Table of contents

1	Intro	ductio	n	4
	1.1		ound	
	1.2		n discussion	
	1.3		ie	
	1.4		ition	
		•		
2	Fran	ne of re	eference	8
_	2.1		s corporate governance?	
	2.2		esis development	
	2.2	2.2.1		0
		2.2.1	Corporate governance characteristics from prior	~
			studies	
			2.2.1.1 Management ownership 2.2.1.2 Non-executive directors	
			2.2.1.2 INON-executive directors	
			2.2.1.9 Earge duality	
			2.2.1.5 Diffuse ownership	11
			2.2.1.6 Audit committee	
			2.2.1.7 Board size	
		<u></u>	2.2.1.8 Number of shareholders	12 10
		2.2.2	Own corporate governance characteristics	. IZ
			2.2.2.1 Board ownership 2.2.2.2 Board compensation	
			2.2.2.2 Doard compensation 2.2.2.3 Nomination committee	
			2.2.2.4 Compensation committee	
			2.2.2.5 Board activity	
		2.2.3	Control variables	
			2.2.3.1 Corporation size	
		004	2.2.3.2 Multiple listings	
		2.2.4	Other characteristics	
			2.2.4.1 Industry type 2.2.4.2 Domestic listing status	
3	Meth	nod		17
	3.1	Examir	nation	. 17
	3.2		search process	
	-	3.2.1	Step 1 - Hypothesis formulation	
		0.2	3.2.1.1 Problem formulation	
			3.2.1.2 Literature exposition	19
			3.2.1.3 Development of theoretical starting point	19
			3.2.1.4 Hypothesis formulation	
		2 2 2	3.2.1.5 Step 2 - Examination plan	
		3.2.2	Step 3 - Data collection 3.2.2.1 Corporate governance characteristics and control variables	
			3.2.2.1 Corporate governance characteristics and control variables 3.2.2.1.1 Management ownership	
			3.2.2.1.2 Non-executive directors	
			3.2.2.1.3 Large audit firms	
			3.2.2.1.4 Role duality	24
			3.2.2.1.5 Diffuse ownership	24
			3.2.2.1.6 Audit, nomination and compensation committee	
			3.2.2.1.7 Board size 3.2.2.1.8 Number of shareholders	
			3.2.2.1.9 Board ownership	
			3.2.2.1.10 Board compensation	
			3.2.2.1.11 Board activity	26
			3.2.2.1.12 Corporation size	26

			3.2.2.1.13 Multiple listings	
			3.2.2.1.14 Industry 3.2.2.1.15 Domestic listing status	
			3.2.2.2 The corporate governance disclosure index	27
		3.2.3	Step 4 - Processing and analyze of data	
	3.3	Reliabil	lity and validity	
		3.3.1	Interpretation errors	
		3.3.2	Measurement process errors	
4	Anal	vsis ar	nd results	32
	4.1	•	regressions	
		4.1.1	Management ownership	
		4.1.2	Non-executive directors	
		4.1.3	Large audit firms	
		4.1.4	Role duality	
		4.1.5	Diffuse ownership	
		4.1.6	Audit committee	
		4.1.7	Board size	
		4.1.8	Number of shareholders	. 37
		4.1.9	Board ownership	. 38
		4.1.10	Board Compensation	
		4.1.11	Nomination committee	. 39
		4.1.12	Compensation committee	. 39
		4.1.13	Board activity	. 40
		4.1.14	Corporation size	. 41
		4.1.15	Multiple listings	. 42
		4.1.16	Industry type	. 42
		4.1.17	Domestic listing status	. 43
		4.1.18	Summary of the linear regressions	. 43
	4.2		llinearity	
	4.3	•	e regression	
		4.3.1	Role duality	
		4.3.2	O-list other	. 46
5	Con	clusion	is and comments	47
	5.1	Conclu	sions	. 47
	5.2	Comme	ents	. 48
	5.3	Further	studies	. 49
Re	References			

Figures

Figure 1 The research process with phases and examination steps	. 18
Figure 2 The procedure of the hypothesis formulation	. 18
Figure 3 Boxplot of CG index and Large audit firms	. 34
Figure 4 Boxplot of CG index and Role duality	.35
Figure 5 Scatterplot of CG index and Board size	. 37
Figure 6 Scatterplot of CG index and Board ownership	. 38
Figure 7 Scatterplot of CG index and Board activity	. 40

Tables

Table 1 Disposition of industry type and domestic listing status as dummy variables	
Table 2 Descriptive statistics of the corporate governance index	
Table 3 Linear regression of CG index and Board activity, with ABB and	
Pergo excluded	41
Table 4 Pearson's multicollinearity test	44
Table 5 Combinations of related variables in the multiple regressions	44
Table 6 Final multiple regression models	45

Appendences

Appendix 1 – Variables in prior studies	56
Appendix 2 – Sample of Swedish listed corporations	
Appendix 3 – Sample with independent variables	59
Appendix 4 – List of items	62
Appendix 5 – The disclosure index for each corporation	
Appendix 6 – Model summary for linear regressions	68
Appendix 7 – Multiple regressions	74

This chapter begins with a background to the problem discussion of corporate governance disclosure. Thereafter the purpose of the thesis, based on the problem, is defined. We have also made a disposition over the master thesis' chapters.

1.1 Background

The annual report is a major medium used by corporations to communicate information to outsiders (Botosan, 1997; Lang & Lundholm, 1993), in other words the interested parties. Lang and Lundholm have even found evidence that annual report disclosure is positively correlated with other information communicated via other media. The corporations' interested parties are usually, according to Thorell (2003), the owners, investors, employees, lenders, suppliers, customers and the public. All who have an interest in the corporation's success rely upon the information, disclosed by corporations (Percy, 1997), when making different types of decisions (Thorell, 2003). Relevance is an important criterion; therefore, the information must be relevant to users to assist the decision-making (Cooke, 1989b).

Cooke (1989b) claims that since information is crucial in the decision-making about allocation of scarce resources for outsiders, it is important to assess the extent of information provided by a corporation. Since a corporation itself provides much of the information that investors and analysts use to value the corporation, the functioning of the stock market is influenced by information directly provided by the corporation (Williams, Moyes & Park, 1996; Breton & Taffler, 1995).

DiPiazza and Eccles (2002) describe corporations as the people who work in and manage them, whereas the corporation's board of directors exists to guarantee that the shareholders interests are protected. The capital markets effectiveness depends on public trust; at the same time, trust depends on timely accessibility of complete, relevant and trustworthy information. Even Danielsson, Endre and Engström (1998) claim that, the connection between owners and the management is based on trust. The trust can be crucial for how the corporation shall evolve. The owners of the corporation, who contribute with capital, are the shareholders. However, if they lack in trust in the corporation its development will decrease, competitive advantages will decrease or disappear, and the development will be inferior than around the world. Therefore, it is important for the whole country's economic development that the culture in the listed corporations is in a way that the shareholders can trust the management.

According to Ljungdahl (2004), there has been a marked increase of corporate governance disclosure in the annual reports of corporations listed on the Stockholm Stock Exchange. OECD² (2004) defines corporate governance as a set of relationships between a corporation's management, its board of directors, its shareholders and other stakeholders. Good corporate governance should result in effective monitoring of the management, by the board of directors, and should give proper incentives for the board of directors and the management to pursue objectives that are in the interests of the corporation and its shareholders.

The worldwide attention to corporate governance is a result of the Enron collapse in 2001, followed by additional scandals and corporate failures in the U.S., for example WorldCom and Tyco (Coombes, 2003), where the corporations, somehow, concealed debts or expenditures. A parallel could be drawn, considering Sweden, that the increased attention to corporate governance information in the annual reports may be an effect of the scandals in Sweden, for example Skandia, ABB and Trustor, where huge bonuses, redundancy payments and/or pensions were not disclosed.

Berle and Means (1932) were among the first who argued that the separation between ownership and control in publicly traded corporations produces an agency problem; how less informed "outside" owners could monitor better informed "inside" managers. Jensen and Meckling examined similar ideas in 1976 and discussed the principalagent problem; when managers (agents) with private information have incentives to pursue their own interests at the owners' (principals') expense. Therefore, Mayer's (1997) statement that corporate governance traditionally is associated with the principal-agent problem is not so strange.

From the assumption of agency theory, there is a mismatch of interest between the shareholders, who are the owners, and the management, who on the behalf of the shareholders run the corporation. The shareholders appoint a board of directors in order to monitor the management; hence, the board of directors is the link between the shareholders and the management. Therefore, the better the board of directors is at monitoring the management, the more disclosure can be expected (for further information see frame of reference).

There are only a limited number of studies conducted concerning disclosure practices in Sweden and we have not found anyone concerning corporate governance disclosure practices in particular. Moreover, we have not found any studies conducted concerning corporate governance disclosure practices abroad either.

² Organisation for Economic Co-operation and Development

The majority of the studies, both in Sweden as well as abroad, have looked at the relationship between the levels of different types of information disclosure and corporate characteristics. Similar characteristics have been used in these studies and most of them have been derived from agency theory and/or legitimacy theory. The results in these prior studies have been contradictory and most of them have been different from others when looking at a specific type of information; hence, different characteristics influence the disclosure practices of different types of information.

Since this study concerns corporate governance disclosure, we intend to use corporate governance characteristics derived from agency theory. We have only found one study, Ho and Wong (2001), which concerns both disclosure practices and corporate governance characteristics. However, since the authors have looked at voluntary disclosure, it is not that interesting to compare our results with theirs, since as mentioned above; different characteristics influence the disclosure practices of different types of information.

1.2 Problem discussion

As mentioned above, in recent years there have been several corporate scandals, mostly in the U.S., but even in Europe, including Sweden. Have these scandals affected the interested parties' trust in the corporations? What are the corporations doing to maintain the shareholders' trust for them? The increase of corporate governance disclosure in recent years' annual reports can be interpreted as a way by the corporations to keep the shareholders' trust in them; hence, showing them that the management act in the best interest of the shareholders. This may also be due to pressure from the interested parties, due to lack of trust for the business society.

What types of corporations have disclosed more corporate governance information in the annual reports? Corporate governance concerns the relationship between managers and shareholders, which even agency theory do. Theoretically, the implementation of the appropriate corporate governance mechanism should benefit owners financially by enabling them to exercise more control over corporate insiders and management (Eisenhardt, 1989; Fama & Jensen, 1983; Jensen & Meckling, 1976).

According to the agency theory, several corporate governance characteristics in a corporation, for example role duality and the existence of committees, can affect the effectiveness of the board of directors' monitoring role. Furthermore, corporate governance characteristics can be seen as proxies for independence and the alignment of interest between the management and the shareholders. The discussion and questions above have led us to the following problem:

Can agency theory explain why some corporations disclose more corporate governance information than others do?

Corporate governance is a contemporary subject, since the corporate scandals do not seem to end. The scandals may have led to a lack of trust in today's corporations; therefore, it is important that the corporations disclose information about corporate governance. Since we have not found any studies of corporate governance disclosure, we think it would be of theoretical relevance to examine what influences the corporations to disclose corporate governance information in the annual reports.

Moreover, a study like this can be of practical relevance for the users of annual reports, since they can see trends and get a picture of different types of corporations' disclosure practices. If this study for example shows that large corporations disclose more corporate governance information than smaller ones do, the users of annual reports will be aware of that smaller corporations may not disclose corporate governance information in the annual reports that could be of interest to them. They should therefore search after the information from other sources, for example the corporation's website. They can also see what kinds of corporations that they can pressure or legislate further to disclose more corporate governance information.

1.3 Purpose

The purpose with this master thesis is, with starting point in agency theory, to contribute to the understanding of which factors that influence corporations to disclose corporate governance information in the annual reports.

1.4 Disposition

The introduction chapter begins with a background to the problem discussion of corporate governance disclosure. Thereafter the purpose of the thesis, based on the problem, is defined. We have also made a disposition over the master thesis' chapters.

The frame of reference chapter begins with a description of corporate governance. The chapter continues with a presentation of the agency theory, since others and we have derived corporate governance characteristics from this theory for use in the analysis. Moreover, control variables from prior studies are included.

The method chapter begins with an explanation of what kind of examination we will use in our master thesis. The chapter also contains a description of our examination process in four steps. Reliability and validity is also a part of our method chapter.

The chapter of analysis and results contains descriptive statistics of the dependent variable, followed by analyses of the results of the linear regressions of each independent variable and the corporate governance index. Moreover, a Pearson's multicollinearity test of the independent variables is included; thereafter, the results of the multiple regressions are analysed.

The chapter of conclusions and comments begins with the conclusions drawn from the analysis; thereafter, follows comments and suggestions on further studies.



2 Frame of reference

The frame of reference begins with a description of corporate governance. The chapter continues with a presentation of the agency theory, since others and we have derived corporate governance characteristics from this theory for use in the analysis. Moreover, control variables from prior studies are included.

2.1 What is corporate governance?

There are several definitions of corporate governance; although they are formulated differently but the meaning is the same. We have chosen to use the definition in OECD's principles from 2004 since it gives a broad description of what the word means. The following definition can be found in OECD's preamble:

"Corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure through witch the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined. Good corporate governance should provide proper incentives for the board and management to pursue objectives that are in the interests of the company and its shareholders and should facilitate effective monitoring."

2.2 Hypothesis development

"Corporate governance has been traditionally associated with the principal-agent relationship problem." (Mayer, 1997).

Jensen and Meckling (1976) used agency theory as a way to address problems of control between agents and principals, which arise because of information asymmetry. They defined the relationship between principals and agents as a contract under which the principal engages the agent to perform some service on their behalf. The interests and objective of investors and managers differ (Mayer, 1997); therefore, a central element of agency theory is the role of monitoring, which is fully consistent with the view that managerial opportunism is promoted by a situation were ownership is separated from control (Jensen & Meckling, 1976; Daily, Dalton & Cannella, 2003).

According to agency theory, the potential for agency costs exist where there is a separation of control and ownership of a corporation (Hossain, Perera & Rahman, 1995). Because managers accept agency costs (Jensen & Meckling, 1976), they wish to be seen acting in the interest of shareholders (Ness & Mirza, 1991). Agency costs relate to the maintenance of the contractual relationship between the principals and agents (Hossain, Tan & Adams, 1994).

The purpose with this master thesis is, with starting point in agency theory, to contribute to the understanding of which factors that influence corporations to disclose information in the annual reports; therefore, the following hypotheses are motivated with consideration to agency theory.

2.2.1 Corporate governance characteristics from prior studies

The following corporate governance characteristics have been used in prior studies as proxies for effective monitoring and/or alignment of interests.

2.2.1.1 Management ownership

According to Jensen and Meckling (1976), the principal-agent problem between managers and shareholders arises when managers hold little equity in the corporation, which leads managers to engage in non-maximizing behaviour.

However, as management ownership increases, the interests of managers and shareholders are more aligned (Jensen & Meckling, 1976, Leftwich, Watts & Zimmerman, 1981). This alignment reduces conflicts of interest and causes managers to act in the shareholders' interests (Watts, 1977; Craswell & Taylor, 1992; Leung & Horwitz, 2004) and enhances their incentives to provide more disclosure (Leung & Horwitz). Therefore, high share ownership by managers may result in high levels of information disclosure (Watts; Craswell & Taylor; Leung & Horwitz), which reduces information asymmetry (Leung & Horwitz). Our hypothesis will therefore be as follows:

H1: There is a positive association between management ownership and the levels of corporate governance disclosures.

2.2.1.2 Non-executive directors

One major role of the board of directors is its control functions (Pound, 1995). For effective control of the management, the board of directors must be independent, in other words, mainly consists of non-executive directors (Gubitta & Gianecchini, 2002). Therefore, non-executive directors are seen as a toll for monitoring and controlling the actions of the managers, due to their opportunistic behaviour, (Jensen & Meckling, 1976; Leftwich et al., 1981; Fama & Jensen, 1983; Rosenstein & Wyatt, 1990; Pettigrew & McNulty, 1995; Mak, 1996; Leung & Horwitz, 2004) and protecting the shareholders interests (Leung & Horwitz).

