The CEO compensation structure in Swedish listed companies

- A Quantitative Study

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Abstract

In this thesis we explore how CEOs in Swedish listed companies are compensated. Executive compensation in Sweden has not been extensively treated on a top academic research level, though there are a lot of student theses treating the subject. A lot of studies look at the largest companies seen to market capitalization; we contribute to earlier research adding companies with lower market capitalization, in an effort to retrieve a more balanced picture. We match our results with earlier research on Swedish CEO compensation and try to discern trends in a way that until now has not been done.

Our study is two folded, we do a literature review and a quantitative study based on secondary data. The data for CEO compensation are found in the companies’ annual reports. Each report have been thoroughly analysed to give the correct information for the calculations. We show how the total CEO compensations for the fiscal year 2012 are divided between five (5) different components. We follow the division of compensation accounted for in the annual reports; accordingly dividing it in (1) Fixed Salary, (2) Variable Compensation, (3) Other Benefits, (4) Stock & Options and (5) Pension. One of the major differences from our thesis is that we also account for the share of pension and other benefits (perquisites), areas left opaque by many earlier studies.

Our study looks at the compensation of 119 CEOs of companies listed on Nasdaq OMX Stockholm¹. The sample is made out by all 59 CEOs of companies listed on Nasdaq OMX Stockholm Large Cap, 30 CEOs from Mid Cap and 30 CEOs from Small Cap. The study of Mid Cap and Small Cap companies is mainly performed to give a perspective of the differences of the three different lists, and the structures and levels of compensation. CEOs of Large Cap listed companies have a significantly higher total compensation. The performance sensitive pay also makes up for a considerable larger share of the compensation. In particular the compensation awarded as stock and options is much higher, and makes up a larger share of total compensation for CEOs of Large Cap companies. Our study confirms the view that level of total compensation is positively related to firm size; we think that larger companies may seek to employ better qualified and thereby better paid CEOs. It talks in direction of an international market for CEOs of companies listed at Large Cap, that they are compensated to stay. Important criteria’s for how the compensation is valued is the firm size, turnover and international ownership, these factors can be explained by the agency theory and the Market for CEOs. We also look at different industry sectors to see if there are any discernible differences between the different components and how and to what degree, they are being used. Manufacturing Companies seem to use performance sensitive pay to a higher extent than Non-Manufacturing.

¹ Commonly referred to as Stockholm Stock Exchange, and is one of three registered Stock Exchanges in Sweden. The other two, Nordic Growth Market and Burgundy, are not close in size.
ACKNOWLEDGEMENTS

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David Andersson and Eduard Suurküla

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1 INTRODUCTION

“Few issues in the history of the modern corporation have attracted the international attention garnered by what the largest corporations pay their top executives. Fuelled by disclosure requirements and human envy, analysing and criticizing executive remuneration has been a popular sport among business pundits for decades.”

(Michael C Jensen, Murphy, & Wruck, 2004, p. 1)

1.1 BACKGROUND

There is more than a few who believe executive compensation was at least partially to blame for corporate scandals following the bursting of the IT-bubble, as those of Enron and WorldCom, and more recently the financial crisis (Faulkender, Kadyrzhanova, Prabala, & Senbet, 2010; Michael C Jensen et al., 2004). In Sweden the remuneration of the insurance company Skandia’s top executives and the affair with the Percy Barnevik’s, former CEO of ABB, compensation package dawdle in the memories of many (Affärsvärlden, 2003; Expressen, 2006). A 2010 survey\(^2\) showed that the Swedish public had a negative trust in the levels of executive compensation in listed companies, on a scale between -3 and +3 the Swedish public stated a trust of minus (-) 0.86 on this scale even though the numbers were up since the bottom in 2008 ("Kodbarometern," 2010). According to the same survey 56% had a low confidence in the way board of directors handled the matter of executive compensation.

This is also mirrored in the Swedish Government’s actions in the wake of the Financial Crisis. When backing the banks standing with unstable assets the Government set limits for the use of variable compensation during a specific time period for executives in the financial firms (Riksbanken, 2011). This resulted in a, perhaps unintentional, re-composition of compensation for some executives with a consecutive raise of fixed salary to compensate for the decrease in bonus (SvD, 2009).

The development of rising executive compensation has also been linked to increasing economic inequality. A video very graphically showing the actual distribution of wealth in the United States in comparison to people’s beliefs has recently gone viral (America, 2012). The High Pay Commission reported in 2011 that some executives in the UK had increased their pay with more than 4000% during the course of 1980-2010, whereas workers’ average increase was just three-fold for the same period. (Telegraph, 2011). In Sweden, traditionally considered an egalitarian society, we have seen a similar development. Earlier this year a television piece portraying the development of workers’ contra executives’ pay over the length of modern Swedish history presented a ratio now amounting to more than 1:40 (SVT, 2013). The piece matches press reporting’s that Swedish CEOs are at an all-time high in pay (DN: 19/3/2012, DN: 21/12/2012).

\(^2\) Including 1000 persons.
One could ask oneself about the ethics of these levels of executive compensation. The reasonableness of paying persons such huge amounts of money has also been put into question, if it is justified or fair that a CEO’s work is worth 10, 20, 50 times or even more than an average worker’s (Harris, 2009). Henry Mintzberg (2010) has said that;

“Any chief executive who accepts a compensation package that so singles him or herself out from everyone else in the company is not a leader. Leadership is about conveying signals that engage other people in the company. How many leaders are left among America’s large enterprises? There is an Israeli expression that a fish rots from the head down. So too does an enterprise”

Trying to still the possible negative impacts of executive compensation legislative bodies and rule makers around the world continuously take actions. Disclosure is the most popular weapon of choice for these law - and policymakers. The EU holding, communicated through several official documents, is that greater transparency serves sustained investor confidence and trust in the financial market. This confidence is held to be a prerequisite for a sound, liquid and well-functioning capital market. The rules and provisions on disclosure of executive compensation are set out to enable investors to build themselves an opinion of their own as to how and why top executives are compensated and thus act thereafter. In the words of the Transparency Directive’s\(^3\) preamble 1:

“The disclosure of accurate, comprehensive and timely information about security issuers builds sustained investor confidence and allows an informed assessment of their business performance and assets. This enhances both investor protection and market efficiency”

In Sweden executive compensation in listed companies is foremost regulated in the Swedish Corporate Governance Code section 9, implementing EU regulatory measures on the area\(^4\), the section starts:

“Remuneration and other terms of employment of members of the board and the executive management are to be designed with the aim of ensuring that the company has access to the competence required at a cost appropriate to the company, and so that they have the intended effects for the company’s operations.”

– (Swedish Corporate Governance Code, section 9)

1.2 PROBLEM DISCUSSION

There are as implied above many controversies on the subject of executive compensation and a substantial amount of research on has been undertaken. The research consists of both theoretical work and empirical studies. Even so there is no


\(^4\) COM 2004/913/EC Commission Recommendation of 14 December 2004 fostering an appropriate regime for the remuneration of directors of listed companies, with amendments and complements in COM 2005/162/EC and COM 2009/3177/EC.
conclusive answer to what today’s practices are leading to (Faulkender et al., 2010; Frydman & Jenter, 2010; Michael C Jensen et al., 2004).

A majority of the research is focusing on the US. Until recently it has foremost been studied in the field of financial economics from the perspective of the Agency Theory, applying contract theory. (see Core, Guay, & Larcker, 2003; Frydman & Jenter, 2010; Goergen & Renneboog, 2011 ; J. Otten & Heugens, 2007 for an overview).5

According to Agency Theory compensation measures, typically in five (5) different components; Fixed Salary, Variable Compensation (also referred to as bonuses), Stocks & Options grants, Pension, and Other Benefits such as perks, are aimed at forming incentives for managers, closer aligning their interests and the company’s/shareholders’ interests and so lessen or overcome agency problems(Fama, 1980; Fama & Jensen, 1983; Michael C. Jensen & Murphy, 1990; Murphy & Jensen, 1998). Agency Theory has been held to be insufficient to explain executive compensation in reality. In response some researchers have presented the Managerial Power Theory (L. A. Bebchuk & Fried, 2003). Whether or not looked upon as an individual theory or a sub theory to optimal contracting theory it can fruitfully be singled out. According to this theory, executive compensation

“… is viewed not only as a potential instrument for addressing agency problems – but also as part of the agency problem itself.”

(L. A. Bebchuk & Fried, 2003, p. 2)

Executive compensation outside the US has been found to be on average considerably lower and displaying a different component mix (see e.g. Bruce, Buck, & Main, 2005; Fernandes, Ferreira, Matos, & Murphy, 2012; Goergen & Renneboog, 2011; Van Essen, Otten, & Carberry, 2012). Some researchers mean that the range of different compensation practices that exist not only within countries, but also across countries, cannot be explained from the typical use of agency theory or the managerial power theory alone, country specifics need to be considered (Bryan, Nash, & Patel, 2006; Khan, Dharwadkar, & Brandes, 2005; J. Otten & Heugens, 2007).

One could add a doubt whether it is ethically right to compensate persons in the range that is undertaken with CEO payments. Executive compensation can be seen as unreasonable based on its gross magnitude; unreasonable on its comparative magnitude; and/or as violating principles of justice and fairness (Harris, 2009).

This has a perhaps even more important aspect. Executive compensation leading to levels considered as excessive may inflict a weakened investor confidence in executive compensation measures, and prolonged in the financial market. This may in hand increase the transaction costs, and so the cost of capital, leading to more narrow

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5 This is often explained due to a history of better access to and greater volumes of data with a longer tradition when it comes to disclosure of executive compensation.
possibilities for companies to finance themselves on capital markets (Faulkender et al., 2010). The Swedish public has a low trust in executive compensation ("Kodbarometern," 2010) Is there reason to be upset by the compensation practices in Sweden?

