Disclosing the Books

Evidence on Swedish publicly listed firms’ accounting disclosure practices

Derya Vural
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Abstract

Disclosure of accounting information is crucial in facilitating efficient contracts in the publicly listed firm and in reducing information asymmetries in capital markets. A well-known perception in disclosure literature is that, as the separation between managers and owners increases, so does the demand for publicly available disclosure. Many publicly listed firms around the world are controlled by a few large owners that obtain information through their insider positions in the firm. Thus, variations in ownership structures have a considerable effect on how firms’ disclosure practices are resolved. Despite the increased attention paid to the identity of controlling owners and their influence on financial reporting practices, little is known about how owner types and governance mechanisms influence corporate disclosures and capital-market effects. This thesis contributes to the disclosure literature by studying a context in which controlling owners have a large influence on the governance and disclosure practices of firms. This contrasts with the much-studied setting in which management influences the governance and reporting decisions of firms. Thus, the aim of this thesis is to examine the determinants and capital-market effects of Swedish listed firms’ annual report disclosure.

This thesis uses a self-constructed disclosure index from manually gathered data from the annual reports of Swedish publicly listed firms during the years 2001 to 2013. This includes information on the notes to the financial statements, corporate governance and strategy. The findings of the four empirical studies show that the ownership structure of firms and the various contractual relationships that firms are engaged in, drive the disclosure practices. Additionally, the results indicate that higher levels of disclosure decrease information asymmetries between capital-market participants and increase trading activity. However, the findings also show that firms with controlling owners are less forthcoming with disclosure, even after a new disclosure reform. Considering the large influence of controlling owners in the studied context, these are important findings in the research field and in regulators’ processes of deriving disclosure regulation. The thesis concludes that the variety in firms’ disclosure incentives and local governance structures are important disclosure determinants to understand in framing international accounting standards.

Keywords: disclosure; disclosure index; agency theory; ownership structure; control-enhancing mechanisms; capital-market effects

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List of Papers

This thesis is based on the following papers, which are referred to in the text by their Roman numerals.


IV  Vural, D. Measuring disclosure in empirical accounting research: Examining the applicability of a self-constructed disclosure index (In preparation for submission to Advances in Accounting).
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<th>Full Form</th>
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<tr>
<td>AAA</td>
<td>Annual Accounts Act</td>
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<td>CEMs</td>
<td>Control-enhancing mechanisms</td>
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<td>CF</td>
<td>Conceptual Framework</td>
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<td>DVR</td>
<td>Differentiated Voting Rights</td>
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<td>EC</td>
<td>European Commission</td>
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<td>ECD</td>
<td>Executive Compensation Disclosure</td>
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<td>EFRAG</td>
<td>European Financial Reporting Advisory Group</td>
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<td>FASB</td>
<td>Financial Accounting Standards Board</td>
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<td>FRC</td>
<td>Financial Reporting Council</td>
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<td>IAS</td>
<td>International Accounting Standards</td>
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<td>IASB</td>
<td>International Accounting Standards Board</td>
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<td>IFRS</td>
<td>International Financial Reporting Standards</td>
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<td>ISS</td>
<td>Institutional Shareholder Services</td>
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<tr>
<td>NBK</td>
<td>Näringlivets börskommitté (Swedish Industry and Commerce Stock Exchange Committee)</td>
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<td>SSA</td>
<td>Swedish Stockholder Association</td>
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<td>SFASC</td>
<td>Swedish Financial Supervisory Authority</td>
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<td>SFRB</td>
<td>Swedish Financial Reporting Board</td>
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<td>SSE</td>
<td>Stockholm Stock Exchange</td>
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Finally! In the days before sending in this thesis for printing, I am writing the last pages devoted to important people that have helped and guided me to arrive to this point.

First of all, I would like to thank Mattias Hamberg, who has been my main supervisor since the very start of this journey and who encouraged me to pursue a doctoral program. Mattias, I was fortunate to meet you already in my master’s years in Gothenburg while writing my thesis. From working with you, I got inspired to go further along the academic track and especially got inspired to look further into questions regarding disclosure and auditor quality. Not did you only encourage me to start a PhD program, but during the whole process you have also given me the freedom to “customize” my own program and attend relevant doctoral courses. In fact, you always emphasized the importance of “getting out there” and “meet people in your field” – thank you for giving me this opportunity, which has indeed enriched my development as a researcher. I am grateful for you always believing in me and supporting me!

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Uppsala, April 2017
Derya Vural
1. Introduction

Why do some firms disclose more accounting information than other firms? And what are the consequences of disclosure? Experienced accounting scandals have spurred public and political debate, which called for increased corporate disclosure, and resulted in the introduction of several new and revised accounting standards during the 2000s. Consequently, researchers and standard setters are interested in the costs, benefits, incentives, effects and regulation of disclosure. These are central questions covered by this thesis, which aims to investigate the determinants and capital-market effects of disclosure provided in Swedish companies’ annual reports. The next section introduces the reader to corporate disclosure and its role in capital-markets. This is followed by a section where central concepts used in this thesis are briefly defined. Lastly, the overall research aim and a preview of the four studies undertaken in this work are provided.

1.1 Background

The cry for more information

In the aftermath of the accounting scandals at the beginning of the 21st century, members of the business community, politicians and the general public brought up the importance of increased corporate transparency and disclosure as a vital factor in the process of restoring confidence in the financial reporting of corporations. This caused policy makers and regulators to implement changes in disclosure and reporting regulation. The implementation of the Sarbanes-Oxley Act of 2002 in the U.S. contributed to an increased awareness of the need for accounting regulation worldwide. That same year, the European parliament decided that from 2005 onwards, all European listed firms would be required to follow one single set of accounting standards, i.e. the International Financial Reporting Standards (IFRS). This new common standard would increase the usefulness and confidence in financial accounting and reporting (Conceptual Framework, 2010).\(^1\) Moreover, in

\(^1\) The Conceptual Framework (2010) provides two qualitative characteristics for financial information to be regarded as useful: relevant and faithful (CF: QC4). This Framework is a guide for standard-setters in their work in developing accounting rules; it assists preparers and auditors in their preparation of financial reports. As such, it provides an overarching guide of objectives of financial reports, qualitative characteristics of useful accounting information, definitions of elements of financial statements and their measurements and recognitions.
2003 the European Commission actively discussed corporate governance matters and issued a significant number of recommendations concerning this, which resulted in the implementation of revised national corporate governance codes in all member states. For Sweden, an EU member since 1995, the abovementioned regulatory changes implied that all Swedish listed firms had to adhere to international accounting standards and that a Swedish Corporate Governance Code was applicable from 2005 onwards. A period thereby started in which increased regulations on financial reporting and corporate governance were introduced that were intended to protect investors from possible accounting fraud.

According to the International Accounting Standards Board (IASB) responsible for developing International Financial Reporting Standards (IFRS), the objective of financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity (Conceptual Framework, 2010). As such, it is important that reported accounting numbers faithfully represent the state of the entity they purport to represent. However, a series of corporate scandals in the early 2000s, such as the Enron and Worldcom cases in the U.S. and Parmalat and Royal Ahold in Europe, are examples of reported accounting numbers in financial reports being intentionally misrepresented. These are events that exemplify how corporate insiders used their information to manipulate the accounting system by avoiding reporting significant liabilities and providing a falsely positive picture of the firms’ financial situation to the market. Herein, not only did the management fail to act on behalf of its shareholders, but also the current monitoring mechanisms, such as the monitoring by the board of directors and the independence of the auditors, proved inapt.