Both Leftwich et al. (1981) and Fama and Jensen (1983) argued that the non-executive directors strengthen the extent to which a board of directors is independent of the management. The larger the proportion of non-executive directors on the board, the more effective it will be in monitoring managerial opportunism; therefore, corporations can be expected to have more disclosure (Leftwich et al.; Fama & Jensen; Haniffa & Cooke, 2002). Our hypothesis is therefore as follows:

H₂: There is a positive association between proportion of non-executive directors and the levels of corporate governance disclosures.



2.2.1.3 Large audit firms

The size of audit firm has been related to the extent of disclosure in several articles and prior studies, which have used the Big-8³ (e.g. Firth, 1979) or the Big-6⁴ audit firms (e.g. Wallace, Naser & Mora, 1994) as a proxy for large audit firms. These have greater expertise and experience and can therefore reduce information asymmetry between shareholders and managers by encouraging managers to disclose more information (Baiman, Evans & Noel, 1987; Baiman, 1990; Wallace et al., 1994).

Large audit firms have also more incentive to encourage their clients to disclose more information since they do not want to be associated with clients who disclose limited information; because of the possible damaging of their reputation (DeAngelo, 1981; Firth, 1979) and because they are associated with higher audit quality (Leung & Horwitz, 2004). Therefore, the clients are recommended to disclose more information (Firth; DeAngelo; Chow, 1982; Ahmed & Nicholls, 1994; Leung & Horwitz).

Furthermore, large audit firms are said to be more likely to influence corporations to disclose additional information, because they play an important role in limiting opportunistic behaviour of management, thereby reducing the agency costs borne by shareholders (Jensen & Meckling, 1976; Watts, 1977; Watts & Zimmerman, 1986). Therefore, our hypothesis is as follows:

H₃: There is a positive association between large audit firms and the levels of corporate governance disclosures.

2.2.1.4 Role duality

According to Jensen and Meckling (1976), the need to limit the decision discretion of management and the need for a separate board of directors to oversee that the management acts in the interests of shareholders is well understood from agency theory. Different individuals should hold the positions as CEO⁵ and chairman since excessive power concentration in the hands of a single person could favour opportunistic behaviours (Gubitta & Gianecchini, 2002).

To reduce the advantages gained by withholding information (Forker, 1992), the roles of the CEO and the chairman should be separated; thereby providing essential checks and balances of the management (Blackburn, 1994) and enhancing monitoring quality (Forker).

³ Arthur Young McClelland Moores, Coopers and Lybrand, Deloitte Haskins and Sells, Peat Marwick Mitchell, Price Waterhouse, Thomson McLintock, Touche Ross and Whinney Murray (Firth, 1979).

⁴ Arthur Andersen, Coopers and Lybrand, Deloitte Touche Tohmatsu, Ernst and Young, KPMG Peat Marwick and Price Waterhouse (Hossain et al., 1994).

⁵ Chief Executive Officer

Moreover, when the position as CEO and chairman is held by the same person, the board of directors' effectiveness in performing its monitoring function may be compromised, since the CEO will be able to control board meetings, select agenda items, as well as select directors to the board (Blackburn, 1994); thereby protecting own interests to decrease the functions of the board of directors (Patton & Baker, 1987).

Fama and Jensen (1983) believe that the board of directors is ineffective when the decisions of the management cannot be controlled. When CEO duality exists, the CEO needs to monitor its own decisions and activities; therefore, actions in the best interest of the shareholders may not be carried out (Messier, 2000).

According to the Swedish Companies Act (ABL 8:14§), the CEO is not allowed to be the chairman of the board of directors. However, corporations listed on the Stockholm Stock Exchange are not necessarily Swedish; therefore, in some of the corporations, the CEO can also be the chairman. Our hypothesis is therefore as follows:

H4: There is a negative association between role duality and the levels of corporate governance disclosures.

2.2.1.5 Diffuse ownership

The annual report is the main source of information for small shareholders (Raffournier, 1995); therefore, the corporations with diffuse ownership have more incentive to disclose information that can help the shareholders to monitor the managers' activities (Leftwich et al., 1981; Craswell & Taylor, 1992; McKinnon & Dalimunthe, 1993; Hossain et al., 1994; Raffournier). Our hypothesis is therefore as follows:

H₅: There is a positive association between diffuse ownership and the levels of corporate governance disclosures.

2.2.1.6 Audit committee

The audit committee's functions include guaranteeing the financial accounting and control systems (Collier, 1993). Therefore, the existence of an audit committee may improve internal control and is regarded as an effective monitoring device for reducing managerial opportunism (Braiotta, 2004; McDaniel, Martin & Maines, 2002) and improving disclosure quality (Forker, 1992).

Financial reporting (Hossain et al., 1994), hence the audit committee (DeZoort, 1997; Ho & Wong, 2001) can help the principals to monitor the agents' activities and also act as a bonding function where the agents can signal their compliance with the principals' interests (Hossain et al.; DeZoort; Ho & Wong). Therefore, our hypothesis is as follows:

H₆: There is a positive association between the existence of an audit committee and the levels of corporate governance disclosures.

2.2.1.7 Board size

Jensen (1993) and Yermack (1996) argue that board of directors are less effective monitors as they grow in size, since the control over management will be reduced. Moreover, a smaller board of directors will more likely take responsibility for monitoring a corporation's operations than a larger board of directors, according to Vaefas (2000).

Larger board of directors may be slower to react to decisions that require an immediate course of action. Furthermore, as more directors are added, the board of directors loses the ability to be direct and decisive in their operation; therefore, it will be easier for the CEO to control the board of directors. The directors also become less candid in the ability to be critical of one another, which results in less efficient decisionmaking (Jensen, 1993). Therefore, our hypothesis is as follows:

H7: There is a negative association between board size and the levels of corporate governance disclosures.

2.2.1.8 Number of shareholders

The greater the number of shareholders, the more likely it is that their information needs will be different, which results in a greater need for different information to be disclosed (Cooke, 1989a). Our hypothesis is therefore as follows:

H₈: There is a positive association between number of shareholders and the levels of corporate governance disclosures.

2.2.2 Own corporate governance characteristics

The following corporate governance characteristics will also be included in the analysis. We think these also may influence corporations' disclosure practices, since the starting point for their influence on corporations' disclosure practices is taken in the corporate governance characteristics from prior studies.

2.2.2.1 Board ownership

As mentioned earlier under heading 2.2.1.1, when managers own shares, their interests are more aligned with the shareholders; therefore, their incentive to provide more disclosure is enhanced. We think the same arguments can be applied when the directors of the board own shares. Therefore, our hypothesis is as follows:

H₂: There is a positive association between board ownership and the levels of corporate governance disclosures.

2.2.2.2 Board compensation

We believe that the board of directors will be more motivated to carry out its role as monitors of the management, as the directors' compensation gets higher. Therefore, as mentioned above under heading 2.2.1.2, corporations can be expected to have more disclosure since it will be more effective in monitoring managerial opportunism. Our hypothesis is therefore as follows:

H10: There is a positive association between board compensation and the levels of corporate governance disclosures.

2.2.2.3 Nomination committee

A nomination committee can be appointed to help monitoring the composition of the board of directors (Braiotta & Summer, 1987). The nomination committee is a sub-committee to the board of directors and consists of directors of the board (Danielsson et al., 1998). As mentioned earlier under heading 2.2.1.2, the board of directors must mainly be composed of non-executive directors, hence even the nomination committee. Therefore, we believe that the existence of a nomination committee can help to assure that the board of directors consist of non-executive directors. Consequently, the non-executive directors of the board help to enhance the monitoring of the management, which may result in more disclosure. Therefore, our hypothesis is as follows:

H11: There is a positive association between the existence of a nomination committee and the levels of corporate governance disclosures.

2.2.2.4 Compensation committee

We believe that if the board of directors appoint a compensation (remuneration, salary) committee, the monitoring over the managers' compensations, bonuses and other benefits is improved. Therefore, as mentioned above under heading 2.2.1.2, corporations can be expected to have more disclosure, since it will be more effective in monitoring managerial opportunism. Our hypothesis is therefore as follows:

H12: There is a positive association between the existence of a compensation committee and the levels of corporate governance disclosures.

2.2.2.5 Board activity

We believe that as more meetings of the board of directors are held, the more enhanced the board of directors will be at monitoring of the management, hence a stronger control role. Although, the length of the meetings can also be considered since one meeting of two hours and two meetings of one hour gives the board of directors the same amount of time to monitor the management. However, the enhanced monitoring by the board of directors can ensure that the management fulfils the shareholders' interests and not act in a self-interested way, as mentioned earlier under heading 2.2.1.2. Therefore, our hypothesis is as follows:

H13: There is a positive association between board activity and the levels of corporate governance disclosures.

2.2.3 Control variables

Other variables, which have shown significant relations to disclosure levels in prior studies, are corporation size and multiple listing status (appendix 1). Since the majority of the studies have found the variables to be significant, it does not seem to matter what kind of disclosure these are tested on. Even though, different disclosures have been studied. Therefore, we think that corporation size and multiple listing status may affect the disclosure of corporate governance information as well.

2.2.3.1 Corporation size

Corporation size has been a commonly used variable in prior studies, since it is a general agreement that a positive relationship between the size of a corporation and its extent of disclosure is to be expected. Prior studies and other authors have put forward several reasons to support the idea that larger corporations disclose more information in the annual reports than smaller corporations do.

Political pressure from government agencies is greater on larger corporations (Buzby, 1975; Firth, 1979; Cowen, Ferreri & Parker, 1987); therefore, the corporations' incentive to disclose more information is enhanced (Patten, 1992), which may lead to a lower pressure from the government (Buzby).

The demand from financial analysts for information is greater on larger corporations (McKinnon & Dalimunthe, 1993; Hossain et al., 1995), since the annual reports are more likely to be examined by financial analysts (Schipper, 1991). Therefore, larger corporations have a greater incentive to disclose more information (Schipper; McKinnon & Dalimunthe; Hossain et al.).

Larger corporations are also more seen by the public (Firth, 1979), which results in greater social pressure (Cowen et al., 1987); therefore, they have greater incentive to disclose more information (Firth; Patten, 1992) since it may improve their reputation and image (Firth).

Larger corporations are more likely to disclose more information than smaller corporations, since it is more probable that smaller corporations feel it will give the corporation competitive disadvantage, when disclosing full information in the annual report (Buzby, 1975; Craswell & Taylor, 1992).

To decrease the agency costs and reduce the information asymmetry between the management and the providers of funds (shareholder), larger corporations will disclose more information since they need more external funds (Giner Inchausti, 1997).

Moreover, larger corporations generally have more products and operate in larger geographical areas; therefore, Buzby (1975) expects the disclosure costs to be lower because the extent of internal data, which also can be used when disclosing information to the public, is larger in these corporations. Our hypothesis is therefore as follows:

H14: There is a positive association between corporation size and the levels of corporate governance disclosures.

2.2.3.2 Multiple listings

Corporations listed beyond their domestic capital market disclose more information because they comply with foreign regulations (Choi & Mueller, 1984; Cooke, 1989b; Gray, Meek & Roberts, 1995) and meet the needs of the capital market to obtain funds on favourable terms (Gray et al.).

Agency theory suggests that listing status may affect the disclosure of information (Cooke, 1991), since corporations can reduce the shareholders' monitoring costs by disclosing information (Schipper, 1981; Cooke). Cooke also states that it is possible that multiple listed corporations disclose more information than only domestically listed corporations, in order to raise capital through the markets.

Moreover, multiply listed corporations are more in the public eye (Cooke, 1992). Consequently, there will be additional capital market pressure (Meek, Roberts & Gray, 1995) and more potential conflicts between and across the interested parties (Giner Inchausti, 1997); therefore, corporations may disclose information to reduce the agency costs (Giner Inchausti; Meek et al.). Our hypothesis is therefore as follows:

H₁₅: There is a positive association between multiple listings and the levels of corporate governance disclosures.

2.2.4 Other characteristics

We have decided to include two more characteristics, industry type and domestic listing status, for the reasons stated below.

2.2.4.1 Industry type

Since different studies often have different purposes, it is not interesting to compare the result of the industry characteristic's relation to disclosure between studies.

According to Cooke (1991), historical reasons why corporations in some industries disclose more information than others could be that a firm with high level of disclosure is dominant in an industry. Therefore, this could have an effect on the disclosure levels in other corporations in the same industry since they may follow them. For this reason, our hypothesis is as follows:

H16: There is association between industry type and the levels of corporate governance disclosures.

2.2.4.2 Domestic listing status

We even believe that similar reasons, as for the industry characteristic, can be applied to the domestic listing status characteristic.

Moreover, since the corporations in our sample are randomly selected in proportion to the total number of corporations on each of the Stockholm Stock Exchange's four lists, the inclusion of this characteristic makes it possible to draw general conclusions about the listed corporations in Sweden.

However, the characteristic can even serve as a proxy for corporation size, since larger corporations tend to be on the Stockholm Stock Exchange's A-list. Therefore, to role out the possibility of this proxy, our hypothesis is as follows:

H17: There is association between domestic listing status and the levels of corporate governance disclosures.

3 Method

The method chapter begins with an explanation of what kind of examination we will use in our master thesis. The chapter also contains a description of our examination process in four steps. Reliability and validity is also a part of our method chapter.

The method chapter is a description of the procedure to achieve the purpose. Therefore, we repeat the purpose of this thesis here: the purpose with this master thesis is, with starting point in agency theory, to contribute to the understanding of which factors that influence corporations to disclose corporate governance information in the annual reports. What kind of examination has been conducted and which method have been used, to achieve the purpose of this master thesis?

3.1 Examination

According to Artsberg (2003), a descriptive study tells how something is. We are going to use corporate governance characteristics, control variables and an index when examining which factors that influence corporations to disclose information in the annual reports. In this way, we try to find causes and effects when putting the data into SPSS. Since corporate governance disclosure is a relatively new subject, we have used plenty of variables, not only derived from agency theory and prior studies, but also characteristics of our own.

There are different procedures to collect accounting knowledge, but generally, the collection of knowledge can be classified in the deductive and the inductive procedure (Artsberg, 2003).

With deductive theory, the starting-point is taken in an existing theory and the purpose is to test or increase the theory. Scientifically, this method is also called hypothetical/deductive where it also attempt to explain or predict the reality (Artsberg, 2003). In our case, the starting point for this thesis is taken in agency theory, since we will use it to derive corporate governance characteristics.

With inductive theory, the starting-point is taken from the empiricism and the purpose is to build up a new theory, more specifically, a new knowledge (Artsberg, 2003). The development of the corporate governance disclosure index (see 3.2.3) is on the other hand inductive, since we will develop it while going through the annual reports.

3.2 The research process

The research process with phases and examination steps by Lundahl and Skärvad (1999) can be divided in three phases and four examination steps. According to this model, we are going to present the procedure to our master thesis.

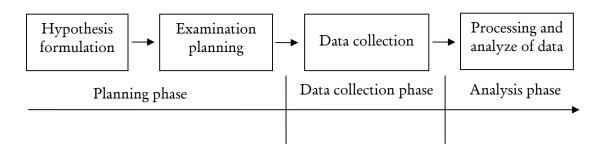


Figure 1 The research process with phases and examination steps (modified after Lundahl & Skärvad, 1999, p. 95)

In the planning phase, hypotheses are formulated and the examination is planned. The data collection phase means that essential data is collected. The last phase, the analyze phase, concerns the processing and analyzing of the data.

3.2.1 Step 1 - Hypothesis formulation

The first step in the quantitative examination is to specify the hypotheses that are going to be tested. Our hypothesis formulation follows Lundahl and Skärvad's figure below.

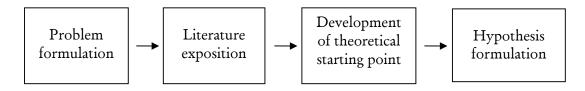


Figure 2 The procedure of the hypothesis formulation (Lundahl & Skärvad, 1999, p. 95)

3.2.1.1 Problem formulation

We think corporate governance is an interesting subject since it receives increased attention because of the corporate scandals, primary in the U.S. for example the Enron scandal. Corporate scandals have also appeared here in Sweden, for example Skandia; consequently, increased attention to corporate governance has been seen in the annual reports of listed corporations in Sweden (Ljungdahl, 2004).