1.3 RESEARCH QUESTIONS

The situation regarding CEO compensation structure in Swedish listed companies is rather unclear due to a lack of comprehensive empirical research on a top academic research level, though there are a lot of student theses treating the subject. Prior examples of empirical research on executive compensation structures in Sweden return results that are not unambiguous, (see e.g. Bryan et al., 2006; Bång & Waldenström, 2009; Oxelheim, Wihlborg, Zhang, Chapter 11; Oreland, Chapter 14 Fernandes et al., 2012; Goergen & Renneboog, 2011; Meyerson, 1993; Oxelheim & Wihlborg, 2008; Randøy & Nielsen, 2002). The variation in sample selection and sample sizes is most likely explaining this. Most of the studies look at the largest companies seen to market capitalization. That does not say anything of a “Swedish CEO compensation practice” in listed companies. Since the new rules of executive compensation in Swedish listed companies came into force in 2010 ("The Swedish Corporate Governance Code," section 9) there has not, to our knowledge, been undertaken a study that maps the CEO compensation structure in Sweden. Inquires of a study has well been made (Bång & Waldenström, 2009).

In this thesis we consequently set aim to answer the following questions:

Main question:

- How is CEO compensation structured in Swedish listed companies?

Subqueries:

To tie our findings to earlier research and make a contribution to new knowledge we wish to add to the (somewhat ambiguous) earlier findings of CEO compensation in Swedish Large Cap listed companies. We therefore set out to answer the question:

- What developments in CEO compensation can be seen over the last 10 years?

To see which determinants are relevant for the total CEO compensational package we examined the following.

- Is there any correlation between the CEO compensation structure and:
  - Market Capitalization, Turnover.

Earlier studies have found relationships between firm size and CEO compensation. We find market capitalization and turnover to be good indicators of size whence we
look into these relations with compensation. Comparisons in between the Large -, Mid -, and Small Cap is done.

- **Gross Profit, Net Profit Margin**

  Earlier studies correlation compensation - net profit margin is interesting because it shows the performance of the firm in such a way that it can be compared with other firms.

- **Different Industry sectors**

  To relate the compensation structure to different industry sectors is of interest to see if any component stands out according to industry.

### 1.4 THE PURPOSE OF THIS STUDY

Our purpose is to perform an exploratory, quantitative study and produce a comprehensive picture of Swedish listed companies’ compensation structures for CEOs, thus taking a stance in the ambiguity of earlier research results. From our results and earlier research we intend to make statements on CEO compensation in Swedish listed companies connected to the theory on the subject.

Whereas others include severance packages and so called golden parachutes in the executive compensation we limit our thesis to more expressively on-going compensation.
2 THEORY

There are three dominating theories explaining executive compensation, the Agency Theory, the Managerial Power Theory and what has been called an Institutional approach to Managerial Power (J. A. Otten, 2007).

2.1 AGENCY THEORY

Agency Theory handles agent-principal relations. An agent-principal relation is constituted by somebody (the agent) is given some decision-making authority to do something for somebody else (the principal or the principals). Agency theorists fear that agents will use their discretion to benefit their private interests rather than those of the principal. This is a key to understanding the agency theoretical set up. The theory assumes that the decisions of principals and agents are rooted in rational, calculative, anticipatory, and consequential actions and that they all pursue their own self-interested objectives (Michael C Jensen & Meckling, 1976; J. A. Otten, 2007).

Many financial economists view the firm as a nexus of contracts between different stakeholders. These contracts regulate agency relationships. One such relationship is that between managers and shareholders. In publicly owned companies shareholders in general lack both the time and knowledge to run the daily business of the company. The solution is to hire managers, or to elect boards of directors, who in turn hire managers, to do that for them. When shareholders leave their control to managers a conflict of interest can be outlined. With close monitoring and shareholder activism, such as proxy proposals, shareholders may force managers to act in their interests. Monitoring is costly for shareholders if they do not have a large enough stake, or if they are not able to coordinate with each other. Shareholders can, and will according to portfolio theory, diversify away all idiosyncratic risk, while managers have vested all their human capital in the firm leading to risk aversion amongst managers. As a result shareholder monitoring might be lacking, and managers can take advantage of the situation relative shareholders. Executive compensation is one way to mitigate the conflict of interests between shareholders and managers. By making compensation sensitive to the company’s performance via e.g. share ownership, stock options and bonuses it is deemed possible to lessen this agency conflict (Fama, 1980; Fama & Jensen, 1983; Goergen & Renneboog, 2011; Michael C Jensen & Meckling, 1976; Murphy & Jensen, 1998; Shleifer & Vishny, 1997).

To make this effective the directors hiring managers should negotiate executive compensation at “arm’s length” and ensure that it is designed to align the interests of managers and shareholders (Bruce et al., 2005; Michael C Jensen et al., 2004). A well-designed executive compensation negotiated at arm’s length will accomplish three things; firstly it will attract the right executives at the lowest cost; secondly it will retain the right executives at the lowest cost (and encourage the right, or perhaps more fitting the wrong, executives to leave the firm at the appropriate time); and thirdly motivate executives to take actions that create long-run shareholder value and avoid actions that destroy value (Michael C Jensen et al., 2004). This can also be
expressed as making the pay performance sensitive. Consequently if the company provides good value to the shareholders, the managers will also do better in terms of higher compensation and vice versa, or worst case get fired. To test the performance sensitivity is perhaps the most popular discipline within financial research on executive compensation (Frydman & Jenter, 2010; Lilling, 2006).

The varying results studies have returned on the link between firm performance and executive compensation bear witness of the problems with ascertaining the efficiency and indicate the difficulties of measuring efficiency as well as the problems with finding a methodology that works. Companies are and will be different from one another and so are and will their compensation schemes be, which implicate the difficulties of finding statistically significant relationships between those and firms’ performances (Bång & Waldenström, 2009).

Agency Theory is also used as the base for the theory about a labour market for CEOs. This theory suggests that CEOs, like shareholders, are interested in performance sensitive pay. They are also interested in getting appropriate reward for their efforts giving optimal contracting a good prognosis. To prove their competence and attractiveness on the Market for CEOs both managers themselves and shareholders would favour performance sensitive compensation (Baranchuk, MacDonald, & Yang, 2011; Giannetti & Metzger, 2013).

“The rates at which management can sell the rights to their services in the market for managerial labor depend on that management’s past association with success or failure. The association with success or failure for a CEO or manager becomes information about his or her talents as a manager or CEO /.../ Given a competitive managerial labor market, when the firm’s reward system is not responsive to performance the firm loses managers, and the best are the first to leave”

– (Fama 1980, p.292)

The Market for CEOs predicts that the use of especially stocks & options would be greater in a more competitive market for CEOs than in another less competitive. This since remuneration in the form of options provide the most direct link between firm performance and CEO compensation pay rational, and therefore make CEOs more likely to take shareholder-oriented decisions (Goergen & Renneboog, 2011).

The situation for CEOs have been likened to that of superstar athletes and their hunt for a notation in record books, the compensation not so much about level as benchmark measure to show how good you are at your work (Elson & Ferrere, 2012).
2.2 MANAGERIAL POWER THEORY
The failures of Agency Theory to deliver satisfactory explanations to executive compensation have led to the formation of a theory that somewhat takes into account the differences between companies, the Managerial Power Theory. (L. A. Bebchuk & Fried, 2003, 2004, 2006b). Strong proponents of the Managerial Power Theory mean that the scholars’ applying the view of the board of directors and CEOs negotiating compensation contract at arm’s-length distance is faulty. The reason they give is that arm’s length bargaining fails due to an agency conflict between the board members and the shareholders. The sole fact of directors being independent (defined as basically having no other affiliation to the firm than board membership, e.g. not having worked in the company and having no ownership, etc.) is not enough to ensure them always acting in the interest of the shareholders and the company. Bebchuk & Fried account for factors of CEOs influence on board members including, but not limited to: Directors’ desire to be re-elected to the board and CEOs (indirect) influence on the re-election of boards, CEOs power to benefit directors with perks (almost horse-trading level), friendship and loyalty bonds between directors and CEOs, the small cost to directors of favouring CEOs, insufficient time and information for board work, the infrequent firing of CEOs. The differences in executive compensation are explained by the different power or strength managers have in the compensation negotiation, and the lack of incentives for directors to pick a fight over compensation that to the eye first seems performance sensitive but is not. The agency conflict between shareholders and CEOs is instead fuelled by executive compensation, the CEO trying to extract rents in the pay-setting process. Except for the personal attributes of every CEO the legal mechanisms and market forces of the corporate governance system in question decide the bargaining power of the CEO (L. A. Bebchuk & Fried, 2006b; Van Essen et al., 2012).

2.3 MANAGERIAL POWER AND INSTITUTIONAL THEORY
Several scholars have found the explanatory values of the theories of Agency and Managerial Power alone insufficient in regard to CEO compensation, especially in other countries outside the US (Frydman & Jenter, 2010). They find that other things than the rationality-functionality view of the mentioned theories and other factors, not normally directly assigned to the power relationship of the CEO and the directors, seem to have a great influence on the matter of executive compensation practices (Bruce et al., 2005; Fernandes et al., 2012; Jouber & Fakhfakh, 2011; J. Otten & Heugens, 2007; Oxelheim & Randøy, 2005, upcoming; Randøy & Nielsen, 2002). They mean country specifics and companies’ institutional environments; cultural, social, and political factors also matter for the makeup and effectiveness of national corporate governance systems and not just by market forces and legal mechanisms (compared to La Porta, López de Silanes, Shleifer, & Vishny, 1998; Shleifer & Vishny, 1997).
One could say that the Institutional Theory is very well summarized by Eisenhardt (1988), below is a comparison to agency theory exhibited:

<table>
<thead>
<tr>
<th></th>
<th>Agency Theory</th>
<th>Institutional Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key idea</strong></td>
<td>Organizational practices arise from efficient organization of information and risk-bearing costs</td>
<td>Organizational practices arise from imitative forces and firm traditions</td>
</tr>
<tr>
<td><strong>Basis of Organization</strong></td>
<td>Efficiency</td>
<td>Legitimacy</td>
</tr>
<tr>
<td><strong>View of people</strong></td>
<td>Self-interested rationalists</td>
<td>Legitimacy seeking satisficers</td>
</tr>
<tr>
<td><strong>Role of environment</strong></td>
<td>Organizational practice should fit environment</td>
<td>A source of practices to which organizations conforms</td>
</tr>
<tr>
<td><strong>Role of technology</strong></td>
<td>Organizational practice should fit technology employed</td>
<td>Technology moderates the impact of institutional factors or can be determined institutionally</td>
</tr>
<tr>
<td><strong>Problem domain</strong></td>
<td>Control problems (vertical integration, compensation, regulation)</td>
<td>Organizational practice in general</td>
</tr>
<tr>
<td><strong>Independent variables</strong></td>
<td>Outcome, uncertainty, span of control, programmability</td>
<td>Industry traditions, legislation, social and political beliefs, founding conditions that comprise the institutional context</td>
</tr>
<tr>
<td><strong>Assumptions</strong></td>
<td>People are self-interested, rational and risk averse</td>
<td>People satisfy and conform to external norms</td>
</tr>
</tbody>
</table>

Figure 1 - Agency Theory and Institutional Theory compared, adapted from Eisenhardt (1988) and Eneby & Lundberg (2012)

Institutional differences have been suggested as one explanation for a continued divergence in compensation policies across nations; as contradictory to what would be suggested by the globalization of financial markets (Bryan et al., 2006).

