives
Vafeas (2003)	271 large public U.S. companies between 1991 and 1997	1) Effect of insider presence on compensation committee on CEO compensation 2)Effect of compensation disclosure and tax reforms on compensation committees and CEO compensation	1) Insider presence on compensation committee had no effect on the level or pay-performance sensitivity of CEO compensation. 2) Before the reforms insider presence on compensation committee was associated with lower pay-performance sensitivity
Conyon and He (2004)	455 U.S. companies that carried out an IPO in 1999	1)Effect of insider, CEO and diversified compensation committee members' proportion, on CEO compensation 2) Effect of compensation committee members' fees on CEO compensation 3) Effect of large shareholder's presence on compensation committee on CEO compensation	1) Proportion of insider, CEO, or diversified directors on compensation committee had no effect on CEO compensation 2) Higher compensation committee members' fees were coupled with higher level of CEO compensation and lower equity incentives 3) Presence of large shareholder on compensation committee resulted in lower level of CEO compensation and higher equity incentives
Sapp (2008)	416 Canadian public companies between 2000 and 2005	Effect of independent, CEO, and financially sophisticated compensation committee members' percentage on CEO compensation	1) Higher percentage of both independent and CEO-directors on compensation committee increased the level and pay-performance sensitivity of CEO compensation 2) Percentage of compensation committee members with financial expertise had no effect on CEO compensation

Table 1. Continued

Study	Sample	Compensation committee characteristics examined	Key findings relating to compensation committees
Sun and Cahan (2009)	812 U.S. public companies in 2001	Impact of compensation committee quality on CEO compensation, when quality is measured through committee size and shareholdings, and proportion of CEO, busy, "CEO appointed" and long-serving directors on compensation committee	Higher compensation committee quality was associated with higher pay-performance sensitivity of CEO compensation
Sun, Cahan and Emanuel (2009)	474 U.S. public companies during 2001 - 2004	Impact of compensation committee quality on CEO compensation, when quality is measured through committee size and shareholdings, and proportion of CEO, busy, "CEO appointed" and long-serving directors on compensation committee	Higher compensation committee quality was associated with higher pay-performance sensitivity of CEO compensation.
Boyle and Roberts (2010)	114 companies on New Zealand Stock Exchange between 1997 and 2005	Effect of CEO's presence on his own compensation committee on CEO compensation	Presence of CEO on his own compensation committee was associated with lower pay-performance relationship and more generous annual pay increments
Capezio, Shields and O'Donnell (2011)	663 Australian public companies during 1998 - 2006.	Effect of non-executive compensation committee members' proportion on CEO compensation	Proportion of non-executive compensation committee members had no effect on pay-performance sensitivity of CEO compensation
Hoitash (2011)	13 000 directors on U.S. companies during 2004 - 2005	Impact of social ties between managers and independent compensation committee members on CEO compensation	Social ties between managers and independent compensation committee members were associated with higher CEO compensation

Next I go through the findings of the papers that have examined the effect of the CEO's presence on his own compensation committee on CEO compensation. To begin with, Boyle and Roberts (2010) found that CEO compensation packages are more favorable towards the CEO when the CEO is a member of his own compensation committee. In more detail, their results indicated that CEO compensation is less sensitive to accounting performance in the companies where the CEO is a member of his own compensation committee compared to the companies where the CEO is not even a board member. Additionally, in a case of negative

performance, the companies with the CEO on the compensation committee had lower pay-performance sensitivity, while the companies with the non-board CEO had higher pay-performance sensitivity. Finally, they discovered that subsequent performance was inferior in the companies where the growth in pay was due to the CEO's presence on his own compensation committee. Altogether, Boyle and Roberts came to a conclusion that CEO participation in the mechanisms setting executive compensation benefitted the CEO at the expense of the shareholders.

Nevertheless, Anderson and Bizjak (2003) could not uncover evidence of opportunistic behavior by the CEOs who sit on their own compensation committee. To be more precise, their evidence indicated that the presence of the CEO on his own compensation committee was not associated with a higher level of compensation or lower equity incentives, but rather the other way around. In addition, their results denoted that the CEO's exit from the compensation committee was not associated with lower CEO compensation or higher equity incentives.

The majority of the compensation committee studies have explored the association between compensation committee independence and CEO compensation. The measure of independence, however, has varied considerably. Below I discuss the findings of these papers.

First of all, Hoitash (2011) found that social ties between managers and independent compensation committee members resulted in more favorable compensation packages for the CEOs. By a social tie Hoitash referred to a situation where the manager and the independent director served together on another company's board. To be precise, his results revealed that social ties between managers and independent compensation committee members were associated with statistically significantly higher CEO salary and total cash compensation. Based upon this finding, Hoitash recommended the independent directors with social ties to management to step aside from the compensation committees.

Newman and Mozes (1999) discovered that insider presence on the compensation committee resulted in compensation practices that were, to some degree, tilted in the management's favor. In more detail, their results indicated that the relationship between negative company performance and CEO compensation was weaker in the insider influenced firms than in the outsider influenced firms. Furthermore, their evidence suggested that this weaker link was

explained by the insider influenced firms granting new stock options to the CEO after the value of their pre-existing stock options had dropped due to negative company performance. According to Newman and Mozes, this practice was evidence of managerial self-dealing. Finally, they found, however, that the presence of insiders on the compensation committee had no effect on the level of CEO compensation, a result that was not in the spirit of their other findings.

Similarly, Vafeas (2003a) discovered some evidence of opportunistic behavior by insider directors. More specifically, his result indicated that in 1991, before the compensation disclosure and tax reforms in the U.S. took place, insider membership on the compensation committee was associated with a higher non-contingent pay and a lower contingent pay. However, the findings regarding the whole period (1991-1997), indicated that the existence of insiders on the compensation committee had no influence on the level or the pay-performance link of CEO compensation.

Conyon and Peck (1998) provided mixed evidence about the importance of outsider directors in designing effective executive compensation packages. In more detail, their results suggested that a higher proportion of outsiders on the remuneration committee, in fact, increased the level of CEO compensation. Additionally, their findings indicated, however, that the pay-performance relationship was stronger in the companies where the proportion of outsiders on the remuneration committee was higher. Thus Conyon and Peck's results are somewhat ambiguous. On the one hand a higher proportion of outsiders on the remuneration committee increased the level of CEO compensation and, on the other hand, a higher proportion of outsiders on the remuneration committee strengthened the pay-performance link.

In contrast, Capezio, Shields and O'Donnell (2011) found that CEO pay is not more tightly linked to performance in non-executive dominated compensation committees. More specifically, their results indicated that the percentage of non-executives on the compensation committee was unrelated to the pay-performance sensitivity of the CEO. In addition, they discovered that non-incentive cash compensation of the CEO was positively related to the percentage of non-executives on the compensation committee.

The findings of Anderson and Bizjak (2003), however, indicated that compensation committee independence and CEO compensation had no statistical association. In more detail, they found that the fraction of outsiders on the compensation committee had no effect on the level or pay-performance sensitivity of CEO compensation.

Instead of focusing solely on independence, there are several studies that have analyzed compensation committee composition more extensively by applying various characteristics. These include, for instance, the proportion of CEO-directors (i.e. the directors who are the CEOs of other companies) and the presence of a blockholder on the compensation committee. The results of these investigations are discussed below.

In the first place, Sapp (2008) presented non-uniform evidence about the effectiveness of the independent directors, CEO-directors and directors with financial expertise. More precisely, his findings indicated that a higher percentage of both independent directors and CEO-directors on the compensation committee increased both the level and the pay-performance sensitivity of CEO compensation. Additionally, his results indicated that a percentage of compensation committee members with financial expertise had no statistically significant effect on CEO compensation. To sum up, Sapp's study provided mixed evidence about the usefulness of independent directors and the harmfulness of CEO-directors.

The findings of Conyon and He (2004) indicated that the compensation committee members' fees and the presence of a large shareholder on the committee were significant factors in CEO compensation, whereas the proportion of insider directors, CEO-directors and diversified directors were statistically insignificant. Specifically, they discovered that higher fees of the compensation committee members were coupled with higher CEO compensation and lower equity incentives. Additionally, they found that the attendance of a large shareholder (equity stake ≥ 5%) on the compensation committee resulted in lower CEO compensation and higher incentives. Together these findings supported the conception of self-interested compensation committee members, as stated by Conyon et al. (2004). Finally, their results indicated that the proportion of insider directors, CEO-directors and diversified directors on the compensation committee had no effect on the level or structure of CEO compensation.

Correspondingly, Daily, Johnson, Ellstrand and Dalton (1998) found that a higher proportion of affiliated, interdependent or CEO-directors on the compensation committee did not result

in more favorable compensation arrangements for the CEOs. More specifically, their findings indicated that the proportion of affiliated, interdependent and CEO-directors had no effect on the level, structure or change of CEO compensation. By affiliated directors they denoted non-management directors who had personal and/or professional ties with a company or its management. By interdependent directors they denoted non-management directors who were hired during the tenure of the CEO.

Sun and Cahan (2009a) and Sun, Cahan and Emanuel (2009b) discovered that higher compensation committee quality resulted in higher pay-performance sensitivity of CEO compensation. More specifically, the findings of Sun et al. (2009a) indicated that higher compensation committee quality resulted in a stronger relationship between CEO cash compensation and accounting performance. In addition, they observed that this effect was weaker for the high growth companies and the loss-making companies. The results of Sun et al. (2009b) denoted that higher compensation committee quality was associated with a greater positive link between CEO stock option grants and future firm performance. Based on these findings Sun et al. (2009b) concluded that higher quality compensation committees structure more effective compensation contracts. In order to measure compensation committee quality, both studies employed the same six metrics, which were the compensation committee size, the aggregate shareholdings of the committee members and the fraction of CEO-directors, busy directors, "CEO appointed directors" and long-serving directors on the compensation committee.

Finally, O'Reilly, Main and Crystal (1988) discovered that the social comparison model had an impact on the pay determination of the CEO. More specifically, their results indicated that higher salaries of outsider compensation committee members at their own companies were associated with higher CEO compensation, thus supporting the idea of the social comparison.

In summary, it can be said that the findings of the earlier compensation committee studies differ substantially. For that reason, additional evidence on this ambiguous subject is of high importance.

4.2. Boards and CEO compensation

In this section I review, in brief, studies that have investigated the association between board structure and CEO compensation. It is not my intention to discuss all the research done in this field because this literature is substantial, but rather to give some idea of the research conducted on this area because it is closely related to my real subject of interest i.e. the compensation committees. The studies are discussed in a chronological order.

In the first place, Lambert, Larcker and Weigelt (1993) examined the determinants of CEO compensation and discovered that the fraction of both outside directors and "CEO appointed" outside directors on the board resulted in higher CEO pay. In addition, they discovered that CEO stockholdings and the existence of an external blockholder were negatively associated with CEO compensation.

Boyd (1994) explored the relationship between board control and CEO compensation and found that a greater board control was associated with lower CEO compensation. To be specific, his evidence pointed out that CEO duality and director pay had an adverse effect on board control and, consequently, led to a higher level of CEO compensation. In addition, he discovered that board stock ownership, the presence of institutional owners on the board and, surprisingly, the insider board membership had a positive impact on board control and, accordingly, a negative relationship with CEO compensation.

Yermack (1996) analyzed the efficiency of small boards and discovered that a small board size was associated with higher pay-performance sensitivity of CEO compensation. Hallock (1997) on the other hand, investigated the effect of interlocked boards on CEO remuneration and found that the interlocked boards (excluding interlocks based on business relationships) increased CEO remuneration consisting of salary, bonus and other compensation about 17%.

Core, Holthausen and Larcker (1998) examined the impact of corporate governance on CEO compensation and discovered that weaker governance structures were associated with higher CEO compensation. These weaker governance structures were characterized by a higher percentage of busy directors, old directors, "gray" directors, and "CEO appointed" directors. Additionally, CEO duality, large board size, low CEO equity stake and the absence of blockholder directors were features of weaker governance structures.

Talmor and Wallace (2001) studied CEO compensation in the financial services sector and found board strength, measured by independence and effectiveness, to have a negative relationship with both the level and pay-performance sensitivity of CEO compensation.

Bertrand and Mullainathan (2001) studied the role of luck in CEO compensation and found that the companies compensated their CEOs for luck as much as for general performance. In addition, they discovered, however, that this relationship between luck and CEO compensation was weaker in the companies that had large shareholders sitting on the board.

Cyert, Kang and Kumar (2002) examined the effect of board structure on CEO compensation and discovered that the board shareholdings were associated with lower CEO equity compensation. Furthermore, their results indicated that both CEO duality and the proportion of outsiders increased CEO compensation.

Cahan, Chua and Nyamori (2005) investigated the effects of board structure on CEO compensation in the public sector. Their findings suggested that board size and the CEO's board membership were positively related to the level of CEO compensation. Director reputation, then again, reduced CEO compensation. Finally, however, they discovered that the proportion of insider, grey and busy directors had no influence on CEO compensation.

Chhaochharia and Grinstein (2009) explored the impact of the new corporate governance requirements by NYSE and NASDAQ in 2002 on CEO compensation. Their evidence indicated that the companies least in line with these new regulations reduced most their CEO compensation subsequently. Specifically, they identified that the companies that did not fulfill the requirement of the board consisting of the majority of independent directors cut the compensation of their CEOs by 17% more compared to the companies that satisfied the requirement. Furthermore, they discovered that in the non-complying companies which had substitutive monitoring instruments like an outside blockholder on the board or an institutional ownership concentration, new requirements had no effect on CEO compensation.

Lastly, Brickley, Horn and Wedig (2010) investigated the determinants of CEO remuneration at non-profit hospitals in the U.S. Their results denoted that the presence of the CEO with voting rights on his own board and the proportion of management insiders on the board were both associated with higher CEO compensation.

5. HYPOTHESES

In this chapter, I present the hypotheses about the relationship between compensation committee composition and CEO compensation. The hypotheses are based on the theories relating to executive compensation, the empirical findings of earlier research and the recommendations of the corporate governance codes. Altogether, there are five hypotheses which are discussed below.