3.2.1.2 Literature exposition

We first searched on the website of the library at Jönköping University and used words and different combinations of words such as corporate governance, corporate governance disclosure, disclosure, mandatory disclosure, voluntary disclosure, annual reports, non-financial disclosure, annual report, agency theory. Here we found plenty of books, articles, essays and websites. Through LIBRIS, a national library data system in Sweden, we borrowed literature and articles from other universities and libraries in Sweden. We also searched for articles in several journals, as can be seen in the reference list, and databases, such as ABI/Inform Global and ArtikelSök.

When we started to read the books and articles, we realized that most of them only described what corporate governance is and there were nothing about disclosure practices. Therefore, another search was conducted to find even more articles about the subject. We did not find any articles concerning corporate governance disclosure in particular, neither in Sweden nor abroad. The only authors, who used corporate governance characteristics in their study of disclosure practices, were Ho and Wong (2001). We have also searched information on agency theory; most of the articles we found have used this theory to derive variables. Although, only a few of the authors of the articles have examined disclosure practices, and neither has looked at corporate governance disclosure. Therefore, we only had use of the articles when deriving the characteristics.

When going through the articles about disclosure practices, we found that several of them contained correlation analyses. The authors tried to see if the levels of disclosure in annual reports were related to different corporate characteristics. We became interested to examine if corporate governance characteristics derived from agency theory can explain why some corporations listed on the Stockholm Stock Exchange disclose more corporate governance information than others do.

3.2.1.3 Development of theoretical starting point

The following step is to compose the frame of reference. After the literature review, we had formed us a good understanding of corporate governance and the agency theory. The motivations for how most of the corporate governance characteristics are related to disclosure practices were gathered from the literature. Moreover, we motivated the characteristics that have not been used before, by our own, from the agency theory perspective. However, even characteristics that have been found to have a relationship with disclosure practices, in most of the prior studies (appendix 1), were included as control variables. We also included two characteristics, industry type and domestic listing status, since the corporations in our sample are classified into different industries and listed on different lists on the Stockholm Stock Exchange.



3.2.1.4 Hypothesis formulation

The last step in Lundahl and Skärvad's (1999) model is the hypothesis formulation. A hypothesis can take form in many different ways, through for example real discoveries. In most practical situations, it can be suitable to have some linear guidelines to what a good hypothesis is for example:

- the hypothesis shall be able to be a possible solution to the problem that the study is based on,
- the hypothesis shall be able to be tested, and
- the hypothesis shall be reasonable, that is based on arguments.

We have developed our hypotheses from the motivations to each of the characteristics in the frame of reference; therefore, we think the hypotheses can provide possible explanations, can be tested and are reasonable. Below follows a disposition of our hypotheses:

- H1: There is a positive association between management ownership and the levels of corporate governance disclosures.
- H₂: There is a positive association between proportion of non-executive directors and the levels of corporate governance disclosures.
- H₃: There is a positive association between larger audit firms and the levels of corporate governance disclosures.
- H4: There is a negative association between role duality and the levels of corporate governance disclosures.
- H₅: There is a positive association between diffuse ownership and the levels of corporate governance disclosures.
- H₆: There is a positive association between the existence of an audit committee and the levels of corporate governance disclosures.
- H7: There is a negative association between board size and the levels of corporate governance disclosures.
- H₈: There is a positive association between number of shareholders and the levels of corporate governance disclosures.
- H₉: There is a positive association between board ownership and the levels of corporate governance disclosures.
- H10: There is a positive association between board compensation and the levels of corporate governance disclosures.
- H11: There is a positive association between the existence of a nomination committee and the levels of corporate governance disclosures.

Method

- H12: There is a positive association between the existence of a compensation committee and the levels of corporate governance disclosures.
- H₁₃: There is a positive association between board activity and the levels of corporate governance disclosures.
- H14: There is a positive association between corporation size and the levels of corporate governance disclosures.
- H₁₅: There is a positive association between multiple listings and the levels of corporate governance disclosures.
- H₁₆: There is association between industry type and the levels of corporate governance disclosures.
- H17: There is association between domestic listing status and the levels of corporate governance disclosures.

3.2.1.5 Step 2 - Examination plan

The second step concerns how the examination shall be designed. This is made by choosing source of knowledge, methods for data collection and drawing a sample.

The corporate scandals, as earlier mentioned in the background, have concerned listed corporations; therefore, our sample of corporations is based on listed corporations on the Stockholm Stock Exchange. Because of the short time we have on writing this master thesis and since there were 274 corporations listed on the Stockholm Stock Exchange (autumn, 2004), we chose to draw a sample of 20% of the corporations. To draw a random sample, we used Excel, so all of the corporation would have the same chance of being included. Since we have worked with Excel before in the course Business Statistics, we were aware of that some corporations were going to be duplicated when drawing the sample. Therefore, we decided to take a sample of 22%, resulting in 60 corporations where six of them were duplicates. Therefore, our final sample was 54 corporations, which is almost 20% of all the listed corporations in Sweden.

However, to be able to draw general conclusions about the corporations listed on the Stockholm Stock Exchange, the proportion of corporations from each list in our sample must approximately be the same as on the Stockholm Stock Exchange. When looking at the sample, we noticed that the proportion of corporations from each of the Stockholm Stock Exchange's lists approximately were the same in our sample.

All the corporations, which are included in our sample, have a website where specific information can be found fast and easy. Unfortunately, since we do not know how often the websites are updated or how old the information is, we wanted to be consequential with all the corporations; therefore, we have decided to use the annual reports because the information is in printed form and cannot be changed.

Method

We e-mailed the National Statistics Office of Sweden (September, 2004) to get information on how much it would cost to order the annual reports from them; the answer was 80 Swedish kronor, excluding postage. As we still are students and cannot afford to pay at least 80 Swedish kronor for each of the 54 annual reports, we quickly decided to change our strategy for the gathering of the annual reports.

Instead, we e-mailed the corporations and asked if it was possible for them to send us the annual reports from 2003. Some of them answered back and some of them ignored the e-mail. The first week, we received 29 annual reports. Since, the time was getting on, we sent a new e-mail, one week later, to the corporations we had not received the annual report from. The effect of the second e-mail was that another 17 annual reports were sent to us. Since the last eight corporations in our sample did not send us the annual report, we printed out the annual reports from the corporation's website, so all corporations in our sample could be included. The annual reports we printed were from Borås Wäfveri, Diamyd Medical, Fagerhult, Micronic, Senea, Sigma, Strålfors and Tripep.

We also wrote, in both e-mails we sent to the corporations, that it was of importance for us to receive the annual report in English, since we wanted to avoid misunderstandings in the translations; furthermore, because this master thesis was going to be written in English. Even though, only 27 of the annual reports were in English and the rest in Swedish. The annual reports we printed out were available in English, except from Borås Wäfveri and Senea, which only were available in Swedish.

During the time we were going through the annual reports, we faced some problems that forced us to change or angle some decisions we have already made. For instance, we excluded twelve corporations (Carnegie, FöreningsSparbanken, Hagströmer & Qviberg, Hufvudstafen, Investor, JM, Klövern, Latour, Ljungbergsgruppen, NeoNet, Novesta, Skandia) from our sample since they were, according to the Stockholm Stock Exchange (2005), in the financial industry. These corporations do not for example sell any products, which makes it impossible for us to include them in our sample since we have used sales as a proxy for corporation size.

We came across another problem with our sample since we used the annual report from the fiscal year 2003, because the annual reports from 2004 were not finished yet. Therefore, we excluded one corporation (NOTE) from our sample, which were not registered on the Stockholm Stock Exchange in 2003. NOTE registered on the Stockholm Stock Exchange in 2004; therefore, we decided to exclude this corporation from this study. After excluding the corporations from the financial industry and NOTE, the total number of corporations in our sample ended up at 41 (appendix 2).

Since the attention to corporate governance is increasing continuously, we decided to use the annual reports from 2002/2003 for the corporations with a broken fiscal year. We believe that these corporations have had more time to notice the increased attention to corporate governance, and therefore may have included more corporate governance disclosure in the annual reports from 2003/2004. In our sample Addtech, Bergman & Beving, Diamyd Medical and Retail & Brands had a broken fiscal year.

3.2.2 Step 3 - Data collection

The data collection was divided into two parts, first the characteristics for each corporation were measured and thereafter the levels of corporate governance disclosure in the annual reports of the corporations were measured.

3.2.2.1 Corporate governance characteristics and control variables

While going through the annual reports, we encountered some problems to find some of the corporate governance characteristics in the annual reports. Therefore, some of the corporations have been contacted via e-mail or telephone to help us gather the needed information or clarify some questions. Below follows a description of how we have defined or measured the characteristics.

3.2.2.1.1 Management ownership

The corporate governance characteristic management ownership measures the proportion of how many shares the management group owned to the total amount of outstanding shares (less repurchased shares) in the corporation. Since not all corporations had disclosed the same information in the annual reports, we had to change the way of measuring this characteristic. To be consequent, we excluded all the members in the management group except the CEO, since all corporations had disclosed the amount of shares that the CEO held. Some of the corporations have not separated the CEO's private holdings from holdings via corporations; therefore, we have included shares owned both privately and via corporations. Some corporations had a new CEO from 2004 and did not disclose information about the former CEO's share holdings; therefore, the former CEO's holdings were looked up in the annual report from 2002 on the corporation's website (e.g. Borås Wäfveri, Senea).

3.2.2.1.2 Non-executive directors

This characteristic measures the proportion of non-executive directors on the board. This was done by dividing the number of independent directors with the total number of directors on the board. Since not all of the corporations had disclosed if the employee representatives of the board are actual employees or not, we have considered them as executive directors. Even if the directors or their corporations have had other assignments earlier in the corporation, they were considered as executive directors (e.g. Johnson Pump, Ortivus).

Moreover, we considered the CEO, the founder of the corporation (CashGuard and Tripep), other managers (e.g. Consilium), even those who were employed in the subsidiaries (e.g. Svedbergs) and directors who have been managers and received a salary during the fiscal year 2003, as executive directors.

Method

In Pergo's case, where the chairman is a lawyer and remuneration has been paid to the lawyer's office, we have considered the chairman as a non-executive director, since it is not disclosed in the annual report if the chairman has been involved in cases concerning the corporation or not. In Micronic, the chairman of the board has received salary, but the corporation had not disclosed if the chairman was employed or not; therefore, we telephoned the corporation, which confirmed that the chairman has not been an employee, hence non-executive.

3.2.2.1.3 Large audit firms

We have used the Big 4⁶ audit firms as a proxy for large audit firms. All corporations in our sample have disclosed the name of their audit firms. Some of the corporations had several audit firms; this was not a problem if all of their auditors were one of the Big 4 audit firms or if they had disclosed which auditor or audit firm that was the head auditor. We contacted Höganäs and Technology Nexus via telephone since it was not clear which of their auditors that was the head auditor.

3.2.2.1.4 Role duality

If the corporation had not disclosed information about the CEO's involvement in the board of directors, we had to compare the names of the CEO and the chairman to know if both positions were held by the same person.

3.2.2.1.5 Diffuse ownership

From the beginning, we were going to measure the diffuse ownership by looking at how much the ten largest shareholders held, since the first annual reports we examined had disclosed the ten largest shareholders' percentage of the capital. However, during the examination of the annual reports, we soon realised that not all of the corporations disclosed the same information. Some of them only disclosed the three largest shareholders; therefore, we had to change our way of measuring the diffuse ownership. Since ABB were the corporation that had disclosed the least information about the largest shareholders, we had to accommodate our measure after the disclosed information in ABB's annual report; hence, the shareholders who owned 5% or more. Thereafter, we subtracted the sum of the shareholders who owned 5% or more from 100%.

⁶ Öhrlings-PricewaterhouseCoopers, Deloitte & Touche, KPMG (Bohlins), Ernest & Young (Artsberg, 2003)

3.2.2.1.6 Audit, nomination and compensation committee

Some of the corporations had a separate heading for corporate governance, which made it easier to determine if the board of directors had committees. Nevertheless, most of the corporations only wrote about the board of directors and its committees in the board of directors' report, if at all. However, some of the corporations had disclosed information similar to other corporations, but had not actually written that they had a committee, so we assumed that the corporation did not have that committee.

3.2.2.1.7 Board size

When determining the size of the board of directors, we excluded the deputy directors since they mostly attend meetings when necessary; hence, when an ordinary director is absent. Moreover, some of the corporations had disclosed information about honorary directors, but since they are not mentioned in the information about the number of directors elected by the Annual General Meeting and the number of employee representatives and deputies, we excluded them from the size of the board of directors. The size of the board of directors includes the directors elected by the Annual General Meeting and the employee representatives, since they normally attend the meetings of the board of directors.

3.2.2.1.8 Number of shareholders

Most of the corporations had disclosed, not only in the text but also in a table, the exact number of shareholders; however, ABB and Technology Nexus had only disclosed the approximate number of shareholders. Moreover, Poolia was the only corporation that had not disclosed any information about its number of shareholders; therefore, we telephoned the corporation for that information.

3.2.2.1.9 Board ownership

Board ownership was measured by dividing the total number of shares owned by the board of directors with the corporation's outstanding shares (less repurchased shares). We have included the employee representatives since they are included in most of the corporations' descriptions of the board of directors. All of the corporations had disclosed the directors' holdings in the corporation; however, one of Rottneros' directors has deceased and there was no information about the director's holdings. We did not contact the corporation for the information because of the circumstances.

3.2.2.1.10 Board compensation

The compensation to the board of directors was found in the notes of the annual reports. Sometimes, there was only one sum for both the CEO and the board of directors; it was not always clear how much the CEO and the board of directors received in compensation. Therefore, we several times had to calculate by our own how much the compensation was with help of the tables and the comments to the note.

Since NeoNet had disclosed board compensation for both the fiscal years 2002/2003 and 2003/2004, there was no other way to calculate the compensation for 2003, than taking an average of the two years.

3.2.2.1.11 Board activity

When we were about to search for information concerning board activity, we did not know what information the corporations had disclosed about the meetings of the board of directors, for example number of meetings or even the length of the meetings. Soon, we realised that ABB was the only corporation, which had disclosed both number of meetings and the average time, whereas the rest of the corporations only had disclosed number of meetings. Therefore, board activity was measured as the number of meetings for the board of directors.

3.2.2.1.12 Corporation size

In this case, the corporations' sales, hence turnover, served as a proxy for corporation size. Since ABB disclosed the financial information in Dollars, we converted the sales to Swedish kronor, according to the course on the 31st of December 2003, which we found in ABB's annual report.

3.2.2.1.13 Multiple listings

Most of the corporations had a separate section with disclosed information about its share(s), but some of the corporations had not disclosed any information about which Stock Exchanges the share(s) was(were) listed on. However, sometimes it was clearly disclosed in the text. Although, there were occasions where the corporation only had disclosed information about one of its shares; therefore, we contacted the corporation to be sure that the other share was not listed at all.

3.2.2.1.14 Industry

Since we studied corporations on the Stockholm Stock Exchange, we decided to categorize the different corporations according to the Stockholm Stock Exchange. Since we had forgotten to write the reference and the categorization on the Stockholm Stock Exchange's website was updated on the 1st of March 2005, the industry classification of the corporations in our sample was checked again. The Stockholm Stock Exchange has used 10 categories for industry, but our sample only contains corporations from seven of these categories.

3.2.2.1.15 Domestic listing status

As stated earlier, our sample is taken from the corporations listed on the Stockholm Stock Exchange, which has four major lists; A-list most frequently traded, A-list other, Attract 40 (O-list most frequently traded) and O-list other.

3.2.2.2 The corporate governance disclosure index

To be able to measure the level of corporate governance disclosure, we have calculated an index for each corporation. We developed a list of items, over the disclosed information concerning corporate governance, during the time we were going through the annual reports (appendix 4).

The disclosed corporate governance information can mostly be found under a separate heading for corporate governance or in the board of directors' report. The information about for example the compensation to the board of directors, principles for salary, pension, the actual salary to managers was normally disclosed in the notes, as was the information about the fee to the auditors. Almost all corporations had pictures of the directors of the board and the management; it was common to find information about them under the pictures, such as age, positions in other corporations, other board assignments and holdings in the corporation.

