Determinants of voluntary disclosure in Swedish corporate annual reports

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Abstract

This study examines if three hypothesized variables affect the extent of corporate strategic information, i.e. voluntary information, in corporate annual reports, specifically in Sweden in the year of 2012. The variables deemed appropriate to the Swedish environment, i.e. firm size, ownership dispersion and performance, were retrieved from previous disclosure research conducted in a Swedish context (Cook, 1989; Adrem, 1999), as well as relevant theoretical consideration.

The statistical analysis conducted in this thesis suggests that firm size is significantly positively related to the extent of strategic corporate information in Swedish listed firms’ corporate annual reports. The result hence confirms the expectation that larger listed firms to a larger extent disclose strategic corporate information, i.e. voluntary information, in their corporate annual reports. No positive relation was found between the variables performance or ownership dispersion and the extent of strategic corporate information.

The results of this thesis are interpreted to suggest that asymmetric information and agency costs are important determinants of the extent of strategic corporate information, i.e. voluntary information, in Swedish corporate annual reports. Larger firms seem to reduce agency costs and narrow the information asymmetry by increasing the level of information disclosed.

Keywords: Annual report; Voluntary disclosure; Corporate Strategic Information; Internal firm characteristics; Asymmetric information; The principal-agent problem
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1. Introduction

Why do some listed firms disclose more voluntary information than others? The question is indeed intriguing.

Research has shown that it is essential to disclose information in order to reduce information asymmetry between a company and its stakeholders (Nayak, 2012). The reported benefits from full disclosure are indeed many, e.g. increased share liquidity, lower cost of capital, better informed investors, consensus about firm performance in the market place, increased analyst coverage and more accurate earnings forecasts (Lang & Lundholm, 1996). Not surprisingly then, the extent of voluntary disclosure in annual reports, i.e. disclosure that is not regulated by law, has increased dramatically over the years. Two thirds of an annual report today contains voluntary information (Thorell & Norberg, 2005).

Researchers have tried to explain the level of annual report disclosure through both internal firm characteristics, such as firm size, ownership dispersion, age, performance, listing status, etc., as well as external factors, such as legal, political, social, cultural, capital market conditions, cost of capital, industry, etc. Only two studies have however examined Swedish firms’ disclosure practices (Cooke, 1989; Adrem, 1999), none of which in the 21th century. These studies are comparatively old and were conducted during a period when the Swedish stock market, to a larger extent, was regulated. Additional empirical evidence is hence needed. This thesis will investigate variables that have been previously examined in a Swedish setting, such as firm size, ownership dispersion and performance (Cooke, 1989; Adrem, 1999).

Furthermore, there are many different types of information, including strategic information, financial information, social information, environmental information, stock price information, etc. In previous research, the level of analysis has mostly been restricted to the overall level of voluntary annual report disclosure. By this, these studies have implicitly assumed that all information types are influenced by the same set of factors, and to an equal extent. (Adrem, 1999, p. 45) This thesis offers a focused analysis on one specific information type, i.e. corporate strategic information. Adrem (1999, p. 54) suggests that it is “desirable to
distinguish between information types, since it is likely that it will result in additional insights into the disclosure practices of firms.” Strategic corporate information consists of general information, information about acquisitions and disposals, strategic alliances, and research and development activities.

### 1.1 Purpose and contribution

This study aims to examine if three hypothesized variables affect the extent of corporate strategic information, i.e. voluntary information, in corporate annual reports, specifically in Sweden in the year of 2012. The variables deemed appropriate to the Swedish environment, i.e. firm size, ownership dispersion and performance, are retrieved from previous disclosure research conducted in a Swedish context (Cook, 1989; Adrem, 1999), as well as relevant theoretical consideration, and will be further accounted for in the following chapters. In contrast to prior research, the scope of this study is limited to listed firms only. Thus, this thesis contributes to the body of empirical research conducted within the field of voluntary annual report disclosure, especially in Sweden.

### 1.2 Research question

*Do firm size; ownership dispersion and performance affect the extent of corporate strategic information (i.e. voluntary information) in Swedish corporate annual reports?*

### 1.3 Disposition

**Chapter 2: Background**

*The second chapter presents key concepts important for this thesis. It introduces the term (voluntary) disclosure, as well as its benefits and disadvantages. It furthermore introduces and elaborates on the role and usage of the annual report.*

**Chapter 3: Previous research**

*The third chapter presents the scope of previous research within the field of disclosure as well as previous research on Swedish firms’ disclosure practices.*
Chapter 4: Theory and hypotheses
The fourth chapter elaborates upon information asymmetry and agency theory to derive three factors (hypotheses), which are used to explain the extent of voluntary disclosure in annual reports.

Chapter 5: Research method
The fifth chapter elaborates upon the methodological approach used in this study. The extent of voluntary disclosure in Swedish corporate annual reports was quantified by the use of a disclosure checklist. The total score, i.e. disclosure index, represents the total amount of voluntary information disclosed by one company in its corporate annual report. The disclosure index was used as the dependent variable in the statistical analysis. Factors that may influence the extent of voluntary disclosure, i.e. the hypotheses stated below, were used as independent variables in the statistical analysis. The hypotheses were confirmed or rejected using bivariate and multivariate statistical analysis.

Chapter 6: Results
The sixth chapter presents the results from the statistical analysis.

Chapter 7: Analysis and discussion
The seventh chapter elaborates upon the results reported in chapter six. The hypotheses are confirmed or rejected.

Chapter 8: Conclusion and future research
Concluding remarks as well as suggestions for future research.

Chapter 9: Literature
2. Background

2.1 Disclosure

Disclosure is defined as “the process through which information is disseminated to the potential users” (Kavitha & Nandagopal, 2011, p. 29). Corporate disclosure refers to a firm’s communication of both financial and non-financial information to its stakeholders and the business environment, i.e. from the private domain to the public domain (ibid. 2011). According to Petersen & Planeborg (2006), firms’ disclosure practices are used as a means to reduce information asymmetry towards various stakeholders, including investors, shareholders, media, etc. Information asymmetry refers to imperfect knowledge in decision-making, particularly when one party has different (more or better) information than the other.