The first hypothesis concerns the non-independent directors. By a non-independent director I denote a director who is not independent of the company. The evaluation of director independence is based on the recommendations of the Finnish Corporate Governance Codes. The direct quote of the Recommendation 15 - Evaluation of independence of the Finnish Corporate Governance Code 2008, can be seen in Table 15 in Appendix 1. A variable measuring some form of director independence is generally applied in studies investigating the relationship between compensation committee structure and CEO compensation. Usually the non-independent directors are assumed to be weak monitors of the CEO because of their close relationship with the CEO. The Finnish Corporate Governance Codes suggest that the majority of the directors should be independent directors, because it is their responsibility to supervise and control the management, which could be endangered if the directors were non-independent of the company. On the basis of the reasoning above, the first hypothesis states that:

Hypothesis 1: A higher proportion of non-independent directors on the compensation committee is associated with a higher level of CEO base salary, cash compensation and total compensation.

The second hypothesis relates to the long-serving directors. I define a director as a long-serving director if he has sat ten consecutive years or more on the company's board. An assumption made, for example by Vafeas (2003b), is that the long-serving directors are more likely to make friends with the CEO and less likely to monitor him. One explanation for this relationship, offered by Vafeas, states that the CEO may be able take over the director in time, as the director becomes less mobile and less employable. Vafeas also presents statistically significant evidence that the presence of a senior director on the compensation committee is associated with higher CEO compensation. In a similar vein, Sapp (2008) states that the board

is expected to be weaker when the tenure of the directors is longer, which should result in higher CEO compensation. Also Sapp provides statistical evidence that supports his hypothesized relationship. Finally, the Finnish Corporate Governance Codes indicate that long-term directorships may be problematic, which can be seen in one of the recommendations, which states that an outsider director with over 12 consecutive years of service on the company's board, can be regarded as a non-independent director. On the basis of the above reasoning, the second hypothesis is as follows:

Hypothesis 2: A higher proportion of long-serving directors on the compensation committee is associated with a higher level of CEO base salary, cash compensation and total compensation.

Next I discuss the CEO-directors, by which I mean directors who are the CEOs of other companies. For example, Conyon et al. (2004) and Daily et al. (1998) used a variable measuring the proportion of CEO-directors on the compensation committee. It has been discovered in earlier research that the CEOs are quite a homogenous and coherent group of persons (Useem 1984). Thanks to this unity, the CEO-directors may have a tendency to back up other CEOs in the boardrooms (Lorsch and MacIver 1989). Derived from this, the third hypothesis is as follows:

Hypothesis 3: A higher proportion of CEO-directors (i.e. other companies' CEOs) on the compensation committee is associated with a higher level of CEO base salary, cash compensation and total compensation.

The fourth hypothesis concerns the busy directors. A director is defined as busy if he serves on three or more additional boards. In the case that the director is retired, 6 or more additional board seats are required to make him busy. In this fashion, I use the same definition of the busy directors as, for example, Core et al. in 1999. The report by the National Association of Corporate Directors (NACD) about director professionalism in 1996, stated that director professionalism requires a significant dedication of time, which limits the number of board seats the director can simultaneously keep. Furthermore, Cahan et al. (2005), Core et al. (1999) and Talmor et al. (2001) assumed that the directors' additional board seats reduce their ability to properly take care of their board responsibilities. Also, the Finnish Corporate Governance Codes suggest that the directors should be able to devote a sufficient amount of

time in their board work, in order to thoroughly sink their teeth into the company matters. Based on above discussion, the fourth hypothesis states that:

Hypothesis 4: A higher proportion of busy directors on the compensation committee is associated with a higher level of CEO base salary, cash compensation and total compensation.

The final hypothesis concerns the blockholder directors i.e. the directors with a significant ownership stake in the company. I define a director as a blockholder if he owns 10% or more of the company's shares. According to Finkelstein and Hambrick (1989), the board can be expected to be more vigilant and to exercise tougher control over the CEO, when the directors are major shareholders and thus hold a considerable personal stake in the company. In a similar vein Shivdasani and Yermack (1999), assume that directors with a higher stock ownership have stronger incentives to monitor the CEO. Furthermore, Core et al. (1999) present that director shareholdings should result in lower CEO entrenchment. In the same spirit, the Finnish Corporate Governance Codes state that director shareholdings foster good corporate governance. Based on the discussion above, the last hypothesis suggests that:

Hypothesis 5: The presence of a blockholder on the compensation committee is associated with a lower level of CEO base salary, cash compensation and total compensation.

6. DATA AND METHODS

In this chapter, the data and methods of this study are presented. I start by describing the data in Section 1. In Section 2, I explain the methods applied in this study and the common problems associated with the methods.

6.1. Data

This section presents the data of this thesis. The section is divided in four subsections. In Subsection 1, the sample and its formation are explained. Subsection 2 concerns CEO compensation. In Subsection 3, data related issues about the compensation committees are discussed. Finally, Subsection 4 deals with the control variables.

6.1.1. Sample

I started the sample formation by choosing all the companies that were listed on the NASDAQ OMX Helsinki in September 2011. From this mass I searched for the companies that used a compensation committee in their internal governance at some point between 2006 and 2009. This yielded altogether 236 firm-year observations. In the next stage, I removed the observations that had missing data, whose accounting period differed from the calendar year and where the CEO was replaced during the accounting period. I eliminated the observations where the CEO was replaced because it is unlikely, under the circumstances, that the pay package of the new CEO was determined in the previous year, as is assumed in this study. After these eliminations the sample size was 188 firm-year observations. In the final stage, I eliminated the outliers from the sample, in order to guarantee that the results are not distorted. An observation was regarded as an outlier if its value, in relation to any of the variables, was more than three standard deviations away from the mean of the variable. After this I reached the final sample which consists of 177 firm-year observations.

As already mentioned above, the assumption in this thesis is that CEO compensation packages are determined in the previous year compared to the year when the actual payment is made. For example, Heiskanen (2008) and Holopainen (2010) made a similar assumption in their Master's theses. This means that all the explanatory variables must be from the previous

year compared to the dependent variable i.e. CEO compensation. As a consequence, all the explanatory variables in this study are from the years 2006-2009, while the dependent variable which is CEO compensation is from the years 2007-2010.

The yearly sample sizes are reported in Table 2 below. As can be seen, the yearly sample size first increased steadily starting from 41 observations in 2006 and ending at 48 observations in 2008. However, in 2009 the sample size decreased considerably ending up at 44 observations, as a consequence of the financial crisis, which caused several observations to be considered as outliers and accordingly to be removed from the sample. Lastly, Table 2 shows us that the size of the total sample is 177 firm-year observations.

Table 2. Sample size per year

This Table presents the yearly sample sizes from the perspective of the explanatory variables. All CEO compensation variables are from the subsequent year compared to the explanatory variables.

	2006	2007	2008	2009	Total
Sample size	41	44	48	44	177

Table 3 below shows how the total sample is divided between different industries. The industry classifications of the companies were obtained from the NASDAQ OMX Helsinki, which applies the Global Industry Classification Standard (GICS) taxonomy.

Table 3. Industry classification

This Table presents the industry classification of the sample companies. The companies have been classified based on the GICS-industry classification used by the NASDAQ OMX Helsinki. In order to guarantee that each industry has, at least, a reasonable number of observations, Telecommunication services, Utilities and Energy sectors were left out of the analysis and the companies in these industries were transferred to some of the remaining sectors most suitable for them. Accordingly, Neste Oil Oyj from Energy sector and Fortum Oyj from Utilities sector were transferred to Materials sector and Elisa Oyj and TeliaSonera AB from Telecommunication services sector were transferred to Information technology sector.

Industry	Number of firm-year observations	Percentage of firm-year observations
Materials	33	18,6 %
Industrials	40	22,6 %
Consumer discretionary	32	18,1 %
Consumer staples	11	6,2 %
Health care	8	4,5 %
Financials	17	9,6 %
Information technology	36	20,3 %
Total	177	100,0 %

In Figure 1 the division of the total sample into different industries is shown graphically. As can be seen, Industrials (22,6%), Information technology (20,3%), Materials (18,6%) and Consumer discretionary (18,1%) are clearly the largest industries. Financials is a midsized industry with 9,6% of the firm-year observations, whereas, Consumer staples (6,2%) and Health care (4,5%) are evidently the smallest industries in the sample.

Figure 1. Percentage of observations in different industries

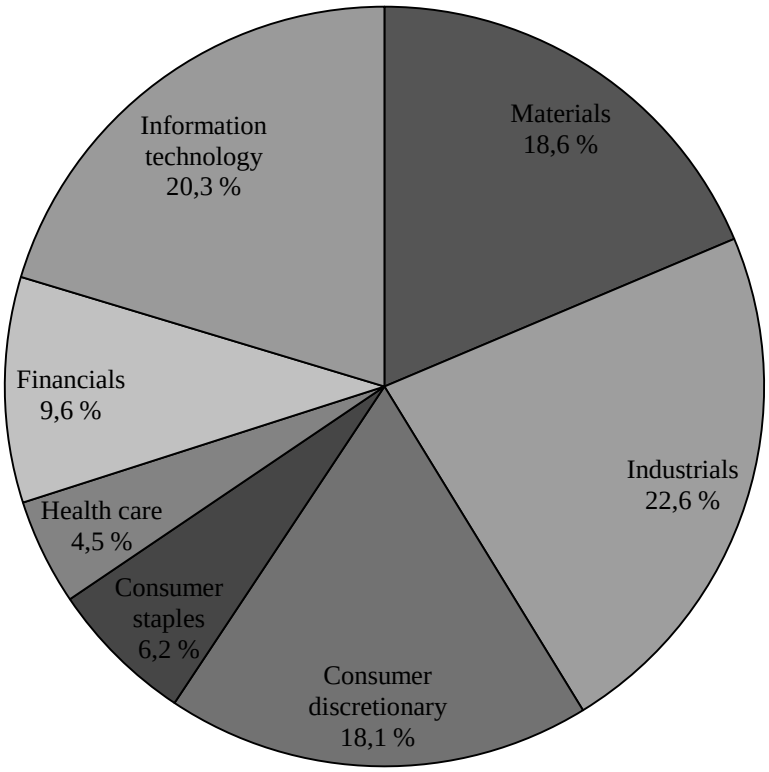


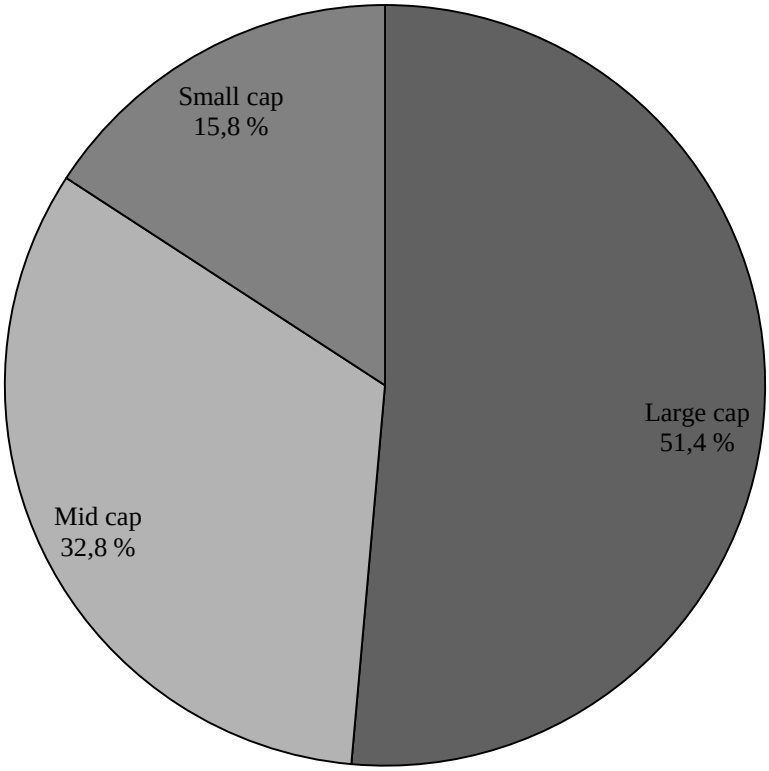
Table 4 reports the market cap segment classification of the total sample and in Figure 2 the same is illustrated graphically. As revealed by Figure 2, the total sample is centered in the large cap segment. More specifically, the majority (51,4%) of the firm-year observations belong to the large-cap segment. The mid cap segment comprises 32,8% of the firm-year observations, while small cap segment contains only 15,8% of the observations.

Table 4. Market cap segment classification

This Table presents the market cap segment classification of the total sample. The classification follows the classification of the NASDAQ OMX Helsinki. Accordingly, if the market value of the company is higher than 1 billion euros the company belongs to the large cap segment. If the market value of the company is lower than 150 million euros, the company belongs to the small cap segment. Finally, if the market value of the company is between 150 million euros and 1 billion euros, the company belongs to the mid cap segment.

Segment	Criterion	Number of observations	Percentage of observations
Large cap	Market value (€) > 1 billion	91	51,4 %
Mid cap	Market value (€) > 150 million and < 1 billion	58	32,8 %
Small cap	Market value (€) < 150 million	28	15,8 %
Total		177	100,0 %

Figure 2. Percentage of observations in different market cap segments



6.1.2. CEO compensation

I collected data concerning CEO compensation from the annual reports of the companies and from the companies' websites. In gathering CEO compensation data, I had to decide how to select the year to which I allocate different forms of compensation. With base salary and bonuses the procedure is plain; they are both assigned to the year when the payment took place. However, with stock options, performance shares and other LTIPs the method is not that obvious. With stock options the question is whether they should be allocated to the year when they were granted or to the year when they were exercised. In this study, stock options are included in CEO compensation in the year they were granted, as is usually done in similar studies. In my opinion this is the clearest way to deal with stock options because we know the number of options and get the value of options by using the Black-Scholes option pricing model. As a consequence, the value of an option grant is easily calculated.

With performance shares it is a different story. The number of performance shares to be handed over to the CEO is not known in advance because it depends on the company performance. Thus I cannot use the year when the performance share plan was brought into use, but instead, performance shares are included in CEO compensation in the year they were actually handed over to the CEO. At this point the number of performance shares is known and value of the package straightforwardly computed. Other LTIPs come in various forms. To keep things simple enough, other LTIPs are included in CEO compensation in the year they were paid.

In this thesis, CEO compensation is measured by using three different instruments, which are base salary, cash compensation and total compensation. The use of several measures of CEO compensation enables an extensive study of the effects of compensation committee composition on CEO compensation. In this way, it is possible to analyze how certain compensation committee characteristics affect, on the one hand CEO base salary, and on the other hand total CEO compensation, for instance.