At the beginning, it was difficult to decide how detailed the list should be; therefore, as we went through the annual reports we added new items to the list. Consequently, we looked in several annual reports twice to be sure if the new items were disclosed in them or not. The new items were mostly found in the annual reports that had a separate heading for corporate governance. However, most of the corporations disclosed the same information in the board of directors' report, but not so detailed.

We used a dichotomous procedure when scoring the corporations, which means that the corporation received 1 for each disclosed item on the list and 0 for each item that was not disclosed. For example, if the corporation had disclosed that the board of directors did not have any committee(s) it received 1. Moreover, it was not relevant for the corporation to disclose information about committee(s) that the board of directors did not have.

Another example is ABB, where the CEO and chairman was the same person; therefore, it was not relevant for the corporation to disclose the same information for each position. ABB also had a finance and audit committee unlike some other corporations that had one finance and one audit committee. We thought it was not right to give the corporation 1 on both committees neither 0 on one of them; therefore, we considered one of the committees as not relevant.

When we had gone through all the annual reports, the items that were not relevant for each corporation was subtracted from the total number of items on the list. The total score for each corporation was then divided with the relevant number of items on the list for each corporation (appendix 5).



Method

The dichotomous procedure is referred to as an unweighted index, which is, according to Cooke (1989a), a suitable research instrument in disclosure studies when the focus of the research is directed to all users of annual reports rather than any specific user group. This means that each item on our list is equally important.

It was difficult to think right when scoring the corporations, since we looked up the corporate characteristics first. During the time we were doing that, we could telephone the corporation or find the information to the characteristics elsewhere, but here the purpose was to see if the corporation had disclosed a certain item. An example is the committees; it was easy to give the corporation 0 if the board of directors did not have a committee, but this was not the point. Here, the corporation only received 0 if it had not mentioned that the board of directors did not have any committee(s); whereas, if the corporation had disclosed that the board of directors did not have a committee it received 1.

3.2.3 Step 4 - Processing and analyze of data

After collecting the data from the annual reports from 2003, it was now time to put the data into SPSS version 11.5, to be able to analyse our empirical data

According to Norusis (2002), a dependent variable is thought to be influenced by another variable, an independent variable. Since other researchers and we think that the level of any kind of disclosure is influenced by different corporate characteristics, the corporate governance disclosure index will be our dependent variable and the corporate characteristics our independent variables. When trying to establish if a relationship exists between a dependent variable and independent variables, linear and multiple regression analyses will be used.

The scales on which the variables are measured must always be considered, because not all variables are suitable in all kinds of analyses. Variables whose values cannot be meaningfully ranked from smallest to largest are said to be measured on *a nominal scale*. Variables on *an ordinal scale* can however indicate order or rank. The values of variables that can tell how much larger or smaller one value is compared with another is said to be measured on *a ratio scale*. The last scale, *the interval scale*, is just like a ratio scale except that it does not have an absolute zero, but the distinction between them is seldom important in statistical analyses (Norusis, 2002).

Variables on a nominal scale can be included in a regression model, but they have to be coded using 1 and 0; this is called a dummy variable (Norusis, 2002). The variables for large audit firm, role duality, multiple listings and the committees were coded, as we were going through the annual reports. The corporation received 1 if it had a Big 4 audit firm serving as a proxy for large audit firms, 1 if role duality existed, 1 if it was listed on several stock exchanges and 1 on each of the audit, nomination and compensation committee that the corporation's board of directors had, but otherwise 0.

Method

When transforming the industry type and domestic listing status variables into dummy variables in SPSS, we shortened the names; table 1 is a disposition over this. Whereas the other variables; management ownership, non-executive directors, diffuse ownership, board size, number of shareholders, board ownership, board compensation, board activity and corporation size, are on a ratio scale.

Industry type	9
Energy	DENERGY
Industrials	DINDUSTR
Materials	DMATERIA
Health Care	DHEALTCA
Consumer discretionary	DCONDISC
Information technology	DIT
Consumer staples	DCONSTAP

Domestic listing status			
A-list most frequently traded	DAmostfr		
A-list other	DAother		
Attract 40	DATTRACT		
O-list other	DOother		

Table 1 Disposition of industry type and domestic listing status as dummy variables

To be able to know which of the independent variables that were significantly related to the dependent variable at a 5% significance level, we first ran a linear regression for each of the independent variables (appendix 6). This showed that nine independent variables were significantly related to the corporate governance disclosure index; since these variables' significance levels were lower than 0.05. The independent variables that showed a significant relationship with the corporate governance index were going to be included in a multiple regression.

The partial regression coefficient for a variable, labelled B^7 in a regression model, tells how much the value of the dependent variable will change when the value of the independent variable increases by one and the values of the other independent variables are unchanged. Moreover, by looking at R square, it is possible to see how much of the variability in the dependent variable which is explained by the independent variables (Norusis, 2002).

When examining relationships with a multiple regression model, the conclusions about independent variables must be drawn carefully. It is possible that some of the independent variables are correlated with each other, this is called multicollinearity. The strength of the possible multicollinearity is called tolerance. If some of the independent variables have a high tolerance, the coefficients of the other variables are affected, therefore it is important to examine if multicollinearity exists between the independent variables (Norusis, 2002).

⁷ Henceforth, we will label it B coefficient.



A Pearson correlation coefficient matrix was produced to examine if multicollinearity existed and how high the tolerance was (see table 4). In prior studies, for example Ho and Wong (2001), Hossain et al. (1995), and Roberts (1992), a tolerance level lower than 0.8 or 0.9 have been considered not to be harmful to the multiple regression model. If tolerance levels of at least 0.8 exist, the multiple regression analysis can be run with the variables that are highly correlated at the same time.

Now it was time to run the multiple regressions. We chose to run a stepwise multiple regression for each combination of the independent variables, due to the multicollinearity problem. As a result, we received five different multiple regressions (appendix 7).

After using these three steps, linear regression, multicollinearity and multiple regressions, we analysed the data and draw conclusions.

3.3 Reliability and validity

Reliability means that the measuring instrument will provide reliable and stable results, hence that it is free from systematic errors. To gain high reliability the method should be independent of examiner and examined units. Validity can be defined as the measuring instruments capability to measure what was intended to be measured (Eriksson & Wiedersheim-Paul, 2001).

Eriksson and Wiedersheim-Paul (2001) have arranged the following checklist on different critical matters in an examination concerning the reliability and validity.

3.3.1 Interpretation errors

Interpretation errors arise when examining a sample and drawing conclusions about the population and having one of the following defects in the examination method:

• Sampling errors: a unit can be missing or a unit that has been wrongly classified can be included.

To minimize the risk of sampling errors, the list of corporations on the Stockholm Stock Exchange was obtained from the Swedish stock exchange's website since we think it is a reliable source.

• Non-response problems: the results are distorted, if answers are not received from everyone and if the answers from those who have not answered would have been different from the received answers.

As mentioned earlier, we e-mailed the corporations twice and asked for the annual reports from 2003. The annual reports that were not obtained from the corporations were printed out from the corporation's website, in this way we did not have any non-response problems.

3.3.2 Measurement process errors

A process error occurs when the data material is processed in a way that makes it possible to draw wrong conclusions from it. It can be due to:

• Handling errors: errors in the transfer process from the source to workable data, for example coding errors and punching errors.

As mentioned earlier, we made several decisions when measuring the characteristics and the corporate governance disclosure index, which may have affected the results of this study. Since we developed the corporate governance index together, we think that the risk of including disclosure that does not concern corporate governance and the risk of scoring a corporation wrong was lower than if we had divided the development of the index and the scoring process of the corporation.

• Analyzing errors: miscalculations, misinterpretation or inappropriate analyze methods can give inaccuracies.

Before analysing the data in SPSS, we had a discussion with J. Klaesson, who is a Research Fellow and a Doctor of Philosophy in Economics at Jönköping International Business School (personal communication, 2004-12-15); to make sure that the chosen analyses were appropriate.

The chapter of analysis and results contains descriptive statistics of the dependent variable, followed by analyses of the results of the linear regressions of each independent variable and the corporate governance index. Moreover, a Pearson's multicollinearity test of the independent variables is included; thereafter, the results of the multiple regressions are analysed.

Table 2 shows the descriptive statistics for the dependent variable, the corporate governance index. The average corporate governance disclosure index was 0.2944, with a range between 0.16 (BioPhausia) and 0.55 (ABB), which also can be seen in appendix 5. ABB was the corporation that had disclosed the most information about corporate governance, but only received an index of 0.55, due to the great variation of corporate governance information in the annual reports of the corporations in our sample. Therefore, BioPhausia's index of 0.16 seams very low.

N	Valid	41
	Missing	0
Mean	,2944	
Minimum	,16	
Maximum	,55	

Table 2 Descriptive statistics of the corporate governance index

4.1 Linear regressions

To be able to examine which or what combination of the independent variables that have a significant relationship with the dependent variable, which is done through a multiple regression; a linear regression for each of the variables have to be conducted first.

4.1.1 Management ownership

Agency theory claims that the level of corporate governance disclosure increases as the management ownership increases, since the managers' interest is more aligned with the interests of the shareholders (see 2.2.1.1). Therefore, we hypothesised:

H1: There is a positive association between management ownership and the levels of corporate governance disclosures.

Since the linear regression of this independent variable and the dependent variable shows a positive association (B coefficient: 0.179) with a significance level of 0.579, in other words, an insignificant positive association (appendix 6); therefore we reject the hypothesis. This does not necessary mean that the theory is wrong, since only six of our corporations had managers that owned more than 1% of the outstanding shares and only three of them owned more than 10% (appendix 3). This might not be sufficiently high to align the interest between the managers and shareholders; therefore, the corporate governance disclosure level is not significantly affected by the managers' level of ownership.

4.1.2 Non-executive directors

The larger the proportion of non-executive directors on the board, the more effective it will be in monitoring managerial opportunism, since non-executive directors are seen as a toll for monitoring and controlling the actions of the managers; therefore, corporations can be expected to have more disclosure (see 2.2.1.2). Our hypothesis is therefore as follows:

H₂: There is a positive association between proportion of non-executive directors and the levels of corporate governance disclosures.

As can be seen in appendix 6, the linear regression of this independent variable and the dependent variable shows an insignificant positive association (Significance level: 0.503; B coefficient: 0.062); therefore, we reject the hypothesis. Since most of the corporations in our sample mostly had non-executive directors (appendix 3), the theory that this will lead to more corporate governance disclosure is incorrect.

However, when measuring the independent variables we noticed that the majority of directors, both dependent and independent, also are members in board of directors in several other corporations. This might affect the independence of the directors since they, in some cases, are likely to be members of the same board of directors, making the directors of listed corporations well acquainted and their membership in different board of directors merely becomes a routine.

4.1.3 Large audit firms

Large audit firms have greater expertise, experience and more incentive to encourage their clients to disclose more information since they can reduce information asymmetry between shareholders and managers, by encouraging managers to disclose more information. At the same time, they do not want to be associated with clients who disclose limited information, because of the possible damaging of their reputation (see 2.2.1.3). Therefore, our hypothesis is as follows:

H₃: There is a positive association between large audit firms and the levels of corporate governance disclosures.

We reject the hypothesis, since the linear regression between this independent variable and the dependent variable shows an insignificant negative association, with a B coefficient of -0.002 and a significance level of 0.957 (appendix 6). It was not surprising that the association was insignificant, we suspected this since only three corporations did not use a large audit firm, a Big-4 audit firm (appendix 3), and the corporate governance disclosure index of the corporations that use large audit firms varied a lot.

However, it was surprising that the association was negative. In the boxplot below, it is possible to see that this is because the corporate governance indexes for the corporations that do not use a large audit firm are closer to each other than the indexes for the corporations that use a large audit firm. Since ABB's value of 0.55 is considered as an outlier; hence not included, the mean is lower than for the corporations that do not use a large audit firm.

This does not necessarily indicate that the theory is incorrect. Therefore, large audit firms may encourage the clients to disclose more corporate governance information, to reduce the information asymmetry between the managers and the shareholders and to protect the audit firm's reputation.

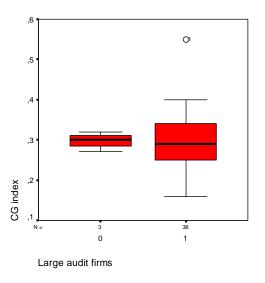


Figure 3 Boxplot of CG index and Large audit firms

4.1.4 Role duality

The board of directors is ineffective when the decisions of the management cannot be controlled. When CEO duality exists, the CEO needs to monitor own decisions and activities; therefore, actions in the best interest of the shareholders may not be carried out; thereby protecting own interest to decrease the functions of the board of directors (see 2.2.1.4). Our hypothesis is therefore as follows:

H4: There is a negative association between role duality and the levels of corporate governance disclosures.

The hypothesis cannot be rejected since the linear regression between this independent variable and the dependent variable shows a significant level of 0.000 (appendix 6). However, the B coefficient is positive, 0.262; in figure 4 below, it is obvious that this is because ABB is the only corporation with role duality (appendix 3) and the corporation with the highest corporate governance index. The hypothesis will be included in a multiple regression since it cannot be rejected.

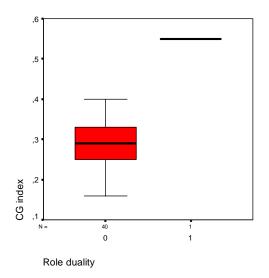


Figure 4 Boxplot of CG index and Role duality

4.1.5 Diffuse ownership

The corporations with diffuse ownership have more incentive to disclose information in the annual report, which can help the shareholders to monitor the managers' activities, since the annual report is the main source of information for small shareholders (see 2.2.1.5). Our hypothesis is therefore as follows:

H₅: There is a positive association between diffuse ownership and the levels of corporate governance disclosures.

The linear regression of this independent variable and the dependent variable shows a positive B coefficient of 0.097 and a significance level of 0.099 (appendix 6), in other words significant at a 10% significance level. However, we look at a 5% significance level, as mentioned earlier in the method chapter, and therefore we reject this hypothesis. The result shows that the theory is wrong; the corporations with high diffuse ownership do not necessarily disclose more corporate governance information in the annual reports than corporations with low diffuse ownership. This might be the case since corporations nowadays spread the information to smaller shareholders in other ways, for example through the website.

4.1.6 Audit committee

The audit committee is regarded as an effective monitoring device for reducing managerial opportunism. Financial reporting, hence the audit committee, can help the principals to monitor the agents' activities and act as a bonding function where the agents can signal their compliance with the principals' interests (see 2.2.1.6). Therefore, our hypothesis is as follows:

H₆: There is a positive association between the existence of an audit committee and the levels of corporate governance disclosures.

The linear regression of this independent variable and the dependent variable shows a positive association (B coefficient: 0.053) and a significance level of 0.038 (appendix 6), as we hypothesised. Consequently, the hypothesis cannot be rejected. This indicates that the theory is not wrong; hence, the existence of an audit committee has a positive effect on the monitoring of the management. Moreover, through financial reporting, the management can signal that they meet the shareholders' interests, which can result in increased trust in the corporation. The hypothesis will be included in a multiple regression, since it shows a significant association with the corporate governance index.

4.1.7 Board size

Board of directors are less effective monitors as they grow in size, since the control over management will be reduced. As more directors are added, the board of directors loses the ability to be direct and decisive in their operation; therefore, it will be easier for the CEO to control the board of directors (see 2.2.1.7). Therefore, our hypothesis is as follows:

H7: There is a negative association between board size and the levels of corporate governance disclosures.

A linear regression shows a significance level of 0.163 and a positive association (B coefficient: 0.008) between this variable and the dependent variable (appendix 6). The result shows the opposite of what we have hypothesised and the hypothesis is therefore rejected. This result shows that the theory is wrong; more directors may be less effective monitors, but this does not necessarily mean that their monitoring is of poorer quality. As can be seen in figure 5 below, BioPhausia (point 5) is one of the corporations with the lowest number of directors (appendix 3) and the corporation with the lowest corporate governance index (0.16). Therefore, it may be the case, that it is easier for the CEO to control the board of directors if it consists of few directors.