Disclosure can be divided into mandatory and voluntary disclosure. Mandatory disclosure refers to information that is disclosed in accordance to international and Swedish accounting standards and principles, corporate law and the Stockholm Stock Exchange’s listings requirements. All additional disclosure is termed as voluntary disclosure (Meek, Robert and Grey, 1995).

Voluntary disclosure is in this study defined as the “free choices on the part of company managements to provide accounting and other information deemed relevant to the decision needs of users of their annual reports” (ibid. p.555).

Voluntary information spans across all information types and can be of both financial and non-financial nature. A firm may for example disclose information about its R&D initiatives (strategic information), CSR initiatives (social and environmental information), and competitive position (strategic information), etc., none of which are required by law.

2.1.1 Benefits and disadvantages of disclosure

Demand for information originates from capital market participants, both domestically and internationally. Examples are analysts, business journalists and institutional and private
investors, who need information for valuation and sound investment decisions. Other actors, such as rating institutes and creditors, require information in order to valuate the financial positions of various firms. Government need information for control and tax purposes, etc. (Kavitha & Nandagopal, 2011). Informational pressures thus originate from all major stakeholders of a firm.

Managers may choose to either disclose or not disclose information, as there are costs associated with both. Costs associated with disclosure can be classified as either direct or indirect. Direct costs include costs of gathering, processing, and disseminating information as well as information technology equipment and management time spent on disclosure activities. Direct costs are often substantial and easy to measure. Indirect costs can be explained as the effects of firms’ disclosure practices (Farvaque et.al 2011). Some examples are competitive position costs, i.e. the effects of revealing proprietary information that may be beneficial to competitors, and political costs, i.e. the effects of revealing information that may potentially lead to governmental regulation. Indirect costs are generally harder to measure. (Adrem, 1999).

The benefits of disclosure are many. For example, a firm will gain from full disclosure since an increased share price will lower the cost of capital (Nayak, 2012). Some stakeholders will furthermore benefit from full disclosure when it leads to a reduction in the cost of capital. With a high level of disclosure, investors and creditors are better informed, thus able to understand the economic risk of the investment better (Elliott & Jacobson 1994). Other benefits include consensus about firm performance in the market place, increased analyst coverage and more accurate earnings forecasts (Lang & Lundholm, 1996).

Although the purpose of disclosure is to provide adequate and sufficient information to various stakeholder groups, managers may choose not to disclose certain information in order to protect competitive advantages, i.e. presence of proprietary costs (Kavitha & Nandagopal, 2011). Studies have shown that public firms in particular are somewhat careful about disclosing information that might lead to competitive disadvantage, e.g. information about technological innovations, strategies and specific operational data (Elliott & Jacobson 1994). The decision on the optimal level of disclosure is thus affected by the interplay between the costs and benefits of such disclosure.
2.2 The annual report

A company can disclose information through various channels such as newspapers, annual- and quarterly reports, Internet, press meets, press conferences, etc. The annual report is however considered to be the most important and effective means of communication. It is considered superior to other means of communication in terms of timeliness, understandability, neutrality, credibility and availability of specific information (Kavitha & Nandagopal, 2011). The annual report must furthermore undergo a mandatory review to ensure that its content is correct (Thorell & Norberg, 2005). The annual report is thus to be viewed as more credible and neutral in comparison to other communication vehicles (Kavitha & Nandagopal, 2011).

Information in the annual report can be of either financial or non-financial nature. According to Swedish law, an annual report must consist of a balance sheet, an income statement, notes and a management report. A larger company must also include a cash flow statement. (SFS 1982:763) All other disclosure is voluntary.

Focusing only on the annual report may cause underestimation of the total amount of voluntary disclosure made by one firm. For instance, larger companies may provide additional reports such as a CSR-report, sustainability report (e.g. H&M), etc. Thus, such companies may not have equal incentives to disclose additional or similar information in their annual reports. The overall voluntary disclosure level in this study may hence not represent the actual level of disclosure if all communications channels would have been taken into consideration. The generalizability of the results may hence be limited to the annual report, and the annual report only.
3. Previous research

3.1 Scope of disclosure studies

Disclosure studies have been in existence for the past five decades (Kavitha & Nandagopal, 2011). Most of the empirical research within the area of disclosure has focused on the extent of disclosure and the antecedents and precedents of disclosure, i.e. why some firms disclose more information than others. In such research, internal firm characteristics are often used as explaining variables. This thesis is of such a nature.

A great number of studies have furthermore examined the effect of external factors, e.g. legal, political, social, cultural and capital market conditions on disclosure practices of various firms (Healy & Palepu, 2001; Healy & Hutton, 1999; Adrem, 1999). For example, Healy & Palepu (2001) found political costs and capital market considerations to be associated with the level of disclosure.

Other research within the area of disclosure has focused on specific types of information, e.g. segment information, interim reporting, etc. A stream literature, which originates from disclosure research, examines the relationship between the extent of disclosure and the cost of equity capital (Botosan, 1997; Botosan & Plumlee, 2002). Others have examined the quality of disclosure. A commonly known study was made by Beattie (2004), who found the quality of disclosure to be associated with the amount of disclosure as well as the spread of disclosure across topics.

Most of the conducted research in the field of disclosure has been made in developed countries, e.g. U.S, UK and Canada (Kavitha & Nandagopal, 2011).

3.2 Literature on Swedish firms’ disclosure practices

Few studies have examined Swedish firms’ disclosure practices, in particular in the 21th century. Even fewer have examined what factors that may affect the extent of voluntary disclosure in Swedish annual reports.
In 1989, Cooke (1989) examined whether listing status, size, parent company relationship and industry affect the extent of Swedish financial disclosure. Furthermore, he investigated whether the same firm characteristics affect the extent of voluntary and social disclosure. The study contained 90 Swedish companies, of which 52 were listed. The extent of voluntary disclosure in annual reports was measured using a disclosure index. Cooke (1989) concluded that listed firms disclose significantly more information in their annual reports than unlisted firms. The results furthermore show that listing status and size significantly explain the extent of voluntary disclosure in Swedish annual reports and that firms in the trading sector disclose less voluntary information than other industry types.

