The explicit kind of remuneration plans which not only attract and motivate managers but also enhance the long-term performance of the firms have always been a subject of ongoing debate and a big concern for researchers in this area. A considerable variance in compensation plans of different companies in different countries is clearly observable. The highest level of salaries and compensation plans usually belong to CEOs in the US which is considerably greater than the amount that CEOs receive in the UK and subsequently the rest of Europe (Pepper 2006). The variance in executive compensation plans consists of both amount and mix of pay. More precisely, the compensation package of each executive usually involves one or more of these components: Salary, Bonus, Long-Term Incentive Cash Plan (LTICP), Stock option, restricted stocks and other benefits. Salary, bonus and other benefits are considered to be short-term rewards. Stock options, performance stocks and restricted stocks are used in long-term incentive plans (LTIP). While it is common to have a mix of all the mentioned components in the executive compensation package, it is clear that in general, variable compensation plans, including performance-based and equity-based compensation plans, have been receiving more attention in previous decades. This is due to the reason that these contracts are aimed at mitigating the agency cost and moral hazard problems through closely aligning the interests of managers and shareholders (Jensen and Meckling 1976) and increasing pay-performance sensitivity (Jensen and Murphy 1990).

The large amount of payments to executives through bonus plans and the lack of a strong relation between pay and performance have been extensively criticized by researchers. In parallel with academic interest, the coverage of the media has also led to fundamental changes in the structure of compensation plans so that more variable incentive schemes, including equity-based compensation, have been included. Hence, non-cash elements of compensation plans for executives are becoming increasingly important. The significant differences in the extent of executive compensation plans and variance in the mix of these plans from time to time have attracted many researchers to seek the determinants of executive compensation plans. It is possible to find thousands of different articles regarding different aspects of compensation plans in different journals, particularly for executives. The prominent

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1 The aim of this draft is to summarize and describe my main ideas to be developed in my Licenciate thesis. To begin with, I have briefly mentioned the background and the problem of my study. However, the main focus is on the primarily ideas of modeling that have been developed here in my first attempt. Therefore, I would be thankful for the comments from the reader in order to improve and operationalize the models.
theoretical perspective among scholars in this context is agency theory which considers the
important role of economic incentives as determinants of executive compensation plans.
Agency theorists have considered these compensation schemes including stock option plans
as an important advance for enhancing the pay-performance relation and for decreasing the
agency cost. It is argued that agency cost could be a consequence of having conflicts of
interest between different parties including, executives (agent), the board of directors
(supervisors) and shareholders (principal)(Conyon and He 2004).

Therefore, a large body of research has tried to see how the interests of these different parties
could be aligned and through which mechanism. It is commonly accepted among agency
theorists that, for alignment of interests, a compensation plan for managers is required which
is not only in favor of the managers but also in line with the interests of shareholders. Hence,
dispersed shareholders consider equity-compensation plans as a monitoring mechanism since
the compensation of directors and managers is dependent on how shareholders perceive the
accounts and financial position of the firms. Agency theorists have considered these kinds of
compensation plans as being beneficial for all parties and perceived that as a “happy
outcome” (Kolb 2011). However, the use of equity-based compensation varies between firms
with different characteristics. One important factor is size. Small companies use fewer equity-
based compensation plans as it is expected that the agency cost is lower among managers and
investors. Another important factor is ownership structure. As mentioned by La Porta et al
(1999), governance and compensation structure of firms in different countries are influenced
by the country-specific factors. In the settings where firms are characterized by having
controlling shareholders, monitoring management is not a problem for large owners. In some
extreme cases the top management is also part of the controlling family which has the power
over the minority shareholders.

In the US, the use of equity-based compensation is very prominent and nowadays options and
restricted stocks are considered as the major components of top management compensation
plans. However, it is worthwhile considering that the US market is characterized by having a
dispersed ownership structure. Therefore, investors apply equity-based compensation in order
to monitor executives and align the management interests with their interests. Furthermore,
the prominent use of stock option plans in the US could be also linked to the CEOs´ tax
behavior and their further benefits in respect to their granted options and stocks. In the US
setting no tax is payable until the underlying shares are sold. In EU countries, on the other
hand, the tax authorities do not give this benefit to corporation (Pepper 2006). Yet still, in the
US there is an ongoing discussion about the problems that exist for having equity-based
compensation, particularly options as one main component of these kinds of incentive plans.
The criticisms are usually towards the efficiency of option plans and the lack of equilibrium
between costs and benefits of granted options (Hall and Murphy 2003). Furthermore, it is
criticized that granting a large number of options may encourage managers to consider the
short-term share price volatility over long-term value creation and to take excessive risk. The
possibility that equity-based compensation gives incentives for earning management has been
in the focus of many studies and articles for many years (Armstrong et al. 2010). In this
context and in recent years, most significantly the role of corporate governance has been
questioned. It has been discussed that after the big scandals and during the recent financial crisis the board of directors of companies failed to fulfill their role for monitoring, risk management and setting appropriate compensation for executives.