Closely related to this view is the view that pay is a matter of values. The explanation to CEO compensation is accordingly largely found in personal traits of every CEO and the environment he or she is acting (Adams & Giannetti, 2012).
2.4 EARLIER FINDINGS CONCERNING COMPENSATION PRACTICE IN SWEDEN

In 2005 Swedish compensation structure had the relation shown in Figure 1 to international practice:

![Figure 2 – International comparison of compensation. Source: Goergen & Reeneboog (2011)](image)

We can see from Figure 1 that the US has the highest level of total compensation, much due to the option/long-term incentive program part (yellow). Sweden shows off a quite competitive level of total compensation, but with very low levels of performance sensitive compensation. We also see that the share of other benefits is comparatively large in Sweden.

A table showing the development of CEO-compensation and structure in Sweden since 1998 can be found in Appendix 4.

2.4.1 INTERNATIONALIZATION

Swedish listed companies is getting more and more internationalised. This is achieved not least due to a common European market with a common European corporate governance framework; bringing a convergence of education, and increasingly internationalised markets for capital with cross-border mergers and - listings. But the mobility of CEOs between countries is not perfect. There still are language- and cultural barriers remaining, CEOs networks are usually not as extended and valued abroad and their past credentials not as valuable in other countries. There are limited findings of a common European/International/Nordic market for executives that
would affect Swedish CEO compensation. During the period 2000-2005 around 20% of top executives in Swedish companies with a turnover over € 500 M were of foreign descent (Oxelheim & Wihlborg, 2008).

Growing internationalization would according to the theory of a labour market for CEOs indicate a convergence of compensation structure, lowering the gap between countries (see e.g. J. A. Otten, 2007). European corporate governance experiences growing influence from the US, due to several factors including cross-border mergers, English as corporate language in multinational companies, and not least the perception of USA as the business country number one (Bruce et al., 2005; Oxelheim & Wihlborg, 2008). Growing internationalization towards European and US standards would for Swedish CEO compensation mean an increase in the share of performance sensitive-pay and also a higher level of total compensation as well as a lower share of other benefits.

Another presented hypothesis is that CEO compensation rise with internationalization due to a risk premium for reduction in job security. Oxelheim & Randøy (2005; upcoming) argues that a special “international risk premium” is required to weigh up for executives exposure to performance fluctuations that lie beyond their control. They claim that executives know that they may be penalized for poor firm performance and that compensation is needed for the greater exposure to a more uncertain (than the domestic) international environment with harsher monitoring thus lower job security.

Studies on Swedish conditions have made observations of a positive relationship between CEO compensation and the internationalization of sales, internationalization of ownership and internationalization of board membership in Swedish listed companies (Oxelheim & Randøy, 2005; Randøy & Nielsen, 2002). In addition foreign shareholding has been observed to have a positive relationship to level of total compensation (Abrahamson & De Ridder, 2010; Håkansta et al., 2011) Foreign ownership is also showed to increase the use of performance sensitive compensation, foremost stocks&options (Collin & Gustafsson, 2012; Hansson & Sandquist, 2011; Jansson & Svae, 2005). One study found that CEO tenure is shorter in Swedish listed companies with a higher degree of internationalization (Oxelheim & Randøy, 2005)

2.4.2 FIRM SIZE
Several US-based studies highlights the increase in stock market capitalization as the explanation for growth in CEO compensation, for instance they mean that the 600% increase in CEO pay in US firms between 1980 and 2003 can be explained by the 600% increase in market capitalization of firms. They produce evidence showing that the increase in overall pay is related to a more wide-spread use of option-based compensation see e.g.(L. Bebchuk & Grinstein, 2005; Frydman & Jenter, 2010; Tosi, Werner, Katz, & Gomez-Mejia, 2000). This may also be seen on individual company level, larger companies may also be willing to pay more to get the right competence of the CEO. Several studies report that to be the case also in Sweden with findings of
positive relationships between firm size, measured in different ways, and compensation (Askmark & Holmbom, 2013; Grahn & Högfeldt, 2010; Mattson & Nordahl, 2010; Palmberg, 2009; Randøy & Nielsen, 2002). These findings have been criticized as due to multicollinearity between firm size and firm profits it is uncertain if company performance or size is the dependent variable (Oxelheim & Wihlborg, 2008).

2.4.3 SHAREHOLDER MONITORING
According to Agency Theory performance sensitive compensation will account for a smaller share of total compensation in firms where alignment of interests is attended to more by other forms of control such as monitoring. In firms with controlling shareholders this ought to be the case. Controlling shareholders is often present in Swedish listed companies. That would According to Agency Theory therefore result in lower incentive-based compensation such as bonuses and stock & options grants (Michael C Jensen et al., 2004).

Ownership concentration has found to have no or negative correlations with CEO-compensation (Oxelheim & Randøy, 2005; Oxelheim & Wihlborg, 2008; Randøy & Nielsen, 2002). Family control and ownership concentration have been found to reduce CEO total compensation (Hansson & Sandquist, 2011; Palmberg, 2009) The companies without any controlling shareholder have been found to award highest compensation (Håkansta et al., 2011)

When controlling shareholders have small cash-flow rights this might instead imply they have lower incentives to control their agents. Sweden allows for voting concentration with dual-class shares. These incentives should be absent especially in lower levels of pyramidal structures, shifting the agent-principal to controlling/non-controlling shareholders. Multiple-class shares have been found to be positively related to total compensation (Palmberg, 2009). This is somewhat confirmed by findings that the lower level companies in pyramidal structures has been shown to have a higher level of total compensation than those above in the pyramid, but only if the pyramids are family controlled (Antonsson, 2011).

Institutional investors are often noted as good monitors. Khan et al. (2005) found that institutional ownership showed a negative correlation to total compensation in the US. A negative relationship between total compensation and institutional ownership has been found in several studies (Grahn & Högfeldt, 2010; Khalatyan & Jouri, 2010; Mattson & Nordahl, 2010) Findings that contradicts this exist (Gustafsson & Norin, 2009). Foreign institutional investors have been found to positively correlate to total compensation (Abrahamson & De Ridder, 2010; Mattson & Nordahl, 2010)

2.4.4 MANAGERIAL POWER IN SWEDEN
Sweden with a high degree of controlling owners and a high degree of independent directors would according to the Managerial Power theory lead to CEOs being unable to extract rents from shareholders, or at least decrease that possibility.
Sweden being a country with a medium notation for investor protection rights on the rule of law index La Porta et al. (1998) on most accounts leading to on average powerful CEOs as of the Managerial Power Theory. Van Essen et. al, (2013) going through 210 US-based studies observed that most often where CEOs are expected to be powerful and have influence over the compensation contract negotiation, they receive significantly higher levels of total cash and total compensation. In contrast, where boards are expected to have more power, CEOs receive lower total cash and total compensation. Compensation in the form of stocks & options have been found to be more frequently used in countries with a strong number and strong protection of shareholder’s rights in the rule of law index or have English common-law legal origins (Bryan et al., 2006).

The possible rent extracting of CEOs may be shown in bonuses having no relation to performance. When it comes to the awarding performance sensitive compensation, variable compensation and stock & options grants, the connection to predetermined performance targets are wildly debated. The use of financial performance measures (“FPMs”) has suffered criticism. They are typically set on at most a yearly basis, thus allegedly providing executives with a short-term focus that may not be in line with increased shareholder value. Further FPMs may be manipulated through earnings management. Powerful CEOs are suggested to be able to twist these their own way (Ibrahim & Lloyd, 2011, Michael C Jensen et al., 2004; Oxelheim & Wihlborg, 2008).

Some observers flag for the element of randomness and uncertainty in performance sensitive compensation and link this to the conditions out of executive’s control, such as currency exchange rates and other macro-economic factors. The compensation might be awarded by the cause of luck rather than performance (Bebchuk, Grinstein & Peyer, 2010; Chiu, Oxelheim, Wihlborg & Zhang, 2011)

In Sweden negative, no, or a very small correlation between compensation (both in total and as bonuses) and firm performance (as measured in a variety of ways) have been observed (Grahn & Högfeldt, 2010; Lejdelin & Lindén, 2008; Mattson & Nordahl, 2010; Sandström & Wernhoff, 2009; Tariq, 2010)

Prevalence of perks and other benefits have been recognized to be a signal of weak corporate governance (Frydman & Jenter, 2010). The share of pension in total compensation might tell on powerful CEOs extracting rents (L. A. Bebchuk & Fried, 2004; Sundaram & Yermack, 2007). In Sweden there are findings that suggest that the share and level of pension compensation increases with CEO age (Askmark & Holmbom, 2013).

2.4.5 PEER BENCHMARKING
Another theoretical explanation to CEO compensation treated in earlier research is peer benchmarking. The increased disclosure in the US has been shown to increase compensation peer benchmarking. It seems common to benchmark CEO
compensation at or above the median of peer CEOs, leading to an upward spiral of compensation (Shin, 2013). The actors involved in the peer benchmarking group are often the compensation committee, not seldom with the assistance of compensation consultants. With a considerable risk, due to the influence of powerful CEOs, of manipulation concerning the sample of peers used in comparisons an ever upward spiral of executive pay and increasing agency costs may be the result (L. A. Bebchuk & Fried, 2006a, 2006b; Elson & Ferrere, 2012; Faulkender & Yang, 2010, 2012; Hermalin & Weisbach, 2012; Murphy & Sandino, 2010). Collin and Gustafsson (2012) find that the use of compensation committees in Sweden is positively correlated with both level of total compensation and the propensity to use options. They offer the explanation that as with all organizational units, when in place they start to produce actions in order to create legitimacy, which probably imply advanced compensations schemes, including options. Thus, the reason for the correlation could be purely symbolic. There is one qualitative study that finds that compensation consultants are widely used in Swedish listed companies and that the use of peer benchmarking is extensive, with selection of peers mainly conducted in Sweden but also throughout all of Scandinavia (Ehne & Lundberg, 2012).