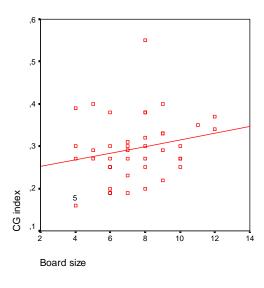




Figure 5 Scatterplot of CG index and Board size

4.1.8 Number of shareholders

It is more likely that the shareholders information needs will be different the greater the number of shareholders is; this results in a greater need for different information to be disclosed (see 2.2.1.8). Our hypothesis is therefore as follows:

H₈: There is a positive association between number of shareholders and the levels of corporate governance disclosures.

A positive significant association, with a B coefficient of $1.725E-0.7^8$ and a significance level of 0.020, is the result from a linear regression of this independent variable and the dependent variable (appendix 6). The result is in accordance with our hypothesis; therefore, the hypothesis cannot be rejected. This indicates that the managers disclose more corporate governance information when the number of shareholders is large, since it is expected that their demand for information differ greatly. The hypothesis will be included in a multiple regression, since it shows a significant association with the corporate governance index.

⁸ The partial regression coefficient, in this case, is extremely small; 1,725E-0.7 is the same as 0.000 000 1725. Henceforth, we will write out the whole value.

4.1.9 Board ownership

When directors of the board own shares, their incentive to provide more disclosure is enhanced, since their interests are more aligned with the shareholders (see 2.2.2.1). Therefore, our hypothesis is as follows:

H₉: There is a positive association between board ownership and the levels of corporate governance disclosures.

The result in the linear regression between this variable and the dependent variable shows a significance level of 0.094 and a B coefficient of -0.100 (appendix 6). This insignificant negative association is the opposite of what we hypothesised, based on the theory, and the hypothesis is therefore rejected. This can be the case since the directors with high ownership do not have enhanced incentives to provide more disclosure, since the corporate governance information is obvious for them. This can be supported by the scatterplot below, where the majority of the corporations, with directors owning more than 1%, have a lower corporate governance index.

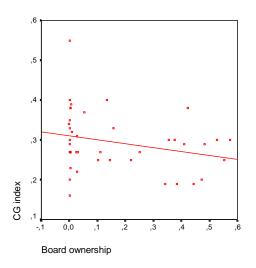


Figure 6 Scatterplot of CG index and Board ownership

4.1.10 Board Compensation

As the directors' compensation gets higher, the board of directors will be more motivated to carry out its role as monitors of the management. The board of directors will be more effective in monitoring managerial opportunism; therefore, the corporations can be expected to have more disclosure (see 2.2.2.2). Our hypothesis is therefore as follows:

H10: There is a positive association between board compensation and the levels of corporate governance disclosures.

The result in the linear regression between this variable and the dependent variable shows a significance level of 0.001 and a B coefficient of 0.000 000 010 31 (appendix 6). This significant positive association is in correspondence with our hypothesis; consequently, the hypothesis cannot be rejected. This indicates that the board of directors' motivation, to monitor the managers, increases as they receive larger compensation. Consequently, more corporate governance disclosure can be expected. The hypothesis will be included in a multiple regression, since it shows a significant association with the corporate governance index.

4.1.11 Nomination committee

The existence of a nomination committee can help to assure that the board of directors consist of non-executive directors, since the committee consists of directors of the board. Moreover, the board of directors must mainly be composed of non-executive directors, hence even the nomination committee. Therefore, the corporations with a nomination committee may disclose more information since the non-executive directors on the board of directors help to enhance the monitoring of the management (see 2.2.2.3). Therefore, our hypothesis is as follows:

H11: There is a positive association between the existence of a nomination committee and the levels of corporate governance disclosures.

As can be seen in appendix 6, the linear regression of this independent variable and the dependent variable shows a highly insignificant association (significance level: 0.980), and a low positive association (B coefficient: 0.001). The direction of the association is in accordance with our hypothesis, but the existence of a nomination committee hardly affects the level of corporate governance disclosure.

The theory states that the nomination committee consists of directors of the board; however, when reading the annual reports we noticed that the nomination committee, in most cases, consists of one director of the board and large shareholder representatives. It might be the case that the representatives nominate individuals that are well known in the business society and already have other board assignments. This may be an explanation to why the existence of a nomination committee do not have the effect on corporate governance disclosure that we hypothesised, since it may lead to poorer monitoring of the managers, given that the directors in listed corporations becomes well acquainted and their membership in different board of directors becomes a routine.

4.1.12 Compensation committee

The monitoring over the managers' compensations, bonuses and other benefits is improved, if the board of directors appoint a compensation committee. Since it will be more effective in monitoring managerial opportunism, corporations can be expected to have more disclosure (see 2.2.2.4). Our hypothesis is therefore as follows:

H12: There is a positive association between the existence of a compensation committee and the levels of corporate governance disclosures.



The result from the linear regression of this independent variable and the dependent variable is in correspondence with our hypothesis. The B coefficient is 0.057 and the significance level is 0.013 (appendix 6), in other words, a positive significant association. Consequently, the hypothesis cannot be rejected. This indicates that the existence of a compensation committee increases the monitoring of managerial opportunism, hence more corporate governance disclosure can be expected. The hypothesis will be included in a multiple regression, since it shows a significant association with the corporate governance index.

4.1.13 Board activity

Enhanced monitoring of the management, hence a stronger control role, can be a result of more meetings of the board of directors. The enhanced monitoring by the board of directors can ensure that the management fulfils the shareholders' interests and not act in a self-interested way (see 2.2.2.5). Therefore, our hypothesis is as follows:

H₁₃: There is a positive association between board activity and the levels of corporate governance disclosures.

A positive association (B coefficient: 0.003) is the result of the linear regression of this independent variable and the dependent variable, which is in accordance with our hypothesis. However, the significance level is 0.395, in other words insignificant (appendix 6), so the hypothesis is rejected. As can be seen in figure 7 below, ABB (point 1), which has the highest corporate governance index (0.55) has only had six meetings, whereas Pergo (point 23) with a corporate governance index of 0.27 has had 23 meetings (appendix 3 & 5).

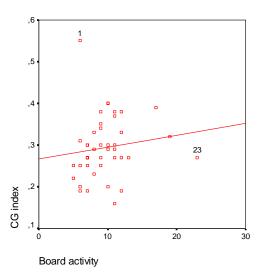


Figure 7 Scatterplot of CG index and Board activity

However, if ABB and Pergo are excluded from the linear regression (see table 3), the board activity variable is positively associated with the dependent variable (B coefficient: 0.008) and the association is significant (significance level: 0.020). This indicates that these corporations affect the result from the first linear regression, with ABB and Pergo included, and that our theory is not wrong; hence, the number of meetings enhances the monitoring of the management.

Table 3 Linear regression of CG index and Board activity, with ABB and Pergo excluded

		Unstandardized Coeffi- cients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	,213	,033		6,532	,000,
	Board ac- tivity	,008	,003	,372	2,437	,020

Coefficients(a)

a Dependent Variable: CG index

4.1.14 Corporation size

It is a general agreement that a positive relationship between the size of a corporation and its extent of disclosure is to be expected. Larger corporations tend to have larger pressure and demand of information from government agencies, financial analysts and the public; therefore, larger corporations will disclose more information to lower the pressure and to improve their reputation and image. In addition, more disclosure reduces the information asymmetry between the managers and the fund providers (shareholders); therefore, larger corporations can be expected to disclose more information since they need more external funds. Furthermore, the disclosure costs for larger corporations tend to be lower since they have more internal data, because they generally operate in larger geographical areas and have more products (see 2.2.3.1). Our hypothesis is therefore as follows:

H14: There is a positive association between corporation size and the levels of corporate governance disclosures.

As can be seen in appendix 6, the result from the linear regression of this independent variable and the dependent variable is significant and in accordance with our hypothesis (B coefficient: 0.000 000 000 000 8997; significance level: 0.002). Therefore, the hypothesis cannot be rejected. This indicates that larger corporations disclose more corporate governance information, since the corporations want to lower the pressure from government agencies, financial analysts and the public; at the same time, the corporations' reputation and image are improved; hence, increase the shareholders' trust in the corporation.

Moreover, larger corporations require more external funds and can therefore be expected to disclose more corporate governance information, since this decreases the information asymmetry between the managers and the shareholder, which are the providers of the external funds, and can increase the shareholders' trust in the corporation. In addition, the disclosure costs for larger corporations are lower since the corporations tend to have more products and operate in larger geographical areas, hence have more internal data; therefore, larger corporations are expected to disclose more corporate governance information. The hypothesis will be included in a multiple regression, since it shows a significant association with the corporate governance index.

4.1.15 Multiple listings

Since corporations, which are listed beyond their domestic capital market, have to meet and comply with the needs of the capital market and the foreign regulations, they can be expected to disclose more information. These corporations are also more in the public eye, hence additional capital market pressure and more potential conflict between and across the interested parties; therefore, corporations may disclose information to reduce the agency costs (see 2.2.3.2). Our hypothesis is therefore as follows:

H₁₅: There is a positive association between multiple listings and the levels of corporate governance disclosures.

The result of the linear regression of this independent variable and the dependent variable is significant (significance level: 0.002) and in accordance with our hypothesis (B coefficient: 0.136), as can be seen in appendix 6. Consequently, the hypothesis cannot be rejected. This indicates that corporations, which are listed on several stock exchanges, are expected to have more corporate governance disclosure, since they have to meet and comply with the needs of the capital market and the foreign regulations, as well as domestic.

Moreover, these corporations also tend to be more in the public eye; therefore, more disclosure can be expected to lower the pressure and lessen the conflict between and across the interested parties. More disclosure can also be expected, since the foreign and domestic regulations may not include the same requirements of corporate governance information. The hypothesis will be included in a multiple regression, since it shows a significant association with the corporate governance index.

4.1.16 Industry type

There are historical reasons why corporation in some industries disclose more information than other do; it could be that the corporation in an industry follows a dominant corporation, which discloses a higher level of information (see 2.2.4.1). For this reason, our hypothesis is as follows:

H16: There is association between industry type and the levels of corporate governance disclosures.

The results from the linear regressions of the seven industry type variables and the dependent variable shows that no industry type is significantly associated with the level of corporate governance disclosure, not positively nor negatively (appendix 6); as a result, the hypothesis is rejected. The reason for this may be that we used a too general classification of the industry types and therefore the difference between the corporations in our sample cannot be shown. For example, both Volvo and Poolia are classified as industrials; however, there is a big difference in what these corporations do, Volvo produces cars and trucks while Poolia hire out and recruit staff to corporations.

4.1.17 Domestic listing status

The inclusion of this variable makes it possible to draw general conclusions about the listed corporations in Sweden, since the corporations in our sample are randomly selected in proportion to the total number of corporations on each of the Stockholm Stock Exchange's four lists. However, since larger corporations tend to be on the Stockholm Stock Exchange's A-list, this variable can serve as a proxy for corporation size (see 2.2.4.2). Therefore, to role out the possibility of this proxy, our hypothesis is as follows:

H17: There is association between domestic listing status and the levels of corporate governance disclosures.

As can be seen in appendix 6, there is a significant association between the dependent variable and the independent variables of A-list most frequently traded (DAmostfr) and O-list other (DOother). The B coefficient for A-list most frequently traded is positive, while it is negative for O-list other. The variables of A-list most frequently traded and O-list other will be included in a multiple regression, since they show a significant association with the corporate governance index.

4.1.18 Summary of the linear regressions

Of all the 17 variables we have examined, there were only nine that were significantly related to the dependent variable, in other words the corporate governance index. We will therefore include the following variables in the multiple regression; role duality, audit committee, number of shareholders, board compensation, compensation committee, corporation size, multiple listings, A-list most frequently traded and O-list others.

4.2 Multicollinearity

Before running the multiple regressions, the independent variables have to be examined and checked to see if there is multicollinearity between them. Multicollinearity between the independent variables is not a problem until it exceeds the limit of 0.8, as mentioned in the method chapter. Table 4 shows high multicollinearity between board compensation and number of shareholders, board compensation and multiple listings, corporation size and multiple listings, corporation size and DAmostfr and finally between multiple listings and DAmostfr.

		Role duality	Audit committee	Number of shareholders	Board compen- sation	Compen- sation committee	Corporation size	Multiple listings	DAmostfr	DOother
Role duality	Pearson Correlation	1								
Audit committee	Pearson Correlation	,246	1							
Number of shareholders	Pearson Correlation	,232	,344 (*)	1						
Board compensation	Pearson Correlation	,708 (**)	,399 (**)	,8 04 (**)	1					
Compensation committee	Pearson Correlation	,140	,461 (**)	,233	,234	1				
Corporation Size	Pearson Correlation	,499 (**)	,474 (**)	,678 (**)	,789 (**)	,291	1			
Multiple listings	Pearson Correlation	,563 (**)	,437 (**)	,787 (**)	,879 (**)	,249	,96 0 (**)	1		
DAmostfr	Pearson Correlation	,481 (**)	,511 (**)	,687 (**)	,798 (**)	,291	,921 (**)	,855 (**)	1	
DOother	Pearson Correlation	-,208	-,513 (**)	-,352 (*)	-,365 (*)	-,570 (**)	-,432 (**)	-,370 (*)	-,433 (**)	1

Table 4 Pearson's multicollinearity test

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Because there were multicollinearity between some of the nine independent variables, we have constructed a table of possible multiple regressions, where the correlated independent variables were not included in the same multiple regression. The result, as can be seen in table 5, is five different multiple regressions, where the independent variables with an X are included and the ones with a - are not.

Table 5 Combinations	of related variables	in the multiple	regressions
		· · · · · · · · · · · · · · · · · · ·	

	Bard compensation	Multiple listing status	Number of shareholders	Corporation size	A-list most frequently traded
1	Х	-	-	-	Х
2	Х	-	-	Х	-
3	-	Х	Х	-	-
4	-	-	Х	Х	-
5	-	-	Х	-	Х

4.3 Multiple regression

As can be seen in appendix 7, it does not matter which one of the regression models we use since the results are the same in all of them. Since, R square is larger in model 2 than in model 1, our final multiple regression model is model 2 in table 6. The model explains 41.2% of the variability in the corporate governance index.

Table 6 Final	multiple	regression	models

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,547(a)	,299	,282	,06338
2	,642(b)	,412	,381	,05883

a Predictors: (Constant), Role duality

b Predictors: (Constant), Role duality, DOother

Model		Unstandardized Coef- ficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,288	,010		28,741	,000
	Role duality	,262	,064	,547	4,083	,000
2	(Constant)	,322	,016		20,487	,000
	Role duality	,228	,061	,476	3,742	,001
	DOother	-,053	,020	-,343	-2,693	,010

Coefficients(a)

a Dependent Variable: CG index

We only included the independent variables that had a significant association with the dependent variable in a linear regression; however, in a multiple regression the results are different. Role duality and DOother are the only independent variables that show a significant association with the corporate governance index in the multiple regression, hence we cannot reject the hypotheses.

Whereas, Audit committee, Compensation committee, Board compensation, Corporation size, Number of shareholders, Multiple listings and DAmostfr no longer are significantly associated with the corporate governance index, hence the hypotheses are rejected. This difference occurs since the independent variables are correlated with each other, even though we have checked and considered for high values of multicollinearity between the independent variables.

4.3.1 Role duality

Table 6 shows that role duality has the largest significant relationship with the corporate governance index, since it is the first one that is entered in the model. However, our hypothesis for role duality was:

H4: There is a negative association between role duality and the levels of corporate governance disclosures.

As can be seen, the result in the multiple regression is the opposite from our hypothesis, the B coefficient is positive (0.228), which means that the level of corporate governance disclosure increases if there is role duality in a corporation. This indicates that the theory is wrong, since it states that the CEO's power and controlling role gets too large. It gets harder for the board of directors to monitor the CEO, since the CEO also is the chairman. Therefore, it is easier for the CEO to protect own interests instead of handling in the interest of the shareholders.