In Sweden, however, we face a completely different situation with different settings in the market. In fact, the institutional setting that exists in Sweden gives us the opportunity to study determinants of executive compensation from another angle. A significant difference of this market is related to private or family investors that hold a large percentage of shares even in large and international corporations. These families such as Wallenberg, Lundberg, Douglas, Paulsson, and many others not only hold a large percentage of cash-flow rights in the companies, but also have a large number of dual shares with more voting powers. In fact, Sweden has a long history in terms of using dual shares or in other words differentiated voting rights (DVR)(Carlsson 2007). Hence, the ownership structure of Swedish firms is interesting and important to be examined as it gives us a good setting for examining two main aspects of agency theory, including agency cost and the entrenchment problem. Agency cost, as it was mentioned before, is the cost incurred due to separation of ownership and control and the information asymmetry among different parties in a firm. However, the entrenchment problem has arisen based on the conflict of interests between large and small shareholders and the possibility that large shareholders use their power to extract benefits by taking decisions which are not necessarily beneficial for minority shareholders (Masulis et al. 2009).

Furthermore, the structure of the board of directors is very different from what is observed in the US or the UK. It is involved with the majority of independent directors in relation to executives but not in relation to the large and controlling owners. Based on the Swedish Corporate Governance Code, which is subject to “comply or explain”\(^2\), only one executive (usually CEO) can have a seat in the board. However, according to the Code, a maximum of two directors must be independent of large owners. This Code implies that the majority could be dependent members. Another distinctive feature of the corporate governance system in Sweden is that employee representatives have the possibility to sit on the board. Based on the size of the companies, two to three ordinary representatives are allowed to be the members of the board. The attendance of employee representatives in the board could be a great contribution to the board practice, particularly when there is a lack of enough executives in the board.

Based on the above-mentioned background it can clearly be observed that executive compensation plans have always involved many debates and arguments. However, the large amount of payments to executives through bonus plans, on the one hand, and contradictory results in the studies in this area for finding strong relation between economic factors and executive compensation plans, on the other hand, have been a constant issue in research. Consequently some researchers have tried to seek factors other than those that have been studied and examined through agency theory in order to provide a complementary theoretical perspective and explain the determinants of a specific remuneration plan for executives.

\(^2\) The Code consists of a set of numbered rules. It is with these rules that companies applying the Code must comply or explain. It means that non-compliance must be identified and explained. (the Swedish Corporate Governance Code, 2010; p.5)
Managerial power theory, particularly in recent years, has received a lot of attention from researchers in this area. This theory emphasizes the main role of independent board of directors in providing appropriate executive compensation plans and aligning the CEO pay to firm performance (Bebchuk and Fried 2004).

Executive compensation packages in Sweden have been involved in some changes over time. First, a shift from bonus plans to more stock option plans and subsequently to more restricted stocks. In recent years, most of the large companies in Sweden that apply equity-based compensation plans have changed the design and mix of these incentive plans to be included with less stock option plans and more restricted stock plans (Dagens industri, 2010). The aim of this study is, therefore, to consider the main influential factors in structuring and setting executive compensation plans. These factors are mainly identified based on previous studies within institutional setting that exists in Sweden. Therefore a multiple-tier agency relation is considered which not only examines the agency conflict between managers and shareholders, but also the agency cost between the board of directors and shareholders, the board of directors and managers, and finally large and small shareholders. Furthermore, considering the main notion of managerial power theory, the independence and structure of board of directors is assessed to see whether it has any effect on executive compensation plans. Therefore, the model includes three main sections that mainly consider the relation between different parties including board members, owners (large and small) and executives. In order to test the main hypotheses the study aims to run the tests in different settings: firstly, the whole sample where all the companies are examined; secondly, a sub-sample of the companies that are family-owned companies; thirdly, whether the CEO is the founder of the company or is related to the controlling family owners of the company. It is also important to mention that several factors are added to the models in order to control for possible effects of them on executive compensation. These factors are also identified based on the earlier studies particularly those based on agency theory that consider the important role of firms’ characteristics (including size, total debt of the firm, firm growth, industry differences and risk of the firm) on executive compensation plans.

