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**What explains the extent and content of  
social disclosures on corporate websites?**

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**ABSTRACT**

The demand for information and transparency from corporations has increased over the last few years. Today, there are other information dissemination channels besides annual financial statements. One important channel is the Internet. The aim of this study is to explain the extent and content of social disclosure information on corporations' websites. The empirical data in this study is based on annual financial statements and such websites. A multi-theoretical framework is used in order to explain the extent and content of social disclosures on corporate websites. The findings support that size and profitability are positively correlated with the content of social disclosure information on these websites. In general, State-owned corporations disclose more social information on their websites than privately owned corporations do. There are significant differences between different industries. This is true regarding not only the extent of social disclosures, but also their content.

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## **Introduction**

The demand for information and transparency from corporations has increased over the last few years. Public awareness and interest in social, environmental and ethical issues and increased attention in mass media have resulted in more corporations making social disclosures about themselves (e.g. Patten, 1991; Hooghiemstra, 2000; Deegan, 2002). Broadly speaking, *social disclosures* can be defined as reporting that considers, environmental, ethical and human issues (Gray et al., 1995a; Hackston & Milne, 1996; Adams et al., 1998; McMurtrie, 2005; Solomon & Darby, 2005; Branco & Rodrigues, 2006; Golob & Bartlett, 2007).

The extent and content of social disclosures differs from corporation to corporation. Research has shown that factors such as firm size and industry influence the reporting of social and environmental information (e.g. Patten, 1991; Gray et al., 1995a, 1995b; Hackston & Milne, 1996; Adams et al., 1998; Jenkins & Yakovleva, 2006; Stanwick & Stanwick, 2006). With varying levels of success, researchers have also tried to relate social disclosures with profitability (e.g. Patten, 1991; Hackston & Milne, 1996). Contextual factors such as culture and nationality have also been used to explain the extent and content of social disclosures (Maignan & Ralston, 2002; Haniffa & Cooke, 2005; Van der Laan Smith et al., 2005; Golob & Bartlett, 2007).

Annual financial statements have been the most frequently used source in communicating social and environmental reporting (Adams et al., 1998; Line et al., 2002). However, there are also other information channels that corporations use to communicate social and environmental information. Zeghal & Ahmed (1990) question the one-sidedness of research that focuses on corporate accounts alone in studies addressing social disclosures. Corporations use many other channels of information to inform their stakeholders. One of these over the past few years has been the Internet (e.g. Esrock & Leichty, 1998; Line et al., 2002; Maignan & Ralston, 2002; Coupland, 2005; Branco & Rodrigues, 2006; Capriotti & Moreno, 2007; Guimarães-Costa & Pina e Cunha, 2008). The use of the Internet as an information dissemination channel has become more frequent (Oyelere et al., 2003), and might imply that a firm is modern, up-to-date and, therefore, of high quality (Craven & Marston, 1999). The literature on Internet-based corporate disclosure and financial reporting argues that these channels of communication with stakeholders have the advantage over their paper-based

equivalents of, for example, unlimited capacity, global reach, flexibility, versatility, timeliness, and speed (e.g. Ashbaugh et al., 1999; Craven & Marston, 1999; Debreceeny et al., 2002; Oyelere et al., 2003; Xiao et al., 2004), but have disadvantages as well due to the risk of information overload (e.g. Debreceeny et al., 2002) and the difficulty of controlling the use of the information (e.g. Xiao et al., 2004). Nonetheless, due to the increased geographical dispersion of investors and other stakeholders, Internet-based disclosures can also be more cost-effective than, for example, traditional paper-based disclosures (e.g. Debreceeny, et al., 2002; Oyelere et al., 2003).

The aim of this study is to explain the extent and content of social disclosures on corporate websites.

The paper is structured as follows. Part 2 develops the theoretical framework and hypotheses, while part 3 describes the data collection and methodology. Part 4 presents an analysis of the data and relevant findings, and part 5 offers our concluding remarks.

### **Theoretical framework and hypotheses**

A number of different theoretical approaches have been used to explain corporate social and environmental reporting. Even though this kind of information does not have a direct impact on a corporation's financial result, several scholars have used positive accounting theory in order to explain the existence and content of social and environmental accounting (e.g. Belkaoui & Karpik, 1989; Ness & Mirha, 1991). However, the theories that seems to have been most successful in explaining the extent and content in social and environmental reporting are system-oriented, particularly legitimacy and stakeholder theories (Gray et al., 1995a; Milne, 2002; O'Dwyer, 2003). Institutional theory has also been used to explain corporate behaviour and disclosure practice (Oliver, 1991). Beside these theories, others that are more market-oriented have also been used to shed light on reporting practice. According to the latter theories, social disclosures are principally used to guard a corporation's reputation and identity (Hooghiemstra, 2000). Indeed, both Adrem (1999) and Cormier et al. (2005) hold that disclosures are a complex phenomenon that cannot be explained by a single theory. Thus, if the aim of a study is to explain an empirical phenomenon, it could be problematic if theories were looked upon as competitive instead of complementary (Gray et al., 1995a;

Ljungdahl, 1999). Hence, in this study, we have employed an eclectic approach (e.g. Neu & Simmons, 1996; Falkman & Tagesson, 2008; Collin et al., forthcoming;) and a multi-theoretical framework (Comier et al. 2005) in order to explain the extent and content of social disclosures on corporate websites.