6.1.3. Compensation committee

I gathered data about compensation committee characteristics from the annual reports of the companies, the corporate governance statements of the companies and from the companies' home pages. In order to analyze the composition of the compensation committee extensively, I used five variables, which are typically applied in similar studies investigating either the relationship between compensation committee structure and CEO compensation or between board structure and CEO compensation. These five variables are: 1) the proportion of non-independent directors on the compensation committee, 2) the proportion of long-serving directors on the compensation committee, 3) the proportion of CEO-directors on the compensation committee, 4) the proportion of busy directors on the compensation committee and 5) the presence of blockholder on the compensation committee.

In order to provide general knowledge about the Finnish compensation committees, I also collected data about the compensation committee size, the number of compensation committee meetings, the attendance rate in these meetings and whether the compensation committee and the nomination committee were combined.

6.1.4. Control variables

I collected data about the characteristics that have been found to have an effect on CEO compensation in earlier studies and are supported by theory. In this study, these features are called control variables. I gathered data about the control variables from the Orbis database, the web pages of the companies, the annual reports of the companies and the Kauppalehti Online service. I divided the control variables into two sub-groups which are: 1) economic and ownership variables and 2) CEO variables. The economic and ownership variables measure company performance, size, ownership structure, growth opportunities and risk. The CEO variables measure length of tenure, age and stock ownership of the CEO. Below I go through these measures one by one, also pointing out the exact variable used in this thesis to measure the above-mentioned attributes.

Performance: Under the agency theory it is assumed that executive compensation should be tied to performance, in order to motivate managers to strive for shareholder interests. Consequently the supposition is that better performance is associated with higher CEO

compensation, which is also statistically supported (e.g. Lewellen and Huntsman 1970; Murphy 1985). In this study stock return is used to measure company performance.

Size: One of the well known relationships in the compensation literature is the positive connection between company size and CEO compensation. There is abundant statistical evidence backing up this relation (e.g. Baker, Jensen and Murphy 1988; Core, Holthausen and Larcker 1999; Cyert, Kang and Kumar 2002). The reasoning behind this linkage is usually based on the complexity of the task of running a large organization (e.g. Talmor and Wallace 2001). In this thesis, size is measured by using sales of the company.

Ownership structure: It is generally assumed that having a major shareholder reduces agency costs, because major shareholder has an incentive and means to control and monitor the managers (e.g. Tosi and Gomez-Mejia 1989). For example, Core et al. (1999) and Sapp (2008) found that the presence of a blockholder statistically significantly reduced total CEO compensation. I incorporate in this study a dummy variable, which measures the presence of a major shareholder. Shareholder is considered as a major shareholder if he owns 20% or more of the shares of the company.

Growth opportunities: Smith and Watts (1992) stated that the companies with more growth opportunities are expected to use more stock options and, altogether, pay higher compensation for their CEOs. They justify their statements by the difficulty of monitoring the managers when there are plenty of investment opportunities available for the CEO to choose from and by the special talent required in making economically significant investment decisions. Statistical evidence parallel with the above assertions is provided, for example, by Smith and Watts themselves, Core et al. (1999) and Cyert et al. (2002). I employ M/B ratio to incorporate the effect of growth opportunities into the analysis.

Risk: It is normally supposed that managers who have tied their non-diversifiable human capital in the company are risk-averse (e.g. Beatty and Zajac 1994). Because the risk relating to compensation cannot be effectively diversified away by the managers, they should be compensated for bearing this risk (Smith and Watts 1992). Smith and Watts further present that company risk and compensation risk are positively related, which means that the riskier companies should pay their managers more. For example Cyert et al. (2002) and Hoitash

(2011) discovered evidence that the riskier companies, actually, pay their CEOs more. In this thesis the standard deviation of stock return is used as a proxy for company risk.

CEO tenure: The power of the CEO is expected to grow with the length of the tenure, resulting in a positive relationship between CEO tenure and CEO compensation (e.g. Finkelstein and Hambrick 1989). Statistical evidence supporting the above mentioned relationship is provided, for example, by Newman and Mozes (1999) and Vafeas (2003).

CEO age: The CEOs close to retirement carry only negligible career concerns and, consequently, their compensation should be most closely linked to current performance, in order to provide optimal incentives (Gibbons and Murphy 1992). Gibbons and Murphy also present statistical support for their hypothesized relationship.

CEO ownership: Under the agency theory the separation of ownership and control is seen as a source of agency problems (e.g. Fama and Jensen 1983). Putting this other way around, it could be assumed that a higher CEO ownership is associated with a higher incentive alignment (e.g. Vafeas 2003a). In the context of CEO compensation, this would mean lower CEO compensation (Talmor and Wallace 2001). Statistical evidence for the above relationship is provided, for example, by Anderson and Bizjak 2003 and Core et al. 1999.

In addition to the above control variables, I also included a state dummy and both industry and year dummies into the analysis, as is usually done in the comparable studies. Below in Table 5 the variables are summarized and definitions for them provided.

Table 5. List of variables and their definitions

This Table presents the list of the variables and their definitions. All of the explanatory variables (compensation committee, economic and ownership, and CEO variables) are from the previous year compared to the dependent variable (CEO compensation). CC = compensation committee, NC = nomination committee.

Compensation variables	
Base salary	Consists of the CEO's salary and perquisites, measured in euros.
Total cash compensation	Sum of the CEO's base salary and bonuses, measured in euros.
Total compensation	Sum of the CEO's base salary, bonuses, stock options, performance shares and other LTIPs, measured in euros.
Compensation committee variables	
CC size	Number of compensation committee members.
CC and NC combined	A dummy variable getting a value of 1 if the company had combined the compensation committee and the nomination committee, 0 otherwise
Number of meetings	Number of meetings held by the compensation committee.
Attendance rate	Attendance rate of compensation committee members on committee meetings.
Proportion of non-independent	Number of non-independent directors on the compensation committee divided by the number of all compensation committee members. Evaluation of director independence is based on the recommendations of the Finnish Corporate Governance Codes. See Appendix 1.
Proportion of long-serving	Number of long-serving directors on the compensation committee divided by the number of all compensation committee members. Director is regarded as long-serving if he has served 10 or more years on the company's board.
Proportion of CEOs	Number of other companies' CEOs on the compensation committee divided by the number of all compensation committee members. Director is regarded as CEO if he is simultaneously some other company's CEO.
Proportion of busy	Number of busy directors on the compensation committee divided by the number of all compensation committee members. Director is regarded as busy if he has 3 or more additional board seats. In the case that director is retired, 6 or more additional board seats are required in order to categorize him as busy.
Blockholder on CC	A dummy variable getting a value of 1 if somebody of the compensation committee members owns 10% or more of the company's shares, 0 otherwise.
Economic and ownership variables	
Stock return	Annual stock return including dividends, measured in percent.
Sales	Number of sales, measured in euros.
20% block	A dummy variable getting a value of 1 if the company has a blockholder who owns 20% or more of the company's shares, 0 otherwise.
M/B ratio	Market value of the company's stock divided by the book value of the company's stock.
Volatility	Annualized standard deviation of the daily stock returns for the past three years or which is available, measured in percent.
CEO variables	
CEO tenure	Length of CEO tenure, measured in years.
CEO age	Age of the CEO, measured in years.
CEO ownership	Percentage of the company's shares owned by the CEO, measured in percent.

6.2. Methods

This section explains the methods applied in this thesis and the general problems associated with them. The section is divided in two subsections. In Subsection 1, the OLS linear regression method is discussed. Subsection 2 explains the common problems with relation to the regression analysis.

6.3.1. OLS linear regression

I apply the ordinary least squares (OLS) linear regression method to analyze the relationship between the dependent variable and the independent variables, as is typically done in similar studies (e.g. Cahan et al. 2005; Conyon et al. 2004). Specifically, to test the effects of compensation committee characteristics and the control variables on CEO compensation, I estimate the following linear regression model:

Ln (Compensation) = β_0 + β_1Economic and ownership variables + β_2Compensation committee variables + β_3CEO variables + β_4State dummy + β_5Industry dummies + β_6Year dummies + ε

In order to study the relationship between the explanatory variables and the dependent variable as extensively as possible, I have broken the regression model above into four different models. The amount of variables in the models increases model by model. More specifically, Model 1 includes only the economic and ownership variables. In Model 2 also the compensation committee variables are included. Model 3 already contains the economic and ownership variables, the compensation committee variables and the CEO variables. Finally, Model 4 is identical to the model presented above i.e. it includes the economic and ownership variables, the compensation committee variables, the CEO variables, the state dummy and both the industry and year dummies. The models are shown below.

Model 1

Ln (Compensation) = β_0 + β_1Economic and ownership variables + ε

Model 2

Ln (Compensation) = β_0 + β_1Economic and ownership variables + β_2Compensation committee variables + ε

Model 3

Ln (Compensation) = β_0 + β_1Economic and ownership variables + β_2Compensation committee variables + β_3CEO variables + ε

Model 4

Ln (Compensation) = β_0 + β_1Economic and ownership variables + β_2Compensation committee variables + β_3CEO variables + β_4State dummy + β_5Industry dummies + β_6Year dummies + ε

6.3.2. Common problems with regression analysis

In order to obtain reliable results and draw credible conclusions from them, it is of the essence to recognize the common problems with the regression analysis and then seek to overcome these problems. Below I discuss three common problems with the regression analysis, which are multicollienarity, heteroscedasticity and outliers (e.g. Metsämuuronen 2008). To be more exact, I first explain the concept briefly and then describe how it is dealt with in this study.

Multicollienarity refers to a situation where the explanatory variables are highly correlated. This could arise from the fact that there are two or more different variables measuring the same phenomenon. (Metsämuuronen 2008.) Multicollienarity may complicate the regression analysis and the interpretation of the regression results (Mellin 2006). With the purpose of identifying whether this study suffers from multicollienarity, I analyzed both the correlation coefficients and the variance inflation factors (VIF) of the explanatory variables. First, Table 10 reports the correlation coefficients for the variables. As can be seen in Table 10, the highest correlation among the explanatory variables is between stock return and M/B ratio with a coefficient of 0,47. In general, a correlation coefficient of 0,80 or higher among the explanatory variables is considered as a sign of multicollinearity. As a result, the correlation coefficients suggest that multicollinearity should not be a problem in this study. Second, Appendix 3 presents the variance inflation factors of the explanatory variables. As revealed

by Appendix 3, the highest VIF is 3,24. The rule of thumb is that multicollinearity is an issue if VIF > 10 (Gujarati 2004). In this sense, it can be deduced from the VIF-values that multicollinearity is not an issue in this study.

Heteroscedasticity means that the error terms do not have constant variance. In the presence of heteroscedasticity, the standard errors are biased, which in turn results in biased test statistics and confidence intervals. (Williams 2011a.) With the purpose of fighting off heteroscedasticity, I took the natural logarithms of all the CEO compensation variables, sales and CEO age. Logarithmic transformation is often suggested as a remedy for heteroscedasticity (e.g. Metsämuuronen 2008).

Outlier is an observation that differs substantially from the other observations. The slope and the intercept of the least squares regression line are extremely vulnerable to outliers and, as a consequence, the outliers can twist the regression results (Williams 2011b). With the intention of preventing the outliers from distorting the regression results, I eliminated all the observations whose value, in relation to any of the variables, was more than three standard deviations away from the mean of the variable. As a result, 11 firm-year observations were removed from the initial sample.

7. RESULTS

In this chapter, I present the results of my thesis. Section 1 discusses the descriptive results of the study. In Section 2, the correlation coefficients are reported. Finally, Section 3 presents the results of the regression analysis.

7.1. Descriptive results

In this section, the descriptive results about the compensation committees, CEO compensation and control variables are reported. The section is divided in four subsections. Subsection 1 describes the development of the compensation committee usage among the Finnish listed companies. Subsection 2 presents the summary statistics for the variables. In Subsection 3, year-specific data about CEO compensation is provided. Finally, Subsection 4 reports year-specific data about the explanatory variables.

7.1.1. Development in compensation committee usage

As can be seen in Table 6, the percentage of the Finnish listed companies using a compensation committee in their internal governance has increased moderately, starting from 46,3% in 2006 and ending at 54,4% in 2010.

Table 6. Compensation committee usage among Finnish listed companies

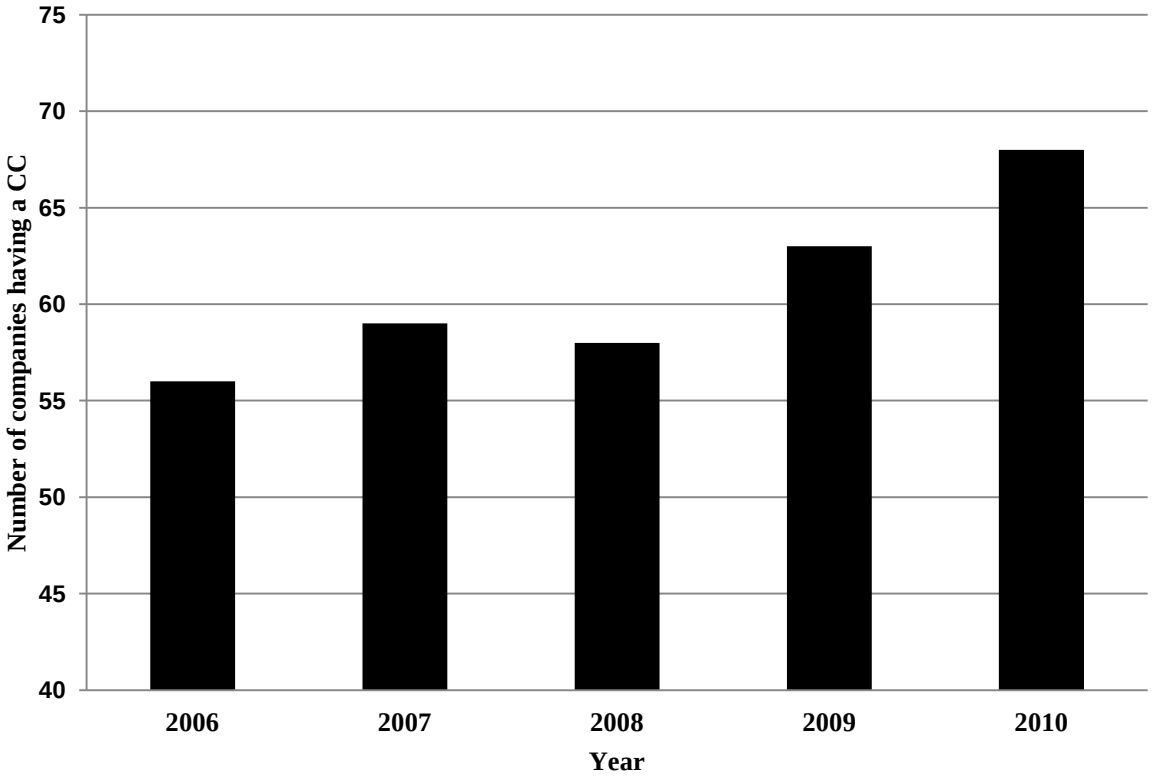
This Table presents the compensation committee usage among the Finnish listed companies during 2006-2010. The sample applied in this analysis includes the companies that were listed on NASDAQ OMX Helsinki in September 2011. For this reason, this analysis is not a perfect representation of all the Finnish listed companies during 2006 and 2010 because it ignores companies that were delisted during January 2006 and August 2011.