At present, more than a decade has passed since the abovementioned regulatory reforms took place and both standard-setters and researchers have questioned whether the regulations had their intended effects. Indeed, research in empirical accounting demonstrated a number of intended and unintended consequences of disclosure regulations (e.g. Barth, Landsman and Lang, 2008; Daske, Hail, Leuz and Verdi, 2008; Christensen, Hail and Leuz, 2013; Christensen, Lee and Walker, 2015), yet more evidence is needed, particularly on market-wide effects and externalities from regulation (e.g. Leuz and Wysocki, 2016).

**Is more information always better?**
The increased disclosure requirements have notably affected the disclosure behaviour of listed firms, which is visible in the annual reports. To illustrate this matter, the reporting behaviours of a sample of Swedish firms listed on the Stockholm Stock Exchange (SSE) during the time period 2001 to 2013
were analysed. Table 1 presents descriptive data on the length of Swedish listed firms’ annual reports.

Table 1. Annual report length

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Note: The sample consists of publicly listed firms on the SSE in years 2001 to 2013. Pages equal the average total number of pages in an annual report, including notes. Notes equal the average number of pages devoted to the notes of the financial statements. # Firms are the number of firms listed on the SSE.

The data in Table 1 shows that the average length of an annual report increased by about 65 percent between the years 2001 and 2013. More specifically, in 2001 an annual report was 52 pages long on average and 70 pages in the IFRS adoption year 2005. The company Ericsson exemplifies this trend as their amount of pages in the annual report increased from 57 pages in 2001 to 138 pages in 2005, and 174 pages in 2013. A main driver behind this increase is the number of pages devoted to the notes to the financial statements. In specific, Table 1 demonstrates that the average number of pages devoted to the notes increased by about 140 percent during the years 2001 to 2013. The highest increase occurred when the IFRS adoption took place, where the average number of pages devoted to the notes increased from 15 pages in 2004 to 19 pages in 2005.

Hence, keeping everything else equal, this data illustrates that increases in disclosure regulation had considerable effects on the length of Swedish listed firms’ annual reports. However, some state that a thicker annual report does not necessarily eliminate information asymmetries between insiders and outsiders of a firm, but instead leads to “fogginess” and information overload (e.g. Li, 2008; Impink, Paananen and Renders, 2016). Primarily, the disclosures in the notes ought to provide information that explains and complements the financial statements. Although more disclosure may increase transparency and reduce information asymmetries, recent discussions in the field of financial reporting have questioned whether more information necessarily leads to fewer financial scandals. The following citation extracted from the report published by European Financial Reporting Advisory Group (EFRAG)\(^2\) highlights the concern of a “disclosure overload”;

\(^2\) European Financial Reporting Advisory Group (EFRAG) is a private organization established in 2001, which has the knowledge and interest in the development of IFRS and how they contribute to the efficiency of capital markets.
“[...] disclosures in the notes to the financial statements have become unwieldy; the increasing length of the notes has done little to improve the quality of information, and may have even decreased it because of information overload. Accordingly, it has become increasingly difficult for capital providers to rely on the information contained in the notes to support their decisions about the allocation of resources.” (EFRAG report, 2012, p. 6).

Similarly, research disciplines including accounting, organization, law and marketing show that the quality of decisions made by an individual is positively related to the level of information available to him or her, but only up to a certain point (Swain and Haka, 2000; Sparrow, 1999; Paredes, 2003; Herbig and Kramer, 1994). Beyond that point, the individual faces a so-called information overload and no more information is assimilated in the decision-making process (Eppler and Mengis, 2004). With the increased financial reporting as a result of post-scandal regulatory changes, it becomes relevant for accounting researchers to study consequences of disclosure requirements and whether the possibility of disclosure overload is one of them. Comparable to our daily lives, in which we are constantly exposed to information from various sources, our own judgement is required in filtering out the irrelevant information. From an investor’s point of view, processing the information in an elaborate annual report requires more time and effort than in a concise and clear report.

The introduction of the reformed accounting regulations has had positive impacts, such as stimulating cross-border investment (DeFond, Hu, Hung and Li, 2011), diminishing information asymmetries between corporate insiders and outsiders (Daske et al., 2008), and allowing efficient resource allocation (Daske, Hail, Leuz and Verdi, 2013). Nevertheless, research suggests that firm transparency is shaped by several factors, rather than reporting standards alone, including legal institutions of countries, strength of enforcement and investor protection, capital-market pressures, by firms’ governance structures and firm-characteristics (Bushman and Smith, 2001; Leuz, Lins and Warnock, 2009). It is therefore unlikely that international rule-makers will manage to design accounting standards that have the same desired outcomes on all firms (Leuz and Wysocki, 2016). Accordingly, questions such as “How are firms’ disclosure incentives affected by the implementation of mandatory disclosure regulations?” and “Why do some firms provide higher levels of disclosure than other firms?” are of interest to accounting researchers and in standard setters’ work towards a uniform regulatory accounting system.

Not only are accounting standards likely to neglect the diversity in firms, but also the diversity in users. According to the Conceptual Framework, the objective of financial reporting is to provide information that helps capital market participant decision-making and assists in the evaluation of management performance (Conceptual framework, 2010). However, the usefulness
of accounting information is relative and is likely to vary from one user to another. An equity investor is interested in predicting a firm’s profitability and therefore finds future oriented information useful, whereas a creditor is interested in the firm’s capability to meet financial constraints. Thus, in drafting accounting regulation, the usefulness of accounting information to its target audience is of importance.

In sum, the past accounting scandals have spurred political and public debate, which called for increased corporate transparency, and resulted in the introduction of several new and revised accounting standards during the 2000s. Researchers have been interested in the costs, benefits, motivations, effects and regulation of corporate disclosure. These types of studies aid standard setters’ development of convergent international accounting standards, which in turn help market participants’ efficient resource allocation. This thesis adds to that body of research, as outlined in the following two sections.

1.2 Disclosure, its role in capital markets, and determinants

Before continuing with the research aim of this thesis, this sub-section aims to introduce the reader to frequently used concepts in this thesis, namely: ‘disclosure’, ‘disclosure quality’ and ‘mandatory’ versus ‘voluntary’ disclosure. The sub-section is concluded with an overview figure of disclosure determinants and disclosure’s role in capital markets. This figure presents a model in which corporate disclosure is explained by its determinants and mediators that are central in this thesis. For an extensive theoretical reasoning and operationalization of concepts, the reader is referred to the theory and research design chapters (i.e. Chapter 2 and 4).

‘Disclosure’

refers to accounting information provided in corporate annual reports. Although public corporate disclosure can be obtained via alternative communication channels including press releases, earnings guidance, quarterly reports and management forecasts, this thesis focuses on narrative disclosure and the notes to the financial statements, provided in the annual reports of publicly listed firms. Hence, this thesis focuses on corporate disclosure, i.e. disclosures provided by the firm, and information intermediaries such as financial analysts’ forecasts and business press are left aside. Likewise, annual report disclosure is a valid proxy of a firm’s overall disclosure environment, including alternative communication channels (Lang and Lundholm, 1996). As such, a firm with rich annual report disclosure is expected to also have high quality disclosures on, for instance, their website.