### *Size*

Size is a variable that has frequently been used to explain the extent to which corporations disclose information (e.g. Trotman & Bradley 1981; Cowen et al., 1987; Belkaoui & Karpik, 1989; Cooke, 1989; Patten, 1991; Scott, 1994; Gray, Meek & Roberts 1995; Meek et al., 1995; Hackston & Milne, 1996; Hussein, 1996; Zareski, 1996; Adams et al., 1998; Neu et al., 1998; Adrem, 1999; Ljungdahl, 1999; Jaggi & Low, 2000; Hossain & Reaz, 2007 ). With the exception of Roberts (1992) and Ratanajongkol et al. (2006), most studies have found a positive relationship between corporate size and the extent of its social disclosures. Cowen et al. (1987) also found that corporate size was related to the nature of the corporate disclosure itself. Disclosures concerning energy consumption and environmental issues were related to corporate size, although those regarding products and employee were not (ibid.). Large corporations have a more pronounced effect on the society and, therefore, normally have a higher number of stakeholders that influence the corporation (Hackston & Milne, 1996; Knox et al., 2006). In addition, media and the public generally demand more information from large corporations than from smaller ones (Schipper, 1991; Lang & Lundholm, 1996; Zareski, 1996; Adrem, 1999; Stanny & Ely, 2008). It has been suggested that the voluntary disclosure of information on corporate social, environmental and ethical practice is an effort to avoid regulation and reduce political costs (Ness & Mirha, 1991; Gray, Meek & Roberts 1995; Adams et al., 1998; Clarke & Gibson-Sweet, 1999; Scott, 2003). However, Adrem (1999) points out that there are several other explanations for the relationship between firm size and the extent and content of information in voluntary disclosures. Adams (2002) shows that large corporations formally involve more than one person in the collection and compilation of information for social disclosures, whereas small corporations usually have a single person responsible for the whole process. This fact also influences the extent and content of disclosed information. Ersrock and Leichty (1998) show that large corporations generally disclose more information on their websites than smaller corporations do. Even though it is relatively unclear what the variable *Size* actually measures from a theoretical point of view, there are still many arguments for the following hypothesis:

*H1. There is a positive relationship between a firm's size and the social information disclosed on its website.*

### ***Industry***

In previous research, *Industry* – together with *Size* – is the most common variable for explaining the extent and content of social and environmental disclosures (e.g. Verrecchia, 1983; Cowen et al., 1987; Cooke, 1989; Gray et al., 1995a; Meek et al., 1995; Adams et al., 1998; Ljungdahl, 1999). However, *Industry* is a tricky variable to interpret as it also can be a proxy for *Size* (Watts & Zimmerman, 1986). The results from these studies show that corporations in industries whose manufacturing processes negatively influence the environment disclose and report considerably more information than corporations in other industries do (Cowen et al., 1987; Adams et al., 1998). In general, corporations within the finance and service industries disclose very little information on social and environmental issues, while mining companies, oil companies and chemical companies have a leading position regarding such reporting (Line et al., 2002; Douglas et al., 2004; Chan & Welford, 2005). However, ethical investors and consumers have started to put pressure on other industries as well to report on the implicit effects of investment decisions, amongst other things (Line et al., 2002; KPMG, 2005). Corporations in the mining, oil and chemical industries emphasise information regarding environmental, health and safety issues (Ness & Mirha, 1991; Yamagami & Koukoku, 1991; Clarke & Gibson-Sweet, 1999; Line et al., 2002; Jenkins & Yakovleva, 2006), while the finance and service industries generally seem to report more on social issues and philanthropical deeds (Clarke & Gibson-Sweet, 1999; Line et al., 2002). Hence, it appears as though industries differ with regard to the extent and content of social and environmental information they disclose. Knox et al. (2006) show that some corporations within the telecommunications and extraction industries, for example communicate social responsibility more effectively than do corporations from other industries. According to Zeghal & Ahmed (1990) corporations in industries that are highly regulated and exposed to public scrutiny do not only use their their annual financial statements to disclose information, but offer social information in other sources as well. Xiao et al. (2004) argue that information technology (IT) companies, particularly because of their Internet expertise, are more likely to use the worldwide web to disclose information than other companies do. Hence, the discussion above leads us to Hypothesis 2:

*H2. There is a relationship between the industry in which a firm operates and the social information disclosed on the firm's website.*