In 1999, Adrem (1999) examined why some Swedish firms have a proactive disclosure strategy, while others devote less resources and effort to disclosure and investor relations. The study contained 141 firms, out of which 85 were listed. Six variables, with the purpose of explaining a firm’s choice of disclosure strategy, were derived from agency theory and the capital market pressures hypothesis. The results show that “the probability of a firm claiming it has a proactive disclosure strategy increases with size, ownership dispersion, and official listing on the Stockholm Stock Exchange, but decreases with service & retail sector affiliation.” (Adrem, 1999, p. 25) The results furthermore show that “asymmetric information and agency costs as well as capital market pressures to a great extent determine and explain a firm’s choice of disclosure strategy.” (Adrem, 1999, p. 25)

In a second essay, Adrem (1999) examined the influence of disclosure strategy on voluntary annual report disclosures by 31 small listed Swedish firms. The extent of voluntary disclosure in Swedish annual reports was measured cross-sectionally using a disclosure index. The findings revealed that “a proactive disclosure strategy, compared to a reactive disclosure strategy, has a primary influence on strategic information and on stock price information, a secondary influence on financial information, but no influence on social information.” (Adrem, 1999, p. 53)
4. Theory and hypotheses

4.1 Information asymmetry

Statutory disclosure may not meet the information demand of modern society. Societal changes create new information demands for companies to respond to, which in turn affect the way companies communicate to their stakeholders and the business environment. Firms disclose additional (voluntary) information in order to reduce such information gaps. The purpose of the annual report is to decrease the informational distance between an owner of information, i.e. the company, and a receiver of information, i.e. stakeholders. The annual report thus has the ability to reduce information asymmetry. (Petersen & Plenborg, 2006)

Information asymmetry, as previously stated, is defined as imperfect knowledge in decision-making, particularly when one party has different (more or better) information than the other. Most often, information asymmetry is studied in the context of principal-agent problems.

4.1.2 The principal-agent problem

Companies’ disclosure practices, i.e. the extent and variety of the information presented in the annual report, may in part be explained by agency theory (Cooke, 1989; Adrem, 1999; Raffournier, 1995). According to agency theory, the agent, i.e. management, tries to maximize its value at the expense of the principal, i.e. shareholders. (Eisenhardt, 1989)

The principal-agent problem is about motivating the agent to act in the best interest of the principal, rather than his or her own. The problem arises when two different parties have asymmetric information and different interests. In such a case, the principal may not be able to ensure that the agent is acting in the best interest of the principal – especially if the actions are costly for the agent and useful for the principal or when the actions of the agent are costly to observe. The principal-agent problem is thus a question of moral hazard (further described below) and conflict of interest. Deviation from the principal’s interest is called agency costs. (Eisenhardt, 1989)
The principal always faces the possibility of being exploited by the agent. Such concern may lead to avoidance of transactions that would ultimately serve the interests of both parties. Above is a suboptimal outcome that lowers welfare overall. (Farina, 1980).

### 4.1.3 The separation of ownership and control

The separation of ownership and control refers to “the phenomenon associated with publicly held business corporations in which the shareholders possess little or no direct control over management decisions. This separation is generally attributed to collective action problems associated with dispersed share ownership. The separation of ownership and control creates costs due to adverse selection and moral hazard.” (Marks, 1999, p. 692).

The phenomenon described above is explained in figure 1. It originates from the principal-agent problem. The control of public firms is transferred from the owners, i.e. the shareholders, to the managers of the corporations. The objectives of the owners may differ from the ones of the manager. The owners may not be able to ensure that the managers are acting in their best interest, which generates agency costs (monitoring costs).

![Fig. 1 The separation of ownership and control](image-url)
4.1.4 Adverse selection

Adverse selection initially refers to a situation where a seller has information that the buyer does not, or vice versa, about some aspect of product quality (Akerlof, 1970). An illustrative example put forward by Akerlof (1970) is when selling a car, only the car owner has full knowledge about the actual quality of the car, e.g. service history, likelihood to break down, etc. In contrast, the buyer has limited knowledge and may not be able to trust the seller. The buyer will hence demand a lower price to compensate for the underlying risk.

In a situation characterized by information asymmetry, it is possible for one party to signal its type, thus resolving the information asymmetry by transferring knowledge (information). This is called signalling, one of two primary solutions to adverse selection discussed by Akerlof (1970).

The stock market may function as an illustrative example. An insider may possess information that the market does not. Actions made by the insider may signal certain information to the market, i.e. to outsiders, which in turn may affect stock prices. Again it is a question of asymmetric information. Above refers to a situation in where an executive presumably knows more about his or her company than the market. Thus, if an executive buy shares in the company, it signals certain information to the market, i.e. to outsiders. The same is true for the opposite, i.e. if an executive sell shares in the company.

4.1.5 Moral hazard

Moral hazard refers to a situation in which one party gets involved in risky events knowing that it is protected against the risk, i.e. that another party will incur the cost. (Farma, 1980). One illustrative example put forward by Farma (1980) is when an individual becomes less cautious after signing car insurance, since the insurance company is the one that will incur the cost if the car is damaged or stolen.
4.2. Hypotheses

Three hypotheses have been derived from the theory presented above. The hypotheses are further explained below, as well as why disclosure is a potential remedy to the agency problem.

4.2.1 Ownership dispersion

The separation of ownership and control may create agency costs, since there is a conflict of interests between involved parties, i.e. between shareholders and managers and between bondholders and shareholder-managers (Fama & Jensen, 1983; Cooke, 1989). In order to resolve or mitigate the damage of such a conflict, management may decide to increase the information disclosed in order to signal that it is acting in the best interest of the owners (Raffournier, 1995). By this, managers can actively decrease the owners’ perceived risk of moral hazard (Cooke, 1989; Adrem, 1999).