2.4.6 SWEDISH CULTURAL AND SOCIETAL FEATURES
Taking note of societal, cultural and traditional features of Sweden Institutional Theory interplaying with Managerial Power would imply a somewhat other CEO compensation. Growing internationalization would according to the Institutional Theory have a more limited effect, still holding on to historical values and traditions of Swedish society (J. A. Otten, 2007; J. Otten & Heugens, 2007; Van Essen et al., 2012). Sweden is often looked upon as an egalitarian society, with features as the Swedish Social Democratic Party’s historical predominance in politics, leading a high tax regime and not least “Jante-lagen”. Swedish labour organizations have a “smooth history” with company executives, seen in the few strikes and also in “the Swedish Model” of labour law with collective agreements between employers and employees. The right for employees to representation on the board of directors thus labour organizations have a close relationship to the board (Henrekson & Jakobsson, 2012).

2.5 SUMMARY OF THEORIES
Agency Theory views CEO compensation as the outcome of arm’s length bargaining with optimal aligning of interests. Performance sensitive compensation is dependent on the level of presence on other interest-aligning factors, such as monitoring. More monitoring predicts lower share of total compensation being performance sensitive.

Managerial Power Theory views CEO compensation as the outcome of different bargaining power, determined by market powers, of CEOs vis-à-vis directors. Some more successful in negotiations some less, explaining differences in compensation practises, such as variable compensation, having varying sensitivity to firm performance.
Institutional view of Managerial Power sees executive compensation as the outcome of bargaining power but adds country specifics as political, social, and cultural factors to the bargaining power of CEOs and effectiveness of corporate governance mechanisms.
3 METHODOLOGY

Our work is based upon a quantitative survey of secondary data (Bryman & Bell, 2007). Trost and Hultåker (2007) write that the quantitative approach is often perceived as a clear method that provides more accurate and easily interpretable data. They argue that the quantitative methods are often used as it traditionally gives a result, which is considered more accurate than those based on a qualitative method. A quantitative approach is also the most prominent in earlier research on Swedish CEO Compensation (see e.g. Fernandes et al., 2012; Oxelheim & Randøy, 2005; Palmberg, 2009). To make comparisons possible we follow suit.

We make an overview over the CEO compensation structure using a sample of 119 companies listed on Nasdaq OMX Stockholm. Our sample consists of all the 59 companies listed on Large Cap, 30 companies from Mid Cap and 30 companies from Small Cap. The criteria for the different Caps are as follows, for a listing on Large Cap the company has to have a market capitalization equal to, or more than one (1) billion Euros, Mid Cap companies has to have a market capitalization between €150 million and €1 billion and for Small Cap companies the market capitalization needs to be less than €150 million (NasdaqOMX, 2013). With this sample we will be able to display any differences in compensation practices in Sweden with regards to market capitalization. After discussions with our supervisor Zia Mansouri a sample of 30 companies was deemed to give statistically viable results. The selection of companies on Mid Cap and Small Cap has been made randomly but with the criteria to cover all different industry sectors.

We choose to look at just the CEO as that commonly is the most prominent person of a company. The compensation for top executives other than the CEO is also accounted for in the annual reports, but in a lump sum and due to the limited possibilities of finding out the levels of and organizational peculiarities of every other top executive we abstain from doing so.

3.1 COLLECTION OF DATA

We primarily use secondary data such as companies annual financial reports, published research papers, surveys etc. (Eriksson & Wiedersheim-Paul, 2011).

The sample is in so far possible accounting for at least one observation from each industry sector at the three lists; Basic Materials, Consumer Goods, Consumer Services, Financial, Health Care, Industrial, Oil & Gas, Technology.

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6 We are aware that there are other Swedish stock exchanges but we presume the differences between Nasdaq OMX Stockholm and the other stock exchanges to be insignificant when it comes to compensation practices. There are also possibilities for a Swedish registered company to list itself exclusively on foreign stock exchanges, as well as the reverse for foreign companies. But we conclude that the majority of Swedish companies with publicly traded shares are listed on a Swedish stock exchange and therefore our sample is illustrative for Swedish CEO compensation practices.
Our primary sources of data are the annual reports of the studied Swedish listed companies with the disclosed compensation for the fiscal year 2012 and the other financial information we use. The data is gathered online from the respective companies’ webpages.

To tie our findings to theory we mix theoretical research and article reviews with empirical works, especially concerning Sweden, trying to retrieve and present a balanced picture of CEO compensation and executive compensation. We use reputed databases accessed via Gothenburg University Library to do that, inter alia Business Source Premier, Science Direct, Social Science Research Network(SSRN), Scandinavian working papers in Business Administration, - Economics(S-WoBA, S-WoPEC). Student theses handling the subject matter have we found through www.uppsatser.se and www.diva-portal.org. Entered search queries have been many, amongst: executive compensation, executive remuneration, executive pay, CEO compensation, VD-ersättning, ersättning till ledande befattningshavare, VD-lön. This has made certain that the theories are current and that the subject itself is not being researched at the moment. We have also been in contact with Joakim Bång and Daniel Waldenström to secure the value of our research.

3.2 DATA ANALYSIS

We follow suit with earlier research on CEO Compensation and from our collected data we divide compensation into five different components or parts, listed below(Bång & Waldenström, 2009). This is the same subdivision used for the mandatory disclosure of executive compensation in Swedish listed companies. It is also a widespread approach in earlier studies (Bryan et al., 2006; Fernandes et al., 2012; Håkansta, Lindholm, & Gårdängen, 2011; Mattson & Nordahl, 2010)

I. Fixed salary
The fixed salary, also referred to as fixed pay or base salary, is the compensation the executive receives independently of the company’s performance, such as financial results or market capitalization (Bång & Waldenström, 2009).

II. Variable compensation
The variable compensation is usually an extra cash pay-out to the executive on an annual basis. Another widespread label to it is bonus. Typically it is contingent on reaching predetermined goals. The goals set vary a lot but may be divided into two main categories of more or less strategic targets. They are firstly financial performance measures (“FPMs”), such as earnings per share, sales growth, revenues, return on stockholders’ equity and other accounting-related measures. And secondly variable compensation may as well be contingent on non-financial performance measurements (“NFPMs”), such as customer satisfaction, product quality improvement, workforce development etc. (Ibrahim & Lloyd, 2011).

Some companies on the other hand use a subjective form of evaluation for the variable compensation, in those cases the size is normally decided by the board of
directors (Bång & Waldenström, 2009). Variable compensation paid in cash is to be subject to predetermined limits regarding the total outcome (Swedish Corporate Governance Code, 9.5).

III. Stocks and Options – Equity based compensation
Many companies offer long-term incentives to executives in form of options or stocks in the company. It is considered long-term since they usually come with a restriction to be sold within a numbers of years, often more than two (2). This type of compensation is in many cases, the variable compensation alike, based on predetermined goals for the company (Bång & Waldenström, 2009).

This sort of component is to be designed with the aim of achieving increased alignment between the interests of the participating individual and the company’s shareholders (Swedish Corporate Governance Code, 9.8). The long-term emphasis has been further chiselled out after a regulatory change in 2010. This type of compensation is now not to be realized until three (3) years have passed from the receiving year (Swedish Corporate Governance Code, 9.8).

IV. Other Benefits
The fourth component of the total compensation that many executives receive we choose to address as other benefits. These are distinguished as non-cash compensations, even if they may be measured in monetary terms. They include, but are not limited to, perquisites such as a company car, paid accommodation, education, health insurance, pension and wealth management advice and so on (Bång & Waldenström, 2009).

V. Pension
The last part of the total compensation is the pension. CEOs often sign pension insurances or engage in other retirement savings procedures, and the company pays for this. It is often a substantial part since the CEO commonly is given the right to an early retirement age, at the age of 60 instead of 65, and a part of his or her salary for the rest of her life. It is not rare that the CEO has the right to get the pension paid out straight away as a lump sum (Bång & Waldenström, 2009).

We use Microsoft Excel to calculate a mean and a median absolute value as well as a percentage number of total compensation and of its components, mentioned above. The percentage calculation is mainly done to determine how the total compensation is constructed with its components to be comparable over time and see if the weights match earlier studies’ results. This is done including and excluding pension to better match earlier research results. The correlations have been calculated in Microsoft Excel using the correlation-formula and the input originates from the annual reports. Mean and medians in both absolute values and percentage numbers have been reported before, but not always as comprehensive as in our study (Abrahamson & DeRidder, 2010; Fernandes et al., 2012; Oxelheim & Wihlborg, 2008; Palmberg, 2009; Randøy & Nielsen, 2002)
Some companies have a different accounting currency than SEK in their annual reports. For those companies we have calculated these figures into SEK using the rates as of January 1st 2012 provided by Reuters Financial Data (ReutersFinancialData, 2013). For a few number companies the Stocks & Options are not accounted for in the annual reports in present values, we have calculated this using the Black & Scholes model for option valuation.

Our study is set out to be more comprehensive when it comes to displaying the compensation for the CEOs of Swedish listed companies. We try to present our results in a way so that they are easily understood in comparison with earlier research results. Comparability to earlier research is partially an issue due to the fact that earlier studies have not been as comprehensive as ours, and that only parts of the sort of results we have been getting are presented in these studies. The comparisons are made with those results that can be compared with. We fill out earlier research with our own calculations when possible. We do not adjust for inflation when comparing our results with earlier researches.

### 3.3 RESEARCH QUALITY - RELIABILITY AND VALIDITY

There are many different factors to take into consideration concerning the trustworthiness of our results and conclusions.