3 Unless otherwise specified, this thesis uses the terms: disclosure, corporate disclosure and voluntary disclosure interchangeably.
‘Disclosure quality’ in this thesis is assessed by a self-constructed disclosure index that assigns a disclosure score based on the extent of disclosure provided in the annual report (e.g. Botosan, 1997). More specifically, disclosure quality refers to the level of detail of information provided in the annual report. Indeed, ‘quality’ is a relative term that is inevitably dependent on the user of financial information. This work focuses on accounting information in capital markets and primarily concentrates on accounting information that is of use for existing and potential investors, including, shareholders and creditors. Similarly, this follows the IASB, which states that the objective of financial reporting is to provide useful financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity (cf. OB2). Thus, high quality disclosure is expected to have a positive effect on the capital market and increase market liquidity (Leuz and Verrecchia, 2000). The capital-market effects of disclosure are further discussed in section 2.4 and the components and set-up of the disclosure index that ought to measure disclosure quality are presented in Chapter 4.

Next, the concepts of ‘mandatory’ and ‘voluntary’ disclosure deserve to be briefly clarified. Mandatory disclosure constitutes financial disclosure that is required by corporate law, stock exchange listing rules and accounting regulations. As such, mandatory disclosures are confirmed and audited information. Voluntary disclosure, on the other hand, includes all corporate disclosure that is provided beyond what is mandated by accounting regulations. This type of corporate disclosure includes, for instance, management forecasts, conference calls, press releases, websites and the extent of information provision in annual reports.

Research in empirical accounting has been mainly interested in examining firms’ incentives for voluntarily disclosing information to capital markets, as firms’ voluntary disclosure practices vary and this phenomenon provides cross-sectional disclosure variations (e.g. Beyer, Cohen, Lys and Walther, 2010). Indeed, one may ask why a firm would voluntarily disclose information to the public if it is not mandated by any regulation. The disclosure literature provides several possible explanations for this and making a firm’s stock price attractive is a commonly studied motivation (Kothari, 2001; Beyer et al., 2010). Nevertheless, markets and regulators have continued to call for increased regulation and mandating certain disclosure. Without going deeper into the discussion on rationales for disclosure regulation (see section 2.5), an important reason to regulate certain disclosures is to save externalities and guarantee “socially optimal” disclosure levels (e.g. Dye, 1990; Leuz and Wysocki, 2016). However, this kind of research requires one to understand the effect disclosure regulations have on firms’ incentives to voluntarily disclose information. In fact, research documents that mandatory disclosure has an important impact on determining firms’ voluntary disclosure...
practices (Einhorn, 2005). Therefore, in this thesis, the attempt is to study firms’ voluntary disclosure practices.

Having introduced the central concepts, this section continues by presenting Figure 1 that schematically illustrates the role of disclosure in capital markets, its determinants and how the four empirical studies undertaken in this thesis are related. In line with the IASB’s Conceptual Framework (2010), this model is based on a theoretical framework in which accounting information aids contractual relationships between the firm and its contracting parties and resolves information asymmetries between informed and uninformed market participants. Figure 1 shows theories that will be discussed in Chapter 2 and intends to provide readers with an overview of concepts that are discussed in this thesis. We will return to it repeatedly, for instance how Paper I-IV focus on different roles of disclosure.

Figure 1. Schematic representation of the overview of firms’ disclosure, determinants and effects

As shown in Figure 1, corporate disclosure has two major roles in capital markets. The first role referred as the ‘Stewardship role’, in which the disclosure of information aims to limit the moral hazard problem (Gjesdal, 1981). Moral hazard problems occur when an individual takes a risk that he or she does not bear the cost for. This is related to the principal-agent theory,

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4 According to the Conceptual Framework (2010) the objective of financial reporting is to: “[...] provide financial information about the reporting entity that is useful to existing and potential investors, lenders, and other creditors in making decisions about providing resources to the entity” (OB2, 2010). Despite this, the IASB has in their exposure draft for a revised conceptual framework noted the importance of stewardship. Consequently, the IASB proposes a revised financial reporting objective and highlights the importance of providing information needed in the assessment of the management’s stewardship of the entity’s resources (CF Exposure draft, 2015).
which will be further discussed in theory section 2.2. Likewise, Paper I and II of this thesis investigates the stewardship role of corporate disclosure.

The ‘Information role’ of disclosure arises from the adverse selection problems that result from trades in which information is unevenly distributed between buyers and sellers in the market (Akerlof, 1970; Healy and Palepu, 2001). Herein, the capital providers and the market analysts, being the outsiders of the firm, are dependent for their valuation and investment decisions on management’s provision of corporate disclosure (e.g. Diamond and Verrecchia, 1991; Hope 2003). More specifically, Paper III examines the valuation role of accounting information and whether disclosure of such information improves capital-market participants’ decision-making. Lastly, Paper IV integrates both the stewardship and information role of disclosure. The two roles of corporate disclosure are further discussed in section 2.3.

Collectively, the extent of agency conflicts and information asymmetries shapes firms’ disclosure environments, which are dependent on capital market forces and the institutional context (e.g. Burgstahler, Hail and Leuz, 2006). For instance, in the publicly listed firm, the separation between ownership and control create the need for publicly available information to minimize information asymmetries between investors and managers (Jensen and Meckling, 1976). The larger the distance between owners and managers, the Demand for disclosure by owners is expected to increase. Furthermore, managers’ reporting incentives play an important role in the Supply of disclosure. These incentives are determined as a consequence of the managers entering contractual arrangements, such as performance-based compensation contracts (Nagar, Nanda and Wysocki, 2003). Beside this, as presented in Figure 1, disclosure practices are determined by the firm’s Context including its industry, growth prospects, competition and performance. For instance, firms in a highly competitive industry may avoid disclosure of sensitive information to avoid proprietary costs (Verrecchia, 2001). Lastly, the supply and demand of corporate disclosure depends on Mediating factors, where governance mechanisms in place may complement or substitute the need for additional disclosures (Sinani et al., 2008). Local governance structures, listing rules, accounting standards and independent audit committees are mechanisms that may assure a certain level of disclosure and/or complement it. In essence, a firm’s disclosure practices vary depending on the forces from contracting parties, mediating factors and its business context. It needs to be stressed that Figure 1 provides a simplified picture of how corporate disclosure is shaped and its use in capital markets. Similarly, this thesis examines disclosure of Swedish listed firms, why determinants relevant to this context are considered. This is further elaborated in the next section.
1.3 Research aim

As highlighted in the previous two sections, disclosure plays an important role in facilitating the monitoring of management and in diminishing information asymmetries between the firm and its contracting parties (Armstrong, Guay and Weber, 2010). Implementation of general accounting standards such as the IFRS is one way in the direction to assure a certain quality of disclosures to the stakeholders. Nonetheless, a firm’s reporting environment is also a result of institutional factors including corporate governance, legal enforcement and corruption (e.g. La Porta, López-de-Silanes, Shleifer and Vishny, 1998; Bushman, Piotroski and Smith, 2004), which in turn impact the quality of corporate disclosures. Furthermore, if disclosure is to be useful to the receiver, it should provide information that aids investors’ decision-making. As such, this thesis aims to empirically investigate the determinants and the capital market effects of corporate disclosures provided in Swedish companies’ annual reports.