The information asymmetry between owners and management is larger in firms with dispersed ownership. Monitoring costs should hence be larger for firms with a greater number of shareholders. Annual report disclosure may reduce such monitoring costs. According to Adrem (1999, p. 57), “agency theory predicts that firms with a more dispersed ownership structure are more exposed to conflicts of interest than firms where capital is more closely held. Voluntary disclosure is one device by which managers can facilitate monitoring for owners. Thus, agency theory indicates that there is a positive relationship between ownership dispersion and the extent of voluntary annual report disclosure.” According to Schipper (1981, p. 86), ”any monitoring problems that could be solved by issuing public accounting reports would (increase with) the number of owners”.

Empirical support for the above reasoning is relatively strong. As an example, Hoosain, Tan and Adams (1994) found that ownership dispersion is positively related to the extent of voluntary disclosure for Malaysian firms. However, some empirical researchers did not confirm a positive relationship between ownership dispersion and voluntary disclosure (see Raffournier, 1995; Craswell & Taylor, 1992; Depoers, 2000; Patelli & Prencipe, 2007, etc.).

In line with the above reasoning, the following hypothesis is formulated:
**H1:** Ownership dispersion is positively related to the extent of corporate strategic information (i.e. voluntary information) in Swedish corporate annual reports.
4.2.2 Firm size

Agency costs are associated with the separation of ownership and control, which is likely to be greater in larger firms (Jensen & Meckling, 1976). Larger firm may disclose additional information in order to reduce such agency costs (Tuinh, 2014). Furthermore, larger firms presumably have more stakeholders (analysts, investors, shareholders, etc.), thus widespread interest in additional disclosure (Watts & Zimmerman, 1983). Accordingly, Cooke (1989, p. 179) argues “the greater the number of shareholders, the more likely that their information needs will be heterogeneous and the greater the diversity of information disclosure. This may result from pressure from both shareholders and analysts for additional disclosures.”

According to Adrem (1999), agency theory suggests that “agency costs [monitoring costs] increase with the amount of outside capital and that the proportion of outside capital tends to be higher for larger firms. Managers can reduce agency costs and narrow the information asymmetry as well as alleviate the potential wealth transfer from the suppliers of outside capital to themselves by increasing the level of information disclosed.” (Adrem, 1999, p. 52)

In other words, an increased proportion of outside capital might increase the separation of ownership and control, which in turn may generate agency costs. The providers of outside capital could have incentives that do not align with those of management. Managers can reduce agency costs as well as narrow the information asymmetry by increasing the level of information disclosed.

Previous empirical results support above (see Cooke, 1989; Raffournier, 1995; Meek, et. al. 1995; Adrem, 1999). The result is according to Adrem (1999) one of the most corroborated over time and across countries. Raffournier (1995) found, for example, that larger firms in Switzerland disclose more voluntary information in comparison to smaller firms. Cooke (1989) found that size significantly explain the extent of voluntary disclosure in Swedish annual reports.

There are some complementary explanations for a positive relationship between size and the extent of voluntary information. Depoers (2000) suggests that voluntary disclosure entails certain costs. Larger firms are better equipped to meet these costs, in terms of resources, access to information, information/reporting systems, qualified personnel, etc. According to Dye (1985), managers of small firms are more likely than managers in large firms to feel that
full disclosure will lead to competitive disadvantages, thus reluctant to disclose certain information that they feel may potentially harm the firm and its competitive position (e.g. information about technological innovations, strategies and specific operational, etc.) Lang & Lundholm (1996) suggest that dissemination cost may be higher for smaller firms, since analysts are keener on attending meetings arranged by larger firms. Furthermore, the informational demand may be greater for larger firms, as they are usually followed by a larger number of analysts and investors, which in turn induces them to disclose additional information. (Lang & Lundholm, 1996) Accordingly, Cooke (1989) suggests that larger firms may have to endure greater informational demands from customers, suppliers and analysts as well as the public in general. Cooke (1989) furthermore suggests that larger firms are more likely to be more complex than smaller firms, e.g. multiproduct based, operations in a number of geographical areas, international, etc. Such complexity requires sophisticated management information systems in order to meet the needs for managerial control and the needs of investors. Larger firms are more likely to be able to attract individuals capable of introducing reporting systems that “can disclose an extensive array of information” (Cooke, 1989, p. 178)

On the basis of the above, the following hypothesis is formulated:

\[ H2: \text{Firm size is positively related to the extent of corporate strategic information (i.e. voluntary information) in Swedish corporate annual reports} \]
4.3.3 Performance

According to Akerlof (1970), higher profitability, e.g. rate of return, should motivate managers to disclose more detailed information in order to support the continuance of their position and compensation (Inchausti, 1997; Adrem, 1999). Rate of return is generally considered a measurement of good management, since it signals that the business is profitable, and thus well managed (Adrem, 1999). Theoretical models in the face of adverse selection also imply a positive relationship between performance and the extent of voluntary disclosure (Adrem, 1999). In other words, high performing firms are presumably perceived as well managed. Managers may want to signal such a fact in order to support the continuance of their positions as managers as well as their compensation, e.g. bonuses, wages, etc. Furthermore, managers may want to showcase high profitability, as a result of good management, to attract new capital, etc. Agency theory thus suggests a positive relationship between performance and the extent of voluntary information in corporate annual reports.

An alternative explanation is proposed by Watts and Zimmerman (1986), who suggest that firms with higher profitability, as well as higher profits, are more vulnerable to regulatory intervention. High performing firms should thus disclose more detailed information in order to justify their financial performance and reduce political costs.

Empirical results for the above reasoning are limited, although agency theory and signalling would predict a positive relation between voluntary disclosure and performance. Some empirical researchers have found insignificant relationships between the extent of voluntary disclosure and performance (see Raffournier, 1995; Adrem, 1999). Cook (1989) excluded profitability measures from his analysis since he claimed no hypotheses could be put forward for suggesting that earnings margins and rates of return should be associated with disclosure levels.