### ***Profitability***

There are several studies, with different theoretical approaches, that suppose a positive relationship between disclosure policy and profitability (Ullman, 1985; Cowen et al., 1987; Belkaoui & Karpik, 1989; Roberts, 1992; Ljungdahl, 1999; Watson et al., 2002; Ismail & Chandler, 2005). The empirical results have varied, however. According to Belkaoui & Karpik (1989), for example, the underlying cause of this positive relationship is management's knowledge. Management that has the knowledge to make a company profitable also has the knowledge and understanding of social responsibility, which leads to more social and environmental disclosures. Inchausti (1997) hold that management in very profitable corporations provide more detailed information in order to support their own position and compensation. Ng and Koh (1994) point to the fact that profitable corporations are more exposed to political pressure and public scrutiny and, therefore, use more self-regulating mechanisms such as voluntary disclosure in order to avoid regulation. The most obvious and explicit explanation might be that profitable corporations have the necessary economic means to make such information available (Cowen et al., 1987; Hackston & Milne, 1996; Pirsch et al., 2007). In a corporation with fewer economic resources, management will probably focus on activities that have a more direct effect on the corporation's earnings than the production of social and environmental disclosures (Ullman, 1985; Roberts, 1992). Hence, the most obvious and economical way to disclose information is probably through financial statements. Thus, it is reasonable to suppose that profitable corporations use sources other than the annual financial statements to a greater extent than do their less profitable counterparts in respect of disclosing social, environmental and ethical information. This leads us to Hypothesis 3:

*H3. There is a positive relationship between a firm's profitability and the social information disclosed on its website.*

### ***Ownership structure***

There are several ways of defining and measuring *ownership structure*. One common way is to measure ownership concentration (Belkaoui & Karpik 1989; Roberts, 1992; Adrem, 1999; Ljungdahl, 1999; Prencipe, 2004; Cormier et al., 2005). Opportunistic management behaviour and a conflict of interest between agents and principals are more likely to occur in corporations with a dispersed ownership structure and a low share of management ownership (Adrem, 1999). Hence, corporations with low ownership concentration and a low share of management ownership are in general expected to disclose more information than those with concentrated ownership (Prencipe, 2004). Thus, we present Hypothesis 4:

*H4. There is a negative relationship between the ownership concentration of a firm and the social information disclosed on its website.*

### ***Ownership identity***

Another way of looking at ownership structure is to base the line of reasoning on the owners' identity. Secci (2005) shows that there is a difference in disclosure practice between State-owned and privately owned corporations. This variable, *Ownership identity*, is not very often considered in research on social and environmental reporting, probably because such research is mostly conducted in an Anglo-American context, where State-owned corporations do not commonly occur. There are also some studies considering social and environmental disclosures in the public sector, albeit not in a comparative way (Burrit & Welch, 1997; Frost & Seamer, 2004). However, in Sweden, there are several public corporations in which the State controls all or a majority of the votes. In his study, Secci (2005) shows that corporations controlled by the Italian State disclose less information than other corporations.

The information presented by State-owned corporations in general differed not only in extent, but also in content. , State-owned corporations directed their communications to the community as a whole, while non-State-owned corporations directed their information to more defined and focused stakeholder groups (ibid.). The Swedish State has also decided that its State-owned corporations should set a good example as regards reporting on corporate activities and their impact on the environment. However, in a recent report by the Swedish National Environment Protection Board (*Naturvårdsverket*), they note that State-owned



corporations have not achieved more than other corporations (Naturvårdsverket, 2007). Hence, based on results from previous research, the following can be hypothesised:

*H5. State-owned corporations disclose less information on their websites than other corporations do.*

## **Data collection and methodology**

### ***Data selection***

The empirical data in this study is based on information provided in annual financial statements and corporate websites. Data from the websites was collected during April and May 2007. The data from the annual financial statements related to the financial year ended 2006. The initial goal population consisted of all corporations listed on the Stockholm Stock Exchange (271) and all State-owned corporations (55). However, several investment companies were excluded from the initial selection. As some of the State-owned corporations were also listed on the Stockholm Stock Exchange, the final selection was 267 corporations in total.

### ***The dependent variable***

The dependent variable, *Social disclosures on the corporate website*, is measured by using a checklist (see Appendix 1). The checklist is divided into three areas: environmental disclosures, ethics disclosures, and human resource disclosures (e.g. Adams et al., 1998). Each area is divided into different issues based on the standards issued by the Global Reporting Initiative (GRI) and previous research (e.g. Gray et al., 1995b; Adams et al., 1998; Haniffa & Cooke, 2005; KPMG, 2005). Even if some disclosures might be more important than others (Cooke, 1989; Adams et al., 1998), it is a very subjective matter to weight various disclosures. Thus, we have used an unweighted scoring approach (e.g. Gray, Meek & Roberts, 1995). Initially, each issue in the checklist was recorded as a dummy variable, where 1 indicates that the information is disclosed and 0 indicates that the information is not disclosed. In total, the checklist covers 22 different issues, categorised into environmental disclosures (8), ethics disclosures (8), and human resource disclosures (6). In order to measure the extent and content of information provided on such pages, the dummy variables were recalculated

into a percentage for each area and for the total number of issues (e.g. Cowen et al. 1987; Gray et al., 1995b).

### ***Independent variables***

- *Size* was measured as turnover and number of employees (e.g. Trotman & Bradley, 1981; Belkaoui & Karpik, 1989; Roberts, 1992; Scott, 1994; Gray, Meek & Roberts, 1995; Adams et al., 1998; Neu et al., 1998; Prencipe, 2004). An alternative measure of size could be total assets (Zareski, 1996; Jaggi & Low, 2000; Watson et al., 2002; Cormier et al., 2005), but this option was not employed in this study.
- *Industry* was determined in accordance with the divisions used by the Scandinavian Information Exchange (SIX) index, namely *Energy, Raw materials, Manufacturing, Consumer goods, Health services, Finance, IT, and Telecommunications*. *Industry* was transformed into seven dummy variables, while *Manufacturing* was used as a reference variable.
- *Profitability* was measured as the return on total asset (ROA) and as the return on equity (ROE) (Belkaoui & Karpik, 1989; Ljungdahl, 1999).
- *Ownership structure* was measured as the number of votes controlled by the five largest owners (e.g. Ljungdahl, 1999).
- *Ownership identity* was measured by a dummy variable, where  $0 =$  “Privately owned” and  $1 =$  “State-owned”.