The quality and trustworthiness of our input data the information taken from annual reports and corporate governance reports can be considered high on both accounts. All reports printed in Swedish or English, with Swedish being the native language of the authors the risk of misinterpretation is considered as extremely minor (Bryman & Bell, 2007).

As to the earlier empirical research on compensation structure we study, the quality and trustworthiness are considered high, especially the works published in peer reviewed journals, but there may be reasons to be vigilant due to differences in sample sizes and selections, as well as included components and what is included in each component (Bryman & Bell, 2007).

We consider the prospects of replicating our study as very good, thus having a high reliability. This especially applies to our more descriptive research due to the fact that the data for compensation of executives are publicly disclosed (Bryman & Bell, 2007). We make a reservation for printing errors in the annual reports.

Our study can be generalized in a number of ways and therefore applied in other studies (Bryman & Bell, 2007). We consider our research to have a high validity based on the two factors that; one (1) from the methodology we use we receive a clear answer to our research question, and that; two (2) the data input in the research is of high quality and trustworthy (Bryman & Bell, 2007).

We gather that our result provides a good picture of CEO compensation practices in companies listed on Nasdaq OMX Stockholm. Our randomly selected companies with
lower market capitalization is used to contrast Large Cap companies but most probably also bear witness of the practices in smaller companies.

When it comes to CEO compensation structures in companies listed on other Swedish stock exchanges and market places we find no reason to believe that our presented picture of NasdaqOMX listed companies differs from the pictures there.

Concerning our study’s value for compensation levels and structure in different industry sectors, the overall picture and for large cap we find good. We do not take account of which sectors have been excelling on the stock market; and the lack of a more longitudinal view therefore lower the validity for different industry sectors. Our sample of different industry sectors in Mid and Small Cap are too small to give an accurate picture but may add to the general picture (Bryman & Bell, 2007).

What it is in detail determining executive compensation structures is as mentioned above a matter of some dispute. We believe though that the validity of our results for describing CEO compensation, and executive compensation structures as a whole, in other countries is dependent on their similarity to Swedish corporate governance practice and Swedish business culture as well as cultural values in general. One such country sharing great similarities with Sweden is Norway (Randøy & Nielsen, 2002). Our view is that Denmark and Finland also seems to be good candidates. On the other hand may our results’ validity be questioned for countries with systems differing from that of the Swedish corporate environment.
3.4 ANALYSING MODEL

There is no comprehensive picture of Swedish CEO compensation. Many studies return results of only parts of compensation, others yet use inexplicable sample sizes, and all use dated figures. We will, in the manner the scheme below shows, connect the dots to return a comprehensive picture of CEO compensation.

Scheme 1 - Breakdown of compensation and working procedures.

As shown in scheme one (1) we have chosen to break down the compensational structure for CEO’s on all three listed exchange. Later on we have used these numbers to create charts presented later on in this thesis and with these empirical findings we have drawn conclusions together with earlier studies.

For the analysis part we have used existing theories such as the Agency theory Managerial Power theory and Institutional theory.
4 EMPIRICAL RESULTS

Under this chapter we present our results that have been concluded from the data analysis made in Microsoft Office Excel. The results have been divided between the three (3) different lists.

4.1 OMXS LARGE CAP

The total average compensation for large cap on OMXS is listed in Table 1. For 2012 there was 59 different companies listed on the large cap OMXS and the criterion is that the enterprise value for the company must exceed one (1) billion euros.

Table 1 - Mean compensation in year 2012 for OMXS Large Cap. Source: Andersson & Suurküla (2013).

As Table 1 is showing above the mean total compensation for CEOs on OMXS Large Cap is summarized to 14 170 113,00 SEK. The top fixed salary was 17 460 000,00 SEK and the lowest was 1 342 000,00 SEK, this gives a spread for Fixed salary at 16 118 000,00 SEK for the 59 companies listed on Large Cap. The Variable compensation top was 23 547 150.00 SEK and lowest compensation was 47 000.00 SEK. Of the 59 companies studied, 13 companies did not pay out any variable compensation for the fiscal year of 2012. The top compensation in the Other benefits category was 3 062 116.00 SEK and the lowest was 26 576.00 SEK. Ten (10) companies did not pay out any benefits for their CEOs during this year. The Stock & Options category had a highest notation at 29 217 465.00 SEK for 2012, and the smallest was 67 552.00 SEK. Important to remember is that this type of compensation in most companies are not available to cash in for the CEO until a period of time, often 2-3 years, has passed by without any declines in profitability or other

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7 To see listed companies on OMXS Large Cap, see appendix A.
8 To see a scatter chart over the different compensation components on OMXS Large Cap, see appendix D.
performance targets set up by the compensation committee (or board of directors when there is none). 37 companies did not pay out any compensation that can be categorized in the Stocks & Options category. The top deposition for pension was 16 241 000.00 SEK and the smallest was 400 000.00 SEK. One (1) company did not declare their pension deposition as their CEO was hired as a consultant.

The distribution between the different components in the total compensation is show in Table 2.

Table 2 - Mean distribution of total compensation on OMXS Large Cap in year 2012. Source: Andersson & Suurküla (2013).

The structure of the total compensation is graphically shown in Table 2 above. A remarkable notation to this structure is that of the total compensation, barely half is made out of the fixed salary. Another notation that can be made is that the pension adds up to twenty-one (21) percent of the total compensation; important to remember is that pension only is based on the fixed salary for the Swedish pension system and if you calculate this share, the pension ends up around 44.5 percent. Well above the legal requirement of 18.5 percent for a regular worker.

<table>
<thead>
<tr>
<th>Type</th>
<th>Median compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Salary</td>
<td>7 879 492.00 SEK</td>
</tr>
<tr>
<td>Variable Compensation</td>
<td>2 100 000.00 SEK</td>
</tr>
<tr>
<td>Other Benefits</td>
<td>135 000.00 SEK</td>
</tr>
<tr>
<td>Stocks &amp; Options</td>
<td>0.00 SEK</td>
</tr>
<tr>
<td>Pension</td>
<td>2 700 000.00 SEK</td>
</tr>
</tbody>
</table>

Table 3 - Median compensation of OMXS Large Cap in year 2012. Source: Andersson & Suurküla (2013)
A more justified view of the compensation package can be visualized by the median compensation figures. The Fixed Salary and the Variable Compensation do not differ significantly from the average. The Stock & Options category equals to 0 SEK due to more than half of the companies did not use this option when constructing the compensational package for their CEOs in 2012. Of the 59 CEOs studied on Large Cap Stock & Options were received by 22 CEOs (37%) and 46 CEOs (78%) received bonuses. In Appendix E Scatter charts can be found to see the spread of the different components.

4.2 OMXS MID CAP

On OMXS Mid Cap there was 67 different companies listed and in our calculations we have taken a random sample of thirty (30) of these. The criterion for companies listed on Mid Cap is that the enterprise value lies between 150 million and one (1) billion euros.

Table 4 - Mean compensation in year 2012 for OMXS Mid Cap. Source: Andersson & Suurküla (2013).

In comparison to the figures on Large Cap, the mean total compensation in our sample, for CEOs in companies listed on OMXS Mid Cap is 6 375 698.04 SEK. This is a bit under half of what CEOs on Large Cap earned in 2012.

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9 To see listed and selected companies on OMXS Mid Cap, see appendix B.
The distribution between the different components in the total CEO compensation on Mid Cap is shown in Table 5.

![Distribution of Compensation - Mid Cap Year 2012](image)

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed salary</td>
<td>57%</td>
</tr>
<tr>
<td>Variable compensation</td>
<td>17%</td>
</tr>
<tr>
<td>Pension</td>
<td>22%</td>
</tr>
<tr>
<td>Stocks &amp; Options</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
</tr>
</tbody>
</table>

Table 5 - Distribution of total compensation in year 2012 on OMXS Mid Cap. Source: Andersson & Suurküla (2013).

The structure of the total compensation on Mid Cap is shown in Table 5. A notation that can be made out of this is the differences in the Stocks & Options category. For the CEOs of the companies listed on the mid cap list, only three (3) percent of their total compensation is made out of stocks & options, this in comparison to ten (10) percent on the Large Cap list. A bigger proportion of the compensation is here made out of the fixed salary and variable compensation. The share of pension, if calculated only in proportion to the fixed salary, adds up to around thirty-one (31) percent.

Of the 30 CEOs studied on Mid Cap stocks & options were received by 8 CEOs (27%) and 25 CEOs (83%) received bonuses.
4.3 OMXS SMALL CAP
On OMXS Small Cap there was 125 different companies listed and in our calculations we have taken a random sample of 30 companies\textsuperscript{10}. The criterion for companies listed on this exchange is that the enterprise value is less than 150 million euros.

The mean total compensation for CEOs on OMXS Small Cap is 3 265 997,28 SEK. The top fixed salary in our sample is 3 969 000.00 SEK and the lowest was 1 111 000.00 SEK which gives us a spread in fixed salary of 2 858 000.00 SEK.

The distribution between the different components in the total CEO compensation on Small Cap is show in Table 7.

\begin{table}[h]
\centering
\caption{Distribution of compensation in year 2012 on OMXS Small Cap. Source: Andersson & Suurküla (2013).}
\begin{tabular}{|c|c|c|c|c|}
\hline
Component & Mean & SD & Min & Max \\
\hline
Fixed salary & 2 215 124,14 & 2 061 000,00 & 0,00 & 5 000 000,00 \\
Variable compensation & 361 448,28 & 261 000,00 & 0,00 & 1 000 000,00 \\
Other & 42 106,41 & 36 000,00 & 0,00 & 2 000 000,00 \\
Stocks & Options & 70 586,21 & 60 000,00 & 2 500 000,00 \\
Pension & 576 732,24 & 500 000,00 & 0,00 & 2 000 000,00 \\
\hline
\end{tabular}
\end{table}

\textsuperscript{10}To see listed and selected companies on OMXS Small Cap, see appendix C.
The compensation structure on Small Cap, in relation to the Large and Mid Cap, is much more focused on the Fixed Salary component; nearly seventy (70) percent of the total compensation is made up by Fixed Salary. We can also see that the Stocks & Options category has decreased even more in comparison to Large Cap and is now down to just under two (2) percent. The Variable Compensation has been halved from twenty-two (22) to a bit over eleven (11) percent. The share of Pension, if calculated only in proportion to the Fixed Salary, adds up to around twenty-one (21) percent. Just a bit over the legal requirement of 18.5 percent.