In line with the above reasoning, the following hypothesis is formulated:

\[ H3: \text{Performance is positively related to the extent of corporate strategic information (i.e. voluntary information) in Swedish corporate annual reports} \]
5. Research Method

5.1 Quantitative, explanatory and deductive approach

This thesis is of a quantitative, explanatory and deductive nature. It aims to test hypotheses derived from previous research as well as theoretical consideration. Statistical tests were chosen and conducted in order to confirm or reject the hypotheses.

5.2 Data Collection

The data was collected from the 2012 corporate annual reports of 70 listed companies in Sweden. The 2012 annual reports were selected for analysis as the latest available at the time (2013 not yet available). All annual reports were downloaded from the firms’ websites.

5.2.1 Sample

The number of firms listed on the Stockholm Stock Exchange in 2012 was 253 (Nasdaqomx.com) (see Appendix 1). The financial sector was however excluded from the target population as its mandatory disclosure requirements differ from other sectors (Adrem, 1999). Furthermore, previous studies, which were used in this thesis for selecting explanatory variables, also excluded this sector (Adrem, 1999; Cooke, 1989; Raffournier, 1995, etc.). Out of 253 firms, 210 were hence applicable to this study (see Appendix 1). The results of this study are hence not applicable to the financial sector.

Although an increased sample size increases the precision of a sample, the scope and time constraints of this study did not allow analysing all 210 firms. Out of 210 annual reports, almost one third of the total population (70) were selected (see Appendix 2). The analysed firms were selected using simple random sampling, which is the most basic form of probability sample. With random sampling, each unit of the population has an equal probability of inclusion in the sample. (Bordens & Abbot, 2011; Bryman & Bell, 2007) The sample includes firms from various industries, such as engineering, construction & energy,
chemicals and service & retail. Firms from the construction & energy sector as well as the service & retail sector seem to be overrepresented in the sample.

5.2.2 Quantitative content analysis

An annual report consists of both mandatory and voluntary qualitative and quantitative information. The aim of this thesis is not to understand or interpret the content of such information. It simply aims to investigate the extent of voluntary disclosure in Swedish annual reports. This thesis hence used quantitative content analysis, in where qualitative data was transformed into quantitative data, without any interpretation from the authors (Han & Shavitt, 1994). Above was carried out through the use of a disclosure checklist, further described in the subsequent chapters.

5.3 Operationalization

5.3.1 Voluntary disclosure checklist

The extent of voluntary information in Swedish corporate annual reports was measured using a voluntary disclosure checklist. The checklist used in this study was developed by Adrem (1999) (Fig. 2), derived from the checklist used by Meek et. al (1995). Adrem’s (1999) checklist contains 141 indicators, reduced from 222 previously after comparison with Swedish recommendations. All indicators are of a voluntary nature, i.e. they are not mandatory.
Adrem’s (1999) disclosure checklist is of a hierarchical structure. At the first level - the bottom level - seven information types are included, i.e. corporate strategic information, segmental strategic information, corporate financial information, segmental financial information, environmental information, personnel information and stock price information. On the second level, the information types included at the bottom level are aggregated into three main types of information: strategic, financial and social. On the third and last level, all information types are aggregated into one overall measurement of the extent of voluntary annual report disclosure. (Adrem, 1999).

Strategic corporate information consists of general information, information about acquisitions and disposals, strategic alliances, and research and development activities. Financial corporate information consists of the financial review, foreign currency and interest rate information, and forecast information. Swedish firms generally disclose environmental information in a separate report. The environmental report and the annual report are thus viewed as a package. Personnel information consists of information about board members, corporate managers and employees. Stock price information is excluded from financial information due to its characteristics - “it does not include the same amount of proprietary costs as the other types of financial information” (Adrem, 1999, p. 68-69). (Adrem, 1999)
5.3.2 Revised disclosure checklist

In previous research, “the level of analysis has mostly been restricted to the overall level of voluntary annual report disclosure. By this, these studies have implicitly assumed that all information types are influenced by the same set of factors, and to an equal extent.” (Adrem, 1999, p. 45) By structuring the analysis as in figure 2, the analysis of voluntary disclosure levels is further refined. (Adrem, 1999) This thesis offers a focused analysis on one specific information type, i.e. corporate strategic information. Adrem (1999, p. 54) suggests that it is “desirable to distinguish between information types, since it is likely that it will result in additional insights into the disclosure practices of firms.” Strategic corporate information consists of general information, information about acquisitions and disposals, strategic alliances, and research and development activities. The indicators included are presented below (Table 1). To investigate corporate strategic information is interesting as it could be viewed as quite controversial – strategic information may expose a firm towards its competitors. And as stated above, a distinction between information types facilitates a more in-depth analysis.

Changes in regulations have been made since Adrem (1999) constructed his disclosure checklist presented in Fig. 2. For example, IAS 38 requires disclosing R&D expenses, and IFRS 3 requires disclosing amount of goodwill. These indicators have been excluded (marked yellow) from the revised disclosure checklist presented in Table 1.
Table 1
Revised voluntary disclosure checklist

1. Introduction about the corporation  
6. Statement of business policy and general objectives  
11. Description of market development in relation to competitors  
16. Amount on goodwill on acquisitions  
21. Reasons for strategic alliances  
26. Number of employees in R&D

2. Organisational structure  
7. Comments on achievement of general objectives  
12. Impact of macro-economic variables on current results  
17. Comments on the effects of the acquisitions  
22. Comments on the effects of the strategic alliances  
27. R&D expenses for the current period

3. Financial summary for 2012  
8. Statement of financial objectives  
13. General future information  
18. Reasons for disposals  
23. Statement of policy, strategy and/or objectives of R&D activities  
28. Future prospects regarding R&D

4. Statement of business vision  
9. Comments on achievement of financial objectives  
14. The full annual report is available in English  
19. Amount of considerations realised from the disposals  
24. Description of on-going R&D activities  

5. Statement of business concept  
10. Description of market development  
15. Reasons for acquisitions  
20. Effects of acquisitions and disposals on results for current period  
25. Location of R&D activities

Again, all indicators presented in Table 1 are of voluntary nature, i.e. include information that is not mandatory. Although strategic corporate information only constitutes one out of seven information types, it was deemed as relevant for this thesis since it provides a comprehensive and general picture of the extent of voluntary information disclosed in annual reports.