### **Analysis and findings**

Out of the 267 corporations in the sample, 169 reported social disclosures on their websites. As shown in Table 1, there is a positive relationship between disclosure and the variables *Size* and *Profitability*.

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Insert Table 1 about here

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A Pearson chi-square test shows that there is no significant relationship between ownership identity and the use of the website or not. As shown in Table 2, the use of the website for social disclosure varies considerably between different industries ( $p = 0.004$ ).

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Insert Table 2 about here

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Among the corporations that disclose social information on their websites, the extent to which they do so varies among the three different areas. Table 3 shows descriptive statistics on social disclosures provided via corporate website.

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Insert Table 3 about here

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***Multiple regressions***

Table 4 show a correlation matrix with total disclosure information as constant. The correlation matrix indicates support for Hypotheses 1 to 3, but not for Hypotheses 4 and 5. *Ownership identity* shows an opposite relationship to what was expected, while the variable ownership concentration does not show any significant relationship to the content of social disclosures on the firms’ website. However, if you analyse each area one by one, the variable ownership concentration is significantly negatively correlated ( $p = 0.052$ ) with disclosures in the area of ethics and positively correlated with a moderate significance ( $p = 0.10$ ) with disclosures within the area of human resource.

As shown in table 4, the correlation between the independent variables indicates a presence of a collinearity problem. As expected the variables turnover and number of employees are correlated as well as the variables ROA and ROE. However all variables show correlation with one or more of the independent variables.

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Insert Table 4 about here

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In the multiple regression, the variable *ROA* has been excluded. Due to the strong correlation between the variable *Number of employees* and *Turnover*, two regressions were conducted. However, the complete exclusion of one of the two *Size* variables was not desired, as different theoretical assumptions support different operationalisations of the *Size* variable. For example, human resource disclosures can be expected to be more affected by a corporation's number of employees than by its turnover, while other areas of social disclosures might be more or equally affected by corporate turnover. Two regression models are presented, one regression model where the variables *Turnover* and *Ownership concentration* are included and one where the variables are excluded. The reason for excluding the latter variable was that partial data loss was quite large.

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Insert Table 5 about here

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As shown in Table 5, the variables *Turnover* and *Number of employees* are significant and positively correlated in both models. The variable *ROE* is also significant, and positively correlated as expected. The variable *Ownership identity* is significant, but the sign is inverted compared with what was expected. The test of the dummy variables for *Industry* show that there are significant differences between the various industries, as expected. If the dependent variable is changed and only environmental disclosures are considered, the same variables show significance. If ethics disclosures are considered, the same results are obtained – except for the dummy variables for *Industry*. Instead, compared with all other industries, the industry *Consumer goods* disclosed significantly more information. For the third area, namely Human resource disclosures, the pattern is the same. However, the *IT* and *Finance* industries seem to disclose significantly less information than their counterparts.

In sum: Firm size has a very strong explanatory power regarding the extent of social disclosures on corporate websites. Profitability influences the extent and content of social disclosures on firms' websites in a positive way. In contrast to what was expected, State-owned companies disclosed more social information on their websites than privately controlled companies did. No significant correlation could be found between ownership concentration and social disclosures on the Internet. As expected, industries differed significantly from each other. In general, the *Raw materials* industry disclosed more social information than any of the others. The *Consumer goods* industry disclosed more information than other industries within the realm of ethical issues. The *IT* industry disclosed very little information in general. The *Finance* industry distinguished itself by disclosing the least information about human resources.

### **Concluding remarks**

This study investigated Internet-based social disclosure by Swedish listed firms. The result suggests that such disclosures are associated with firm size, profitability, ownership and industry. The same variables that explain the extent of social disclosures also seem to explain the content of such disclosures on corporate websites.

As shown in many studies on voluntary disclosure, the current study also found that the extent of disclosures (in this case, social disclosures on the Internet) increased with corporate size. These results are in line with the theoretical assumptions implying that larger corporations have a large number of employees, and can thereby involve more people in the collection and compilation of information presented in social disclosures. Larger corporations also have a larger group of stakeholders that influence them, and there is also a higher demand for information from these corporations.

Corporations within the *Consumer goods* industry disclose more about ethics than do corporations in other industries. This might be an effect of the on going debate about ethics issues among consumers and the mass media.

In line with the assumptions in the theory, corporations within the *Raw materials* industry disclose more environmental information. These corporations emphasise environmental issues such as health and safety, which are important issues in this industry.

When it comes to IT corporations, the results are not in line with theoretical assumptions. Since IT corporations disclose less social information on the Internet than do their counterparts in other industries, it could be assumed that they do not use their Internet expertise to disclose all kinds of information – not only social. One explanation for not disclosing much social information in particular could be that no debate on social issues seems to prevail among these corporations.