In order to achieve this aim, this thesis consists of four empirical studies with different purposes, but with at least two shared commonalities. First, the four studies examine Swedish publicly listed firms on the Stockholm Stock Exchange (SSE), which are characterized by high concentrated ownership and strong controlling owners that have a large influence in the corporate governance of the firm (Faccio and Lang, 2002; Barontini and Caprio, 2006). As such, these strong controlling owners play a crucial role in determining the corporate disclosure decisions of firms. In addition, disclosure literature suggests that the presence of controlling owners results in incentives and disincentives for accounting transparency (e.g. Paiva, Lourencó and Branco, 2016). Collectively, the studies examine a context where the main agency conflict is the one between controlling and non-controlling owners and where control is commonly leveraged by employing control-enhancing mechanisms (e.g. via usage of differentiated voting rights).

The second commonality is that all four studies use the same technique for measuring disclosure quality, namely a self-constructed disclosure index based on hand-collected disclosure data from firms’ annual reports. What is perceived as disclosure quality is likely to differ depending on the user of the information and reflects the quantity, relevance, validity, timeliness and precision of such information, as related to how each user performs his assessment of the firm. In this thesis, disclosure quality is instead viewed from an imagined average capital provider’s (i.e. shareholder’s and creditor’s) perspective and thus the role of corporate disclosure in capital markets is the focus of this thesis. Disclosure quality refers to accounting information that is of value to current and potential investors and aids in their decision-making (Conceptual Framework, 2010). How disclosure has been operationalized through the index used here will be discussed in section 4.2. Jointly, the papers focus on
disclosure determinants and in particular how context specifics (including governance structure and country specifics) impact disclosure behaviours of firms. Lastly, Paper III also examines disclosure consequences and its effects in capital markets.

1.4 Preview of findings

This section provides a brief preview to the four empirical studies of this thesis. Paper I examines the determinants of executive compensation disclosure (ECD) by Swedish publicly listed firms during a time period when mandatory disclosure regulations increased. Overall, the findings show a significant increase in ECD for all firms after the regulatory ECD reform in 2003. However, we also note that firm-level disclosure incentives continue to determine ECD after the reform. The findings further show that ECD is determined by firm-level incentives, i.e. firms’ disclosure decisions are shaped by the extent of agency conflicts, which are specific for the Swedish setting. In particular, when ownership is concentrated and managerial ownership is high, the provision of ECD is lower. We also show that highly paid CEOs disclose more ECD, but not when there is a controlling owner who increases his power via e.g. dual-class shares. Further, the results indicate the role of media as an “extra-legal mechanism” and that firms that are frequently mentioned in newspapers provide more ECD.

While one of the findings of Paper I demonstrates the influence of controlling owners on the extent of ECD provided by firms, Paper II takes a further step in that it identifies the type of controlling owner. More specifically, Paper II investigates whether founding-family owned firms exhibit different disclosure practices compared to non-family firms. Furthermore, this paper examines whether controlling owners can increase their power via “mediating” governance mechanisms, including the usage of control-enhancing mechanisms and creation of coalitions with other blockholders. In the founding-family firm, an alternative agency conflict to what is “usually” observed in non-family firms is observed. In these constellations, the founders’ personal and long-term interest in the firm collides with the short-term minded investors’ interests. Overall, the findings show that founding-family firms provide less disclosure on governance matters, financial targets and strategic information, and on accounting policies, than non-family firms. Furthermore, the results indicate that this negative relationship is aggravated in founding-family firms where control is enhanced via dual-class shares or pyramid structures. However, founding-family firms provide more disclosure in the presence of a non-family blockholder, suggesting a monitoring effect of multiple large shareholders.

Whereas Paper I and II focus on determinants of disclosure, Paper III investigates whether corporate disclosure has implications in capital markets.
Essentially, if disclosure is useful, it is expected that market actors value this and incorporate it in their decision-making. Paper III also extends the users of annual reports by incorporating financial analysts’ perceptions of disclosure in the analysis. Particularly, the study examines whether the observed disclosure variations across founding-family and non-family firms in Paper II have any consequences in markets. In other words, do higher levels of disclosures in annual reports increase trading in informed firm stocks? The results in Paper III demonstrate that the poor information environment observed in founding-family firms has a negative impact on the capital market, as attributed in the liquidity of the shares, bid-ask spread prices and the number of analysts following the firm. As such, from this study it appears as if capital market participants value corporate disclosures positively.

All four studies use empirical analysis by employing a sample of publicly listed firms on the Stockholm Stock Exchange during the years 2001 to 2013. A main challenge in empirical accounting and association-based studies is the issue of causality and endogeneity (Beyer et al., 2010), which is further discussed in section 6.2. Another issue that troubles voluntary disclosure research is to find an appropriate method to measure disclosure (Beyer et al., 2010). Collectively, the papers employ an index that is constructed to measure voluntary disclosure. In developing the index, subjective choices are made, which for instance include the selection of disclosure categories and weighting of certain disclosures. Thus, the focus of Paper IV is to investigate whether such a self-constructed disclosure index is sensitive to the discretionary subjective choices made by the researcher. Overall, the results in Paper IV show that the self-constructed index is robust to alternative set-ups and correlate with common disclosure determinants and effects. This is an important finding, which strengthens the results of Paper I-III, but also contributes to the accounting research community that has struggled to find an appropriate way to measure reporting quality (Leuz and Wysocki, 2016) and cautions the subjectivity of disclosure indices (Beyer et al., 2010).

In sum, prior research on disclosure determinants and their effects are mainly explored in an Anglo-Saxon setting where the management is powerful and the main conflict of interest is the one between management and shareholders. However, the factor common to the four papers in this thesis is that they examine a setting where owners are strong and have an important influence in the governance of the firms. As such, this particular setting allows us to test for a different set of agency conflicts, i.e. the one between controlling and non-controlling owners. The literature provides opposite effects of large shareholders in the corporate decisions of firms (e.g. Shleifer and Vishny, 1997; Dou, Hope, Thomas and Zou, 2016) and therefore a main interest of this thesis is to add to this stream of research.
2. Theoretical framework

Academic research on disclosure practices of firms utilizes different perspectives and theories from other fields. Indeed a comprehensive disclosure theory is absent (Schipper, 2007) and as described by Verrecchia (2001), disclosure literature borrows ideas from different disciplines including economics, business and finance:

“In the disclosure literature, there is no central paradigm, no single compelling notion that gives rise to all subsequent research, no well integrated “theory” however one interprets that term. Indeed, in its current composition the disclosure literature could probably best be characterized as an eclectic commingling of highly idiosyncratic (and highly stylized), economics-based models, each of which attempts to examine some small piece of the overall disclosure puzzle. Eclecticism is exacerbated by the fact that disclosure, as a topic, spans three literatures, accounting, finance, and economics, and thus inevitably takes on features of those literatures.” (pp. 98-99).