The general model in this study is the following:

\[ \text{CEO pay} = f(\text{ownership structure, board of directors structure} + \text{control variables}) \]

Ownership incentives hypotheses:

There has been a substantial research in the area of compensation that empirically examines the relation between control mechanism, ownership structure and executive compensation. Many researchers have found that firms with large controlling owners provide less variable compensation plans to CEOs (Frye 2004; Ke et al. 1999; Tosi and Gomez-Mejia 1989). The important point in this relation is grounded in the ability of large controlling owners to monitor CEOs. Mehran (1992) argues that having controlling owners in the firm decreases the

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3 Dagens Industri (2010), “Fler får aktier som bonus” (More Recieve Shares as Bonus)-2010.08.26
performance-based compensation and equity-based compensation due to the fact that major shareholders assert direct monitoring on executives and do not use alternative monitoring mechanisms including equity-based compensation plans. One could argue, however, that large ownership by major shareholders can be associated with large costs as well. This cost has arisen due to the private benefits of controlling shareholders including salary enhancement and sub-optimal investments decisions (Zerni et al. 2010). In other words, the large shareholders particularly with larger voting rights, effect on investment and policy decision making of the firms might not necessarily be in the same interest of smaller shareholders (Claessens et al. 2002).

There are many studies that consider the relation between ownership structure and firm value. Gompers et al (2010) discuss that the superior class of shares are usually owned by the insiders of firms with a significant wedge between voting and cash-flow rights. This significant difference provides the ability for holders to have a significant effect on decision making with only holding a small percentage of forms’ economic value. Differences in the insiders’ cash-flow rights and voting rights and its influence on the firms’ value are considered to be an important issue of concern for contemporary research in this area. In a much-cited paper in this area, Claessens et al. (2002) emphasize the negative effect that a wedge between voting rights and cash-flow rights has on the firms´ value measured by Tobin’s Q. More precisely, the negative effects are related to the cost that controlling shareholders, in general, and corporate insiders, in particular, exert on small outside shareholders for their private benefits. There are different kinds of private benefits according to different definitions. This study, however, focuses on the executive compensation plans and more importantly whether or not CEOs expropriate private benefits in the situations with more divergence between cash flow rights and voting rights. Managerial expropriation particularly happens if the market is involved with less investor protection mechanisms. In this case there is a high possibility that managers extract more benefits at the expense of minority shareholders.

Masulis et al (2009) have taken a closer look at different financial consequences to the separation of voting rights and control rights. They examine whether excess control from insiders having more voting rights leads to larger CEO compensation. According to these authors, larger separation of ownership and control allows the managers to benefit more in the form of having more compensation. The ratio of insiders’ voting rights to cash flow rights is found to be significantly associated with CEO total compensation. Having a Swedish sample provides a unique context for testing this hypothesis since it is characterised by the higher influence of corporate insiders with significant differentiated voting rights. Moreover, the probability of equity-based compensation is tested here to examine how the larger entrenchment problem is associated with having equity-based compensation. Along with the main agency theory arguments of agency cost and the entrenchment problem, Hypothesis 1 predicts that:

Hypothesis 1(a): CEO cash compensation and equity incentives decrease when cash-flow ownership of the largest owners increases
Hypothesis 1(b): CEO cash compensation increases and CEO equity incentives decrease when the differences between control rights and cash-flow rights (entrenchment problem) increases

Board structure hypotheses:

Another important approach which has been more recently focused on is managerial power theory. This theory is related to the role of corporate governance in setting executive compensation plans. This approach considers the negotiation between CEOs and the board of directors as the main influential factor for having a specific compensation plan in companies. According to this theory, a CEO has the power and voice in determining his or her incentives (Kolb, 2010; p.248). Bebchuck and Fried (2004), in their often cited book “pay without performance”, strongly emphasize the main responsibility of corporate governance for monitoring executives. They blame the board of directors and the lack of their independence for large payouts in terms of compensation to CEOs. While these authors accept the importance of compensation design in terms of developing an alignment of interests between principal and agent, they mention that the optimal contracting theories cannot explain everything and there is always a flip side of the coin. In other words, having more executives sitting on the boards can exert more benefits for managers but at the expense of other stakeholders of the firms.