The results also show that there is a positive relationship between profitability and social disclosures. This holds true when it comes to ROE, which indicates that economic explanations can be applied when trying to explain social disclosure. In addition, if a corporation is profitable for its owners, it can afford to disclose more information – in this case, social information.

State-owned corporations seem to disclose more social information than privately owned corporations do. One explanation for this might be that State-owned corporations ought to serve as good examples. The ongoing climate debate worldwide has raised questions about environmental issues on the political level in Sweden. State-owned corporations are being scrutinised, and there is pressure from the owner – the State – and from the mass media – pressure to which these corporations seem to have complied. This behavior differs from what was found in Italy (Secci, 2005 ). One reason for the differences found could be that of culture, and more specifically, tradition. In Sweden there is a long tradition of transparency in the public sector, which is also legally regulated in the principle of public access to official records. This principle gives all Swedish citizens the right to inspect the documents of the State. This principle does not exist in Italy and as a possible consequence, the Italian State may not foster transparency. Thus, national culture as an explanatory factor is probably needed in order to fully understand disclosure behavior.

### **Future research**

This study was based on empirical data from annual financial statements and corporate websites. Hence, the research design did not allow us to consider more internal factors such as

corporate culture. However, both Adams (2002) and McMurtrie (2005) have shown that culture is an important factor in order to explain corporate social reporting. According to McMurtrie (2005) the identification of corporate culture as an influencing factor provides a new insight into the understanding of corporate social reporting. A challenge for future research, in order to get a more comprehensive explanation of corporate social reporting, is to include internal as well as external factors in studies with a nomothetic orientation, using large samples and statistical testing.

## References

- Adams C, Hill W-Y, Roberts C. 1998. Corporate social reporting practices in Western Europe: Legitimizing corporate behavior? *British Accounting Review*, 30(1): 1–21.
- Adams, C. 2002. Internal organizational factors influencing corporate social and ethical reporting: Beyond current theorizing, *Accounting, Auditing and Accountability Journal*, 15(2): 223–250.
- Adrem A H. 1999. *Essays on disclosure practices in Sweden – Causes and effects*. Lund: Lund University Press.
- Ashbaugh H, Johnstone K M, Warfield T D. 1999. Corporate reporting on the Internet. *Accounting Horizons*, 13(3): 241–257.
- Belkaoui A, Karpik P. 1989. Determinants of the corporate decision to disclose social information. *Accounting, Auditing and Accountability Journal*, 2(1): 36–51.
- Branco M, Rodrigues L. 2006. Communication of corporate social responsibility by Portuguese banks: A legitimacy theory perspective. *Corporate communications: An International Journal*, 11(3): 232–248.
- Burritt R, Welch S. 1997. Australian commonwealth entities: An analysis of their environmental disclosures. *Abacus*, 33(1): 1–19.
- Capriotti P, Moreno A. 2007. Corporate citizenship and public relations: The importance and interactivity of social responsibility issues on corporate websites. *Public Relations Review*, 33(1): 84–91.
- Chan, C.J., Welford, R. 2005. Assessing corporate environmental risk in China: an evaluation of reporting activities of Hong Kong listed enterprises. *Corporate Social Responsibility and Environmental Management*, 12(2): 88–104.
- Clarke J, Gibson-Sweet M. 1999. The use of corporate social disclosures in the management of reputation and legitimacy: A cross sectoral analysis of UK top 100 companies. *Business Ethics – A European Review*, 8(1): 5–13.
- Collin S-O, Tagesson T, Andersson A, Cato J, Hansson, K. Forthcoming. Explaining the choice of accounting standards in municipal corporations. *Critical Perspectives on Accounting*,
- Cooke T E. 1989. Voluntary corporate disclosure by Swedish companies. *Journal of International Financial Management and Accounting*, 1(2): 171–195.
- Cormier D, Magnan M, Van Velthoven B. 2005. Environmental disclosure quality in large German companies: Economic incentives, public pressures or institutional conditions? *European Accounting Review*, 14(1): 3–39.
- Coupland C. 2005. Corporate social and environmental responsibility in web-based reports: Currency in the banking sector? *Critical Perspectives on Accounting*, 17(7): 865–881.