Later, authors reinforce this conclusion (e.g. Beyer et al., 2010). Because of this, we need to examine the theoretical choices made in some detail, rather than refer readers to one well-established line of theory. This is done by focusing on the following five topics. First, in section 2.1, a brief introduction to contracting theory is provided, which explains how contractual agreements between the firm and various stakeholders impact disclosure choices of firms. Second, in section 2.2, the existence of agency conflicts in capital markets and the need for disclosure to mitigate these conflicts is discussed. Third, section 2.3 elaborates on the function of corporate disclosure in resolving the capital market inefficiencies that are a result of adverse selection and moral hazard problems. Fourth, section 2.4 presents various explanations for incentives and economic consequences of voluntary disclosure. Lastly, section 2.5 reviews measures of reporting quality that are offered in empirical accounting literature. Thus, the aim of this chapter is to provide a theoretical overview of disclosure determinants, using the theoretical model presented in Figure 1 in Chapter 1, which also serves as a guide to this chapter. Moreover, this chapter familiarizes the reader with central concepts commonly referred to in research on disclosure and capital markets. After reading this chapter, the reader should understand why certain assumptions and reasoning are made in the four papers in this thesis and the overall conclusions we will draw from them in Chapter 6.
2.1 The firm seen as a nexus of contracts

The publicly listed firm is engaged in various contractual relationships with e.g. its investors, creditors, suppliers and employees. The contractual view of the firm is often attributed to Coase (1937) and his seminal paper “The nature of the firm”, where the evolution of the firm and the need of contracting relationships to overcome transaction costs in the market (e.g. information gathering, information asymmetries and bargain costs) was introduced. The firm is also described as a legal fiction, rather than an individual, which serves as a focus for a complex process in which the conflicting objectives of individuals are brought into equilibrium within a framework of contractual relationships (Jensen and Meckling, 1976). A shared factor in any contractual relationship is that one party possesses more or better information than the other party, in other words information asymmetries, which can lead to suboptimal decisions by the uninformed party (Holmstrom, 1979; Hart and Moore, 1988).

In the publicly listed firm, the relationship between investors and management is an example of such a relationship where information asymmetries arise. Herein, the investors’ decision-making and valuation of management performance are dependent on corporate disclosure supplied by the management. Relevant information that is withheld from interested parties may have a crucial impact on the outcome of their decision-making. Thus, the corporate information environment is of importance as it determines the level of conflicts and is used in designing efficient mechanisms to mitigate them (Armstrong et al., 2010). Similarly, accounting information becomes a central component in designing efficient contracts that mitigate conflicts between contracting parties (Watts and Zimmerman, 1986).

However, before I discuss the role of corporate disclosure in capital markets further, the reader deserves to be introduced to the ideas and problems associated with the separation of ownership and control, in other words to principal-agent relationships. Thus, questions such as “How do agency conflicts occur and what are their consequences?” “Which are the central agency conflicts in the publicly listed firm?” and “How does disclosure of accounting information aid in minimizing these conflicts?” are central questions in the following section.

2.2 Why do agency conflicts exist?

As mentioned above, the publicly listed firm deals with multiple contractual relationships and is exposed to principal-agent conflicts. The consequence of the separation of ownership and control in the modern corporation was observed by Berle and Means (1932). When ownership is widely held and the owners cannot efficiently make daily business decisions, these responsibi-
ties are delegated to an appointed manager. In an agency relationship, the principal, in this case the owners, engages the agent, i.e. the manager, to perform services on their behalf, which involves delegating decision-making authority (Jensen and Meckling, 1976; Fama and Jensen, 1983). However, because of information asymmetries, differing interests and the assumption that individuals are utility maximizers, there are reasons to expect that the agent does not always act in the best interest of the principal and hence ‘agency conflicts’ arise. Agency conflicts between managers and shareholders are commonly referred to as Type I equity agency problems (Paiva et al., 2016).

Examples of agency conflicts include when managers invest in risky projects that conflict with the risk appetite of the shareholders (Demsetz and Lehn, 1985), or when they use a corporate jet for unjustified purposes (Yermack, 2006). Principally, as the ownership of the manager decreases, so do his incentives for seeking profitable projects to maximize shareholder value (Jensen and Meckling, 1976). Accordingly, information asymmetries that arise between insiders of the firm and the outside owners create the demand for efficient monitoring and bonding mechanisms to solve agency conflicts between the contracting parties (Holmstrom, 1979). This includes for instance corporate disclosure, board of directors and performance-linked compensation deals. In particularly, in firms with diffused ownership, the outside investor is highly dependent on publicly available and useful accounting information (e.g. LaFond and Watts, 2008). In these contracts, the disclosure of executive compensation practices is of interest as this information is crucial in the evaluation of managers’ performance, and at the same time, this type of information is sensitive to managers’ discretion in disclosure decisions. The balance of self-interested disclosure incentives and mitigation of agency conflicts by means of executive compensation disclosure is analysed in Paper I of this thesis.

The Type I equity agency problem is more extensive in firms where ownership structure is diffused and the separation between managers and owners is large. In contrast to the widely held corporation as described by Berle and Means (1932), many publicly listed firms around the world are controlled and owned by one or a few controlling owners (La Porta, López-de-Silanes and Shleifer, 1999; Faccio and Lang, 2002). In these circumstances, the agency conflict between the controlling and non-controlling shareholders is more pronounced than the one between managers and shareholders. The literature generally refers to this as the second type of agency problem, i.e. Type II equity agency problems (Paiva et al., 2016). In the presence of controlling owners, the literature provides two competing predictions regarding their effect on firms’ corporate governance. The first prediction suggests an alignment effect, in other words the controlling owner monitors the manager in line with the non-controlling owners’ interests (e.g. Ali, Chen and Radhakrishnan, 2007; Cascino et al., 2010). As such, in firms where ownership is
shared among a few controlling owners, the demand for accounting information for monitoring purposes is lower because of the substituting monitoring role of the controlling owner (Bushman et al., 2004). The second prediction proposes an *entrenchment effect*, meaning that the controlling owner utilizes his or her insider position in the firm to extract private benefits at the cost of the non-controlling owners (Shleifer and Vishny, 1997; Claessens, Djankov, Fan and Lang, 2002). The perceived entrenchment effect of controlling owners may incur greater demand for high quality reporting by users of annual reports (Wang, 2006).

The entrenchment effect is more severe in contexts where control and ownership is separated via the use of control-enhancing mechanisms (CEMs), including dual-class shares, pyramids and cross holdings (Bebchuk, Kraakman and Triantis, 2000; Villalonga and Amit, 2006). The use of such mechanisms makes the controlling owner into a controlling-minority shareholder, where the owner exercises control while only retaining a fraction of the cash-flow rights (Bebchuk et al., 2000). Thus, the use of CEMs allows leverage of control, which in turn increases the controlling owner’s possibilities to pursue self-interested actions. However, legal factors, including protection of minority shareholders and restrictions on CEMs, determine the extent of the expropriation effect of controlling owners (La Porta et al., 1999). The potential effect of controlling owners on disclosure decisions is the topic of Paper II, with a particular focus on founding-family owned firms, an ownership structure commonly observed in West Europe and Asia. The Swedish context offers an opportunity to test for the effect of controlling-minority owners, i.e. where owners are commonly leveraging their power via CEMs and thus the prevalence of possible entrenchment effects are high (e.g. Cronqvist and Nilsson, 2003). In fact, Sweden is one of the countries that employ CEMs the most, while investor protection is often regarded as moderate (Faccio and Lang, 2002; La Porta et al., 1999) As such, the study aims to contribute to the opposing effects of controlling owners on corporate disclosure practices, by examining a context with high Type II equity agency problems.