	2006	**2007**	**2008**	**2009**	**2010**
Number of companies	121	122	122	124	125
Number of companies having a CC	56	59	58	63	68
Percentage of companies having a CC	46,28 %	48,36 %	47,54 %	50,81 %	54,40 %

However, the growth has not been stable, as revealed by Figure 3, which depicts the number of companies having a compensation committee in each year. First in 2007 the number of companies with a compensation committee rose somewhat from the previous year, whereas in 2008 the growth turned into negative, albeit only by a whisker. In 2009 the number of

companies with a compensation committee started to increase again and this time the increase was considerable and this considerable growth continued also in 2010. I interpret this increase in compensation committee usage, at least to some extent, to reflect the Finnish Corporate Governance guidelines which encourage the companies to establish board committees and the increased importance of corporate governance altogether.

Figure 3. Number of Finnish listed companies having a compensation committee during 2006-2010



7.1.2. Summary statistics of the variables

Below in Table 7 we can see the summary statistics of the variables. I start by going through the summary statistics relating to CEO compensation. Mean total CEO compensation among the sample companies is €972 000 (median €766 000), as revealed by Table 7. These values are quite well in line with the results reported by Kopra (2012) and Talouselämä (2010).

In more detail, Kopra (2012) presented that realized total compensation of the CEO in Finland in 2009 was €1 200 000 in the large cap segment, €520 000 in the mid cap segment and

€350 000 in the small cap segment. Keeping in mind from the previous chapter that in this study the observations are centered in the large cap segment (51,4% of the firm-year observations), it can be deduced that my results are quite close to those of Kopra, although somewhat higher. To be exact, by applying Kopra's segment-specific compensation values to my sample (see the market cap segment classification in Table 4) the outcome is, 0,514*€1 200 000 + 0,328*€520 000 + 0,158*€350 000 = €843 000.

However, there are two matters that need to be considered, in order to draw correct conclusions. First of all, Kopra's results about total CEO compensation include pension plans (which according to Kopra make up 11% of total compensation), unlike my results. Taking this into consideration, it suggests that my findings overstate the level of CEO compensation, because even without including pension plans I obtained higher values for CEO compensation than Kopra. But then again Kopra's results are from the year 2009, whereas, my results are from the years 2007-2010. As will be seen in the next subsection, total CEO compensation unmistakably recorded its lowest value in 2009 (during the sample period). Taking this into account, it denotes that Kopra's results understate the level of CEO compensation compared to my study, which is from the years 2007-2010. Altogether, it can be stated that the results reported in this thesis are quite parallel with those of Kopra.

The results of this thesis concerning the level of total CEO compensation are additionally supported by the report of Talouselämä (2010). More specifically, the report of Talouselämä analyzed the level of total CEO compensation in 2009 in the 40 largest companies listed on the NASDAQ OMX Helsinki. Their results indicated that average total CEO compensation (excluding pension plans) was approximately €930 000 in 2009. These results about total CEO compensation are very close to my findings.

It is worth noticing, however, that Talouselämä's sample consisted entirely of the large companies, whereas my sample, although centered in the large cap segment (51,4% of the observations), includes also a substantial amount of the mid cap (32,8% of the observations) and small cap companies (15,8% of the observations). Taking this into account, it suggests that my results somewhat overestimate the level of CEO compensation, because it is well-known that CEO compensation grows with the size of the company. On the other hand, the results of Talouselämä are from 2009, and as turned out previously, this was the year when the total CEO compensation reached its bottom due to the financial crisis of the late 2000s.

Taking this into consideration, it means that Talouelämä's results underestimate the level of CEO compensation compared to my study, which is from the years 2007-2010. All in all, it can be stated that my findings concerning total CEO compensation are quite well in line with the results of Talouselämä's report.

In relation to the contingent components of CEO compensation, it can be seen from Table 7 that the mean value of bonuses is €165 000 (median €110 000). Furthermore, the average value of performance shares is €204 000 (median €0) and the corresponding figure for stock options is €82 000 (median €0).

Figure 4 below, shows the proportions of the basic elements of CEO compensation as a percentage of total CEO compensation. From this figure we observe that base salary is, by far, the major component of CEO compensation by making up 67% of total compensation. Far behind come bonuses and performance shares constituting 15% and 12% of total compensation, respectively. Stock options are evidently the smallest component by making up only 6% of total CEO compensation. These figures are in line with the results reported by Kopra (2012). More specifically, Kopra's results pointed out that the percentage of base salary from total CEO compensation was 59%. The corresponding values for bonuses and long term incentive compensation were 12% and 18% respectively.

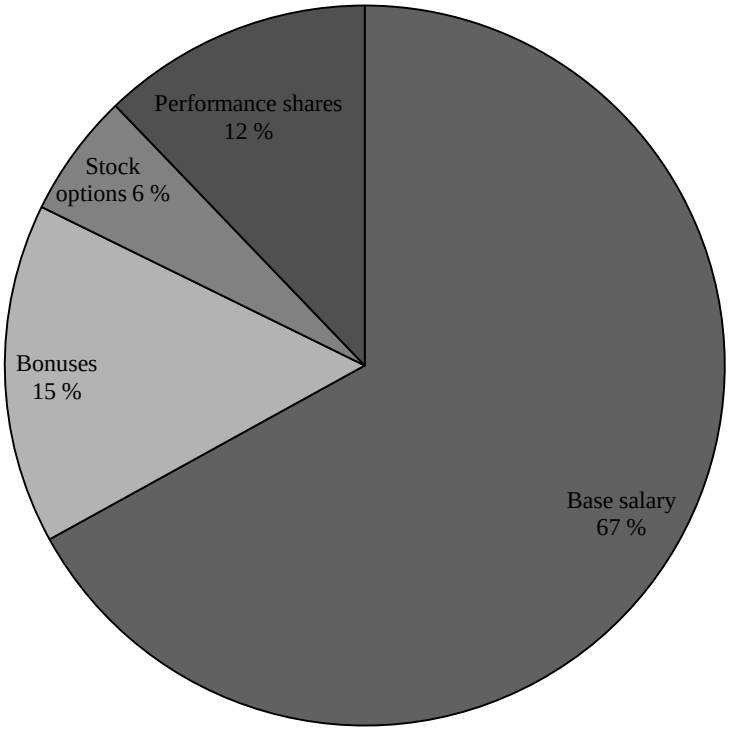
Nonetheless, there are two factors worthy of consideration. In the first place, as came out earlier in this subsection, Kopra's results about total CEO compensation include pension plans, which make up 11% of total CEO compensation. If pension plans are eliminated from total compensation, (in order to make Kopra's results more comparable with my study), the percentages of base salary, bonuses and long term incentive compensation increase slightly thus bringing them even closer to the values reported in this study. Second, Kopra's results are from the year 2009, which is the year when total CEO compensation hit the bottom attributable to the financial crisis. As a consequence, Kopra's results to some extent overstate the percentage of base salary and understate the percentages of the contingent components of compensation, compared to my thesis where the compensation figures are from the years 2007-2010. All things considered, however, the figures reported here are strongly supported by Kopra's results.

Table 7. Summary statistics for the variables

This Table presents the summary statistics for the variables. The summary statistics are based on the total sample consisting of 177 firm-year observations. The summary statistics for other LTIPs are not reported because only in 3 out of 177 observations were other LTIPs used as an instrument to compensate the CEO.

	Mean	Median	Standard deviation	Minimum	Maximum
CEO compensation variables					
Values					
Base salary (€)	517 867	506 689	241 348	125 814	1 353 248
Bonuses (€)	165 252	110 400	241 949	0	2 348 877
Cash compensation (€)	683 119	633 858	417 661	125 814	3 570 099
Stock options (€)	81 623	0	247 005	0	1 780 776
Performance shares (€)	203 371	0	451 946	0	2 650 450
Total compensation (€)	972 221	765 539	868 523	131 700	5 942 503
Proportions of total compensation					
Base salary	0,67	0,70	0,22	0,17	1,00
Bonuses	0,15	0,15	0,12	0,00	0,71
Stock options	0,06	0,00	0,13	0,00	0,71
Performance shares	0,12	0,00	0,18	0,00	0,73
Compensation committee variables					
CC size	3,30	3,00	0,73	2,00	5,00
CC and NC combined	0,34	0,00	0,47	0,00	1,00
Number of meetings	4,17	4,00	1,87	1,00	9,00
Attendance rate	0,97	1,00	0,05	0,75	1,00
Proportion of non-independent	0,10	0,00	0,18	0,00	0,67
Proportion of long-serving	0,20	0,00	0,26	0,00	1,00
Proportion of CEOs	0,29	0,33	0,25	0,00	1,00
Proportion of busy	0,53	0,67	0,27	0,00	1,00
Blockholder on CC	0,38	0,00	0,49	0,00	1,00
CEO variables					
CEO tenure	4,18	3,00	3,18	0,00	13,00
CEO age	50,95	51,00	4,62	42,00	60,00
CEO ownership (%)	0,15	0,02	0,41	0,00	2,45
Economic and ownership variables					
Stock return (%)	7,44	2,00	50,04	-93,82	165,00
Sales (€ million)	3 698	1 671	7 046	7	51 058
20% block	0,50	0,00	0,50	0,00	1,00
MB ratio	2,26	1,71	1,71	0,17	8,05
Volatility (%)	34,92	34,19	9,43	18,74	58,01

Figure 4. Basic elements of CEO compensation as a percentage of total compensation



Relating to the compensation committees, Table 7 reveals that on average the compensation committee consist of 3,30 members, convenes 4,17 times during a financial year and attendance rate in the meetings is as high as 97%. In addition, we see that it is quite common (in 34% of the observations) to combine the compensation committee and the nomination committee into a single committee.

Further, Table 7 shows that the average proportion of non-independent directors on the compensation committee is only 10% which could, to some extent, mirror the effect of the Finnish Corporate Governance guidelines striving to restrict non-independent director participation in the internal governance organs. Additionally, Table 7 reveals that the average proportion of long-serving directors (20%) and CEO-directors (29%) on the compensation committee is quite moderate. However, on average over half (53%) of the compensation committee members are interpreted as busy members. Finally, Table 7 shows that in 38% of the cases there is a blockholder (a person who owns at least a 10% ownership stake in the company) on the compensation committee.

Focusing finally on the control variables, Table 7 indicates that the CEO is on average 50,95 years old with a 4,18-year tenure as the CEO of the company and holds only a minor ownership stake in the company (mean 0,15% and median 0,02%). In addition, we see that the mean annual stock return is 7,44% (median 2,00%). Table 7 also reveals that 50% percent of the sample companies have a major blockholder who owns, at least, 20% of the shares of the company. Finally, Table 7 illustrates that the average sales of the sample companies are about 3,7 billion euros (median 1,7 billion euros).

7.1.3. Year-specific data about CEO compensation

Table 8 below presents year-specific data about CEO compensation between 2007 and 2010. More specifically, Table 8 reports mean and median values of the different compensation components and also their proportions of total compensation. As can be seen from Table 8, mean base salary has increased from €472 000 in 2007 to €551 000 in 2010. However, the increase has not been unbroken, as revealed by Figure 5. Rather, average base salary first rose quite steeply in 2008 from the previous year but then turned into a slight decrease in 2009. In 2010 base salary started to increase again but this time with only a modest rate. With median base salary the direction of the yearly changes has been parallel with mean base salary but the rate of change has differed, as indicated by Figure 5. I suppose that the decrease in base salary of the CEO in 2009 could be explained, at least to some extent, by the financial crisis of the late 2000s, which culminated in the breakdown of Lehman Brothers in September 2008 (e.g. European Trade Union Confederation 2010). My supposition is that as a response to the crisis, the companies may have frozen salaries of their CEOs to the level of the previous year and some companies may even have cut back salaries of their executives.

Table 8 and Figure 6 below show the development of the contingent components of CEO compensation. As can be seen, the trend in bonuses and performance shares has been quite parallel. They both reached their bottom in 2009 following the poor performance of the companies in the previous year, caused mainly by the financial crisis, which suppressed economic activity. Stock options, however, have remained quite stable throughout the period.

Finally, the development of total CEO compensation during 2007-2010 is shown in Table 8 and Figure 7 below. As revealed, the level of mean total CEO compensation has been quite

stable around one million euros, except for the year 2009 when it sank below €900 000, reflecting the development of the components of total CEO compensation and, consequently, the financial crisis of the late 2000s. Alternatively, median total CEO compensation has increased during the period starting from €672 000 in 2007 and ending at €828 000 in 2010, although, also median total CEO compensation slightly declined in 2009. Consequently, we can observe from Figure 7 that the gap between mean and median total CEO compensation has considerably narrowed during the period.

Table 8. Year-specific data about CEO compensation

This Table presents year-specific information about different components of CEO compensation between 2007 and 2010, based on the yearly samples. The figures for other LTIPs are not reported because only in 3 out of 177 firm-year observations were other LTIPs used as an instrument to compensate the CEO.