- Cowen S, Ferreri L, Parker L. 1987. The impact of corporate characteristics on social responsibility disclosure: A typology and frequency-based analysis. *Accounting, Organizations and Society*, 12(2): 111–122.
- Craven B M, Marston C L. 1999. Financial reporting on the Internet by leading UK companies. *The European Accounting Review*, 8(2): 321–333.
- Debreceeny R, Gray G L, Rahman A. 2002. The determinants of Internet financial reporting. *Journal of Accounting and Public Policy*, 21(4-5): 371–394.
- Deegan C. 2002. The legitimizing effect of social and environmental disclosures – A theoretical foundation. *Accounting, Auditing and Accountability Journal*, 15(3): 282–311.
- Douglas A, Doris J, Johnsson B. 2004. Corporate social reporting in Irish financial institutions. *The TQM Magazine*, 16(6): 387–395.
- Esrock S, Leichty G. 1998. Social responsibility and corporate web-pages: Self-presentation or agenda-setting? *Public Relations Review*, 24(3): 305–319.
- Falkman P, Tagesson T. 2008. Accrual accounting does not necessarily mean accrual accounting: Factors that counteract compliance with accounting standards in Swedish municipal accounting. *Scandinavian Journal of Management*, 24(3): 271–283.
- Frost G, Seamer M. 2004. Adoption of environmental reporting and management practices: An analysis of the south Wales public sector entities. *Financial Accountability & Management*, 18(2): 103–127.
- Golob U, Bartlett J. 2007. Communicating about corporate social responsibility: A comparative study of CSR reporting in Australia and Slovenia. *Public Relations Review*, 33(1): 1–9.
- Gray R, Kouhy R, Lavers S. 1995a. Corporate social and environmental reporting: A review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing & Accountability Journal*, 8(2): 47–77.
- Gray R, Kouhy R, Lavers S. 1995b. Constructing a research database of social and environmental reporting by UK companies. *Accounting, Auditing & Accountability Journal*, 8(2): 78–101.
- Gray S J, Meek G K, Roberts C B. 1995. International capital market pressures and voluntary annual report disclosures by US and UK multinationals. *Journal of International Financial Management and Accounting*, 6(1): 43–68.
- Guimarães-Costa N, Pina e Cunha M. 2008. The Atrium Effect of website openness on the communication of corporate social responsibility. *Corporate Social Responsibility and Environmental Management*, 15(1): 4–51.
- Hackston D, Milne M. 1996. Some determinants of social and environmental disclosures in New Zealand companies. *Accounting, Auditing & Accountability Journal*, 9(1): 77–108.

- Haniffa R M, Cooke T E. 2005. The impact of culture and governance on corporate social reporting. *Journal of Accounting and Public Policy*, 24(5): 391–430.
- Hooghiemstra R. 2000. Corporate communication and impression management – New perspectives why companies engage in corporate social reporting. *Journal of Business Ethics*, 27(1-2): 55–68.
- Hossain, M., Reaz, M. 2007. The determinants and characteristics of voluntary disclosures by Indian banking companies. *Corporate Social Responsibility and Environmental Management*, 14(5): 274–288.
- Hussein M E. 1996. A comparative study of cultural influences on financial reporting in the US and the Netherlands. *The International Journal of Accounting*, 31(1): 95–120.
- Inchausti B G. 1997. The influence of company characteristics and accounting regulation on information disclosed by Spanish firms. *The European Accounting Review*, 6(1): 45–68.
- Ismail K N I K, Chandler R. 2005. Disclosure in the quarterly reports of Malaysian companies. *Financial Reporting, Regulation & Governance*, 4(1): 1–25.
- Jaggi B, Low P Y. 2000. Impact of culture, market forces, and legal system on financial disclosures. *The International Journal of Accounting*, 35(4): 495–519.
- Jenkins H, Yakovleva N. 2006. Corporate social responsibility in the mining industry: Exploring trends in social and environmental disclosure. *Journal of Cleaner Production*, 14(3–4): 271–284.
- Knox S, Maklan S, French P. 2006. Corporate social responsibility: Exploring stakeholder relationships and programme reporting across leading FTSE companies. *Journal of Business Ethics*, 61(1): 7–28.
- KPMG. 2005. *International survey of corporate social responsibility reporting 2005*. ISBN 90-5522-031-0.
- Lang M H, Lundholm R J. 1996. Corporate disclosure policy and analyst behaviour. *The Accounting Review*, 17(4): 467–492.
- Line M, Hawley H, Krut R. 2002. Development in global environmental and social reporting. *Corporate Environmental Strategy*, 9(1): 69–78.
- Ljungdahl F. 1999. *Utveckling av miljöredovisning I svenska börsbolag – praxis, begrepp, orsaker*. Lund: Lund University Press.
- Maignan I, Ralston D. 2002. Corporate social responsibility in Europe and the US: Insights from businesses' self-presentations. *Journal of International Business Studies*, 33(3): 497–514.