Beyond Type I and Type II equity agency problems, conflicts between the board of directors and the management and between creditors and the management, are also present in the publicly listed firm. In a formal view of the firm, there is a “chain of command” from shareholders through their elected board to management. Agency conflicts between the board and the management are dealt with executive compensation contracts that align the manager’s action with the interest of the owners. In this relationship, disclosure of for instance executive compensation becomes important for the board of directors’ monitoring and assessment of management performance (Jensen, 1993). Disclosure is also essential when firms raise debt capital and enter into debt contracts, which conditions are based on the creditor’s assessment of a firm’s liquidity risk. These contracts are dependent on the attributes of
available accounting information and based on accounting data used in the estimations of e.g. interest rates and maturity of loans (Watts, 2003; Armstrong et al., 2010). Consequently, creditors are expected to have interest in financial information different from the owners. Therefore, managers are constantly choosing disclosures to meet demand from various contracting parties, simultaneously with their own personal preferences for disclosure. Thus, the various agency conflicts that arise between the firm and its contracting parties, including the ones with owners, the board of directors and creditors, create different demand on disclosure.

Nonetheless, any principal-agent relationship involves agency costs, which is the sum of costly monitoring and bonding mechanisms that deal with agency conflicts and align the interests between two contracting parties. Monitoring mechanisms include, for instance, disclosures of accounting information, high quality auditors and regulation. Further, the manager’s actions can be restrained by installing bonding via formal compensation and debt contracts (Jensen and Murphy, 1990; Sufi, 2007). However, because of unforeseen events, it is not possible to design complete contracts that state exactly how the manager should act in every possible situation, nor would this be advisable, as a manager has to be endowed with a fairly high level of managerial discretion. As a result, there may be instances when the manager’s decisions are not in line with the interest of the shareholders. The loss in wealth an investor experiences by entering a principal-agent relationship is referred to as a residual loss (Jensen and Meckling, 1976). Essentially, this relationship involves costs in form of monitoring and bonding of management and residual loss, which add up to agency costs. Consequently, contracts are established to bond the agent’s actions to the interest of the principals and disclosure can help minimize agency costs by providing relevant information to the uninformed party (Fields, Lys and Vincent, 2001).

In sum, this section describes that a principal-agent relationship involves information asymmetries, and concludes that in order to increase the likelihood of optimal actions on the part of the agent, contracts – for instance monitoring rules and compensation – should be established before entering an agreement. To ensure enforcement of the contract during its duration, disclosure of accounting information can assist in the monitoring of the agent and align his actions with the interest of the principals. This thesis primarily focuses on agency conflicts between a firm’s managers and shareholders, among owners (i.e. Type I and Type II equity agency problems) and with its lenders. Thus, continuing discussion in this introduction concerns disclosure in the setting of the aforementioned parties. The next section continues to explain how corporate disclosure can increase market efficiency.
2.3 The role of corporate disclosure in capital markets

As displayed in Figure 1, corporate disclosure plays two main roles in stimulating efficient capital markets. These are related to minimizing two problems, which in economics literature are known as adverse selection and moral hazard.

**Adverse selection** problems result from trades in which information is unevenly distributed between the buyer and the seller, and the seller enjoys an information advantage at the cost of the buyer (Akerlof, 1970). In the widely held firm, shareholders, being the outsider of the firm, are dependent on insiders’ (managers’ and owner-managers’) provision of corporate disclosure for their valuation and investment decisions. Furthermore, research shows that firms can affect investors’ and creditors’ risk perceptions by being more forthcoming in their disclosure provisions, which in turn decreases the firms’ cost of external financing (e.g. Botosan, 1997; Sengupta, 1998; Botosan and Plumlee, 2002). In this case, disclosure of accounting information has an information role in allowing capital providers to evaluate the potential return on future investments (Beyer et al., 2010).

**Moral hazard** occurs when an individual agent takes a risk that he or she does not bear the cost for or in any other way does not act in the best interest of the principal. The moral hazard problem is a result of imperfect information allocation among individuals, because individual actions cannot be observed (Holmstrom, 1979). A typical example is that the CEO invests in risky projects that may not be in line with the investors’ risk appetite. In this case, disclosure of accounting information can aid investors in their assessment of management’s efforts and monitor its actions so they are in line with the investors’ intentions (Jensen and Meckling, 1976). Executive compensation contracts that are performance-based are one attempt to align managers’ incentives and actions (e.g. Jensen and Murphy, 1990; Bushman and Smith, 2001). In such cases, corporate disclosure plays a stewardship role by providing valuable information to allow efficient contracting and performance evaluation of management (e.g. Holmstrom, 1979; Gjesdal, 1981; Beyer et al., 2010). Hence, the level of information and stewardship problems handled by firms shape the information environment. However, it is worth noting that when we talked about them as “stimulating efficient capital markets”, they are in principle equally important if the firm itself increases the level of disclosure in order to attract financing, or if outside actors – government or an industry organisation – takes measures to improve disclosure in a way which is expected to benefit business. In the former case, a firm’s self-interest can be expected to play a role; in the latter case, the idea that it

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6 Please note that I refer to a widely held firm where manager and owner separation is large. In contrast, in firms with concentrated ownership, the central agency conflict lies between controlling and non-controlling owners (i.e. Type II equity agency problem), as was discussed in section 2.2.
should particularly benefit deserving firms, and benefit an industry or society. The latter is an important background to the existence of mandatory requirements for disclosure, while the former can be expected to influence the extent of voluntary disclosure. This will be further elaborated in sections 2.4 and 2.5 where firm-level disclosure incentives and rationales for regulation are discussed. The next two sub-sections further review prior research on disclosure, by following its two main roles in capital markets.

### 2.3.1 The Information role

According to the efficient market hypothesis (EMH), the market should fully reflect all available information and new corporate information release is constantly incorporated in the stock price (Fama, 1970). Thus, outperforming the market is impossible for any single investor. However, this is only true in a world where transaction costs do not exist, all information is costless to all market participants, and all investors have the same beliefs in the effects of current information on current stock prices and the distribution of future prices of each security (Malkiel and Fama, 1970). This is obviously an oversimplification of the “real” world where information processing is costly and financial information is unevenly distributed among market participants, and beliefs differ among prospective owners due to their differing ideas of future worlds. As the following discussion presents, empirical accounting studies document that capital markets value firms’ earnings announcements and investors require a higher return from firms that stay opaque.

Ball and Brown (1968) and Beaver (1968) are a crucial starting point for a number of empirical capital-market-based accounting studies (see review by e.g. Kothari, 2001). Ball and Brown (1968) test whether accounting information in the form of net income and earnings per share are incorporated in share prices. They show that release of positive earnings announcements increase stock prices. As such, proving that release of new accounting information is indeed useful input for the capital market participants. Since then, a number of so-called “value relevance” studies have examined the usefulness of accounting information by linking accounting numbers and stock market prices (e.g. Francis and Schipper, 1999; Easley and O’Hara, 2004; Hamberg and Beisland, 2014).

According to the EMH all information is equally distributed among all market participants. However, in “reality” investors often trade with corporate insiders that have access to firm-specific information that may not be publicly available. Information asymmetries between corporate insiders and outsiders mean that the latter possess only incomplete information on the true firm economic value. This may result in investors requiring higher return on their investment, or that they opt out from investing in uncertain firm stocks. Similarly, empirical evidence shows that higher levels of disclosures are associated with lower cost of equity capital (Botosan, 1997). This is ex-
plained by the information effect of disclosures and that increased disclosures reduce uncertainty regarding the estimation of a firm’s future cash flows (Verrecchia, 2001). Furthermore, investors are more willing to trade in informative stocks, which in turn increases market liquidity (Diamond and Verrecchia, 1991). Prior research documents this and that high disclosing firms enjoy narrower bid-ask spreads and higher trading volume (Amihud and Mendelson, 1986; Welker, 1995; Leuz and Verrecchia, 2000). Moreover, analysts also benefit from increased disclosures by providing more accurate and less dispersed forecasts (Hope, 2003; Yu, 2010). Analysts are also more likely to follow firms with rich disclosure environments (Lang and Lundholm, 1996). Collectively, these findings suggest that higher levels of disclosure are associated with positive capital-market effects, in the form of improved stock liquidity, earnings forecast prediction, and reduced market imperfections including adverse selection.