Studying the corporate governance role in relation to executive compensation is the most popular area among researchers as compared to other roles that corporate governance has taken (Kolb 2011). It is clear that the main observed factor in the literature for defining executive compensation is the board independency. Independent or outside director refers to an individual who has no formal or informal relationship with the company and its employees. Independence of board of directors and compensation committees are measured by different factors. However, the most studied variables include the number of outside board members over inside members, CEO tenure, CEO duality, and CEO shareholding (Adams et al. 2008; Aggarwal and Samwich 1999; Beatty and Zajac 1994; Capezio et al. 2011; Chhaocchharia and Grinstein 2009). Another important issue related to improvement in the board of directors structure is related to enhancing the diversity in the board of directors. The issue of diversity is more related to gender and background of the board members. Academic debate on the strategic importance of women directors is still open for more investigation in different aspects of corporate governance. Cul et al (2011) state that “Gender-diverse boards improve the quality of public disclosure through better monitoring” (p.315). While this new approach to gender-diversity is important to be considered in the executive compensation area, there has not been so much research as to how gender diversity can affect executive compensation. In Sweden the Code of Corporate Governance clearly stipulates that the board members elected at the shareholders’ meeting are collectively to show diversity and equal gender distribution. Another variable which will be considered here in terms of diversity is the number of employee representatives on the boards. This unique characteristic in the Swedish setting is of interest to be examined here.
Hypothesis 2 (a): CEO cash compensation increases and CEO equity incentives decreases when the board size increases

Hypothesis 2 (b): CEO cash compensation increases and CEO equity incentives decreases when the CEO is sitting on the board

Hypothesis 2 (c): CEO cash compensation decreases and CEO equity incentives increases when there is more diversity on the board.

Board incentives hypothesis:

Following the main notions of managerial power theory, many studies have examined the independence of board members in relation to executives of the companies as the factor for mitigating agency cost. However, there has not been so much research on the dependency of the boards on large/controlling owners and the effect of that on managerial compensation decision making. Armstrong et al. (2010) state that: “Inside directors who typically have large holding of firms stock and options as well as more human capital tied to the firm, may also have stronger incentives to monitor because of their lack of independence from the CEO as well as desire to protect their own private benefits” (p.184). In Sweden, the board members are not allowed to receive share options in their compensation package based on the Code of Corporate Governance. However, it is possible to observe that family owners sit on the board with a significant ownership stake in the company and also have control over executives. In this situation the need for alternative monitoring mechanisms including performance-based compensation is less for the same reason that was mentioned in section on ownership incentives.

On the other hand, it is worthwhile considering that the role of independent board members in relation to protecting shareholders’ rights is not only limited to solving the agency conflict between managers and shareholders but also, the conflict of interests between large and small shareholders. Zerni et al. (2010) discuss that “in order to mitigate the negative consequences of the entrenchment problem, firms insiders may seek effective governance mechanisms to assure outside shareholders that their interest will be protected” (p.1170). It is interesting to consider how the board of directors can mitigate the negative consequence of the entrenchment problem. The independent board of directors in relation to controlling owners should be able to mitigate the negative consequences of entrenchment problem in terms of extra private benefits that managers might acquire in these companies. The negative consequence of this latter agency problem is even greater if the the largest owners are indeed the managers or founder of the firms. Therefore, in this respect, it is important to evaluate the role of board of directors and examine how the incentives of board members affects on monitoring executives through providing executive compensation plans.

Hypothesis 3: CEO cash compensation decreases and CEO equity incentives increases when board members have significant ownership stake in the firms.
Appendix 1: An illustration of the multiple-agency relation

**Fig.** A three-tier agency relation between Shareholders (Principal), Board of directors (Supervisors), and Executives (Agent)

Appendix 2: A primarily regression models based on the hypotheses

1) Ownership incentives hypotheses:

\[
COMP_{it} = \alpha + \beta_1 \cdot C.O.\ capital_{it} + \beta_2 \cdot ENTRENCHMENT_{it} + \beta_3 \cdot Sale_{it} + \beta_4 \\
* Growth_{it} + \beta_5 \cdot ROE_{it} + \beta_6 \cdot Solvency_{it} + \beta_7 \cdot Industry_{it} + \beta_8 \\
* FirmAge_{it} + \beta_9 \cdot CEOtenure_{it} + \beta_{10} \cdot CEOOwns_{it} + \beta_{11} \\
* FamilyOwner_{it} + \epsilon_{it}
\]