- McMurtrie T. 2005. Factors influencing the publication of social performance information: An Australian case study. *Corporate Social Responsibility and Environmental Management*, 12(3): 129–143.
- Meek G K, Roberts C B, Gray S J. 1995. Factors influencing voluntary annual report disclosures by US, UK and continental European multinational corporations. *Journal of International Business Studies*, 26(3): 555–572.
- Milne M. 2002. Positive accounting theory, political costs and social disclosure analyses: A critical look. *Critical Perspectives on Accounting*, 13(3): 369–395.
- Naturvårdsverket. 2007. *Är statligt ägda företag föredömen I miljöarbetet? En utvärdering av hur statligt ägda företag arbetar mot miljökvalitetsmålen*. Rapport Nr 5699.
- Ness K, Mirha A M. 1991. Corporate social disclosure: A note on a test of agency theory. *British Accounting Review*, 23(3): 211–217.
- Neu D, Simmons C. 1996. Reconsidering the “social” in positive accounting theory: The case of site restoration costs. *Critical Perspectives on Accounting*, 7(4): 409–435.
- Neu D, Warsame H, Pedwell K. 1998. Managing public impressions: Environmental disclosures in annual reports. *Accounting, Organizations and Society*, 23(3): 265–282.
- Ng E J, Koh H C. 1994. An agency theory and profit analytic approach to corporate non-mandatory disclosure compliance. *Asia-Pacific Journal of Accounting*, 1 (December): 29–44.
- O’Dwyer, B. 2003. The ponderous evolution of corporate environmental reporting in Ireland. Recent evidence from publicly listed companies, *Corporate Social Responsibility and Environmental Management*, 10(2): 91–100.
- Oliver C. 1991. Strategic responses to institutional processes. *The Academy of Management Review*, 16(1): 145–179.
- Oyelere P, Lasward F, Fisher R. 2003. Determinants of Internet financial reporting by New Zealand companies. *Journal of International Financial Management and Accounting*, 14(1): 26–63.
- Patten D. 1991. Exposure, legitimacy and social disclosure. *Journal of Accounting and Public Policy*, 10(4): 297–308.
- Pirsch J, Gupta S, Landreth-Grau S. 2007. A framework for understanding corporate social responsibility programs as a continuum: An exploratory study. *Journal of Business Ethics*, 70(2): 125–140.
- Prencipe A. 2004. Proprietary costs and determinants of voluntary segment disclosure: Evidence from Italian listed companies. *European Accounting Review*, 13(2): 319–340.

- Ratanajongkol S, Davey H, Low M. 2006. Corporate social reporting in Thailand: The news is all good and increasing. *Qualitative Research in Accounting & Management*, 3(1): 67–83.
- Roberts R W. 1992. Determinants of corporate social responsibility disclosure: An application of stakeholder theory. *Accounting, Organizations and Society*, 17(6): 595–612.
- Schipper K. 1991. Commentary on analysts' forecast. *Accounting Horizons*, 5(4): 105–121.
- Scott T W. 1994. Incentives and disincentives for financial disclosure: Voluntary disclosure of defined benefit pension plan information by Canadian firms. *The Accounting Review*, 69(1): 26–43.
- Scott W R. 2003. *Financial Accounting Theory* (3<sup>rd</sup> edition). Toronto: Prentice Hall.
- Secci D. 2005. The Italian experience in social reporting: An empirical analysis. *Corporate Social Responsibility and Environmental Management*, 13(3): 135–149.
- Solomon J, Darby L. 2005. Is private social, ethical and environmental reporting Mythicizing or demythologizing reality? *Accounting Forum*, 29(1): 27–47.
- Stanny, E., Ely, K. 2008. Corporate environmental disclosures about the effects of climate change. *Corporate Social Responsibility and Environmental Management*, 15(6): 338–348.
- Stanwick P, Stanwick S. 2006. Corporate environmental disclosures: A longitudinal study of Japanese firms. *Journal of American Academy of Business*, 9(1): 1–7.
- Trotman K, Bradley G. 1981. Associations between social responsibility, disclosure and characteristics of companies. *Accounting, Organizations and Society*, 6(4): 355–362.
- Ullman A. 1985. Data in search of a theory: A critical examination of the relationships among social performance, social disclosure and economic performance of US firms. *The Academy of Management Review*, 10(3): 540–557.
- Van der Laan Smith J, Adhikari A, Tondkar R. 2005. Exploring differences in social disclosures internationally: A stakeholder perspective. *Journal of Accounting and Public Policy*, 24(2): 123–151.
- Verrecchia R E. 1983. Discretionary disclosure. *Journal of Accounting and Economics*, 5(3): 179–194.
- Watson A, Shrive P, Marston C. 2002. Voluntary disclosure of accounting ratios in the UK. *British Accounting Review*, 34(2): 289–313.
- Watts R L, Zimmerman J L. 1986. *Positive Accounting Theory*. New Jersey: Prentice-Hall.
- Xiao J Z, Yang H, Chow C W. 2004. The determinants and characteristics of voluntary Internet-based disclosures by listed Chinese companies. *Journal of Accounting and Public Policy*, 23(3): 191–225.

Yamagami T, Koukoku K. 1991. A note on corporate social disclosure in Japan. *Accounting, Auditing & Accountability Journal*, 4(4): 32–39.

Zarzeski M T. 1996. Spontaneous harmonization effects of culture and market forces on accounting disclosure practices. *Accounting Horizons*, 10(1): 18–37.

Zeghal D, Ahmed S. 1990. Comparison of social responsibility information disclosure media used by Canadian firms. *Accounting, Auditing & Accountability Journal*, 3(3): 38–53.