However, this opposite result is probably because we actually measured if the corporation had foreign owners, since we noticed that ABB was the only corporation with role duality (appendix 3) and foreign owners. This positive association with the corporate governance index can be a result of that a foreign corporation need to follow several laws and regulations, since it has to follow both domestic laws and regulation(s) for the stock exchange(s) that it is listed on. However, this is one of the arguments for why a positive association is hypothesised in the multiple listings characteristic. On the other hand, it may be that Switzerland, where ABB's parent company is located, has exhaustive laws and regulations concerning corporate governance disclosure.

4.3.2 O-list other

DOother, O-list other, was the second and last significant independent variable that was entered in the multiple regression model (table 6). The domestic listing status variables were entered since the corporations in our sample were drawn from all of the lists on the Stockholm Stock Exchange. Therefore, we did not include the direction of the association in the hypothesis:

H17: There is association between domestic listing status and the levels of corporate governance disclosures.

However, we stated in the frame of reference that these variables could serve as proxies for corporation size, since larger corporation tend to be listed on the Stockholm Stock Exchange's A-list. We believe that the domestic listing status variables serves as proxies for corporation size, since the DOother variable is negatively associated, B coefficient of -0.053, with the corporate governance index (table 6), while the DAmostfr variable was positively associated, B coefficient of 0.120, with the corporate governance index (appendix 6), even though the later association was not significant. Hence, smaller corporations disclose less information than larger corporations do and vice versa.

5 Conclusions and comments

The chapter of conclusions and comments begins with the conclusions drawn from the analysis; thereafter, follows comments and suggestions on further studies.

5.1 Conclusions

The purpose with this master thesis was, with starting point in agency theory, to contribute to the understanding of which factors that influence corporations to disclose corporate governance information in the annual reports. Given that corporate scandals have continued to occur in resent years, at the same time, the interest for corporate governance has increased, which clearly can be seen in the annual reports.

From the analysis it is possible to conclude that the following factors influence corporations to disclose corporate governance information; role duality, the existence of an audit committee, number of shareholders, board compensation, the existence of a compensation committee, corporation size, multiple listings, A-list most frequently traded and O-list others, when analysing the association between the corporate governance index and the independent variables in linear regressions.

Moreover, it is possible to conclude that the following factors do not influence the corporations to disclose corporate governance information; management ownership, the proportion of non-executive directors, larger audit firms, diffuse ownership, board size, board ownership, the existence of a nomination committee, board activity, industry type, A-list other, Attract 40, when analysing the association between the corporate governance index and the independent variables in linear regressions.

However, it is possible to conclude that the following factors do not influence the corporations to disclose corporate governance information, when analysing the variables in a multiple regression; the existence of an audit committee, number of shareholders, board compensation, the existence of a compensation committee, corporation size, multiple listings and A-list most frequently traded.

Moreover, role duality actually measured if a corporation had a foreign parent company and corporations listed on the O-list other on Stockholm Stock Exchange served as proxies for smaller corporations. Therefore, from the analysis of the multiple regressions of the corporate governance index and the significant variables from the linear regression, it is possible to conclude that corporations are influenced by the origin of the parent company and the size of the corporation to disclose corporate governance information.

Another conclusion is that corporate governance characteristics derived from agency theory is not appropriate when trying to find factors that influence corporations to disclose corporate governance information. Nevertheless, this does not mean that it is inappropriate to take the starting point in the agency theory.



5.2 Comments

During the time we were writing this master thesis, we faced some problems. Time was one problem that never followed what we planned, consequently because we examined 41 corporations and our index contained 285 items. If we today want to change how we planned and thought, it will be to minimize the number of corporations and at the same time the list of items. Considering that the time that we are aloud to write the master thesis is 10 weeks, it has taken us almost seven months. We think it depends on that our frame of reference consists of authors who have written articles and examined countries around the world, maybe during a longer period than seven months. It is now we realize that we have taken on a bigger study than we could handle in 10 weeks. At the same time, it has been difficult since, as we have mentioned earlier, we have not found any studies concerning corporate governance disclosure in Sweden nor abroad.

Since we used many corporate characteristics, compared to similar prior studies, and relatively many corporations, we had problems to follow our time plan and dead line for the master thesis. The difficulty was to find where the characteristics were in the annual reports. As we mentioned earlier, sometimes we had to contact the corporation we studied to find out some characteristics, our questions could not always be answered by the person we contacted; sometimes, we had to call other employees, on different hours or several days later. This was something that we had not considered in our plan, but were forced to check, since we wanted answers on everything from all of the corporations.

The analysis in SPSS also caused some problems. Last year, we worked a little with SPSS within the course Statistical methods, but in the course the variables entered in the analysis were stated; therefore, we had problems when making the multiple regression. In some articles with similar studies, that we have seen, there have only been made a stepwise multiple regression. Since we had 17 variables, it is not suitable to make a stepwise multiple regression with all variables at one. Therefore, we first had to make linear regressions between the corporate governance disclosure index and each of the variables, to see which of them that were significantly related, which also took longer time than we had planned.

It has been easy to look at how the authors of the articles concerning disclosure practices have done their research and written their articles, but since this study is not an article but a master thesis, we have had some problems with the design since there are different demands on a master thesis.

5.3 Further studies

We used 15 corporate governance characteristics, derived from agency theory, and two control variables when conducting this study. Since only two were significantly related to the corporate governance disclosure index, we think it would be interesting to study this problem with other characteristics derived from agency theory or other theories.

A code group⁹ with Eric Åsbrink, the former minister of finance in Sweden, as chairman, have made a Swedish Code of corporate governance, which will come into affect on the 1st of January, 2005. It will mainly be a guide for the corporations of what they should include in the annual reports about corporate governance. Since the annual reports for the fiscal year 2004 are going to be published during the spring 2005, we think it would be interesting to examine if the corporations have complied with the Swedish code or not. Moreover, if the corporations have not followed the code, how come?

Since we have used an unweighted index, maybe the results would be different if a weighted index would be used. A weighted index takes the disclosed items' importance, of a specific group of users, into account.

Another way to encounter this problem is to make a qualitative study, in other words, interview the corporations about influencing factors and their motives for corporate governance disclosure.



⁹ A special group in cooperation with the Government Commission on Business Confidence and several organizations in the business community: The Swedish Institute of Authorized Public Accountants, The Business Community's Stock Exchange Committee, Stockholm Stock Exchange, Stockholm Chamber of Commerce, Swedish Bankers' Association, Swedish Security Dealers' Association, Swedish Business Community, Swedish Shareholders' Association and Swedish Insurance Federation.

References

- Adams, C. A., Hill, W-Y., & Roberts, C. B. (1998). Corporate social reporting practices in Western Europe: legitimating corporate behaviour?. British Accounting Review, 30(1), 1-21.
- Ahmed, K., & Nicholls, D. (1994). The impact of non-financial company characteristics on mandatory disclosure compliance in developing countries: the case of Bangladesh. *International Journal of Accounting*, 29(1), 62-77
- Artsberg, K. (2003). *Redovisningsteori policy och –praxis* (1st ed.). Malmö: Liber Ekonomi.
- Baiman, S. (1990). Agency research in managerial accounting: a second look. Accounting, Organizations and Society, 15(4), 341-371.
- Baiman, S., Evans, J. H., & Noel, J. (1987). Optimal contracts with a utilitymaximizing auditor. *Journal of Accounting Research*, 25(2), 271-244.
- Berle, A. A, & Means, G. C. (1932). The modern corporation and private property. New York: Macmillan.
- Blackburn, V. (1994). The effectiveness of corporate control in the US corporations. Corporate Governance: An International Review, 2(4).
- Botosan, C. A. (1997). Disclosure level and the cost of equity capital. Accounting Review, 72(3), 323-349.
- Bozzolan, S., Favotto, F., & Ricceri, F. (2003). Italian annual intellectual capital disclosure. *Journal of Intellectual Capital*, 4(4), 543-558.
- Braiotta, L. Jr. (2004). The audit committee handbook (4th ed.). New York: Wiley.
- Braiotta, L., & Sommer, A. Jr. (1987). The essential guide to effective corporate board committees. Englewood Cliffs, New Jersey: Prentice-Hall.
- Breton, G., & Taffler, R. (1995). Creative accounting and investment analysts response. Accounting and Business Research, 25(98), 81-92.
- Buzby, S. L. (1975). Company size, listed versus unlisted stocks, and the extent of financial disclosure. *Journal of Accounting Research*, 13(1), 16-37.
- Choi, F. D. S., & Mueller, G. G. (1992). *International accounting* (2nd ed.). Englewood Cliffs, New Jersey: Printice-Hall.
- Chow, C. W. (1982). The demand for external auditing: size, debt and ownership influences. Accounting Review, 57(2), 272-291.

- Collier, P. (1993). Factors affecting the formation of audit committees in major UK listed companies. Accounting and Business Research, 23(91), 421-430.
- Cooke, T. E. (1989a). Voluntary corporate disclosure by Swedish companies. Journal of International Financial Management and Accounting, 1(2), 171-195.
- Cooke, T. E. (1989b). An empirical study of financial disclosures by Swedish companies. New York & London: Garland Publishing, Inc.
- Cooke, T. E. (1991). An assessment of voluntary disclosure in the annual reports of Japanese corporations. *International Journal of Accounting*, 26(3), 174-189.
- Cooke, T. E. (1992). The impact of size, stock market listing and industry type on disclosure in the annual reports of Japanese listed corporations. *Accounting and Business Research*, 22(87), 229-237.
- Coombes, P. (2003). Corporate governance: facing up to the challenges ahead. In R. Mannix & R. Oliver (Eds.), *Corporate Governance 2003* (p. 55-61). London: Euromoney Institutional Investor 2003.
- Cowen, S. S., Ferreri, L. B., & Parker, L. D. (1987). The impact of corporate characteristics on social responsibility disclosure: a typology and frequencybased analysis. Accounting, Organizations and Society, 12(2), 111-122.
- Craswell, A. T., & Taylor, S. L. (1992). Discretionary disclosure of reserves by oil and gas companies: an economic analysis. *Journal of Business Finance and Accounting*, 19(2), 295-308.
- Daily, C. M., Dalton, D. R., & Cannella, A. A. Jr. (2003). Corporate governance: decades of dialogue and data. *Academy Management Review*, 28(3), 371-382.
- Danielsson, M., Endre, J., & Engström, S. (1998). Kan aktieägarna påverka företagens utveckling en undersökning om corporate governance. *Balans, 8-9*, 28-32
- DeAngelo, L. E. (1981). Auditor size and audit quality. Journal of Accounting and Economics, 3(2), 183-189.
- Depoers, F. (2000). A cost benefit study of voluntary disclosure: some empirical evidence from French listed companies. *European Accounting Review*, 9(2), 245-263.
- DeZoort, F. T. (1997). An investigation of audit committees oversight responsibilities. ABACUS, 33(2), 208-227.
- DiPiazza, S. A. Jr., & Eccles, R. G. (2002). Building public trust the future of corporate reporting. New York: John Wiley & Sons Inc.
- Eisenhardt, K. M. (1989). Agency theory: an assessment and review. Academy of Management Review, 14(1), 57-74.

- Eriksson, L. T., & Wiedersheim-Paul, F. (2001). Att utreda, forska och rapportera (6th ed.). Malmö: Liber Ekonomi.
- Fama, E., & Jensen, M. (1983). Separation of ownership and control. Journal of Law and Economics, 26(2), 301-326.
- Fan, J., & Wong, T. (2002). Corporate ownership structure and the informativeness of accounting earnings in East Asia. *Journal of Accounting and Economics*, 33(3), 401-425.
- Firth, M. A. (1979). The impact of size, stock market listing, and auditors on voluntary disclosure in corporate annual reports. *Accounting and Business Research*, 9(36), 273-280.
- Forker, J. J. (1992). Corporate governance and disclosure quality. Accounting and Business Research, 22(86), 111-124.
- Giner Inchausti, B. (1997). The influence of company characteristics and accounting regulations on information disclosed by Spanish firms. *European Accounting Review*, 6(1), 45-68.
- Gray, S. J., Meek, G. K., & Roberts, C. B. (1995). International capital market pressures and voluntary annual report disclosures by US and UK multinational companies. *Journal of International Financial Management and Accounting*, 6(1), 43-68.
- Gubitta, P., & Gianecchini, M. (2002). Governance and flexibility in family-owned SMEs. *Family Business Review*, 15(4), 277-297.
- Haniffa, R. M., & Cooke, T. E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *ABACUS*, 38(3), 317-349.
- Ho, S. S. M., & Wong, K. S. (2001). A study of the relationship between corporate governance structures and the extent of voluntary disclosure. *Journal of International Accounting, Auditing & Taxation, 10*(2), 139-156.
- Hossain, M., Perera, M. H. B., & Rahman, A. R. (1995). Voluntary disclosure in the annual reports of New Zealand companies. *Journal of International Financial Management and Accounting*, 6(1), 69-87.
- Hossain, M., Tan, L. M., & Adams, M. (1994). Voluntary disclosure in an emerging capital market: some empirical evidence from companies listed on the Kuala Lumpur Stock Exchange. *International Journal of Accounting*, 29(4), 334-351.
- Jensen, M. (1993). The modern industrial revolution, exit and the failure of internal control systems. *Journal of Finance*, 48(3), 831-880.

- Jensen, M. C., & Meckling, W. H. (1976). Theory of a firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305-360.
- Leftwich, R., Watts, R. L., & Zimmerman, J. L. (1981). Voluntary corporate disclosure: the case of interim reporting. *Journal of Accounting Research*, 19(suppl.), 50-77.
- Lekvall, P., & Wahlbin, C. (2001). *Information för marknadsföringsbeslut* (4th ed.). Göteborg: IHM Förlag.
- Leung, S., & Horwitz, B. (2004). Director ownership and voluntary segment disclosure: Hong Kong evidence. *Journal of International Financial Management* and Accounting, 15(3), 235-260.
- Ljungdahl, F. (2004). *REDREV övriga redovisningsrapporter*. Retrieved 2004-12-15, from Jönköping International Business School's Website: http://jibsnet.hj.se/documents/files/5408531312958272474.ppt
- Lundahl, U., & Skärvad, P-H. (1999). Utredningsmetodik för samhällsvetare och ekonomer (3rd ed.). Lund: Studentlitteratur.
- Mak, Y. T. (1996). The voluntary use of outside directors by initial public offerings firm. *Corporate Governance: An International Review*, 4(2), 94-106.
- Mayer, C. (1997). Corporate governance, competition, and performance. *Journal of Law and Society*, 24(1), 152-176.
- McDaniel, L., Martin, R. D., & Maines, L. A. (2002). Evaluating financial reporting quality: the effects of financial expertise vs. financial literacy. *Accounting Review*, 77(suppl.), 139-167.
- McKinnon, J. L., & Dalimunthe, L. (1993). Voluntary disclosure of segment information by Australian diversified companies. *Accounting and Finance*, 33(1), 33-50.
- Meek, G. K., Roberts, C. B., & Gray, S. J. (1995). Factors influencing voluntary annual report disclosures by U.S., U.K. and continental European multinational corporations. *Journal of International Business Studies*, 26(3), 555-572.
- Messier, W. F. Jr. (2003). Auditing and assurance services: a systematic approach (3rd ed.). Boston: McGraw-Hill.
- Ness, K. E., & Mirza, A. M. (1991). Corporate social disclosure: a note on a test of agency theory. *British Accounting Review*, 23(3), 211-217.
- Norusis, M. J. (2002). SPSS 11.0 Guide to data analysis. New Jersey: Prentice-Hall.