	2007	**2008**	**2009**	**2010**
CEO compensation variables				
Mean values				
Base salary (€)	471 897	528 638	516 691	551 214
Bonuses (€)	210 316	169 867	130 421	156 644
Cash compensation (€)	682 213	698 504	647 112	707 858
Stock options (€)	74 448	77 845	90 070	82 873
Performance shares (€)	230 829	226 927	143 284	219 780
Total compensation (€)	994 247	1 003 276	880 466	1 020 738
Median values				
Base salary (€)	475 961	499 517	487 736	543 984
Bonuses (€)	114 000	124 511	80 610	126 410
Cash compensation (€)	585 088	653 237	607 739	680 418
Stock options (€)	0	0	0	0
Performance shares (€)	0	1 963	0	0
Total compensation (€)	672 000	757 770	736 666	828 251
Mean proportions of total compensation				
Base salary	0,65	0,64	0,71	0,66
Bonuses	0,16	0,16	0,13	0,15
Stock options	0,06	0,06	0,06	0,05
Performance shares	0,12	0,14	0,09	0,13

Figure 5. Development of CEO base salary during 2007-2010

Figure 6. Development of contingent components of CEO compensation during 2007-2010

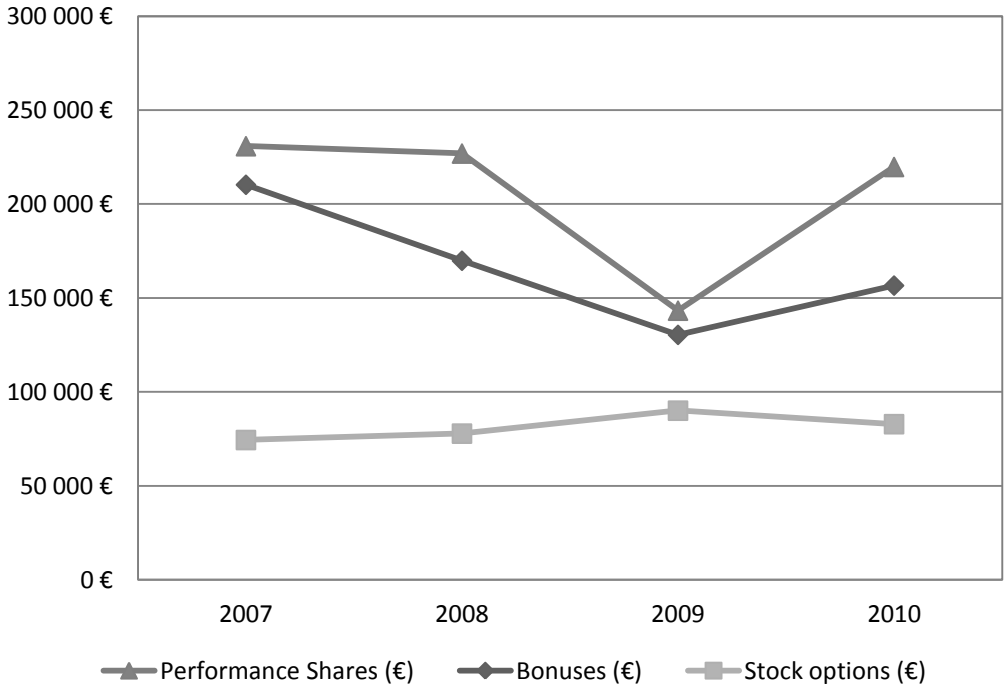
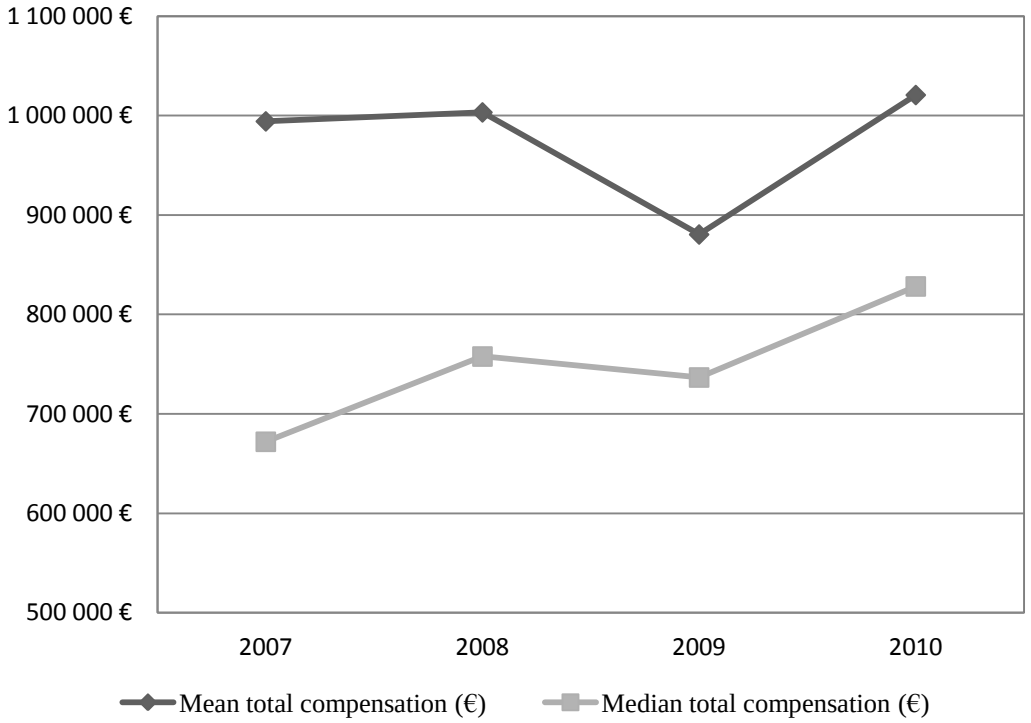


Figure 7. Development of total CEO compensation during 2007-2010



7.1.4. Year-specific data about explanatory variables

Table 9 below provides year-specific information about the compensation committee and control variables between 2006 and 2009. I start by discussing compensation committee variables. First, as can be seen both in Table 9 and Figure 8 below, the proportion of non-independent directors has decreased during the period starting from 0,13 and ending at 0,07. I assume this reduction could, at least to some extent, be explained by the Finnish Corporate Governance Codes which aim at limiting the number of non-independent directors on the boards and board committees. Second, the proportion of CEO-directors has also declined during the sample period, starting from 0,32 and ending at 0,28 although the reduction has not been constant, as revealed by Figure 8. Third, as shown in Table 9 and Figure 8, the proportion of long-serving directors initially somewhat decreased in 2007 from the previous year but after that started to increase ending at 0,23 in 2009. Finally, as reported in Table 9 and Figure 9, the proportion of busy directors reached its peak value 0,58 in 2006 and thereafter remained quite stable at around 0,52 for the rest of the period.

The impact of the financial crisis of the late 2000s is clearly reflected in the economic variables, as revealed by Table 9 below. First, the stock returns plummeted in 2008 (around -45%) when the financial crisis hit its peak. However, the stock returns started to recover already in 2009, as can be seen in Table 9. The M/B ratios understandably followed the same path as the stock returns. Second, the volatilities of the stock returns increased rapidly in 2008 and 2009, as the uncertainty in the markets spread, in consequence of the financial crisis. Finally, the sales of the companies started to decline on the second half of 2008 as the financial crisis undermined consumer confidence, resulting in reduced consumption which continued in 2009, as revealed by Table 9 below.

Table 9. Year-specific data about compensation committee and control variables

This Table presents year-specific information about the compensation committee and control variables between 2006 and 2009, based on the yearly samples. Values are mean values. Attendance rate for the year 2006 is not reported, because only five companies reported their compensation committee attendance rate in the annual report of 2006.

	2006	**2007**	**2008**	**2009**
Compensation committee variables				
CC size	3,24	3,30	3,23	3,43
CC and NC combined	0,32	0,30	0,33	0,41
Number of meetings	4,09	4,26	3,87	4,48
Attendance rate		0,97	0,97	0,98
Proportion of non-independent	0,13	0,13	0,09	0,07
Proportion of long-serving	0,19	0,17	0,22	0,23
Proportion of CEOs	0,32	0,29	0,27	0,28
Proportion of busy	0,58	0,52	0,51	0,53
Blockholder on CC	0,41	0,34	0,38	0,39
CEO variables				
CEO tenure	4,07	3,98	3,94	4,73
CEO age	51,12	50,43	50,56	51,75
CEO ownership (%)	0,16	0,13	0,14	0,17
Economic and ownership variables				
Stock return (%)	30,31	-1,19	-44,57	51,49
Sales (€ million)	3 432	4 268	4 206	2 823
20% block	0,51	0,43	0,48	0,57
MB ratio	3,04	2,56	1,54	2,01
Volatility (%)	27,62	30,01	38,71	42,51

Figure 8. Compensation committee variables during 2006-2009

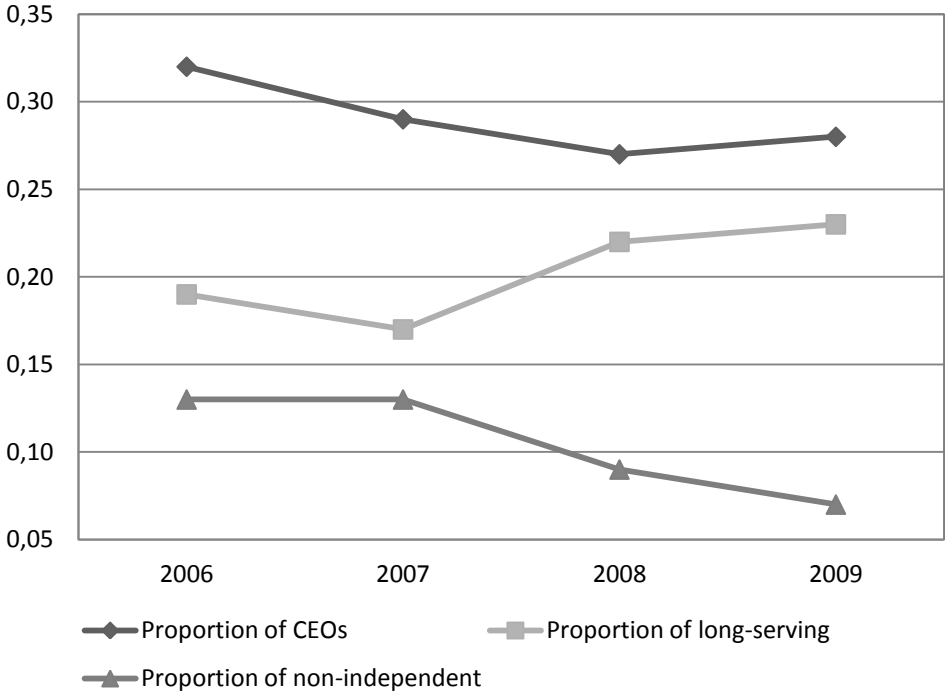
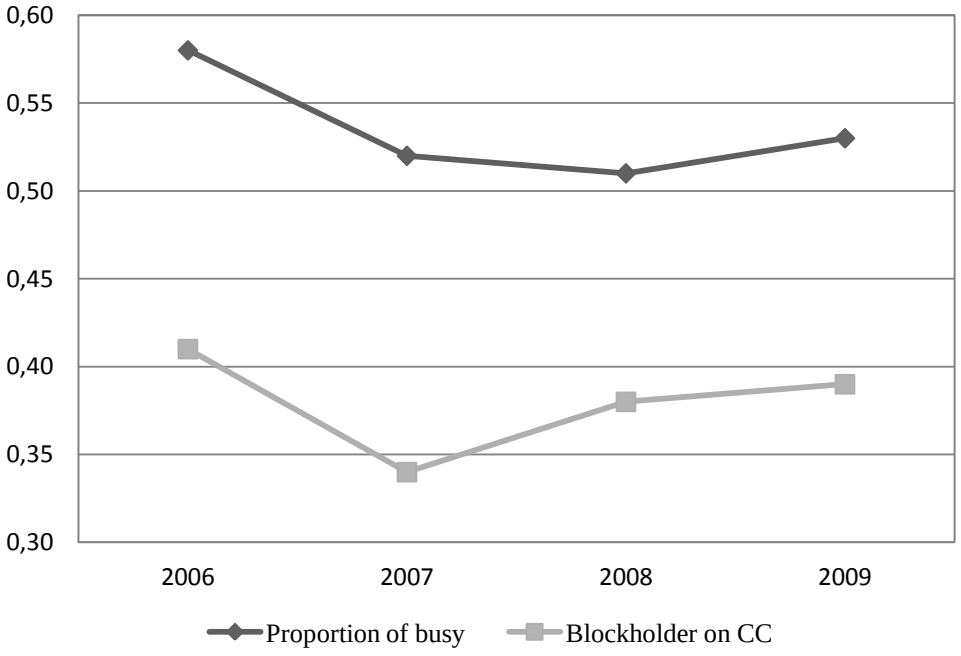


Figure 9. Compensation committee variables during 2006 – 2009



7.2. Correlation coefficients

Table 10 below reports both the Pearson's and Spearman's correlation coefficients for the variables. The correlation coefficients in Table 10 support two well-known relationships in compensation literature, which are: 1) the positive relationship between company size and CEO compensation and 2) the positive relationship between company performance and CEO compensation. More specifically, sales have extremely strong positive correlation with all three measures of CEO compensation both in Pearson's and Spearman's correlation matrices, as indicated by the correlation coefficients varying between 0,757 and 0,903. Second, stock return is significantly positively correlated with total CEO compensation in both matrices, as indicated by the correlation coefficients of 0,198 and 0,232.

The correlation coefficients between the compensation committee variables and CEO compensation present two statistically significant relationships, as revealed by Table 10. First, the presence of a blockholder on the compensation committee has a significant negative correlation coefficient with all three measures of CEO compensation in Pearson's correlation matrix and with total compensation in Spearman's matrix. This result is in line with Hypothesis 5. Second, the proportion of long-serving directors on the compensation committee has a significant negative correlation coefficient with total CEO compensation in Pearson's correlation matrix, which is contrary to Hypothesis 2.

Finally, as can be seen from Table 10 below, CEO age is significantly positively correlated with all measures of CEO compensation in both matrices, whereas CEO ownership has a significant negative correlation coefficient with all of the CEO compensation measures in both matrices, as well.

Metsämuuronen (2008) stated that too high correlations between the explanatory variables cause multicollinearity. As revealed by Table 10, the highest correlation among the explanatory variables is between stock return and M/B ratio with a coefficient of 0,467. This indicates that the explanatory variables are not highly correlated with each other and, accordingly, multicollinearity should not be a serious issue. See Subsection 6.3.2 for further information about multicollinearity.

Table 10. Pearson's and Spearman's correlation matrices

This Table presents both the Pearson's and Spearman's correlation coefficients for the variables. Pearson's correlations are reported in the lower section of the Table and Spearman's correlations in the upper section of the Table. Symbols * and ** denote statistical significance at the 5% and 1% level, respectively.