According to the Conceptual Framework issued by the International Accounting Standard Boards (2010), financial information should provide existing and potential investors, lenders and other creditors information to help them assess the prospects for future net cash inflows to an entity. Investors’, lenders’, and other creditors’ expectations about returns depend on their assessment of the amount, timing, and uncertainty of (the prospects for) future net cash inflows to the entity (CF OB3, 2010). Indeed, Ball and Brown (1968) opened up a rich avenue of research showing that accounting information provides capital-market participants with information in their investment decisions. However, the information perspective of accounting information does not consider managers’ influence on accounting methods (Watts and Zimmerman, 1990; Fields et al., 2001). Based on the ideas of the Positive Accounting Theory (PAT), we are able to understand why managers may intentionally select accounting methods (Watts and Zimmerman, 1978; 1986). This line of theorizing is elaborated in the next sub-section.

Concluding this section on the information role of disclosure, we note that information asymmetries and market inefficiencies can be mitigated by disclosure of useful accounting information. We also note that early empirical evidence shows that release of accounting information has a material effect on stock market prices and that corporate disclosures have positive effects on stock trading and investment decisions (Ball and Brown, 1968). This can be related to Figure 1 and the lower box where accounting information provided to capital markets improves analysts’ forecasting and investors’ decision-making. Similarly, Paper III of this thesis investigates the association between voluntary disclosure of accounting information and its effects on capital markets. In particular the study examines whether the market responds differently to firms with high versus low disclosure levels. The next sub-section continues with the stewardship role of disclosure in capital markets.
2.3.2 The Stewardship role

One may find that the stewardship and information role of accounting information coincide, although scholars argue that there are reasons for distinguishing between the two objectives of accounting (e.g. Gjesdal, 1981; Cascino et al., 2014). The International Accounting Standard Board (IASB) has also emphasized this and has proposed a refinement of the objective of financial reporting and “to give more prominence, within the objective of financial reporting, to the importance of providing information needed to assess management’s stewardship of the entity’s resources” (CF Exposure draft, 2015, p. 10). Thus, as pictured in Figure 1 the purpose of disclosure is two-fold.

Essentially, in the inception of a firm’s life cycle, its financing needs are met by contributed capital. As the firm matures and becomes more dependent on external financing, a complex array of contractual relationships arises between the firm and its stakeholders (Coase, 1937; Armstrong et al., 2010). Due to the presence of information asymmetries and possibly divergent interests between contracting parties, strong monitoring and bonding mechanisms via efficient contracts can aid agency conflicts by controlling and incentivizing the manager. In this case, accounting information plays an essential role in the creation of efficient contracts and in mitigating agency conflicts (Jensen and Meckling, 1976; Fields et al., 2001). As such, disclosures should also aid in capital providers’ assessment of manager performance and allocation of firm resources. This includes disclosure on executive compensation practices, which is investigated in Paper I, and disclosures that help in assessing the performance of management. Moreover, bonding contracts require managers to disclose relevant accounting information, which allows creditors to monitor compliance with contractual agreements and to evaluate whether managers allocate the firm’s resources efficiently (Healy and Palepu, 2001; Shivakumar, 2013). Thus, in the disclosure literature, a general expectation is that firms respond to its contractual relations by providing disclosures that relate directly to their contracts. The positive accounting theory (PAT), on the other hand, explains why managers choose certain accounting methods that are made for personal interest (Watts and Zimmerman, 1978; 1986).

The PAT provides three hypotheses regarding managers’ preferences for certain accounting methods. First, the ‘Bonus Plan’ hypothesis, predicts that managers use accounting methods that increase current reported income numbers, in order to enhance their own bonus rewards (Healy, 1985). Similarly, empirical evidence shows that earnings are more frequently manipulated in firms where CEO’s compensation is equity-based and include options (Bergstresser and Philippon, 2006; Cornett, Marcus and Tehranian, 2008). Second, the ‘debt/equity’ hypothesis, posits that managers favour accounting methods that decrease the firm’s debt/equity ratio, in order to adhere to the
financial covenants and to maximize the borrowing capacity (Sweeney, 1994). Francis, Khurana and Pereira (2005) document that the interest rate of the loan is lower for firms with high accounting quality and Zhang (2008) finds that firms that report conservatively have lower interest rates. The third hypothesis, political cost hypothesis, suggests that managers of large firms are cautious about reporting high profits to avoid public scrutiny and therefore seek accounting methods that can reduce reported profits (Watts and Zimmerman, 1990).

Hence, grounded on the contractual view of the firm and the role of accounting information in the formation of efficient contracts, the PAT helps us to understand why managers choose certain accounting methods over other methods. This is relevant for disclosure practices as well, which is why the four empirical studies of this thesis incorporate the contractual view of the firm and the notions provided by PAT. Specifically, it is expected that the contractual relationships the firm is engaged in incentivize their disclosure practices. For instance, leveraged and large firms are expected to be more forthcoming with disclosures to reduce agency and political costs.

2.4 The incentives and economic effects of voluntary disclosure

As highlighted in previous sections, corporate disclosure is an essential component in a well-functioning and efficient capital market. From a stewardship perspective, disclosure is necessary in the contractual relationships the firm enters, such as compensation and lending contracts. From an information valuation perspective, disclosure is related to capital market transactions and to evaluate the return potential of investment opportunities. According to Grossman and Hart (1980), firms voluntarily disclose all their private information when six conditions are met: 1) disclosures are costless, 2) shareholders know that managers possess private information, 3) all investors are sophisticated, 4) the manager’s goal is to maximize firms’ stock price, 5) all disclosures are reliable and 6) the firm has not committed to a disclosure strategy prior to receiving private information. This is referred as the unravelling result theorem and is obviously only relevant in theory. As the next sub-section demonstrates, much evidence in empirical accounting research shows that stewardship and valuation problems faced by a firm are important determinants of its disclosure decisions.

However, valuation and stewardship problems can also be solved by alternative mechanisms and/or information sources that can act as substitutes or complements for corporate disclosures. For instance, analysts’ forecasts enrich the information environment of a firm (e.g. Lang and Lundholm, 1996), and the presence of active investors may substitute the need for addi-
tional disclosures as a monitoring tool (e.g. Jensen, 1993). Moreover, before entering a contractual agreement the manager can commit to certain mechanisms that assure a certain level of transparency. This includes, installing a high quality auditor (Big 4) and having an independent audit committee (Klein, 2002). As discussed in section 2.5 there are conditions when managers do not voluntarily disclose all relevant information and there is a constant balancing of disclosure costs and benefits tackled by the manager. In these situations, accounting regulations assure an acceptable level of transparency. Thus, the supply and demand for disclosure is also dependent on the governance mechanisms and accounting regulations in place (cf. “Mediating factors” in Figure 1).

The next part of this section continues to extend the previous section on the information and stewardship role of disclosure by discussing three premises that according to Fields et al. (2001) incentivize firms’ disclosure decisions. These include information asymmetry, agency problems and third party related influences.