One could argue that the theory used in this thesis is only applicable to voluntary disclosure as such, not one specific information type. This should however not be viewed as a problem, since the analysed information type, i.e. strategic corporate information, constitutes an important part of general voluntary information. The theory is hence viewed as relevant. In terms of validity for this thesis, a larger number of indicators and information types would have been more beneficial, but was indeed not possible. The alternative, to randomly select a number of indicators from each of the seven information types, would have lowered the validity further.
5.3.3 Scoring procedure and Disclosure index

The content of the 2012 annual reports was compared to the items in the disclosure checklist. An indicator received one (1) point if the information was present and zero (0) if it was missing, i.e. dichotomous procedure. The information was not weighted in any way - an indicator received one (1) point regardless of the quantity of disclosed information related to that particular indicator. All points were thus of equal value, i.e. numeric. The total score, i.e. disclosure index, in where all indicators are included, represents the total amount of voluntary information disclosed by one firm. (Cook 1989; Meek et. al. 1995; Adrem, 1999). The disclosure index was used as the dependent variable in the statistical analysis.

5.3.4 Measurement and definitions of independent variables

Size, ownership dispersion and performance were selected as independent variables since as they are the only variables related to agency theory as well as previously examined in a Swedish setting (Cooke, 1989; Adrem, 1999). Some variables were furthermore excluded from the analysis, since this study, in contrast to prior research, is limited to firms on the Stockholm Stock Exchange. The independent variables were measured as follows:

Size

According to Cooke (1989), size can be measured in a number of different ways. The three size variables, which seem to be of particular relevance to Swedish financial reporting, are total assets, total sales and number of shareholders. Because of the potential problem of multicollinearity, it is however not appropriate to incorporate all three size measures into a regression analysis. Size was hence measured as total sales in 2012. The measurement has been used in previous studies (Adrem, 1999, Cooke, 1989.). The validity of the variable is hence viewed as satisfactory. The variable is furthermore easy to identify and easily retrieved from the income statement in the annual report. Above reduces the risk of interpretation failures between observers, which increases reliability.

Ownership dispersion

Ownership dispersion was at first measured as the number of shareholders at the year-end of 2012. However, in a first attempt of a statistical analysis, the variable showed a large
correlation with the variable size (.870). A value approaching 0.9 indicates a potential multicollinearity problem. When variables are multicollinear they contain redundant information, which means that they are not needed in the same analysis. In other words, there are fewer variables than it appears and the correlation matrix is not of full rank since there are not really as many variables as columns (Pallant, 2007). The correlation coefficients thus indicated that dependencies between the two variables could be harmful for the regression analysis. Cooke (1989) argues that the number of shareholders could be considered a substitute to determine the size the firm, rather than measuring ownership dispersion. Thus, the number of shareholders might actually have measured firm size, not ownership dispersion, as larger firms tend to have a greater number of shareholders (Jensen & Meckling, 1976).

Ownership dispersion was instead measured as the percentage of voting rights controlled by the largest five shareholders at the year-end of 2012 at the year-end of 2012. Adrem (1999) measured the variable ownership dispersion as “100 per cent less the cumulative per cent of the ownership held by the 25 largest owners (votes)” (Adrem, 1999, p. 41). Adrem (1999) collected his data from sources that are no longer available. In this thesis, ownership dispersion was measured as the percentage of voting rights controlled by the largest five shareholders out of availability reasons – the variable is easily retrieved from the annual report. The validity and internal reliability of the variable is hence viewed as satisfactory.

Performance
Performance was measured as the return on equity as reported in the 2012 annual reports. The measurement has been used in previous studies (Adrem, 1999; Raffournier, 1995). The validity of the variable is hence viewed as satisfactory. Return on equity is furthermore easy to identify and easily retrieved from the annual report. Above reduces the risk of interpretation failures between observers, which increases reliability.

5.4 Analysis method

Simple bivariate correlation analysis and standard multiple regression analysis was conducted in order to identify any potential relationships between the dependent variable (extent of voluntary disclosure) and the independent variables (internal firms characteristics). The data
was compiled in Microsoft Excel and analysed in SPSS. A significance level of 95% was accepted.

5.4.2 Simple bivariate correlation analysis

Correlation analysis is used to describe the strength and direction of a linear relationship between two variables. (Pallant, 2007, p. 126). The correlation coefficient can only take in values from -1 to +1. A correlation coefficient that is positive indicates that two variables are positively related (as one variable increases, so does the other one). A correlation coefficient that is negative indicates that two variables are negatively related. A correlation coefficient of 0 indicates no relationship between two variables. (Pallant, 2007)

5.4.2 Standard multiple regression analysis

Multiple regression is a technique used to explore the relationship between one dependent variable and a number of independent variables. In a standard multiple regression, all independent variables (size, ownership dispersion and performance) are entered into the equation simultaneously. Each independent variable is evaluated in terms of its predictive power, over and above that offered by all the other independent variables. This approach is useful when examining how much variance a set of variables are able to explain as a group or block in a dependent variable. Simple multiple regression also examines how much unique variance in the dependent variable each of the independent variables explains. (Pallant, 2007)
6. Results

6.1 Descriptive analysis

Table 2  
Descriptive statistics

<table>
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<tr>
<th></th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>Sd</th>
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<td>Ownership dispersion (% of voting rights controlled by the 5 largest shareholders)</td>
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<td>87.80</td>
<td>53.23</td>
<td>17.57</td>
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<tr>
<td>Performance (return on equity %)</td>
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<td>-202.20</td>
<td>96.00</td>
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<td>36.54</td>
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<td>41337.23</td>
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<td>23.00</td>
<td>13.09</td>
<td>4.29</td>
</tr>
</tbody>
</table>