	Ln (total comp.)	Ln (cash comp.)	Ln (base salary)	Prop. of non-indep.	Prop. of long-s.	Prop. of CEOs	Prop. of busy	Blockh. on CC	Stock return	Ln (sales)	20% block	CEO tenure	Ln (CEO age)	CEO ownership	M/B ratio	Volatility
Ln (total comp.)		**,896****	**,818****	,070	-,147	,012	-,097	**-,234****	**,232****	**,757****	-,087	,090	**,235****	**-,239****	,007	-,040
Ln (cash comp.)	**,909****		**,928****	,046	-,086	,019	-,117	-,145	**,151***	**,840****	,004	,096	**,330****	**-,283****	-,075	-,037
Ln (base salary)	**,841****	**,935****		,010	,000	-,002	-,106	-,146	,060	**,880****	,045	,045	**,308****	**-,330****	**-,167***	-,015
Prop. of non-indep.	,052	,014	-,006		**,181***	-,024	-,027	**,254****	-,004	**,185***	,081	,102	,088	,015	**,153***	-,090
Prop. of long-s.	**-,156***	-,101	-,039	**,163***		,033	,059	**,234****	-,072	-,034	,034	**,159***	-,019	,070	,002	-,082
Prop. of CEOs	,027	,060	,028	-,001	,029		**,219****	-,105	,101	,025	-,028	,147	,004	-,116	,046	,016
Prop. of busy	-,144	-,129	-,137	-,005	,069	**,212****		,040	,071	-,073	,079	-,098	-,030	,102	,009	,101
Blockh. on CC	**-,219****	**-,165***	**-,169***	**,251****	**,210****	-,108	,040		-,019	-,137	**,389****	,020	**,167***	**,187***	,097	,025
Stock return	**,198***	,125	,047	-,045	-,052	,099	,088	-,005		,012	,011	,091	,143	,037	**,467****	-,140
Ln (sales)	**,795****	**,874****	**,903****	**,151***	-,041	,084	-,059	**-,162***	,033		,093	-,018	**,313****	**-,426****	**-,165***	-,009
20% block	-,098	-,018	,008	,075	,012	-,027	,087	**,389****	,028	,048		-,066	**,196****	,090	-,123	,107
CEO tenure	,053	,072	,024	,147	**,262****	**,190***	-,084	,082	,073	-,010	-,037		**,381****	**,278****	,101	-,005
Ln (CEO age)	**,172***	**,246****	**,222****	,061	,016	,015	-,028	**,163***	**,148***	**,242****	**,200****	**,392****		,028	,047	,071
CEO ownership	**-,196****	**-,201****	**-,273****	,075	**,156***	-,094	,070	**,190***	-,001	**-,264****	,101	**,168***	,116		,059	,122
M/B ratio	,053	-,055	**-,149***	,109	,035	-,022	,017	,125	**,291****	-,136	-,108	,019	-,021	,024		**-,397****
Volatility	-,070	-,048	-,021	-,091	-,101	,028	,094	,023	-,045	-,054	,123	-,022	,072	-,021	**-,306****	

7.3. Regression results

In this section, I present the results of the OLS regressions. The section is split in four subsections. Subsection 1 reports the results of the CEO base salary regressions. In Subsection 2, the results of the CEO cash compensation regressions are introduced. Subsection 3 reports the results of the total CEO compensation regressions and finally, Subsection 4 analyzes the robustness of the results.

7.3.1. CEO base salary

The regression results in Table 11 below reveal some unexpected features about the relationship between compensation committee composition and CEO base salary. First of all, the results indicate that the proportion of non-independent directors on the compensation committee has a statistically strong negative impact on CEO base salary, which is contrary to Hypothesis 1. Specifically, the coefficients for the proportion of non-independent directors vary between -0,39 and -0,45 and are statistically significant at the 0,1% level (t-statistics between -4,64 and -4,96) in all the models including the compensation committee variables. These results, although somewhat surprising, are parallel with the findings of Sapp (2008) who found that the proportion of independent directors on the compensation committee was, in fact, positively associated with the level of CEO compensation. In addition, these results receive partial support from the findings of Boyd (1994) and Core et al. (1999), who found that the percentage of insider directors had a negative impact on the level of CEO compensation. The word partial is used above, because non-independent director (which is applied in this study) is a much more extensive concept than insider director. In more detail, insider status is just one of the several criteria that make the director to be regarded as non-independent (see Appendix 1 for further information).

Second, the regression results present statistical evidence that the proportion of busy directors has a negative effect on CEO base salary, which is contrary to Hypothesis 4. In more detail, the results indicate that the proportion of busy directors on the compensation committee has a negative coefficient -0,14 in Model 2 and -0,12 in Model 3, which are both statistically significant at the 5% level. In Model 4 the coefficient is also negative, but, however, not statistically significant. These findings, although opposite to Hypothesis 4, are supported by

Sun et al. (2009a) who discovered that a higher proportion of busy directors on the compensation committee was associated with compensation packages that were more congruent with shareholder interests.

Third, the results provide weak statistical evidence of a negative relationship between the proportion of CEO-directors and CEO base salary. More specifically, in Model 4 the coefficient for the proportion of CEO-directors is -0,12 which is narrowly statistically significant at the 5% level. In the other models, however, the coefficient for CEO-directors is statistically insignificant. Finally, the results indicate that neither the proportion of long-serving directors nor the presence of a blockholder on the compensation committee has a statistically significant association with CEO base salary.

In relation to the control variables, we can observe from Table 11 that sales have a particularly strong positive effect on CEO base salary. In all four models, sales are statistically significant, at the 0,1% level (t-statistics between 25,15 and 28,86). The coefficients for sales are approximately 0,24 in all four models, indicating that a sensitivity between sales and CEO base salary is about 0,24. These findings are consistent with the general result in compensation studies, namely, that CEO compensation grows with the size of the company (e.g. Baker, Jensen and Murphy 1988; Finkelstein and Hambrick 1989).

The regression results about the industry and year dummies, which are not reported here, present four statistically strong relationships. First, the IT, Materials and Financials industry have all positive coefficients of the magnitude of 0,19, 0,19 and 0,21, respectively, which are statistically significant at 0,1%, 0,1% and 1% level, respectively. Consequently, the IT, Materials and Financials industry are all associated with statistically significantly higher CEO base salaries than the benchmark industry Industrials. Second, the coefficient for the year 2010 is 0,17 and statistically significant at 1% level, indicating that in the year 2010 CEO base salaries were statistically significantly 18,5% higher than in the benchmark year 2007.
When the dependent variable is in logarithmic form, the transformation $(e^{\beta x} - 1) *100\%$ for the independent variable must be done, in order to discover its economic significance, as suggested by Anderson et al. (2003). Accordingly, the economic significance of the year 2010 dummy is $(e^{0,17} - 1)*100\% = 18,5\%$.

Finally, the state dummy, which is not reported here either, has no statistically significant relationship with CEO base salary. More specifically, the coefficient for the state dummy is -0,06 and t-statistic is -1,28. (Note: the state dummy measures whether the State of Finland is a significant shareholder of the company with at least 10% ownership stake)

The significance and suitability of the models are highly appropriate. In the first place, the F-statistics of the models vary between 51,6 and 154,5 with p-values < 0,001 indicating that all the models are jointly highly significant. Secondly, the adjusted R^2 -values of the models range from 81,3% to 86,9%, denoting that the explanatory power of the models is especially high.

Table 11. Regressions of CEO base salary on compensation committee variables and control variables

This Table shows the results of the OLS regressions of CEO base salary on compensation committee and control variables. T-statistics are reported in parentheses. The total sample, including 177 firm-year observations, is used in the regressions. Dependent variable is ln (base salary) which includes CEO's salary and perquisites. In Model 4, which includes industry and year dummies, Industrials is used as benchmark industry and 2007 as benchmark year to which other industries and years are compared to. Symbols *, ** and *** denote statistical significance at the 5%, 1% and 0,1% level, respectively.

	Pred. sign	**Model 1 Ln (base salary)**	**Model 2 Ln (base salary)**	**Model 3 Ln (base salary)**	**Model 4 Ln (base salary)**
Economic and ownership variables					
Stock return	+	0,03	0,03	0,02	-0,02
		(0,84)	(0,86)	(0,79)	(-0,52)
Ln (sales)	+	**0,23*** **	**0,24*** **	**0,24*** **	**0,24*** **
		(27,16)	(28,86)	(26,56)	(25,15)
20% block	-	-0,04	-0,03	-0,03	-0,02
		(-1,27)	(-1,05)	(-0,80)	(-0,71)
M/B ratio	-	-0,01	0,00	0,00	0,02
		(-0,88)	(-0,39)	(-0,37)	(1,95)
Volatility	+	0,13	0,14	0,14	-0,30
		(0,71)	(0,87)	(0,84)	(-1,42)
Compensation committee variables					
Proportion of non-independent	+		**-0,39*** **	**-0,41*** **	**-0,45*** **
			(-4,64)	(-4,77)	(-4,96)
Proportion of long-serving	+		0,05	0,03	0,01
			(0,95)	(0,54)	(0,18)
Proportion of CEOs	+		-0,07	-0,10	**-0,12***
			(-1,16)	(-1,62)	(-1,99)
Proportion of busy	+		**-0,14***	**-0,12***	-0,08
			(-2,54)	(-2,17)	(-1,44)
Blockholder on CC	-		0,03	0,03	0,06
			(0,77)	(0,83)	(1,79)
CEO variables					
CEO tenure	+			0,01	0,01
				(1,77)	(1,90)
Ln (CEO age)	+			-0,12	0,01
				(-0,60)	(0,06)
CEO ownership	-			-3,43	-3,14
				(-0,88)	(-0,87)
Constant		8,17***	8,11***	8,52***	8,00***
		(40,19)	(41,01)	(12,02)	(11,02)
State dummy		No	No	No	Yes
Industry and year dummies		No	No	No	Yes
Adjusted R^2		0,813	0,838	0,839	0,869
F-statistic		154,538***	92,236***	71,512***	51,654***
Observations		177	177	177	177

7.3.2. CEO cash compensation

In relation to the compensation committee variables, the results of the CEO cash compensation regressions are somewhat in line with the findings of the CEO base salary regressions. Accordingly, the proportion of non-independent directors on the compensation committee has a statistically strong negative effect also on CEO cash compensation. In more detail, the coefficients for the proportion of non-independent directors vary between -0,37 and -0,55 and are statistically significant at the 1% level in Model 2 (t-statistic -3,28) and at the 0,1% level in Models 3 and 4 (t-statistics -3,77 and -4,42). Similarly, the proportion of busy directors has maintained its significant negative association with CEO compensation, albeit narrowly. More specifically, the coefficient for the proportion of busy directors is -0,17 in Model 2, which is statistically significant at the 5% level. In the other models the coefficients are also negative but, nevertheless, statistically insignificant.

However, as the results in Table 12 below suggest, the proportion of long-serving directors is no longer statistically insignificant as it was in CEO base salary regressions. Rather the proportion of long-serving directors has a statistically significant negative effect on CEO cash compensation, which is against Hypothesis 2. Specifically, the coefficient for the proportion of long-serving directors is -0,16 in Model 3 and -0,20 in Model 4, which are both statistically significant at the 5% level. Parallel findings have been reported by Sun et al. (2009a) who discovered that a higher proportion of long-serving directors resulted in compensation packages that were more aligned with shareholder interests.

Finally, the regression results in Table 12 indicate, that there are two compensation committee characteristics that have no statistically significant relationship with CEO cash compensation. First, the presence of a blockholder on the compensation committee remains as a statistically insignificant factor in CEO compensation. Second, the proportion of CEO-directors has lost even its weak significance it had in CEO base salary regressions. This result concerning CEO-directors is analogous with the findings of Daily et al. (1998) and Conyon et al. (2004), who discovered that the proportion of CEO-directors on the compensation committee had no effect on CEO compensation.

With regard to the control variables, the regression results in Table 12 below show that there are several statistically significant relationships. In the first place, sales have a statistically

particularly strong positive impact on CEO cash compensation, in the same way as they had on CEO base salary. Specifically, the coefficients for sales vary between 0,27 and 0,29 and are statistically significant, at the 0,1% level (t-statistics between 22,40 and 24,47) in all four models. Second, the results provide statistical evidence that stock return has a positive relationship with CEO cash compensation. In more detail, stock return has a positive coefficient in all of the models, and in three out of four models the coefficient is statistically significant at the 5% level. Third, there is statistical evidence that M/B ratio is associated with higher CEO cash compensation. More specifically, in Model 4 the coefficient for M/B ratio is 0,04 which is statistically significant at the 1% level. In the other models the coefficients for M/B ratio are also positive, but not statistically significant. Finally, CEO tenure has a statistically significant positive relationship with CEO cash compensation in Model 3. To be more precise, the coefficient of CEO tenure in Model 3 is 0,02 which is statistically significant at the 1% level.

The industry and year dummies, which are not reported here, reveal two statistically significant relationships. First, the Financials industry has a positive coefficient of 0,29 which is statistically significant at the 1% level. Second, the IT industry also has a positive coefficient of the magnitude of 0,20 which is statistically significant at the 1% level as well. Consequently, the results suggest that in the Financials and IT industry CEO cash compensation is statistically significantly higher compared to the benchmark industry Industrials. Finally, the results indicate that the year dummies have no statistically significant effect on CEO cash compensation.

Finally, the state dummy, which is not reported here, has a statistically significant negative association with CEO cash compensation. In more detail, the coefficient for the state dummy is -0,16 which is statistically significant at the 5% level (t-statistic -2,60).

The significance and fit of the regression models are highly appropriate, as was the case also with the CEO base salary regression models. Accordingly, all the models are highly jointly significant, as indicated by the F-statistics ranging from 35,8 to 120,0 with p-values < 0,001. Similarly, the explanatory power of the models is strong, as suggested by the adjusted R^2 – values of about 80%.

Table 12. Regressions of CEO cash compensation on compensation committee and control variables

This Table shows the results of the OLS regressions of CEO cash compensation on compensation committee and control variables. T-statistics are reported in parentheses. The total sample, including 177 firm-year observations, is used in the regressions. Dependent variable is ln (cash compensation) which includes base salary and bonuses. In Model 4, which includes industry and year dummies, Industrials is used as benchmark industry and 2007 as benchmark year to which other industries and years are compared to. Symbols *, ** and *** denote statistical significance at the 5%, 1% and 0,1% level, respectively.