**Checklist**

**A. Environmental disclosures**

1. Environmental policy
2. The corporation's effect on the environment
3. Improvements – environment
4. Consumption
5. Discharge
6. Environmental certification
7. Environmental objectives
8. Follow-up of environmental objectives

**B. Ethics disclosures**

1. Code of conduct
2. Human rights
3. Charity and sponsoring
4. Investor relations
5. Business ethics
6. Safety and effect of the product
7. Investment policy
8. Supply chain

**C. Human resource disclosures**

1. Values
2. Conditions of employment
3. Change in number of employees
4. Education of employees
5. Health and safety
6. Equal opportunities

## Tables

**Table 1. Corporate disclosures – nonwebsite vs website**

	Mean	Standard deviation	N
Turnover (million Swedish krona)			
Non-website disclosures	693.89	942.21	85
Website disclosures	14800.27	33221.71	169
T-test: Significance level 0.001 (0.000)			
Number of employees			
Non-website disclosures	444.09	734.28	85
Website disclosures	9452.40	23511.48	169
T-test: Significance level 0.001 (0.000)			
ROE			
Non-website disclosures	0.46	20.02	84
Website disclosures	7.37	14.06	169
T-test: Significance level 0.05 (0.002)			
ROA			
Non-website disclosures	2.61	49.52	82
Website disclosures	14.77	32.57	167
T-test: Significance level 0.05 (0.021)			
Ownership concentration			
Non-website disclosures	62.09	25.26	52
Website disclosures	56.02	24.50	140
T-test: No significance			

**Table 2. Corporate disclosures – non-website vs website, by industry**

	Industry							
	Energy	Raw materials	Manu- facturing	Consumer goods	Health services	Finance	IT	Telecom- munications
Non-Website disclosures	20.0%	0.0%	22.1%	22.9%	48.1%	26.9%	49.2%	50.0%
Website disclosures	80.0%	100.0%	77.9%	77.1%	51.9%	73.1%	50.8%	50.0%

**Table 3. Descriptive statistics – Social disclosures on corporate websites**

Type of information	Mean	Standard deviation
Environmental	37.43	37.12
Ethics	20.03	24.45
Human resource	37.17	28.13

**Table 4. Correlation matrix**

Variable	1	2	3	4	5	6	7	8a	8b	8c	8d	8e	8f	8g	
1. Social disclosures in total (%)	1														
2. Number of employees	0.399***	1													
3. Turnover	0.487***	0.604***	1												
4. ROE	0.273***	0.079	0.088	1											
5. ROA	0.171*	0.094	0.119 <sup>†</sup>	0.726***	1										
6. Ownership identity	0.271***	-0.050	-0.022	0.144*	-0.025	1									
7. Ownership concentration	0.002	-0.184**	-0.123 <sup>†</sup>	0.151*	-0.082	0.560***	1								
Industry	8a. Consumer goods	0.091	-0.005	-0.017	0.113 <sup>†</sup>	0.099	-0.060	0.007	1						
	8b. Finance	-0.005	-0.073	-0.001	0.066	0.091	0.232***	0.000	-0.163**	1					
	8c. Health services	-0.169*	-0.094	-0.088	-0.273***	-0.185**	-0.064	-0.084	-0.153*	-0.130*	1				
	8d. IT	-0.287***	-0.102	-0.116 <sup>†</sup>	-0.081	-0.142**	-0.141**	-0.199**	-0.245***	-0.207***	-0.195**	1			
	8e. Energy	0.049	-0.035	-0.020	-0.012	-0.025	0.056	0.055	-0.063	-0.053	-0.050	-0.080	1		
	8f. Raw materials	0.170*	0.022	0.033	0.019	-0.003	-0.015	0.007	-0.107 <sup>†</sup>	-0.091	-0.085	-0.137*	-0.035	1	
	8g. Telecommunications	0.061	0.012	0.113 <sup>†</sup>	-0.033	-0.028	0.073	0.107	-0.056	-0.047	-0.045	-0.072	-0.018	-0.031	1

<sup>†</sup> Correlation is moderately significant at the 0.10 level ; \* correlation is significant at the 0.05 level;

\*\* correlation is significant at the 0.01 level; \*\*\* correlation is significant at the 0.001 level.



**Table 5. Regression results**

Variables	Full model			Model with the variables <i>Turnover</i> and <i>Ownership concentration</i> excluded		
	B	SE(b)	Tolerance	B	SE(b)	Tolerance
1. Constant	0.280	0.065		2.239	0.033	
2. Number of employees	0.000 <sup>†</sup>	0.000	0.634	0.000***	0.000	0.936
3. Turnover	0.000***	0.000	0.656			
4. ROE	0.003 <sup>†</sup>	0.002	0.925	0.003*	0.001	0.863
6. Ownership identity	0.232***	0.064	0.656	0.181***	0.051	0.903
7. Ownership concentration	-0.001	0.001	0.635			
8a. Industry Consumer goods	0.070	0.051	0.812	0.048	0.048	0.773
8b. Finance	-0.040	0.064	0.752	-0.038	0.055	0.779
8c. Health services	-0.064	0.076	0.885	-0.071	0.066	0.747
8d. IT	-0.106*	0.053	0.795	-0.119**	0.046	0.738
8e. Energy	0.068	0.102	0.936	0.065	0.103	0.936
8f. Raw materials	0.123 <sup>†</sup>	0.065	0.887	0.131*	0.066	0.879
8g. Telecommunications	-0.106	0.146	0.904	0.031	0.144	0.950
R <sup>2</sup> / Adj. R <sup>2</sup> / F-value / Sig.	0.425/0.366/7.262/0.000			0.369/0.326/8.535/0.000		

<sup>†</sup> Correlation is moderately significant at the 0.10 level ; \* correlation is significant at the 0.05 level;  
\*\* correlation is significant at the 0.01 level; \*\*\* correlation is significant at the 0.001 level.