Table 2 reports the descriptive statistics. The total number of annual reports amounted to 70. The independent variable performance, measured as the return on equity, was unavailable in 15 reports for unknown reasons. Note the spread in the variables ownership dispersion (min 14.50, max 87.80) and size (min 10.3 MSEK, max 303647 MSEK). The table shows that the mean firm has 53.23% of its voting rights controlled by the 5 largest shareholders, a return on equity of 6.98% and total sales of MSEK 15733.90. The mean firm discloses approximately 13 of 26 strategic corporate items (50%).
6.2 Correlation analysis

Table 3
Correlations between the variables

<table>
<thead>
<tr>
<th></th>
<th>Ownership dispersion</th>
<th>Performance</th>
<th>Size</th>
<th>Disclosure index</th>
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</thead>
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<td>Ownership dispersion</td>
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<td>-.16</td>
<td>-.08</td>
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<td>.11</td>
<td>.14</td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td></td>
<td></td>
<td></td>
<td>.45**</td>
</tr>
<tr>
<td>Disclosure index</td>
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<td></td>
<td></td>
<td></td>
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</tbody>
</table>

**p<.01

Table 3 reports the correlations between all variables. The table shows that size is significantly correlated with disclosure index ($r=.45$). Performance and ownership dispersion showed no significant correlation with disclosure index ($r=.14$ respectively $r=-.08$).
6.3 Regression analysis

Table 4
Regression analysis

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Predictors</th>
<th>β</th>
<th>R</th>
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<tr>
<td></td>
<td>Performance</td>
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<td>Size</td>
<td>0.442*</td>
<td>0.47</td>
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</table>

*p<.05, **p<.01

In order to examine which of the independent variables that best predict the extent of strategic corporate information in annual reports, a regression analysis was conducted. The model was significant $F=(3,51)4.91$, $p<.05$. The result shows that only size predicts the extent of voluntary disclosure (standardized beta=.442, $p<.05$) with an explained variance of 47%. Ownership dispersion and performance were not significant, see Table 4.
7. Analysis and discussion

7.1 Hypotheses testing

7.1.1 Ownership dispersion

H1: Ownership dispersion is positively related to the extent of corporate strategic information (i.e. voluntary information) in Swedish corporate annual reports

Agency theory predicts that firms with a more dispersed ownership structure are more exposed to conflicts of interest than firms where capital is more closely held. Voluntary disclosure is one device by which managers can facilitate monitoring for owners. The result put forward in this thesis does not support the above.

The statistical analysis conducted in this thesis showed no significant correlation between ownership dispersion and voluntary disclosure, i.e. strategic corporate information ($r = -.08$). Hypothesis 1 is hence rejected, contrary to most previous international research.

The results indicate that Swedish listed firms with dispersed ownership structures do not disclose more strategic corporate information than others. The demand for transparency may be relatively high for Swedish listed firms (Sweden is a developed market, etc.).
7.1.2 Firm size

H2: Firm size is positively related to the extent of corporate strategic information (i.e. voluntary information) in Swedish corporate annual reports

Agency costs are associated with the separation of ownership and control, which is likely to be greater in larger firms. Agency theory further suggests that managers can reduce agency costs and narrow the information asymmetry as well as alleviate the potential wealth transfer from the suppliers of outside capital to themselves by increasing the level of information disclosed. The results put forward in this thesis support the above.

The correlation analysis conducted in Chapter 6 (Table 3) showed that size significantly correlates with disclosure index ($r=.45$). Furthermore, the results from table 4 show that size predicts the extent of voluntary disclosure (standardized beta=.442, $p<.05$) with an explained variance of 47%. There is thus a positive significant relationship between firm size and the extent of voluntary disclosure, i.e. strategic corporate information, in Swedish listed firms’ corporate annual reports. Hypothesis 2 is hence supported, in line with previous research (Cooke, 1989; Raffournier, 1995; Meek, et. al. 1995; Adrem, 1999)

Smaller firms might be reluctant to disclose (additional) information, as they perceive the cost of such disclosure to be larger than the benefits. Larger firms are better equipped to meet larger costs, in terms of resources, access to information, information/reporting systems, qualified personnel, etc. Furthermore, smaller firms presumably have a smaller amount of stakeholders, e.g. analysts, shareholders, media, etc., thus smaller information demands. The information pressure on smaller firms should be relatively homogeneous, which should decrease potential agency costs. In line with the above reasoning, larger firms may feel a need to disclose more information in order to meet various information demands. This could in turn indicate that smaller firms (to some extent) may provide insufficient information to certain stakeholder groups/users. There may or may not be an information problem for such users. Thus, smaller firms might not be able to gain from the potential benefits of full disclosure, such as consensus about firm performance in the market place, increased analyst coverage and more accurate earnings forecasts (Lang & Lundholm, 1996).
7.1.3 Performance

H3: Performance is positively related to the extent of corporate strategic information (i.e. voluntary information) in Swedish corporate annual reports

Higher profitability should motivate managers to disclose more detailed information to support the continuance of their position and compensation. Theoretical models in the face of adverse selection also imply a positive relationship between performance and the extent of voluntary disclosure. The results put forward in this thesis do not support the above.

The statistical analysis in this thesis showed no positive significant relationship between performance and the extent of voluntary disclosure, i.e. strategic corporate information, in Swedish listed firms’ corporate annual reports. Hypothesis 3 is hence not supported, in line with previous research (Raffournier, 1995; Adrem, 1999).