- OECD (2004). OECD principles of corporate governance. Retrieved 2005-01-17, from http://www.oecd.org/dataoecd/32/18/31557724.pdf.
- Patten, D. M. (1992). Intra-industry environmental disclosures in response to the Alaskan oil spill: a note on legitimacy theory. Accounting, Organizations and Society, 17(5), 471-475.
- Patton, A., & Baker, J. C. (1987). Why don't directors rock the boat. *Harvard Business Review*, 65(6), 10-14.
- Percy, J. P. (1997). Auditing and corporate governance a look forward into the 21st century*. *International Journal of Auditing*, 1(1), 3-12.
- Pettigrew, A. M., & McNulty, T. (1995). Power and influence in and around the boardroom. *Human Relations*, 48(8), 845-874.
- Pound, J. (1995). The promise of the governed corporation. *Harvard Business Review*, 73(2), 89-98.
- Raffournier, B. (1995). The determinants of voluntary financial disclosure by Swiss listed companies. *European Accounting Review*, 4(2), 261-280.
- Roberts, R. W. (1992). Determinants of corporate social responsibility disclosure: an application of stakeholder theory. *Accounting, Organizations and Society,* 17(6), 595-612.
- Rosenstein, S., & Wyatt, J. G. (1990). Outside directors, board independence and shareholder wealth. *Journal of Financial Economics*, 26(2), 175-192.
- Schipper, K. (1981). Discussion of voluntary corporate disclosure: the case of interim reporting. *Journal of Accounting Research, 19* (suppl.), 85-88.
- Stockholm Stock Exchange (2005). Classification.xls. Retrieved 2005-03-04, from the Stockholm Stock Exchange's Website: http://domino.omgroup.com/www/WebTransaction.nsf/b9fb46dc1fa35 96c41256603004b40e7/961197ed95f2544ac1256adc0049ed57/\$FILE/Classi fication.xls
- Thorell, P. (2003). Företagens redovisning: grundläggande räkenskapsförståelse (4th ed.). Uppsala: Iustus Förlag AB.
- Vaefas, N. (2000). Board structure and the informativeness of earnings. *Journal of Accounting and Policy*, 19(2), 139-160.
- Wallace, R. S. O., Naser, K., & Mora, A. (1994). The relationship between the comprehensiveness of corporate annual reports and firm characteristics in Spain. Accounting and Business Research, 25(97), 41-53.

References

- Wallace, R. S. O., & Naser, K. (1995). Firm-specific determinants of the comprehensiveness of mandatory disclosure in the corporate annual reports of firms listed on the Stock Exchange of Hong Kong. *Journal of Accounting and Public Policy*, 14(4), 311-368.
- Watson, A., Shrives, P., & Marston, C. (2002). Voluntary disclosure of accounting ratios in the UK. *British Accounting Review*, 34(4), 289-313.
- Watts, R. L. (1977). Corporate financial statements: a product of market and political processes. Australian Journal of Management. Reprinted in: R. Ball and C. Smith (Eds.), The Economics of Accounting Policy Choice, McGraw-Hill, New York, 1992.
- Watts, R. L., & Zimmerman, J, L. (1986). *Positive Accounting Theory*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Williams, P., Moyes, G., & Park. K. (1996). Factors affecting earnings forecasts revisions for the buy-side and sell-side analyst. Accounting Horizons, 10(3), 112-121.
- Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics*, 40(2), 185-211.

Appendix 1 – Variable	s in	prior	studies
-----------------------	------	-------	---------

Variables	Type of information disclosure studied and authors	Result			
Size	Corporate social disclosure (Adams, Hill & Roberts, 1998)	Significant			
	Voluntary disclosure (Cooke, 1991; Depoers, 2000; Ho & Wong, 2001; Hossain et al., 1995; Hossain et al., 1994)	Significant			
	Disclosure (Cooke, 1992; Giner Inchausti, 1997)				
	Environmental disclosure (Patten, 1992)	Significant			
	Voluntary financial disclosure (Raffournier, 1995)	Significant			
	Mandatory disclosure (Wallace & Naser, 1995; Wallace et al., 1994)	Significant			
	Voluntary disclosure of ratios (Watson, Shrives & Marston, 2002)	Significant			
	Voluntary intellectual capital disclosure; aggregate, external structure, internal structure and human capital (Bozzolan, Favotto & Ricceri, 2003)	Significant Significant Insignificant Significant			
	Voluntary disclosure; aggregate, strategic, financial and non-financial index (Meek et al., 1995)	Significant Insignificant Significant Significant			
	Corporate social responsibility disclosure (Roberts, 1992)	Insignificant			
Listing status	Voluntary disclosure (Cooke, 1991; Hossain et al., 1994; 1995)	Significant			
	Disclosure (Cooke, 1992; Giner Inchausti, 1997)	Significant			
	Voluntary disclosure; aggregate, strategic, financial and non-financial index (Meek et al., 1995)	Significant Significant Significant Insignificant			
Leverage	Disclosure (Giner Inchausti, 1997)	Insignificant			
	Voluntary disclosure (Depoers, 2000; Ho & Wong, 2001; Hossain et al., 1994)	Insignificant			
	Voluntary disclosure (Hossain et al., 1995)	Significant a 0,1 level			
	Voluntary financial disclosure (Raffournier, 1995)	Significant a 0,1 level			

	Corporate social responsibility disclosure (Roberts, 1992)	Insignificant
	Mandatory disclosure (Wallace & Naser, 1995; Wallace et al, 1994)	Insignificant
	Voluntary disclosure of ratios (Watson et al., 2002)	Insignificant
	Voluntary disclosure;	
	aggregate,	Insignificant
	strategic,	Insignificant
	financial and	Insignificant
	non-financial index	Insignificant
	(Meek et al., 1995)	3
Profitability	Disclosure (Giner Inchausti, 1997)	Insignificant
	Voluntary disclosure (Ho & Wong, 2001)	Insignificant
	Voluntary disclosure;	
	aggregate,	Insignificant
	strategic,	Insignificant
	financial and	Insignificant
	non-financial index	Insignificant
	(Meek et al., 1995)	
	Voluntary financial disclosure (Raffournier, 1995)	Insignificant
	Mandatory disclosure (Wallace et al., 1994)	Insignificant
	Voluntary disclosure of ratios (Watson et al., 2002)	Insignificant
Assets-in-	Voluntary disclosure (Ho & Wong, 2001; Hossain et al., 1994; 1995)	Insignificant
place	Voluntary financial disclosure (Raffournier, 1995)	Insignificant

Appendix 2 – Sample of Swedish listed corporations

ABB Addtech Bergman&Beving Billerud BioPhausia Borås Wäfveri CashGuard Concordia Consilium **Diamyd Medical** Ericsson Fagerhult Feelgood Höganäs Itab Johnson Pump Karolin Machine Tool Micronic MultiQ Munters Ortivus

PartnerTech Pergo Poolia **Retail and Brands** Rottneros Rörvik Timber Sardus Scania Scribona SecoTools Senea Sigma Strålfors Svedbergs Technology Nexus Teleca Trio Tripep Westergyllen Volvo

Appendix 3 – Sample with independent variables

Corporation	Management	Non-executive	Large audit	Role	Diffuse	Audit
	ownership	directors	firms	duality	ownership	committee
ABB	0,03%	87,50%	1	1	83,64	1
Addtech	0,04%	80,00%	1	0	54,00	1
Bergman&Beving	0,06%	42,86%	1	0	64,00	1
Billerud	0,01%	66,67%	1	0	93,20	0
BioPhausia	0,20%	100,00%	1	0	86,48	0
Borås Wäfveri	0,00%	71,43%	1	0	41,50	0
CashGuard	0,29%	75,00%	0	0	83,80	1
Concordia	0,10%	62,50%	1	0	34,50	0
Consilium	0,25%	50,00%	1	0	38,50	0
Diamyd Medical	13,40%	80,00%	1	0	34,88	0
Ericsson	0,10%	66,67%	1	0	94,98	1
Fagerhult	0,04%	66,67%	1	0	19,00	0
Feelgood	0,13%	80,00%	1	0	36,12	0
Höganäs	0,23%	66,67%	1	0	53,40	0
Itab	1,31%	80,00%	1	0	25,90	0
Johnson Pump	0,00%	83,33%	0	0	51,30	0
Karolin Machine Tool	0,05%	75,00%	1	0	59,90	0
Micronic	0,41%	87,50%	0	0	63,84	1
MultiQ	2,32%	80,00%	1	0	60,40	0
Munters	0,06%	66,67%	1	0	57,00	0
Ortivus	0,00%	83,33%	1	0	67,18	0
PartnerTech	0,04%	57,14%	1	0	60,10	0
Pergo	0,22%	85,71%	1	0	72,80	0
Poolia	0,54%	83,33%	1	0	42,70	0
Retail and Brands	14,26%	66,67%	1	0	45,30	0
Rottneros	0,04%	57,14%	1	0	72,70	1
Rörvik Timber	0,14%	71,43%	1	0	45,30	0
Sardus	0,06%	75,00%	1	0	77,20	1
Scania	0,03%	72,73%	1	0	26,70	1
Scribona	0,00%	66,67%	1	0	54,00	0
SecoTools	0,00%	70,00%	1	0	23,30	1
Senea	0,53%	100,00%	1	0	47,90	0
Sigma	0,56%	62,50%	1	0	52,00	0
Strålfors	0,00%	80,00%	1	0	18,30	0
Svedbergs	0,03%	66,67%	1	0	67,00	0
Technology Nexus	6,88%	83,33%	1	0	83,90	0
Teleca	14,01%	66,67%	1	0	71,00	0
Trio	0,00%	100,00%	1	0	58,30	0
Tripep	0,09%	50,00%	1	0	59,38	0
Westergyllen	0,47%	62,50%	1	0	54,00	1
Volvo	0,01%	75,00%	1	0	74,10	1



Corporation	Board	Number of	Board	Board	Nomination	Compensation
	size	shareholders	ownership	compensation	committee	committee
ABB	8	274 000	0,06%	17 535 484	1	1
Addtech	5	3 450	2,90%	800 000	1	1
Bergman&Beving	7	3 544	2,90%	590 000	1	1
Billerud	9	170 108	0,03%	1 000 000	1	1
BioPhausia	4	11 732	0,03%	718 000	0	0
Borås Wäfveri	7	658	48,34%	480 000	0	0
CashGuard	8	11 538	2,53%	438 000	1	1
Concordia	8	5 431	52,66%	1 045 000	0	1
Consilium	6	1 900	47,19%	300 000	1	0
Diamyd Medical	5	2 159	13,41%	375 000	0	0
Ericsson	12	961 649	5,23%	15 599 600	1	1
Fagerhult	9	3 421	2,73%	750 000	1	0
Feelgood	10	2 617	2,73%	694 800	1	0
Höganäs	10	10 788	22,13%	1 300 000	1	1
· ·	6		55,21%	350 000	1	0
Itab	6	1 112 4 572	37,58%	300 000	1	0
Johnson Pump Karolin Machine Tool	8	4 190	0,19%	700 000	0	0
	8	5 568	0,19%	1 275 000	1	1
Micronic MultiQ	5	4 259	41,05%	325 000	0	0
Munters	9	6 285	0,09%	1 150 000	1	1
Ortivus	9 6		,		0	
PartnerTech	7	2 986 5 097	0,36% 0,30%	520 000 700 000	0	0
	7	20 309	0,30%	975 000	1	1
Pergo Poolia	6	20 309	44,51%	700 000	0	0
Retail and Brands	6	897	14,42%	908 000	1	1
Rottneros	7	25 773	0,15%	600 000	1	0
Rörvik Timber	7	2718	38,28%	5 300 000	1	0
Sardus	8	4 286	0,36%	1 048 000	1	1
Scania	11	39 020	0,05%	2 850 000	0	1
Scribona	9	10 270	0,03%	800 000	0	1
SecoTools	10	11 068	0,03%	556 951	1	1
Senea	4	6 439	0,65%	200 000	0	0
Sigma	8	14 079	42,41%	300 000	0	1
Strålfors	10	2 900	57,36%	800 000	1	1
Svedbergs	6	2 935	34,36%	300 000	0	0
Technology Nexus	6	10 000	10,98%	750 000	1	1
Teleca	9	19 871	15,68%	700 000	0	1
Trio	4	7 720	0,47%	700 000	1	0
Tripep	4	3459	35,57%	200 000	1	1
Westergyllen	8	1 406	10,27%	395 000	1	1
Vestergyllen	12	208 540	0,01%	5 200 000	1	1

Corporation	Board activity	Corporation size	Multiple listings	Industry	Domestic listing status
ABB	6	135 324 000 000	1	industrials	A-list most fre. trad
Addtech	7	2 275 000 000	0	industrials	O-list other
Bergman&Beving	6	3 974 800 000	0	industrials	A-list other
Billerud	10	6 992 000 000	0	materials	Attract 40
BioPhausia	11	1 508 000	0	health care	O-list other
Borås Wäfveri	10	1 369 200 000	0	consumer discretionary	O-list other
CashGuard	13	61 366 000	0	information technology	O-list other
Concordia	7	649 700 000	0	energy	O-list other
Consilium	6	631 000 000	0	industrials	O-list other
Diamyd Medical	10	2 246 000	0	health care	O-list other
Ericsson	11	117 738 000 000	1	information technology	A-list most fre. trad
Fagerhult	5	1 403 200 000	0	industrials	O-list other
Feelgood	12	408 861 000	0	health care	O-list other
Höganäs	5	3 750 000 000	0	materials	A-list other
Itab	6	1 383 465 000	0	industrials	O-list other
Johnson Pump	9	625 478 000	0	industrials	O-list other
Karolin Machine Tool	10	1 050 896 000	0	industrials	O-list other
Micronic	19	427 959 000	0	information technology	Attract 40
MultiQ	11	80 822 000	0	information technology	O-list other
Munters	8	4 308 291 000	0	industrials	Attract 40
Ortivus	12	175 207 000	0	health care	O-list other
PartnerTech	8	1 339 730 000	0	information technology	O-list other
Pergo	23	2 799 000 000	0	industrials	Attract 40
Poolia	12	766 268 000	0	industrials	O-list other
Retail and Brands	9	860 396 000	0	consumer discretionary	O-list other
Rottneros	10	2 380 000 000	0	materials	Attract 40
Rörvik Timber	7	1 277 500 000	0	materials	O-list other
Sardus	9	1 760 221 000	0	consumer staples	A-list other
Scania	9	50 581 000 000	0	industrials	A-list most fre. trad
Scribona	12	11 818 000 000	0	information technology	A-list other
SecoTools	7	3 917 000 000	0	industrials	A-list other
Senea	17	66 218 000	0	information technology	O-list other
Sigma	11	737 270 000	0		
Strålfors	7	2 990 500 000	0	industrials	O-list other
Svedbergs	6	363 734 000	0	industrials	O-list other
Technology Nexus	9	466 331 000	0	information technology	O-list other
Teleca	8	2 455 529 000	0	information technology	Attract 40
Trio	11	117 800 000	0	information technology	O-list other
Tripep	11	0	0	health care	O-list other
Westergyllen	7	1 229 959 000	0	industrials	O-list other
Volvo	9	183 291 000 000	1	industrials	A-list most fre. trad

Appendix 4 – List of items

1 Information about Extraordinary General Meeting

Board of directors

- 2 principles for composition
- 3 composition
- 4 other (smaller) shareholder's involvement in the nominating processes
- 5 re-election possible
- 6 who the board of directors has been elected by
- 7 mandate length
- 8 who new members replace
- 9 who the chairman has been elected by
- 10 laws & recommendations etc the board of directors follows
- 11 responsibilities & tasks
- 12 the chairman's responsibilities
- 13 information about rules of procedure for the board
- 14 the board has developed instructions for the CEO
- 15 location of the board
- 16 convener
- 17 number of meetings
- 18 discussed issues on the meetings
- 19 average duration of the meetings
- 20 average attendance at the meetings
- 21 other people beside the members who are aloud to attend the meetings
- 22 evaluation of the board
- 23 evaluation of the CEO
- 24 evaluation of the importance of the committees
- 25 evaluation of the stakeholders' view and attitude towards the corp.
- 26 cross-involvement
- 27 received training sessions about corporation matters & made site visits
- 28 received training sessions by the Stockholm Stock Exchange
- 29 received introduction, education & training
- 30 lead director
- 31 lead director's tasks
- 32 when the position of lead director will cease to exist
- 33 principles for board compensation