	Pred. sign	Model 1 Ln (cash compensation)	Model 2 Ln (cash compensation)	Model 3 Ln (cash compensation)	Model 4 Ln (cash compensation)
Economic and ownership variables					
Stock return	+	**0,10***	**0,09***	**0,08***	0,06
		(2,30)	(2,21)	(2,00)	(1,06)
Ln (sales)	+	**0,27*****	**0,27*****	**0,28*****	**0,29*****
		(24,00)	(24,47)	(23,59)	(22,40)
20% block	-	-0,07	-0,07	-0,06	-0,06
		(-1,66)	(-1,50)	(-1,37)	(-1,39)
M/B ratio	+	0,01	0,02	0,02	**0,04****
		(0,99)	(1,38)	(1,56)	(2,69)
Volatility	+	0,14	0,12	0,13	-0,15
		(0,62)	(0,53)	(0,60)	(-0,51)
Compensation committee variables					
Proportion of non-independent	+		**-0,37****	**-0,43*****	**-0,55*****
			(-3,28)	(-3,77)	(-4,42)
Proportion of long-serving	+		-0,09	**-0,16***	**-0,20***
			(-1,12)	(-2,03)	(-2,46)
Proportion of CEOs	+		-0,01	-0,05	-0,08
			(-0,09)	(-0,61)	(-0,94)
Proportion of busy	+		**-0,17***	-0,14	-0,12
			(-2,20)	(-1,85)	(-1,47)
Blockholder on CC	-		0,05	0,04	0,07
			(0,95)	(0,83)	(1,60)
CEO variables					
CEO tenure	+			**0,02****	0,01
				(2,69)	(1,73)
Ln (CEO age)	+			-0,15	0,17
				(-0,61)	(0,65)
CEO ownership	-			7,03	8,43
				(1,37)	(1,69)
Constant		7,64***	7,64***	8,00***	6,48***
		(28,98)	(28,84)	(8,60)	(6,49)
State dummy		No	No	No	Yes
Industry and year dummies		No	No	No	Yes
Adjusted R^2		0,772	0,789	0,798	0,820
F-statistic		120,013***	66,797***	54,578***	35,787***
Observations		177	177	177	177

7.3.3. Total CEO compensation

The regression results in Table 13 below indicate that three compensation committee characteristics that were statistically significant in CEO cash compensation regressions remain significant also in total CEO compensation regressions. First, the proportion of long-serving directors on the compensation committee has a negative effect on total CEO compensation, just like it had on CEO cash compensation. However, with total CEO compensation the negative effect is statistically stronger. Specifically, the coefficients for the proportion of long-serving directors range from -0,25 to -0,39 and are statistically significant at the 5% level in Model 2 and at the 1% level in Models 3 and 4.

Second, the proportion of non-independent directors has a statistically significant negative effect also on total CEO compensation, although only in one of the models. In more detail, the coefficient for the proportion of non-independent directors is -0,39 in Model 4, which is statistically significant at the 5% level. In the other models the coefficients are also negative but not statistically significant. Third, the proportion of busy directors on the compensation committee is significantly negatively associated with total CEO compensation in Model 2, exactly as it was with CEO cash compensation. More specifically, the coefficient for the proportion of busy directors in Model 2 is -0,24 which is statistically significant at the 5% level. Although the coefficients for the proportion of busy directors are negative in the other models as well, they are, however, not statistically significant.

Finally, the proportion of CEO-directors and the presence of a blockholder on the compensation committee remain statistically insignificant factors in total CEO compensation, as they were in CEO cash compensation.

With respect to the control variables, Table 13 shows that there are several statistically significant relationships. First, sales have a statistically particularly strong positive impact on total CEO compensation in the same way as it had on CEO base salary and CEO cash compensation. In more detail, the coefficients for sales are between 0,31 and 0,33 and are statistically significant at the 0,1% level (t-statistics between 16,13 and 18,82) in all four models. Secondly, stock return has a statistically significant positive effect on total CEO compensation. More specifically, the coefficients for stock return vary between 0,20 and 0,27 and are statistically significant at the 1% level in all four models. This finding is consistent

with the tenets of the agency theory, namely that executive compensation should be tied to performance. Statistical support for this finding is provided, for instance, by Murphy (1985) and Cyert et al. (2002).

Third, the existence of a 20% block (i.e. a blockholder who owns at least 20% of the company's shares) is negatively associated with total CEO compensation. To be specific, the coefficients for a 20% block range from -0,13 to -0,19 and are statistically significant, at least, at the 5% level in all the models. This finding is in harmony with the general assumption that having a blockholder reduces agency problems, because a blockholder has both incentive and means to control the managers. Similar findings have been reported, for instance, by Core et al. (1999) and Sapp (2008). Fourth, M/B ratio, which measures growth opportunities, has a statistically significant positive effect on total CEO compensation. In more detail, the coefficients for M/B ratio are between 0,05 and 0,08 and are statistically significant in all four models with differing significance levels. Similar results are reported, for example, by Smith et al. (1992) and Core et al. (1999).

Finally, the results in Table 13 below provide evidence of a positive relationship between CEO tenure and total CEO compensation. To be exact, the coefficient for CEO tenure in Model 3 is 0,03 denoting that one additional year in CEO tenure is associated with an increase of about 3% [$(e^{0,03} - 1)*100\% = 3,0\%$] in total CEO compensation. The coefficient for CEO tenure in Model 3 is statistically significant at the 5% level, as indicated by the t-statistic of the magnitude of 2,37. In Model 4, however, the coefficient for CEO tenure, although positive (0,02), is no longer statistically significant. Statistical evidence of a positive relationship between CEO tenure and CEO compensation has been presented earlier, for example by Newman et al. (1999) and Vafeas (2003).

With regard to the industry and year dummies which are not reported here, there is only one statistically significant relationship, which concerns the Financials industry. More specifically, the Financials industry is associated with statistically significantly higher total CEO compensation than the benchmark industry Industrials, as denoted by the regression coefficient of 0,40 for the Financials industry, which is statistically significant at the 1% level (t-statistic 2,94). The coefficient for the Financials industry indicates that total CEO compensation is about 49% [$(e^{0,40} - 1)*100\% = 49,2\%$] higher in the Financials industry than in the benchmark industry Industrials.

Finally, the state dummy is not statistically significant, but it has a negative coefficient as it had in CEO base salary and cash compensation regressions. In more detail, the coefficient for the state dummy is -0,18 and its t-statistic is -1,79.

All the models are appropriate by their significance and suitability, as indicated by the F-statistics and R^2 –values. More specifically, the F-statistics of the models range between 20,9 and 76,8 with p-values < 0,001 denoting that all the models are jointly significant. Furthermore, the explanatory power of the models is high, as indicated by the adjusted R^2-values of the models of about 70%.

Table 13. Regressions of total CEO compensation on compensation committee and control variables

This Table shows the results of the OLS regressions of total CEO compensation on compensation committee and control variables. T-statistics are reported in parentheses. The total sample, including 177 firm-year observations, is used in the regressions. Dependent variable is ln (total compensation) which includes base salary, bonuses, stock options, restricted stocks and other LTIPs. In Model 4, which includes industry and year dummies, Industrials is used as benchmark industry and 2007 as benchmark year to which other industries and years are compared to. Symbols *, ** and *** denote statistical significance at the 5%, 1% and 0,1% level, respectively.

	Pred. sign	Model 1 Ln (total compensation)	Model 2 Ln (total compensation)	Model 3 Ln (total compensation)	Model 4 Ln (total compensation)
Economic and ownership variables					
Stock return	+	**0,20****	**0,20****	**0,20****	**0,27****
		(3,17)	(3,21)	(3,18)	(2,89)
Ln (sales)	+	**0,31*****	**0,31*****	**0,33*****	**0,33*****
		(18,82)	(18,50)	(18,07)	(16,13)
20% block	-	**-0,19****	**-0,15***	**-0,13***	**-0,15***
		(-3,06)	(-2,29)	(-2,05)	(-2,25)
M/B ratio	+	**0,05***	**0,05****	**0,06****	**0,08*****
		(2,48)	(2,81)	(2,98)	(3,65)
Volatility	+	0,25	0,23	0,28	0,01
		(0,74)	(0,70)	(0,84)	(0,03)
Compensation committee variables					
Proportion of non-independent	+		-0,17	-0,24	**-0,39***
			(-1,00)	(-1,43)	(-1,99)
Proportion of long-serving	+		**-0,25***	**-0,35****	**-0,39****
			(-2,19)	(-2,91)	(-3,05)
Proportion of CEOs	+		-0,11	-0,16	-0,22
			(-0,88)	(-1,32)	(-1,76)
Proportion of busy	+		**-0,24***	-0,21	-0,21
			(-2,07)	(-1,82)	(-1,74)
Blockholder on CC	-		-0,05	-0,04	-0,01
			(-0,66)	(-0,60)	(-0,09)
CEO variables					
CEO tenure	+			**0,03***	0,02
				(2,37)	(1,46)
Ln (CEO age)	+			-0,60	-0,29
				(-1,58)	(-0,71)
CEO ownership	-			9,75	11,57
				(1,26)	(1,49)
Constant		6,91***	7,16***	9,07***	7,73***
		(17,66)	(18,06)	(6,46)	(4,97)
State dummy		No	No	No	Yes
Industry and year dummies		No	No	No	Yes
Adjusted R^2		0,683	0,701	0,710	0,723
F-statistic		76,789***	42,331***	34,169***	20,947***
Observations		177	177	177	177

7.3.4. Robustness

The robustness of the results was tested by measuring company performance with accounting-based return, instead of market-based return. More specifically, all the regressions were re-run by applying ROA, in place of stock return. The results which are not reported here, point out that the statistical relationships presented earlier in this study are robust to alternative performance measure. In more detail, the results about the association between the compensation committee variables and different measures of CEO compensation are virtually unchanged. The only noteworthy change concerned the relationship between the proportion of busy directors and total CEO compensation in Model 2. Specifically, the coefficient for the proportion of busy directors was narrowly (t-statistic –1,82) no longer statistically significant. With regard to control variables, there were only two noteworthy changes. First, ROA had no statistically significant association with CEO cash compensation or total compensation, unlike stock return which had a significant positive relationship with both compensation measures. Second, the positive relationship between M/B ratio and CEO compensation was even stronger and more prevalent in the regressions where stock return was replaced by ROA.

8. CONCLUSIONS

The purpose of this study was to examine the effect of compensation committee composition on the level of CEO compensation. Executive compensation is an essential part of the internal governance of the company. More specifically, executive compensation is an instrument to 1) motivate the executives to work harder and to act in accordance with shareholder interests (e.g. Jensen and Meckling 1976; Jensen and Murphy 1990), 2) attract and retain talented executives (e.g. Anderson and Bizjak 2003; Conyon 2006) and 3) strengthen the implementation of the company strategy and goals (e.g. the Finnish Corporate Governance Code 2010). Designing and preparing executive compensation is usually assigned to the compensation committee (e.g. Anderson and Bizjak 2003; Conyon and He 2004). Consequently, analyzing the relationship between the organ setting and preparing executive compensation and the level of CEO compensation is of high importance.

In addition to the importance and topicality of the issue, the research was motivated by the divergence in the results of the previous compensation committee studies as well as the lack of Finnish evidence on the subject. In more detail, the earlier studies have reported conflicting findings about the relationship between, for example, insider directors and CEO compensation. Second, the majority of the compensation committee studies have been conducted with U.S. and U.K. data. Specifically, I was not aware of any study performed with Finnish data that focuses exclusively on the compensation committees and studies, in detail, how its composition affects the level of CEO compensation. As a consequence this thesis contributed to the compensation committee literature in two ways: 1) by providing new evidence on this controversial subject and 2) by presenting novel evidence from Finland, where also the corporate governance system is different compared to the U.S. and U.K.

The methods of this study consisted of the use of the ordinary least squares (OLS) linear regression method to analyze the relationship between compensation committee composition and the level of CEO compensation. The composition of the compensation committee was analyzed by using five variables which were: 1) the proportion of non-independent directors, 2) the proportion of long-serving directors, 3) the proportion of CEO-directors, 4) the proportion of busy directors and 5) the presence of a blockholder on the compensation committee. CEO compensation was measured by using three different instruments, which were base salary, cash compensation and total compensation.

8.1. Summary of the main findings

The main findings of this study are summarized in Table 14 below. As can be seen, the proportion of non-independent directors, long-serving directors and busy directors proved to be statistically significant factors in CEO compensation. Unexpectedly, however, they all had a statistically significant negative association with the level of CEO compensation. The other compensation committee characteristics, i.e. the proportion of CEO-directors and the presence of a blockholder on the compensation committee, had no statistically significant relationship with CEO compensation. Although to be exact, the coefficient for the proportion of CEO-directors was narrowly statistically significant in Model 4 of the CEO base salary regression. Nevertheless, because its coefficient in the other eight models was statistically insignificant, as revealed by Table 14, it is justifiably regarded as an insignificant factor in CEO compensation.

The proportion of non-independent directors clearly had the strongest effect on CEO compensation. In more detail, the proportion of non-independent directors had a statistically significant negative effect on all three CEO compensation measures. The negative effect was especially strong on the level of CEO base salary and CEO cash compensation. The proportion of long-serving directors had the second strongest effect on the level of CEO compensation. More specifically, the proportion of long-serving directors was associated with statistically significantly lower CEO cash compensation and total CEO compensation. With total CEO compensation, the negative association was statistically stronger. Finally, the proportion of busy directors had the least strong effect on CEO compensation. To be exact, the proportion of busy directors had a statistically significant negative relationship with CEO base salary. In addition, the proportion of busy directors had a significant negative coefficient in one out of three models both in CEO cash compensation and total compensation regressions, as can be seen in Table 14 below.

Table 14. Summary of regression results for compensation committee variables

This Table presents the summary of the OLS regression results for the compensation committee variables. In more detail, the results of the CEO base salary, CEO cash compensation and total CEO compensation regressions for compensation committee variables are reported. Symbols *, ** and *** denote statistical significance at the 5%, 1% and 0,1% level, respectively.