2) Board structure hypotheses:

\[
COMP_{it} = \alpha + \beta_1 \cdot BOARDSIZE_{it} + \beta_2 \cdot CEOonBOARD + \beta_3 \cdot FemaleBoard_{it} + \beta_4 \\
* UnionBoard + \beta_5 \cdot Com.Com + \beta_6 \cdot C.O.\ capital_{it} + \beta_7 \cdot Sale_{it} + \beta_8 \\
* Growth_{it} + \beta_9 \cdot ROE_{it} + \beta_{10} \cdot Solvency_{it} + \beta_{10} \cdot CEOtenure_{it} + \beta_{11} \\
* FirmAge_{it} + \beta_9 \cdot Industry_{it} \\
+ \beta_{10} \cdot CEOOwns_{it} + \beta_{11} \cdot FamilyOwner_{it} + \epsilon_{it}
\]

3) Board incentives hypotheses:

\[
COMP_{it} = \alpha + \beta_1 \cdot BoardShares_{it} + \beta_2 \cdot C.O.\ Board_{it} + \beta_3 \cdot C.O.\ Chair_{it} \\
+ \beta_4 \cdot C.O.\ capital_{it} + \beta_5 \cdot ENTRENCHMENT_{it} + \beta_6 \cdot Sale_{it} + \beta_7 \\
* Growth_{it} + \beta_8 \cdot ROE_{it} + \beta_9 \cdot Solvency_{it} + \beta_{10} \cdot Industry_{it} + \beta_{11} \\
* FirmAge_{it} + \beta_{12} \cdot CEOtenure_{it} + \beta_{13} \cdot CEOOwns_{it} + \beta_{14} \\
* FamilyOwner_{it}
\]
### Appendix 3: variable definitions and measurement

<table>
<thead>
<tr>
<th>Variables</th>
<th>Variable label</th>
<th>Measurement</th>
</tr>
</thead>
</table>
| Equity-based compensation         | EBCOM          | 0=there is no EBC  
                                      |                | 1=there is EBC                             |
| Nr. Of Controlling Owners         | c_o_#          | number of controlling owners                     |
| Controlling owners’ vote          | c_o_vote       | %voting of controlling owners                    |
| Controlling owners’ capital       | c_o_cap        | %capital of controlling owners                    |
| Entrenchment                      | entrenchment   | differences between voting% and capital% of controlling owners |
| Size of the company               | totalassets    | Total assets                                     |
|                                   | sale           | Net sale                                         |
| ROE%                              | roe            | Return on shareholders fund                      |
| ROA%                              | roa            | Return on Asset ratio                            |
| Solvency ratio                    | solvencyratio  | Solvency Ratio= total debt / market value of total assets |
| CEO on the Board                  | ceo_inboard    | 0=CEO not on the board  
                                      |                | 1=CEO on the board                         |
| Controlling owners on the board   | c.o._inboard   | The number of controlling owners on the board    |
| Controlling owners chairing the board | c.o._chairman | 0=Chairman is independent of controlling owners  
                                      |                | 1=Chairman is dependent on controlling owners   |
| Compensation Committee           | Com.Com        | 0=there is no Compensation Committee  
                                      |                | 1=there is a Compensation Committee            |
| Employee Representatives on the board | emp.rep | The number of employee representatives on the board |
| Female Board members              | FemaleBoard    | The percentage of female board members on the board |
| Industrial categories             | Industry       | Type of Sector                                   |
| Firm age                          | firmage        | The year that the company is founded             |
| Size of the Board                 | Boardsize      | Size of the board                                |
| CEO’s Fixed pay of                | Fixedpay_CEO   | sum of salary and benefits of CEO                |
| CEO’s Bonus                       | Bonus_CEO      | CEO’s Bonus                                      |
| CEO’s Total cash compensation     | Totalcashcomp_CEO | CEO’s Fixed pay and Bonus                       |
| CEO tenure                        | tenure         | The years that CEO has been working             |
| year                              | t              | Year                                             |
References:


Jensen and Murphy, K.J. (1990), 'Performance pay and top-management incentives', Journal of political economy, 225-64.