- 34 the decider of board compensation
- 35 total board compensation
- 36 salary & compensation to the board, CEO & management
- 37 salary & compensation to the board & CEO(s)
- 38 salary & compensation to the board & other employees
- 39 salary, compensation & social security costs to the board & CEO(s)
- 40 social security costs to the board & CEO(s)
- 41 social security costs to the board
- 42 pension costs & social security costs to the board & CEO
- 43 pension costs & social security costs to the board, CEO & management
- 44 pension costs to the board, CEO & management
- 45 pension costs to the board(s) & CEO(s)
- 46 loans to the board, CEO or managers

The members of the board

- 47 pictures
- 48 member in the committee(s)
- 49 age
- 50 city and/or country
- 51 gender
- 52 main education
- 53 employment year
- 54 work experience
- 55 position in the corporation
- 56 the year the member was elected
- 57 board member in other corporations
- 58 holdings in the corporation
- 59 relationship to larger shareholders in the corporation
- 60 relationship to firm(s) the corporation have business relations with
- 61 relationship to firm(s) the corporation have relations with
- 62 independent in relation to the corporation & the management
- 63 what the independent relation is appointed from
- 64 fee & other compensations to members
- 65 salary to members
- 66 principles of pension to other members

67	information about personnel discount to members of the board	97	how to contact the committee/chairman
68	fee & other compensations to the chairman	98	the name of the owners the members represent
69	decider of the salary for the chairman	99	line of work for the representatives
70	salary and/or other compensation to the chairman	100	convener
71	principles of pension to the chairman	101	secretary
72	pension to the chairman	102	number of meetings
73	terms of employment for chairman	103	average duration of the meetings
74	principles of severance payments to chairman	104	average attendance at the meetings
75	servance payment to chairman	105	other people beside the members who are aloud to attend the meetings
76	refers to the website for further information	106	committee fee
		107	information about communication with the board
	The board's secretary		
77	name	108	Compensation committee
78	age	109	when it was formed
79	holdings in the corporation	110	who the tasks are decided by
80	position in the corporation	111	responsibilities & tasks
81	employment year in the corporation	112	who the members are elected by
82	education	113	mandate length
83	election year	114	composition
84	work experience	115	chairman of the committee
85	board assignments in other corporations	116	secretary
		117	number of meetings
	No committee(s)	118	average duration of the meetings
86	who the members of the board are nominated by	119	average attendance at the meetings
87	who the auditor(s) are nominated by	120	other people beside the members who are aloud to attend the meetings
88	who board fees are suggested by	121	committee fee
		122	information about who reports to the committee
89	Nomination committee	123	information about communication with the board
90	when it was formed		
91	who the tasks are decided by	124	Audit Committee
92	responsibilities & tasks	125	when it was formed
93	who the members are elected by	126	who the tasks are decided by
94	mandate length	127	responsibilities & tasks
95	composition	128	who the members are elected by
96	chairman of the committee	129	composition

- 130 chairman of the committee
- 131 secretary
- 132 number of meetings
- 133 average duration of the meetings
- **134** average attendance at the meetings
- 135 other people beside the members who are aloud to attend the meetings
- 136 committee fee
- 137 information about communication with the board
- 138 Strategy Committee
- 139 when it was formed
- 140 responsibilities & tasks
- 141 composition
- 142 chairman of the committee
- 143 secretary
- 144 number of meetings
- 145 average duration of the meetings
- 146 average attendance at the meetings
- 147 committee fee
- 148 information about communication with the board
- 149 Finance Committee
- 150 who the tasks are decided by
- 151 responsibilities & tasks
- 152 who the members are elected by
- 153 composition
- 154 chairman of the committee
- 155 number of meetings
- 156 committee fee
- 157 information about the communication with board and/or chairman
- 158 "Ownership structure" Committee
- 159 responsibilities & tasks
- 160 who appoints the members
- 161 composition

- 162 information about communication with the board
- 163 Acquisition Committee
- 164 composition
- 165 number of meetings
- 166 other people beside the members who are aloud to attend the meetings
- 167 committee fee
- 168 Disclosure Committee
- 169 responsibilities & tasks
- 170 who appoints the members
- 171 Patent Group
- 172 responsibilities & tasks
- 173 composition
- 174 Working Committee
- 175 responsibilities & tasks
- 176 composition
- 177 Currency Committee
- 178 committee fees
- 179 Human Resource Committee
- 180 responsibilities & tasks

Management (excl. CEO)

- 181 responsibilities and tasks
- 182 who the management is appointed by
- 183 composition
- 184 pictures
- 185 age
- 186 city and/or country
- 187 gender
- 188 position in the corporation

- 189 employment year
- 190 ending year of employment
- 191 main education
- 192 work experience
- 193 membership in the corporation's board
- 194 when the member was elected into the board
- 195 secretary to the board
- 196 board member in other corporations
- 197 holdings in the corporation
- 198 description of option/warrant programs (incl CEO & working chairman)
- 199 relationship to firm(s) the corporation have business relations with
- 200 information about leadership development program
- 201 refers to the website for further information
- 202 how often the management have meetings
- 203 who the managers gets reports from
- 204 the decider of terms of employment
- 205 principles of terms of employment
- 206 employees that the principles of terms of employment concern
- 207 servance payment
- 208 proposes the principles of salary, bonus & other compensation
- 209 the decider of the salary
- 210 principles of salary, bonus & other compensation
- 211 employees that the principles of salary etc. concern
- 212 salary, bonus & other compensation
- 213 salary, bonus & other compensation (incl CEO(s))
- 214 principles of pension
- 215 employees that the principles of pension concern
- 216 pension
- 217 social security fee
- 218 servance payment to former managers (incl CEO)
- 219 principles for salary to former managers (incl CEO)
- 220 salary and other compensations to former managers (incl CEO)
- 221 salary and servance payments to former managers (incl CEO)
- 222 principles of pensions to former managers (incl CEO)
- 223 pensions to former managers (incl CEO)

224 pensions and social security fees to former managers (incl CEO)

CEO

- 225 responsibilities & tasks
- 226 who the CEO is appointed by
- 227 picture
- 228 other positions in the corp.
- 229 age
- 230 city and/or country
- 231 gender
- 232 employment year
- 233 main education
- 234 work experience
- 235 member of the corporation's board
- 236 essential assignments in other companies & corporations
- 237 holdings in the corporation
- 238 relationship to firm(s) the corporation have business relations with
- 239 when the CEO reports to the board of directors
- 240 what the CEO reports to the board of directors
- 241 who the CEO gets reports from
- 242 the decider of terms of employment
- 243 principles of terms of employment
- 244 servance payment
- 245 proposes the principles of salary, bonuses & other remunerations
- 246 principles of salary, bonus & other compensation
- 247 the decider of the salary
- 248 salary, bonus & other compensation
- 249 principles of pension
- 250 pension
- 251 social security fee

Auditors

- 252 responsibilities & tasks
- 253 non-audit services
- 254 statement for how the evaluation of the auditing has been accomplished

- 255 information about the audit plan
- 256 audit firm
- 257 city of the audit firm
- 258 which year the audit firm was elected
- 259 who the auditors are elected by
- 260 mandate length
- 261 mandate length of the deputies
- 262 pictures
- 263 name of the auditors
- 264 age
- 265 city and/or country
- 266 assignments in other corporations
- 267 which year the (head) auditors were elected
- 268 employment year in the audit firm
- 269 holdings in the corporation
- 270 audit fees
- 271 fees for non-audit services
- 272 information about the invoicing to the auditors
- 273 information about the communication with the board/committee

Other information

- 274 report to the Stock Exchange(s)
- 275 submits the annual report to the Stock Exchange's supervision authority
- 276 languages the information is available in
- 277 publish date of coming reports
- 278 refers to the website for reports from the corporation
- 279 provides address, etc. for ordering of reports
- 280 investor relations team
- 281 investor relations team's tasks
- 282 how to contact investor relations
- 283 definition of corporate governance
- 284 goals for corporate governance in the corporation
- 285 refers to the website for further information about corporate governance

Appendix 5 – The disclosure index for each corporation

	ABB	Addtech	B&B	Billerud	BioP	BoråsW.	CashG.	Concordia	Consilium	DiamydM.	Ericsson	Fagerhult	Feelgood
Sum of the total item for each corporation	148	76	86	105	46	69	75	74	57	80	104	62	74
Sum of the total items	285	285	285	285	285	285	285	285	285	285	285	285	285
Not relevant for the corporation	16	6	5	21	4	50	9	35	5	83	5	5	7
Index square for each corporation	0,55	0,27	0,31	0,40	0,16	0,29	0,27	0,30	0,20	0,40	0,37	0,22	0,27

	Höganäs	ltab	J.P	K.M.T	Micronic	MultiQ	Munters	Ortivus	PartnerT.	Pergo	Poolia	R&B	Rottneros	RörvikT.
Sum of the total item for each cor- poration	71	66	77	54	89	78	81	76	65	76	53	69	83	50
Sum of the total items	285	285	285	285	285	285	285	285	285	285	285	285	285	285
Not relevant for the corporation	6	18	32	9	7	19	7	84	5	7	6	6	6	20
Index square for each corporation	0,25	0,25	0,30	0,20	0,32	0,29	0,29	0,38	0,23	0,27	0,19	0,25	0,30	0,19

	Sardus	Scania	Scribona	SecoT.	Senea	Sigma	Strålfors	Svedbergs	T.Nexus	Teleca	Trio	Tripep	Westerg.	Volvo
Sum of the total item for each corpo- ration	105	97	89	74	78	95	79	53	75	82	74	78	71	94
Sum of the total items	285	285	285	285	285	285	285	285	285	285	285	285	285	285
Not relevant for the cor- poration	6	4	17	6	86	38	18	4	7	37	8	21	5	8
Index square for each cor- poration	0,38	0,35	0,33	0,27	0,39	0,38	0,30	0,19	0,27	0,33	0,27	0,30	0,25	0,34

67

Appendix 6 – Model summary for linear regressions

Model		Unstandard cie	ized Coeffi- nts	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,292	,013		23,189	,000
	Management ownership	,179	,320	,089	,560	,579

Coefficients(a)

a Dependent Variable: CG index

Coefficients(a)

Model		Unstandard cie	ized Coeffi- nts	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,249	,069		3,631	,001
	Non-executive directors	,062	,092	,108	,676	,503

a Dependent Variable: CG index

Coefficients(a)

Model		Unstandard cie		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,297	,044		6,786	,000
	Large audit firms	-,002	,045	-,009	-,054	,957

a Dependent Variable: CG index

Coefficients(a)

Model			dized Coeffi- ents	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,288	,010		28,741	,000
	Role duality	,262	,064	,547	4,083	,000

Coefficients(a)

Model		Unstandard cie		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,240	,034		6,968	,000
	Diffuse owner- ship	,097	,058	,262	1,692	,099

a Dependent Variable: CG index

Coefficients(a)

Model		Unstandard cie	ized Coeffi- nts	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,279	,013		20,976	,000
	Audit committee	,053	,025	,325	2,144	,038

a Dependent Variable: CG index

Coefficients(a)

Model			rdized Coeffi- cients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,236	,043		5,519	,000
	Board size	,008	,006	,222	1,422	,163

a Dependent Variable: CG index

Coefficients(a)

Model		Unstandardized Coeffi- cients		Standardized Coefficients	t	Sig.
		B Std. Error		Beta		
1	(Constant)	,286	,011		24,918	,000
	Number of shareholders	1,725E-07 ,000		,363	2,432	,020

a Dependent Variable: CG index

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,311	,015		20,936	,000
	Board ownership	-,100	,058	-,265	-1,714	,094



Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B Std. Error		Beta		
1	(Constant)	,277	,011		24,216	,000
	Board compen- sation	1,031E-08	,000	,494	3,544	,001

a Dependent Variable: CG index

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,294	,020		15,038	,000
	Nomination committee	,001	,025	,004	,025	,980

a Dependent Variable: CG index

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,262	,016		15,922	,000
	Compensation committee	,057	,022	,385	2,608	,013

a Dependent Variable: CG index

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,267	,034		7,940	,000
	Board activity	,003	,003	,136	,860	,395

a Dependent Variable: CG index

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,282	,011		25,549	,000
	Corporation size	8,997E- 13	,000	,471	3,332	,002

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,284	,011		26,365	,000
	Multiple listings	,136	,040	,478	3,398	,002

a Dependent Variable: CG index

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,294	,012		24,579	,000
	DENERGY	,006	,077	,012	,075	,941

a Dependent Variable: CG index

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,305	,015		20,027	,000
	DINDUSTR	-,026	,024	-,171	-1,082	,286

a Dependent Variable: CG index

Coefficients(a)

Model		Unstandardized Coeffi- cients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,295	,012		23,751	,000
	DMATERIA	-,010	,040	-,042	-,261	,795

a Dependent Variable: CG index

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,293	,013		23,261	,000,
	DHEALTCA	,009	,036	,038	,240	,812

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,296	,012		24,451	,000
	DCONDISC	-,026	,055	-,075	-,468	,642

a Dependent Variable: CG index

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B Std. Error		Beta		
1	(Constant)	,287	,014		21,048	,000
	DIT	,026	,026	,158	,998	,324

a Dependent Variable: CG index

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B Std. Error		Beta		
1	(Constant)	,292	,012		24,831	,000
	DCONSTAP	,088 ,075		,183	1,164	,251

a Dependent Variable: CG index

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	B Std. Error			
1	(Constant)	,283	,011		25,909	,000,
	DAmostfr	,120	,035	,481	3,429	,001

a Dependent Variable: CG index

Coefficients(a)

Model		Unstandardized Coeffi- cients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,293	,013		23,232	,000,
	DAother	,016	,036	,069	,430	,670

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B Std. Error		Beta		
1	(Constant)	,290 ,013			22,887	,000
	DATTRACT	,028 ,033		,134	,846	,403

a Dependent Variable: CG index

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B Std. Error		Beta		
1	(Constant)	,337	,018		19,232	,000
	DOother	-,068 ,022		-,442	-3,074	,004

Appendix 7 – Multiple regressions

Combination 1

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,547(a)	,299	,282	,06338
2	,642(b)	,412	,381	,05883

a Predictors: (Constant), Role duality b Predictors: (Constant), Role duality, DOother

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,288	,010		28,741	,000
	Role duality	,262	,064	,547	4,083	,000
2	(Constant)	,322	,016		20,487	,000
	Role duality	,228	,061	,476	3,742	,001
	DOother	-,053	,020	-,343	-2,693	,010

a Dependent Variable: CG index

Combination 2

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,547(a)	,299	,282	,06338
2	,642(b)	,412	,381	,05883

a Predictors: (Constant), Role duality b Predictors: (Constant), Role duality, DOother

Coefficients(a)

Model		Unstandardized Coeffi- cients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,288	,010		28,741	,000
	Role duality	,262	,064	,547	4,083	,000
2	(Constant)	,322	,016		20,487	,000
	Role duality	,228	,061	,476	3,742	,001
	DOother	-,053	,020	-,343	-2,693	,010

Combination 3

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,547(a)	,299	,282	,06338
2	,642(b)	,412	,381	,05883

a Predictors: (Constant), Role duality b Predictors: (Constant), Role duality, DOother

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,288	,010		28,741	,000
	Role duality	,262	,064	,547	4,083	,000
2	(Constant)	,322	,016		20,487	,000
	Role duality	,228	,061	,476	3,742	,001
	DOother	-,053	,020	-,343	-2,693	,010

a Dependent Variable: CG index

Combination 4

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,547(a)	,299	,282	,06338
2	,642(b)	,412	,381	,05883

a Predictors: (Constant), Role duality b Predictors: (Constant), Role duality, DOother

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,288	,010		28,741	,000
	Role duality	,262	,064	,547	4,083	,000
2	(Constant)	,322	,016		20,487	,000
	Role duality	,228	,061	,476	3,742	,001
	DOother	-,053	,020	-,343	-2,693	,010

Combination 5

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,547(a)	,299	,282	,06338
2	,642(b)	,412	,381	,05883

a Predictors: (Constant), Role duality b Predictors: (Constant), Role duality, DOother

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	,288	,010		28,741	,000
	Role duality	,262	,064	,547	4,083	,000
2	(Constant)	,322	,016		20,487	,000
	Role duality	,228	,061	,476	3,742	,001
	DOother	-,053	,020	-,343	-2,693	,010