Of the 30 CEOs studied on Small Cap stocks & options were received by 2 CEOs (7%) and 15 CEOs (50%) received bonuses.

4.4 DISTRIBUTION OF COMPENSATION WITHOUT PENSION – LARGE CAP
To make our empirical data more comparable with earlier research in the area we decided to construct a chart where the total distribution is shown without pension. This is primarily done because in earlier studies the pension part has not always been included in the data (see e.g. Fernandes et.al, 2012).

![Distribution of Compensation without Pension](chart)

Table 8 - Distribution of compensation without Pension, Large Cap OMXS. Source: Andersson & Suurkülä (2013).

In comparison to the chart showing compensation with pension, we can now see that the fixed salary makes up more than half the total compensation. The variable compensation has risen and now adds up to a quarter of the total compensation.

4.5 CORRELATION BETWEEN COMPONENTS AND KEY FIGURES – LARGE CAP
In Table 9 we have calculated the correlation between the different compensational components and three (3) different key factors; Turnover in absolute values, Gross profit in absolute values and the Net profit margin in percent.
As predicted we can see a positive correlation between the turnover and all five (5) different components. In other words, the bigger the total turnover the company has, the bigger the total compensation for the CEO will be. Financial performance should on the other hand be calculated in percent to make the different companies comparable. But as we can see in the row at the bottom of the table, all five (5) different components show a negative correlation to the net profit margin. Even though it is not a big negative correlation, it is not positive as one would predict.

Before we made the calculation se cancelled out the firms that sometimes has profit margins, or loss, up to 5 times their turnover, due to accounting regulations for the Swedish companies. Mainly the investment firms shows this behaviour in the annual reports because the revaluation of their assets between different years.

**4.6 COMPENSATION COMPONENTS IN DIFFERENT INDUSTRY SECTORS – LARGE CAP**

On Nasdaq OMXS Large cap there are 59 companies divided between 9 sectors by the stock exchange. Each and every sector then uses the different components in different extent, presented in Table 10.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Salary</th>
<th>Bonus</th>
<th>Other perks</th>
<th>Stocks &amp; Options</th>
<th>Pension</th>
<th>Total compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic materials</td>
<td>100,0%</td>
<td>83,3%</td>
<td>83,33%</td>
<td>33,3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Goods</td>
<td>100,0%</td>
<td>80,0%</td>
<td>100,00%</td>
<td>20,0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Serv.</td>
<td>100,0%</td>
<td>100,0%</td>
<td>75,00%</td>
<td>0,0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td>100,0%</td>
<td>50,0%</td>
<td>87,50%</td>
<td>37,5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthcare</td>
<td>100,0%</td>
<td>100,0%</td>
<td>100,00%</td>
<td>25,0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial</td>
<td>100,0%</td>
<td>81,3%</td>
<td>81,25%</td>
<td>50,0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oil &amp; Gas</td>
<td>100,0%</td>
<td>100,0%</td>
<td>0,00%</td>
<td>50,0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>100,0%</td>
<td>100,0%</td>
<td>66,67%</td>
<td>66,7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>100,0%</td>
<td>100,0%</td>
<td>100,00%</td>
<td>33,3%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Average        | 100,0% | 88,3% | 77,08%      | 35,09%           |         | **Total: 59**       |

Table 10 - Usage of compensational components between 9 sectors. Source: Andersson & Suurkula (2013).
As shown in Table 10, we have calculated the usage of the different compensational components for all nine (9) different sectors on OMXS Large Cap. For example we can see that in the Healthcare sector, all companies use the fixed salary, bonuses and other benefits as components but only twenty-five (25) percent of the companies use Stocks & Options in their total executive compensation.

The colons show if the different sector is in alignment (yellow) with the average for the total Large Cap exchange, or if the sector is above (green) or under (red) the average.

The observations for all nine sectors are a bit weak we therefore add to this by dividing the companies at Large Cap in two sectors. See below table 11.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Salary</th>
<th>Bonus</th>
<th>Other Benefits</th>
<th>Stocks &amp; Options</th>
<th>Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services</td>
<td>100%</td>
<td>78%</td>
<td>91%</td>
<td>28%</td>
<td>32</td>
</tr>
<tr>
<td>Industrial</td>
<td>100%</td>
<td>85%</td>
<td>74%</td>
<td>48%</td>
<td>27</td>
</tr>
</tbody>
</table>

Table 11 – Usage of compensational components between 2 sectors. Source: Andersson & Suurkulla (2013)

In what we choose to call “Services Sector” we include what NasdaqOMX divide into the sectors: Financial, Healthcare, Communication, Consumer Goods and Consumer services, making up a total of 32 CEOs.

In what we choose to call “Industrial Sector” we include what NasdaqOMX divide into the sectors: Industrial, Oil & Gas, Technology and Basic Materials, making up a total of 27 CEOs. These companies have a more manufacturing production profile than the “Services Sector”.

We see that stock & options are more widely used in the Industrial Sector. Almost half (13) of the 27 companies, awarded remuneration in stock & options. This in comparison to the Services Sector where 9 out of 32 companies, 28%, compensated their CEOs with stocks & options. Other benefits are used in a higher extent in the Services companies(91% v. 74%). Bonuses are pretty equal.
5 ANALYSIS

CEO compensation has been widely discussed in the press and from an academic point of view for many years now. The development might be troubling from an investor confidence perspective.

5.1 THE DEVELOPMENT OF CEO COMPENSATION

Our study confirms earlier research that total CEO compensation is experiencing an upward trend, showing no signs of weakening, despite the negative press after the financial crisis. When comparing our research and earlier research of Oxelheim et. al (2008) the mean total compensation for a CEO on OMXS Large Cap has increased by approximately 120% since 2002. This development is very strongly correlating to the increase in total market capitalization of all Swedish stock exchanges during the same period of time (SCB, 2013). Something that several previous international and Swedish studies have found (Tosi et al., 2000). Earlier research, both on Swedish conditions and on an international level, has suggested that market capitalization has an impact on total compensation for the CEO. As our charts show under the empirical results, this is confirmed once again by our study.

The average share of other benefits, 2 percent, in the total compensation awarded we account for compared to the findings of Fernandes et. al (2012) has sunk decisively since 2006. We think this derives from Fernandes et al have included pension in their other benefits (there is no mentioning of this in their study) explaining no significant difference of other benefits. Prevalence of perks and other benefits have been recognized to be a signal of weak corporate governance (Frydman & Jenter, 2010). This may be explained by Managerial Power as CEOs having the bargaining power to be granted benefits. If the 2% share of total compensation other benefits accounts for in Sweden is high or low in an international comparison is hard to know since earlier reportings are very limited. For the CEOs of Mid and Small Cap companies, we can see that the Other benefits component is much smaller in absolute values, for Mid Cap these figures are just below on third of the same on Large Cap, and on Small Cap it is one third again of Mid Cap, complying with the institutional theory.

5.2 THE CEO COMPENSATIONAL STRUCTURE

A possible explanation is an increase in the use of performance sensitive components. However, this does not account for recent years increase. The use of options has not increased since 2007 as to our findings compared to the findings of Collin, et al (2012). That would also be contrary to international studies showing that the increase in total compensation is related to a more widespread use of option-based compensation (Bebchuk & Grinstein, 2005). The stagnation of stock & options compensation in Large Cap listed companies might be due to the new rules in the Swedish Code of Corporate Governance Code or a reaction to the negative perception of Stocks & Options by the general public. The increase due to performance sensitive pay is slightly contradicted by several studies showing that performance has a marginable impact on compensation in Sweden. We offer the explanation that board
of directors simply has raised the compensation and rewarded CEOs for keeping share prices up, the profitability and gross profit high. These measures we find very well correlating with the total compensation.

Another possible explanation is increased peer benchmarking. Ehne & Lundberg (2012) found that compensation consultants are becoming a more frequent feature, not to say booming, in Sweden and that they very much engage in peer benchmarking. Findings in the US suggest that this connection is plausible (Shin, 2013; Faulkender & Yang, 2010, 2012; Hermalin & Weisbach, 2012; Murphy & Sandino, 2010). This is also confirmed in our comparison with earlier research by the median level of total compensation rising. Our own finding of the mean and median level being so close to each other when it comes to total compensation also leads in this direction. We do not see this development stopping with the increased disclosure of CEO compensation in the EU there is more easily accessible data for the selection of peer groups, also increasing the possibilities of tweaked peer groups.

Our findings of a widespread use of performance sensitive compensation, on average accounting for a large part of total compensation, contradicts Agency Theory that it is used instead of monitoring.

5.3 COMPENSATIONAL STRUCTURE, FINANCIAL KEYS AND CORRELATION

The results from our calculations confirm the results from earlier researches, (see e.g. Fernandes et.al, 2012), where CEOs total compensation rises with the enterprise value of the company, and that CEOs for bigger companies are regarded as more competent and skilled than those of smaller companies and therefore should be rewarded for this.

When looking at the CEO compensation in relation to Turnover, Gross Profit and Net Profit Margin our findings suggests that firstly, the greater the turnover is for a company, the greater the total compensation the CEO will be awarded. The same applies for gross profit. This may not come as a surprise for most observers due to the fact that for most companies, the greater the turnover, in absolute numbers, the greater the gross profit will be, in absolute numbers. The case of net profit margin is interesting. Our findings suggest that with greater profitability the lower total compensation is awarded to the CEO. Though this negative correlation is weak, this may imply that the gain in profitability comes from lower costs of CEO compensation. Again stressing that the correlation is weak this contradicts the usefulness of performance sensitive compensation propagated by the Agency Theory.

Our study suggests that the share of performance sensitive compensation, bonus and Stocks & Options, are a positively correlated to firm size. According to the Agency Theory performance sensitive compensation exists for a sole purpose, to align the interest of the principals (e.g. shareholders etc.) with the interests of the agents (e.g. CEOs, management etc.). A possible explanation to why the figures are so much higher on Large and Mid Cap is that the companies listed there are more
internationalized (more international investors, export sales, foreign board members). These companies are competing for investors on an international market where the variable compensation are used in further extent than what is normal in smaller Swedish listed companies with less internationalization. This is somewhat confirmed by findings of international ownership having a positive correlation with performance sensitive compensation, especially options (Hansson & Sandquist, 2011). The finding can also be explained that there is a labour market for CEOs, given that larger companies hire more competent/able CEOs. We think that at least others believe this, and that leaders of larger companies are more frequently coveted by companies from many different countries and the boards need to be competitive in their construction of compensational packages to keep their CEOs.