High performing firms may use other communication vehicles to disclose information, for example direct contacts with government agencies. Furthermore, firms with limited strategic corporate disclosure may focus on other information types and segment, e.g. financial information. High performing firms could disclose financial information, stock price information, or other information types in order to signal to the owners that the firm is acting in their best interest.
7.1.4 Summary hypotheses

Not supported

H1: Ownership dispersion is positively related to the extent of corporate strategic information (i.e. voluntary information) in Swedish corporate annual reports

Supported

H2: Firm size is positively related to the extent of corporate strategic information (i.e. voluntary information) in Swedish corporate annual reports

Not supported

H3: Performance is positively related to the extent of corporate strategic information (i.e. voluntary information) in Swedish corporate annual reports
8. Conclusion and future research

8.1 Conclusion

The statistical analysis conducted in this thesis suggests that firm size is significantly positively related to the extent of strategic corporate information in Swedish listed firms’ corporate annual reports. The result hence confirms the expectation that larger firms to a larger extent disclose strategic corporate information, i.e. voluntary information, in their corporate annual reports. No positive relation was found between the variables performance and ownership dispersion and the extent of strategic corporate information.

The results of this thesis are interpreted to suggest that asymmetric information and agency costs are important determinants of the extent of strategic corporate information, i.e. voluntary information, in Swedish corporate annual reports. Larger firms seem to reduce agency costs and narrow the information asymmetry by increasing the level of information disclosed.

The results indicate that larger firms to a greater extent reveal voluntary information about the firm’s strategy, including business vision, concept and strategy, motives behind changes in the organisational structure regarding acquisitions and disposals as well as R&D activities and strategies, than do smaller firms. Smaller firms with a limited number of shareholders might be reluctant to disclose additional information, as they perceive the cost of such disclosure to be larger than the benefits. Previous research supports the above reasoning and is further elaborated in chapter 5.
8.2 Future research

8.2.1 Check for industry differences

Previous empirical results imply the importance of controlling for industry differences. The results suggest that the extent of voluntary disclosure in corporate annual reports varies across industries (Meek, et, al. 1995; Cooke, 1989). Cooke (1989) found that Swedish firms in the retail sector disclose less information that other business sectors. A result confirmed by Adrem (1999).

According to Adrem (1999), several explanations have been used to explain why the amount of voluntary disclosure may differ among industries. Cooke (1989) suggests benchmarking, which may result in bandwagon effects in an industry. If internationally listed companies disclose additional information due to international capital pressure, and if domestic companies use these companies as benchmark, bandwagon effects may occur in that specific industry. Verrechia (1983) suggest that proprietary costs vary between industries, which leads to different levels of disclosure across industries. Previous research has furthermore found empirical evidence suggesting that firms in industries traditionally considered as polluting disclose more information regarding the environment than others (Lundahl, 1999).

Cooke (1989) furthermore suggests that historical reasons may explain why some industries disclose more voluntary information than others. For example, early uniformity in financial reporting in Sweden occurred in the Swedish metal working industry in the 1940’s. Successful implementation of an industry uniform chart in the metal working industry led to similar charts in other industries (e.g. textile industry, shoe industry and the electricity industry).

8.2.2 Expand the study

The results of this study are based on a single data set examining the year of 2012 from one country, Sweden. Future researchers could extend the study using a longitudinal approach in order to create results that are more robust. Furthermore, this thesis focused on the annual report only. There is thus a scope for future research to include other forms of communications channels such as press releases, quarterly reports, etc.
8.2.3 Additional information types

This thesis examines one information type, i.e. strategic corporate information. Future researchers may benefit from including all information types put forward by Adrem (1999) to create results that are more robust.

8.2.4 Additional variables and other theories

Future studies may benefit from including additional variables such as firm age, indebtedness (Hossain, & Hammami, 2009), leverage, foreign ownership structure, listing status, multinationality (Adrem, 1999; Cooke, 1989) and parent-company-relationship (Cooke, 1989) to create results that are more robust. Future research may also benefit from examining additional appropriate internal firm characteristics derived from other theories previously used in disclosure research, such as the concept of legitimacy and the capital market pressures hypothesis.
9. Literature


Thorell, P., Norberg, C. (2005), Revisionsplikten i små aktiebolag, Svenskt Näringsliv

### Appendix 1

**Listed firms on the Stockholm stock exchange 2012**

<table>
<thead>
<tr>
<th>Applicable to this study</th>
<th>Not applicable to this study</th>
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<td>SEB A</td>
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<td>Sv. Handelsbanken A</td>
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<td>Swedbank A</td>
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<td>Intrum Justitia</td>
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*Source: nasdaqomxnordic.com*
### Listed firms on the Stockholm stock exchange included in the study

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Appendix 3

Descriptive Statistics

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Correlations

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<td>1</td>
<td>.109</td>
<td>-.103</td>
<td>,142</td>
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<tr>
<td>Sig. (2-tailed)</td>
<td>.429</td>
<td>.454</td>
<td>.302</td>
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<tr>
<td>Pearson Correlation</td>
<td>,109</td>
<td>1</td>
<td>-.162</td>
<td>,451**</td>
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<tr>
<td>Sig. (2-tailed)</td>
<td>.429</td>
<td>1</td>
<td>.181</td>
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<td>55</td>
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</table>

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

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
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<tbody>
<tr>
<td>1</td>
<td>.473a</td>
<td>.224</td>
<td>.178</td>
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a. Predictors: (Constant), Ownership dispersion, Performance, Size
ANOVAa

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
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<th>Sig.</th>
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<td>Regression</td>
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<td>79,872</td>
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<td>Residual</td>
<td>830,131</td>
<td>51</td>
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<td>Total</td>
<td>1069,745</td>
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a. Dependent Variable: Disclosure Index
b. Predictors: (Constant), Ownership dispersion, Performance, Size

Coefficientsa

<table>
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<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
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<th>Sig.</th>
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<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
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<tr>
<td>(Constant)</td>
<td>13,322</td>
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<td>Size</td>
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<td>Performance</td>
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<td>.015</td>
<td>.089</td>
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<td>Ownership dispersion</td>
<td>-.013</td>
<td>.034</td>
<td>-.047</td>
<td>.369</td>
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a. Dependent Variable: Disclosure Index