	Pred. Sign	Model 2	Model 3	Model 4
CEO base salary				
Proportion of non-independent	+	**-0,39*** **	**-0,41*** **	**-0,45*** **
Proportion of long-serving	+	0,05	0,03	0,01
Proportion of CEOs	+	-0,07	-0,10	**-0,12***
Proportion of busy	+	**-0,14***	**-0,12***	-0,08
Blockholder on CC	-	0,03	0,03	0,06
CEO cash compensation				
Proportion of non-independent	+	**-0,37****	**-0,43*** **	**-0,55*** **
Proportion of long-serving	+	-0,09	**-0,16***	**-0,20***
Proportion of CEOs	+	-0,01	-0,05	-0,08
Proportion of busy	+	**-0,17***	-0,14	-0,12
Blockholder on CC	-	0,05	0,04	0,07
Total CEO compensation				
Proportion of non-independent	+	-0,17	-0,24	**-0,39***
Proportion of long-serving	+	**-0,25***	**-0,35****	**-0,39****
Proportion of CEOs	+	-0,11	-0,16	-0,22
Proportion of busy	+	**-0,24***	-0,21	-0,21
Blockholder on CC	-	-0,05	-0,04	-0,01

The finding of a statistically significant negative relationship between the proportion of non-independent directors and CEO compensation is opposite to the corporate governance guidelines and the general conception of the non-independent directors. Accordingly, the results suggest that, instead of being less efficient to limit CEO compensation, the non-independent directors are, in fact, more efficient in restricting the level of CEO compensation. This finding, although unexpected, is not without statistical support as turned out in Subsection 7.3.1 (e.g. Boyd 1994; Sapp 2008). In addition, there exists some reasoning in compensation literature explaining why non-independent directors might, in fact, be more effective at restricting CEO compensation.

First, Daily et al. (1998) stated that non-independent directors could be especially reluctant to compensate CEOs excessively because, they are aware of the intense scrutiny that is targeted especially at them as non-independent directors and at CEO compensation in general. Second,

it is expressed, for example by Baysinger and Hoskisson (1990), that the informational advantage enjoyed by insider directors enables them to evaluate and reward executives more optimally. This second explanation, however, can be regarded only as a partial explanation for my finding because, as explained earlier, non-independent director is a much more extensive concept than insider director (see Appendix 1 for further information).

The result of a statistically significant negative association between the proportion of long-serving directors and CEO compensation is contrary to Hypothesis 2. Consequently, the finding implies that the long-serving directors, in fact, are not less likely to constrain the level of CEO compensation but rather quite the contrary. Even though the finding was surprising, Sun et al. (2009a) have reported parallel results. Additionally, compensation literature offers at least one plausible explanation for why long-serving directors could, actually, be more likely to limit CEO compensation. Vafeas (2003b) brought up the expertise hypothesis, according to which long-serving directors are associated with a greater commitment, experience and competence, thus making them more efficient monitors of the managers.

Finally, the finding of a negative relationship, although not a particularly strong one, between the proportion of busy directors and the level of CEO compensation is in contradiction with the general conception of busy directors. Accordingly, the results reported here suggest that busy directors are, in fact, effective at restricting the level of CEO compensation. This finding, although surprising, is supported by the results of Sun et al. (2009a). Furthermore, it is suggested, for example by Cahan et al. (2005), that additional directorships could reflect the director's reputation and expertise, which could explain the finding.

In summary it can be stated, that in the Finnish listed companies during the sample period 2006-2009, non-independent compensation committee members were not less efficient to restrict the level of CEO compensation, but rather the opposite. Consequently, this finding challenges, to some degree, the functionality of the recent corporate governance guidelines regarding director independence. Similarly, the results indicated that neither long-serving directors nor busy directors were less effective at limiting CEO compensation, as is generally assumed, but rather quite the contrary. Accordingly, these results question, to some extent, the harmfulness of both long-serving directors and busy directors.

8.2. Suggestions for further research

This study suggests at least three possible directions for further research. First, one limitation of this thesis is, that it does not analyze the effect of compensation committee composition on the structure of CEO compensation. By structure I denote the mix between fixed and variable compensation or between short-term and long-term compensation. These are important features when examining the appropriateness of the compensation package. Accordingly, studying the relationship between compensation committee composition and the structure of CEO compensation would be of high importance.

Second, another limitation of this thesis is that the measure of total CEO compensation does not include pension plans. Pension plans, however, may play an important role in total CEO compensation for at least two reasons: 1) the companies may use pension plans to camouflage the total amount of compensation because of a lower transparency of pension plans (Bebchuk et al. 2003) and 2) pension benefits may comprise a considerable part of total compensation of the CEO (e.g. the Finnish Corporate governance Code 2010). Consequently, analyzing the effect of compensation committee composition on total CEO compensation including pension plans would produce valuable additional information about this relationship. In addition, it could be intriguing to study the effect of compensation committee composition solely on the pension benefits of the CEO.

Finally, this study focuses on the compensation committee as a whole, including all the compensation committee members. However, Main, Jackson, Pymm and Wright (2008) discovered that the compensation committee chair plays a key role on the compensation committee. Accordingly, it would be of interest to concentrate solely on the compensation committee chair, and study how the characteristics of the chair affect CEO compensation.

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Appendix 1. Evaluation of director independence

The evaluation of director independence is based on the recommendations of the Finnish Corporate Governance Codes, which the companies listed on the NASDAQ OMX Helsinki are expected to follow. The data for the compensation committee variables is from the years 2006-2009, during which the Finnish Corporate Governance Code was renewed. More specifically, in the end of 2008 the Securities Market Association issued the Finnish Corporate Governance Code 2008 to replace the Corporate Governance Recommendation for Listed Companies of 2003. Accordingly, in the annual reports of 2006 and 2007 the companies have evaluated director independence based on the Corporate Governance Recommendation for Listed Companies of 2003, whereas in the annual reports of 2008 and 2009 the companies have employed the Finnish Corporate Governance Code 2008 to analyze director independence.

Fortunately, however, the recommendation concerning the evaluation of director independence has not changed materially. More precisely, the recommendation about the evaluation of director independence is otherwise similar in both codes, except that there are two additional criteria in the Corporate Governance Code of 2008. These two criteria concern the director who is or has been in the past three years the auditor of the company or in a professional relationship with the auditor, and the director who has been a non-executive director over 12 successive years. These two criteria, i.e. point f) and point j), are highlighted with italics in Table 15 below, which replicates the Recommendation 15 of the Finnish Corporate Governance Code 2008, to the extent that it concerns director independence of the company (not director independence of the significant shareholders).

Hence, in Table 15 we can see the criteria by which the independence of the director is evaluated, according to the Finnish Corporate Governance Code 2008. If we exclude the points f) and j) from Table 15, we have the criteria employed by the Corporate Governance Recommendation for Listed Companies of 2003 to evaluate director independence. Although the requirements for the director independence have tightened slightly in the Corporate Governance Code 2008, this had no effect on the results. Specifically, in the data set of this study, there was not even a single case where the company determined its director to be non-independent of the company based on these two additional criteria.

Finally, I gathered the data about non-independent directors from the annual reports of the companies. The director was regarded as non-independent in this study if the company itself reported in its annual report, that the director was not independent of the company. In other words, I have not tried to make my own assessment about director independence, but trusted the companies' own evaluation. In my opinion, this is an appropriate solution because the companies have informational advantage to evaluate the independence of their directors.

Table 15. Recommendation 15 - Evaluation of independence

This Table presents the part of the Recommendation 15 of the Finnish Corporate Governance Code 2008 that deals with the director independence of the company. The additional criteria compared to the Corporate Governance Recommendation for Listed Companies of 2003 are highlighted with italics.

The board shall evaluate the independence of the directors and report which directors it determines to be independent of the company. A director is not independent of the company, if
a) the director has an employment relationship or service contract with the company;
b) the director has had an employment relationship or service contract with the company in the last three years prior to the commencement of board membership;
c) the director receives from the company or from members of its operative management not insignificant remuneration for services or other advice not connected with the duties of the board, e.g. consulting assignments with the company;
d) the director belongs to the operative management of another company, and the two companies have, or have had in the past year, a customer, supplier or cooperation relationship significant to the other company;
e) the director belongs to the operative management of a company whose director is a member of the operative management of the first-mentioned company (interlocking control relationship); or
f) the director is, or has been in the past three years, the auditor of the company, a partner or an employee of the present auditor, or the director is a partner or an employee in an audit firm that has been the company's auditor in the past three years.
In addition, the board may, based on its overall evaluation, determine that a director is not independent of the company. E.g., the following circumstances shall be taken into account when making the overall evaluation of independence:
i) the director participates in the same performance-related or share-related remuneration scheme as the management of the company, which may be of substantial financial significance to the director;
j) the director has been a non-executive director for more than 12 consecutive years;
k) private or legal persons who are related parties of the director have such circumstances as described in this recommendation; or
l) the company is aware of other factors that may compromise the independence of the director.

Appendix 2. Company-specific information about compensation committee composition

This Appendix presents company-specific information about compensation committee composition for the sample companies. The values of the variables measuring compensation committee composition are company-specific averages. In computing the averages, only the years in which the company was included in the sample were taken into account. For example, if the company is included in the sample in all four years during 2006-2009 (i.e. four firm-year observations) then the yearly proportions of a variable are first added up and then divided by four, to reach the average value of the variable. Abbreviation CC below refers to the compensation committee.

Company	Average proportion of non-independent directors on CC	Average proportion of long-serving directors on CC	Average proportion of CEO-directors on CC	Average proportion of busy directors on CC
Affecto Oyj	0,00	0,13	0,38	0,13
Ahlström Oyj	0,00	0,33	0,33	0,78
Alma Media Oyj	0,00	0,21	0,00	0,46
Amer Sports Oyj	0,00	0,00	0,13	0,58
Aspocomp Oyj	0,00	0,00	0,00	0,50
Atria Oyj	0,00	0,42	0,17	0,83
Cargotec Oyj	0,13	0,00	0,00	0,75
Citycon Oyj	0,00	0,00	0,63	0,85
Comptel Oyj	0,00	0,00	0,22	0,67
Cramo Oyj	0,17	0,00	0,00	0,69
Digia Oyj	0,22	0,22	0,28	0,11
Elcoteq SE	0,00	0,50	0,10	0,33
Elisa Oyj	0,00	0,00	0,58	0,58
Etteplan Oyj	0,33	0,33	0,33	0,33
Exel Composites Oyj	0,00	0,00	0,33	0,67
Finnair Oyj	0,00	0,00	0,25	0,50
Fiskars Oyj	0,13	0,00	0,52	0,35
Fortum Oyj	0,00	0,00	0,33	0,61
F-Secure Oyj	0,33	0,00	0,00	0,67
Glaston Oyj	0,00	0,50	0,50	0,75
HKScan Oyj	0,33	0,50	0,33	0,67
Huhtamäki Oyj	0,00	0,33	0,50	0,50
Ilkka-Yhtymä Oyj	0,00	0,69	0,44	0,38
Ixonos Oyj	0,00	0,00	0,08	0,29
Kemira Oyj	0,00	0,00	0,00	0,58
Keskisuomalainen Oyj	0,17	0,83	0,17	0,67
Kesko Oyj	0,58	0,00	0,00	0,17
Kone Oyj	0,33	0,33	0,00	0,42
Konecranes Oyj	0,25	0,38	0,44	0,75
Lemminkäinen Oyj	0,11	0,44	0,22	0,56
Metso Oyj	0,00	0,08	0,00	0,25
M-Real Oyj	0,33	0,56	0,33	0,67
Neste Oil Oyj	0,08	0,00	0,25	0,50
Nokia Oyj	0,00	0,00	0,64	0,44
Nokian Renkaat Oyj	0,00	0,22	0,44	0,67
Nordea Oyj	0,00	0,50	0,42	0,83

Appendix 2. Continued

Company	Average proportion of non-independent directors on CC	Average proportion of long-serving directors on CC	Average proportion of CEO-directors on CC	Average proportion of busy directors on CC
Oral Hammaslääkärit Oyj	0,11	0,00	0,28	0,89
Oriola-KD Oyj	0,00	0,00	0,33	1,00
Orion Oyj	0,00	0,00	0,33	0,67
Outokumpu Oyj	0,00	0,00	0,69	0,46
Pohjola Pankki Oyj	0,67	0,42	0,67	0,83
Pöyry Oyj	0,00	0,40	0,33	0,20
Raisio Oyj	0,00	0,00	0,00	0,50
Rapala Oyj	0,00	0,50	0,08	0,33
Rautaruukki Oyj	0,00	0,00	0,58	0,50
Sampo Group Oyj	0,36	0,40	0,29	0,76
Sanoma Oyj	0,23	0,34	0,23	0,00
Sponda Oyj	0,00	0,11	0,00	0,56
Stockmann Oyj	0,00	0,81	0,50	0,81
Stora Enso Oyj	0,00	0,25	0,25	0,42
Tecnotree Oyj	0,00	0,00	0,50	0,75
Tectia Oyj	0,00	0,42	0,00	0,58
TeliaSonera AB	0,00	0,00	0,22	0,85
Tieto Oyj	0,00	0,25	0,38	0,75
Tiimari Oyj	0,00	0,00	0,33	0,67
Turvatiimi Oyj	0,50	0,00	0,50	1,00
UPM-Kymmene Oyj	0,15	0,00	0,08	0,08
Vacon Oyj	0,33	0,33	0,33	0,67
Wärtsilä Oyj	0,17	0,08	0,67	0,33

Appendix 3. Variance inflation factors (VIF) for explanatory variables

This Appendix presents the variance inflation factors (VIF) for the explanatory variables in all four models. In Model 4, Industrials is used as benchmark industry and 2007 as benchmark year and, as a consequence, these variables are not included here. Highest value is bolded.

Explanatory variable	Model 1	Model 2	Model 3	Model 4
Stock return	1,11	1,14	1,16	2,68
Ln (sales)	1,04	1,13	1,34	1,80
20% block	1,03	1,26	1,29	1,43
M/B ratio	1,25	1,31	1,31	1,69
Volatility	1,13	1,15	1,16	2,33
Proportion of non-independent		1,15	1,18	1,63
Proportion of long-serving		1,09	1,18	1,41
Proportion of CEOs		1,08	1,16	1,26
Proportion of busy		1,08	1,12	1,37
Blockholder on CC		1,41	1,45	1,59
CEO tenure			1,45	1,99
Ln (CEO age)			1,45	1,71
CEO ownership			1,19	1,25
State				2,18
Materials				2,21
Consumer discretionary				2,33
Consumer staples				1,55
Health care				1,44
Financials				2,01
IT				2,05
Year 2008				1,84
Year 2009				**3,24**
Year 2010				2,98