5.4 STRUCTURE IN DIFFERENT INDUSTRY SECTORS
As we can see in our empirical results the usage of variable compensation are prevalent in all the different sectors for OMXS Large Cap. The average CEOs total compensation is made out of twenty (20) percent variable compensation. On mid cap this figure has risen to twenty-two (22) percent for the companies we have chosen to study and for the sample we have studied on Small Cap, these numbers are down to eleven (11) percent. During 2012, almost all companies listed on the three (3) caps we studied provided good shareholder value, their enterprise value increased (NasdaqOMX, 2013). Why some companies, especially on Small Cap, but also partially on Mid Cap, did not pay out variable compensation we suspect is a consequence of these companies having less refined bonus systems. This can in our opinion be mostly explained by the labor market for CEOs, which is because these executives are not as coveted on the global market as those active on Large Cap. This in turns makes the usage of variable compensations and stocks and options programs less necessary from an investor point of view.

The differences between the different sectors listed on Large Cap are graphically showed earlier in the thesis. One of the more surprising results from these figures are that only fifty (50) percent of the companies in the financial sector uses variable compensation as a part of the total compensational package. One of the possible explanations for this is the Government Guarantee agreement, which many banks signed during the financial crisis. This agreement limited the use of variable compensation during a specific time period for executives in the financial firms (Riksbanken, 2011).

In the communication sector we can see that for all different components, the sectors is above average for the entire Large Cap Exchange. Even do the sample only consists three (3) companies, this also agrees with earlier researches for compensation (see eg Bång & Waldenström, 2009). In the Oil & Gas sector, our research shows that none of the companies are paying out compensation in the form of Other Benefits. This is mostly derived from the Anglo-American business culture where benefits are defrayed directly from the company instead of the CEO.
6 CONCLUSIONS

The main purpose for this thesis has been to study the executive compensation for CEOs of companies listed on the Stockholm Stock Exchange. The thesis is focused on the OMXS Large Cap but also includes samples of companies listed on OMXS Mid- and Small Cap.

The development of the total compensation for CEOs on OMXS Large Cap has increased about 120 percent from 2002, this development follows to a very high degree the increase of market capitalization that has taken place on OMXS Large Cap. This is something that is not often mentioned when criticizing the compensation for CEOs.

As the empirical result shows us, the CEOs of Large Cap has a significant higher total compensation in absolute numbers compared to those of Mid and Small Cap. Further on we can conclude that Variable Compensation component is used as a bigger proportion, of the total compensation, for the companies on Large Cap than those on Mid Cap, which in return uses the same in a bigger extent than companies on Small Cap. This reflects the theory of market of CEOs and the international ownership that is superior on Large Cap.

The Fixed Salary component gets a bigger piece of the pie as the enterprise value for the company decreases. For the Large Cap CEOs, the fixed salary makes out, on average, forty-seven (47) percent of the total compensation in relation to fifty-six (56) and sixty-eight (68) percent for the Mid Cap CEOs and Small Cap CEOs. One possible explanation for this is provided by the agency theory and the competition of CEOs.

Stock and Options program for executives are used in much higher extent for Large Cap than the other two lists. One reason for this could be the international competition of CEOs. As earlier presented, the CEOs for Large Cap companies are more likely to be coveted on the international market where Stock & Options are regularly used as incentives. The use of Stocks & options has not increased since 2007 as compared to the findings of Collin et. al. (2012).

We find that pension plans are a considerable part of the compensation. When it comes to all sizes of companies.

6.1 CONTRIBUTION TO PRACTICAL AND THEORETICAL RESEARCH

Our study confirms the view that level of total compensation is positively related to firm size; we think that larger companies may seek to employ better qualified and thereby better paid CEOs. It talks in direction of an international market for CEOs of companies listed at Large Cap, that they are compensated to stay. Important criteria’s for how the compensation is valued is the firm size, turnover and international
ownership, these factors can be explained by the Agency Theory and the Market for CEOs.

Overall we find that the best explanatory value to CEO compensation in Swedish listed companies seems to be a combination of all mentioned theories, to pick one the Institutional view of Managerial Power since the level of smaller companies still are a relatively low, but Agency Theory and the Market for CEOs have high explanatory value.

6.2 AVENUES FOR FUTURE RESEARCH

- Investigate if cross-listing on other stock exchanges has any significant impact on component structure.
- A study looking further into the predetermined goals used for variable compensation and stocks & options.
- Make a detailed study over which financial performance measures are used for determining if executives have reached predetermined goals.
- How many of the set predetermined goals that are actually reached (and if that may inflict upon other performances of the company).
- Explore what the share accounted for as other benefits are made up of.
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Giannetti, Mariassunta, & Metzger, Daniel. (2013). Compensation and Competition for Talent: Talent Scarcity or Incentives? *Available at SSRN.*


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42 (54)


SCB. (2013). Ägandet av aktier i bolag noterade på svensk marknadsplats (eng. Ownership of stock in companies listed a Swedish market place).


The Swedish Corporate Governance Code.


**APPENDICIES**

**APPENDIX A – COMPANIES LISTED ON OMXS LARGE CAP**

1. ABB Ltd
2. Alfa Laval AB
3. Alliance Oil Company Ltd. SDB
4. ASSA ABLOY AB
5. AstraZeneca PLC
6. Atlas Copco AB
7. Atrium Ljungberg AB
8. Axfood AB
9. Axis AB
10. BillerudKorsnäs AB
11. Boliden AB
12. Castellum AB
13. Electrolux, AB
14. Elekta AB
15. Ericsson, Telefonab. L M
16. Fabege AB
17. Getinge AB
18. Hakon Invest AB
19. Hennes & Mauritz AB, H & M
20. Hexagon AB
21. Holmen AB
22. Hufvudstaden AB
23. Husqvarna AB
24. Industrivärden, AB
25. Investor AB
26. Kinnevik, Investment AB
27. Latour, Investmentab.
28. Lundbergföretagen AB, L E
29. Lundin Mining Corporation SDB
30. Lundin Petroleum AB
31. Meda AB
32. Melker Schörling AB
33. Millicom International Cellular S.A. SDB
34. Modern Times Group MTG AB
35. NCC AB
36. NIBE Industrier AB
37. Nordea Bank AB
38. Oriflame Cosmetics S.A, SDB
39. Peab AB
40. Ratos AB
41. SAAB AB
42. Sandvik AB
43. SCANIA AB
44. Securitas AB
45. Skandinaviska Enskilda Banken
46. Skanska AB
47. SKF, AB
48. SSAB AB
49. Stora Enso Oyj
50. Svenska Cellulosa AB SCA
51. Svenska Handelsbanken
52. Swedbank AB
53. Swedish Match AB
54. Tele2 AB
55. TeliaSonera AB
56. Tieto Oyj
57. Trelleborg AB
58. Volvo, AB
59. Wallenstam AB
APPENDIX B – COMPANIES LISTED ON OMXS MID CAP

Companies listed on OMXS Mid Cap 2012. Companies in bolded letters part of the data sample.

<table>
<thead>
<tr>
<th></th>
<th>Company Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>HEXPOL AB</td>
</tr>
<tr>
<td>2.</td>
<td>Höganäs AB</td>
</tr>
<tr>
<td>3.</td>
<td>AarhusKarlshamn AB</td>
</tr>
<tr>
<td>4.</td>
<td>Black Earth Farming Ltd. SDB</td>
</tr>
<tr>
<td>5.</td>
<td>Cloetta AB</td>
</tr>
<tr>
<td>6.</td>
<td>Duni AB</td>
</tr>
<tr>
<td>7.</td>
<td>Fenix Outdoor AB</td>
</tr>
<tr>
<td>8.</td>
<td>Haldex AB</td>
</tr>
<tr>
<td>9.</td>
<td>Mekonomen AB</td>
</tr>
<tr>
<td>10.</td>
<td>New Wave Group AB</td>
</tr>
<tr>
<td>11.</td>
<td>Nobia AB</td>
</tr>
<tr>
<td>12.</td>
<td>Betsson AB</td>
</tr>
<tr>
<td>13.</td>
<td>Bilia AB</td>
</tr>
<tr>
<td>14.</td>
<td>Byggmax Group AB</td>
</tr>
<tr>
<td>15.</td>
<td>CDON Group AB</td>
</tr>
<tr>
<td>16.</td>
<td>Clas Ohlson AB</td>
</tr>
<tr>
<td>17.</td>
<td>Eniro AB</td>
</tr>
<tr>
<td>18.</td>
<td>KappAhl AB</td>
</tr>
<tr>
<td>19.</td>
<td>Net Entertainment NE AB</td>
</tr>
<tr>
<td>20.</td>
<td>Rezidor Hotel Group AB</td>
</tr>
<tr>
<td>21.</td>
<td>SAS AB</td>
</tr>
<tr>
<td>22.</td>
<td>SkiStar AB</td>
</tr>
<tr>
<td>23.</td>
<td>Swedol AB</td>
</tr>
<tr>
<td>24.</td>
<td>Unibet Group Plc</td>
</tr>
<tr>
<td>25.</td>
<td>Avanza Bank Holding AB</td>
</tr>
<tr>
<td>26.</td>
<td>Bure Equity AB</td>
</tr>
<tr>
<td>27.</td>
<td>Coren Property Group AB</td>
</tr>
<tr>
<td>28.</td>
<td>Diös Fastigheter AB</td>
</tr>
<tr>
<td>29.</td>
<td>East Capital Explorer AB</td>
</tr>
<tr>
<td>30.</td>
<td>Fast Partner AB</td>
</tr>
<tr>
<td>31.</td>
<td>Fastighets AB Balder</td>
</tr>
<tr>
<td>32.</td>
<td>Heba Fastighets AB</td>
</tr>
<tr>
<td>33.</td>
<td>Intrum Justitia AB</td>
</tr>
<tr>
<td>34.</td>
<td>JM AB</td>
</tr>
<tr>
<td>35.</td>
<td>Klövern AB</td>
</tr>
<tr>
<td>36.</td>
<td>Kungsleden AB</td>
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<tr>
<td>37.</td>
<td>Nordnet AB</td>
</tr>
<tr>
<td>38.</td>
<td>Sagax AB</td>
</tr>
<tr>
<td>39.</td>
<td>Växjöborgs Fastigheter AB</td>
</tr>
<tr>
<td>40.</td>
<td>Vostok Nafta Investment Ltd, SDB</td>
</tr>
<tr>
<td>41.</td>
<td>Öresund, Investment AB</td>
</tr>
<tr>
<td>42.</td>
<td>Active Biotech AB</td>
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<tr>
<td>43.</td>
<td>Aerocrine AB</td>
</tr>
<tr>
<td>44.</td>
<td>BioGaia AB</td>
</tr>
<tr>
<td>45.</td>
<td>Medivir AB</td>
</tr>
<tr>
<td>46.</td>
<td>SECTRA AB</td>
</tr>
<tr>
<td>47.</td>
<td>Swedish Orphan Biovitrum AB</td>
</tr>
<tr>
<td>48.</td>
<td>Addtech AB</td>
</tr>
<tr>
<td>49.</td>
<td>B&amp;B TOOLS AB</td>
</tr>
<tr>
<td>50.</td>
<td>Beijer AB, G &amp; L</td>
</tr>
<tr>
<td>51.</td>
<td>Concentric AB</td>
</tr>
<tr>
<td>52.</td>
<td>Fagerhult, AB</td>
</tr>
<tr>
<td>53.</td>
<td>Gunnebo AB</td>
</tr>
<tr>
<td>54.</td>
<td>Industrade AB</td>
</tr>
<tr>
<td>55.</td>
<td>Lindab International AB</td>
</tr>
<tr>
<td>56.</td>
<td>Loomis AB</td>
</tr>
</tbody>
</table>
57. Nolato AB
58. Proffice AB
59. SWECO AB
60. Systemair AB
61. ÅF AB
62. Black Pearl Resources Inc
63. EnQuest plc
64. Tethys Oil AB
65. HiQ International AB
66. Industrial & Financial Systems AB
67. Transmode Holding AB
APPENDIX C – COMPANIES LISTED ON OMXS SMALL CAP

Companies listed on OMXS Small Cap 2012. Companies in bolded letters part of the data sample.

1. Arctic Paper S.A.
2. BE Group AB
3. Bergs Timber AB
4. Endomines AB
5. Nordic Mines AB
6. ProfilGruppen AB
7. Rotteros AB
8. ACAP Invest AB
9. Björn Borg AB
10. FinnvedenBuliten AB
11. KABE AB
12. Lammhults Design Group AB
13. Midsona AB
14. Odd Molly International AB
15. Opcon AB
16. Trigon Agri A/S
17. VBG GROUP AB
18. Electra Gruppen AB
19. Hemtex AB
20. MQ Holding AB
21. Nordic Service Partners Holding AB
22. RNB RETAIL AND BRANDS AB
23. TradeDoubler AB
24. Venue Retail Group AB
25. Catena AB
26. Havsfrun Investment AB
27. Luxonen S.A. SDB
28. Midway Holding AB
29. NAXS Nordic Access Buyout Fund AB
30. Novestra AB
31. Svolder AB
32. Traction AB
33. Allenex AB
34. Artimplant AB
35. BioInvent International AB
36. Biotage AB
37. Boule Diagnostics AB
38. CellaVision AB
39. Dedicare AB
40. Elos AB
41. EpiCept Corporation
42. Feelgood Svenska AB
43. Global Health Partner AB
44. Karo Bio AB
45. Karolinska Development AB ser.B
46. Mertiva AB
47. Moberg Derma AB
48. NeuroVive Pharmaceuticals AB
49. Oasmia Pharmaceutical AB
50. Orexo AB
51. Ortivus AB
52. Probi AB
53. RaySearch Laboratories AB
54. Vitrolife AB
55. Arcam AB
56. Beijer Electronics AB
57. Bong AB
58. BTS Group AB
59. Cavotec SA
60. Cision AB
61. Concordia Maritime AB
62. Consilium AB
63. CTT Systems AB
64. Duroc AB
65. Elanders AB
66. eWork Scandinavia AB
67. Fingerprint Cards AB
68. Geveko, AB
69. Image Systems AB
70. Intellecta AB
71. ITAB Shop Concept AB
72. Lagercrantz Group AB ser B
73. Malmbergs Elektriska AB
74. Micronic Mydata AB
75. Nederman Holding AB
76. NOTE AB
77. OEM International AB
78. PartnerTech AB
79. Poolia AB
80. Precise Biometrics AB
81. Pricer AB
82. Rederi AB Transatlantic
83. Rejlerkoncernen AB
84. Rörvik Timber AB
85. Semcon AB
86. Sensys Traffic AB
87. SinterCast AB
88. Studsvik AB
89. Svedbergs i Dalstorp AB
90. Transcom WorldWide S.A SDB
91. Uniflex AB
92. XANO Industri AB
93. PA Resources AB
94. Shelton Petroleum AB
95. Acando AB
96. AddNode Group AB
97. Anoto Group AB
98. Aspiro AB
99. Avega Group AB
100. Connecta AB
101. Cybercom Group AB
102. DORO AB
103. Enea AB
104. FormPipe Software AB
105. HMS Networks AB
106. I.A.R Systems Group AB
107. Know IT AB
108. Micro Systemations AB
109. MSC Konsult AB
110. MultiQ International AB
111. Net Insight AB
112. NOVOTEK AB
113. Phonera AB
114. Prevas AB
115. Proact IT Group AB
116. ReadSoft AB
117. Seamless Distribution AB
118. Sigma AB
119. Softronic AB
120. StjärnaFyrkant AB

50 (54)
121. Vitec Software Group AB
122. AllTele Allmänna Svenska Telefonab
123. DGC One AB
124. Arise Windpower AB
125. Etrion corp.
## APPENDIX D – COMPARISON TO EARLIER RESEARCH

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Level / million SEK</th>
<th>Share</th>
<th>Stocks &amp; Options</th>
<th>Bonus</th>
<th>No. Of Firms</th>
<th>No. Of Firms</th>
<th>% of firms</th>
<th>Median fixed salary per year</th>
<th>Median variable salary per year</th>
<th>Mean total compensation per year</th>
<th>Mean total compensation per year</th>
<th>Median stock &amp; options</th>
<th>Median bonus</th>
<th>Mean pension perks</th>
<th>Other perks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year / Sample size</td>
<td>Rundekv &amp; Nielsen (2002)</td>
<td>1998</td>
<td>104</td>
<td>2,470</td>
<td>2,600</td>
<td>3,350</td>
<td>2,400</td>
<td>0.66</td>
<td>83.99%</td>
<td>16.65</td>
<td>N/A</td>
<td>N/A</td>
<td>63</td>
<td>48.1%</td>
<td>N/A</td>
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<tr>
<td></td>
<td>Oexlheim et al. (2008) All Cap</td>
<td>2002</td>
<td>131</td>
<td>4,077</td>
<td>2,800</td>
<td>3,500</td>
<td>2,400</td>
<td>0.66</td>
<td>83.99%</td>
<td>16.65</td>
<td>N/A</td>
<td>N/A</td>
<td>63</td>
<td>48.1%</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Oexlheim et al. (2008) All Cap</td>
<td>2005</td>
<td>131</td>
<td>4,077</td>
<td>2,800</td>
<td>3,500</td>
<td>2,400</td>
<td>0.66</td>
<td>83.99%</td>
<td>16.65</td>
<td>N/A</td>
<td>N/A</td>
<td>63</td>
<td>48.1%</td>
<td>N/A</td>
</tr>
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<td></td>
<td>Fernandez &amp; Suuriä (2012)</td>
<td>2006</td>
<td>84</td>
<td>11,683</td>
<td>7,560</td>
<td>2,400</td>
<td>0.66</td>
<td>83.99%</td>
<td>16.65</td>
<td>N/A</td>
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<td>48.1%</td>
<td>N/A</td>
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<td>Haransta et al. (2011)</td>
<td>2009</td>
<td>111</td>
<td>9,290</td>
<td>6,830</td>
<td>4,370</td>
<td>1,469</td>
<td>1,469</td>
<td>19.33</td>
<td>7%</td>
<td>2%</td>
<td>19%</td>
<td>86</td>
<td>74.4%</td>
<td>52, 42.2%</td>
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<td>Studies on Large Cap</td>
<td>2012</td>
<td>119</td>
<td>8,636</td>
<td>4,516</td>
<td>4,516</td>
<td>1,469</td>
<td>1,469</td>
<td>19.33</td>
<td>7%</td>
<td>2%</td>
<td>19%</td>
<td>86</td>
<td>74.4%</td>
<td>52, 42.2%</td>
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<td>Ackerman &amp; Suuriä (2013) All Cap</td>
<td>2007</td>
<td>99-2008</td>
<td>39</td>
<td>10,32</td>
<td>9,546</td>
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<td>60</td>
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<td>2002</td>
<td>48</td>
<td>7,370</td>
<td>6,232</td>
<td>5,835</td>
<td>2,384</td>
<td>74.7%</td>
<td>52, 42.2%</td>
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<td>2013</td>
<td>19</td>
<td>8,075</td>
<td>5,835</td>
<td>2,384</td>
<td>74.7%</td>
<td>52, 42.2%</td>
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<td>Léglain, Lindén</td>
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<td>6,100</td>
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<td>22, 37.0%</td>
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<td>Andersson &amp; Suuriä (2013) Large</td>
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<td>14,17</td>
<td>7,741</td>
<td>7,728</td>
<td>3,235</td>
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<td>20.0%</td>
<td>10.0%</td>
<td>2,00%</td>
<td>21, 00%</td>
<td>46</td>
<td>78.0%</td>
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APPENDIX E – SCATTER CHARTS FOR OMXS LARGE CAP

Scatter chart - Salary
OMXS Large Cap

Scatter chart - Bonus
OMXS Large Cap