**The role of information asymmetries**

Information asymmetries among investors yield adverse selections into capital markets. As was discussed previously, corporate disclosure mitigates information asymmetries between the firm and market participants, which in turn reduce adverse selection problems. Thus, when the firm raises external financing there are incentives to engage in voluntary disclosure to minimize information asymmetries with capital providers (e.g. Myers and Majluf, 1984). The association between disclosure and the firm’s external financing activities has been examined extensively in prior research (e.g. Lang and Lundholm, 1993, 2000; Healy, Hutton and Palepu, 1999). For instance, Lang and Lundholm (2000) show that, six months prior to a seasoned equity offering, firms dramatically increased their disclosure activities. Shroff, Sun and White (2013) document a similar relationship and find that firms provide more disclosure before equity offerings, which is related to a decrease in information asymmetry and a reduction in the cost of raising equity capital.

Economic theory suggests that investors are more likely to invest in firms with high disclosure quality and lenders revise their debt covenants accordingly. The link between accounting information and various capital-market effects has for long interested empirical accounting researchers (e.g. Welker, 1995; Coller and Yohn, 1997; Leuz and Verrecchia, 2000). A commonly tested premise is that less informed traders price-protect themselves or exit the market to avoid losses. This in turn is reflected in reduced market liquidity and increased bid-ask spreads, both measures of the extent of adverse selection and information asymmetries in the market. By engaging in voluntary disclosure firms may increase investors’ willingness to invest in these stocks, resulting in higher stock liquidity (Leuz and Verrecchia, 2000).
Furthermore, the literature provides two arguments for how disclosures affect the cost of capital. First, better disclosure improves risk sharing in the economy and therefore reduces market risk premium (Merton, 1987; Verrecchia, 2001). Second, detailed disclosure better equips investors to forecast future cash flows of the firm (e.g. Lambert, Leuz and Verrecchia, 2012). For instance, Botosan (1997) shows that high disclosing manufacturing firms followed by a small number of analysts enjoy lower cost of equity as compared to what their counterparts do. Similarly, Easley and O’Hara (2004) show that investors holding stocks with higher private information require a higher return as reflected in a firm’s cost of equity capital. Nonetheless, empirical evidence in this research stream is mixed on analysing the cost of equity capital effects of disclosure (e.g. Botosan, 1997; Francis, Nanda and Olsson, 2008). The negative relationship between voluntary disclosure and cost of equity capital is only documented for the sub-set of firms with a low number of analysts following (Botosan, 1997) and moderated when earnings quality is controlled for (Francis et al., 2008). The mixed evidence is partially due to the difficulty associated with measuring the cost of equity capital (e.g. Easton, 2006).  

Prior research also documents that firms with high disclosure quality are associated with significantly lower cost of debt (Sengupta, 1998). For a sample on European private and public listed firms, Burgstahler et al. (2006) show that publicly listed firms have stronger incentives to meet outside capital providers’ demand for high quality reported earnings. Collectively, these studies strengthen the premise that high quality disclosure aids in mitigating information asymmetries between the firm and capital providers, which result in increased liquidity and lower cost of capital. This thesis builds on this premise and that higher levels of disclosure in annual reports decrease information asymmetries in capital markets, which in turn should have positive capital market effects. This could be reflected in narrower bid-ask spreads and higher stock liquidity, but also in improved precision of financial analysts’ forecasts, which are examined in Paper III.

The role of agency problems
The firm is engaged in contractual arrangements with its shareholders, board of directors and creditors. Information asymmetries that arise between two contracting parties create the need for efficient contracts that align the actions of the managers with each of the contracting parties. Because contrac-

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7 A common methodological concern shared by studies examining the disclosure and cost of capital relationship is the issue concerning construct validity of cost of equity capital. Several, critics have highlighted the validity of applied expected return proxies and whether forecasted data is preferable over historical numbers (e.g. Elton, 1991) and whether analysts’ provide biased forecasts (Hou, van Dijk and Zhang, 2012).

8 Although this thesis focuses on corporate disclosure, similarities in arguments used in earnings quality studies can be drawn to disclosure studies.
tual agreements are often formed based on accounting numbers, including managers’ compensation plans or debt contracts, positive accounting theory (Watts and Zimmerman, 1986) suggests that the form of the contracts incentivizes managers’ reporting choices, suggesting that managers engage in voluntary disclosures and accounting choices in order to report desired numbers and figures. There is an ample supply of accounting quality research that examines whether managers’ reporting incentives are shaped by the composition of their compensation contracts. For instance, Cheng and Warfield (2005) document that managers with stock-based compensation are more incentivized to manage earnings to increase the value of the shares. Moreover, CEOs time their voluntary disclosure around stock option awards by delaying good news and rushing forward bad news (Aboody and Kasznik, 2000). Nagar et al. (2003) argue and find that because the quality of a firm’s information environment and stock price is positively related, managers with equity-based incentives provide higher disclosure quality. However, findings are mixed and Larcker, Richardson and Tuna (2007) find no relation between equity-based CEO compensation and the frequency of accounting restatements.

Thus, while the executive compensation package is one monitoring mechanism the board of directors may use and obviously linked to disclosure of the metrics on which compensation is based, high quality disclosure is also by itself crucial in the evaluation and monitoring of managers. This essentially restates that disclosure may be guided by a mix of agency and stewardship reasoning. For instance, in the presence of Type I equity agency problems, investors have no direct contact with management are highly dependent on public corporate disclosure (Jensen and Meckling, 1976). However, in firms with a controlling owner who has a different agenda than the non-controlling owners, the agency conflict between managers and shareholders becomes less severe. Instead, Type II equity agency problems arise. The disclosure literature provides two opposing effects of controlling owners on reporting practices. First, because of the smaller separation between ownership and control, controlling owners have fewer agency conflicts with managers and the board of directors (Jensen and Meckling, 1976). Thus, there is a lower demand for accounting disclosure for monitoring purposes. In contrast, agency conflicts between the controlling and non-controlling owners create the demand for high quality disclosure that prevents rent extractions by the controlling owner (e.g. Shleifer and Vishny, 1997). To date research is inconsistent on controlling owners’ effect on disclosure choices. For instance, Ali et al. (2007) find that family owned firms provide high quality disclosure by disclosing timely bad news and high quality earnings. On the other hand, Chen, Chen and Cheng (2008) show that family firms provide fewer earnings forecasts and conference calls, but more earnings warnings. Nonetheless, identifying the type of controlling owner and their
possible impact on accounting outcomes has become an important question in accounting research (Dou et al., 2016).

Another contractual arrangement where disclosure is crucial is the one between the firm and creditors. In line with positive accounting theory, leveraged firms are incentivized to adjust their disclosure and accounting numbers to make favourable deals and meet debt covenants. As such, it is expected that managers employ high quality corporate disclosure to mitigate agency costs in form of interest rates that arise between the firm and the creditors. Likewise, prior studies document that firms reporting conservatively have better credit ratings (Ahmed, Billings, Morton and Stanford-Harris, 2002), and that firms providing high quality accounting have lower interest bearing debt (Francis et al., 2005).

Besides investors and creditors, stakeholders including regulators and tax authorities are also concerned about the firms’ corporate decisions and disclosures. Thus, public scrutiny, litigation concerns and political costs are factors that can impact firms’ disclosure decisions. For instance, managers choose financial reporting methods in order to avoid or keep corporate taxes low. Similarly, Hope, Mark and Thomas (2013) find that under the SFAS 131 period firms choose to avoid disclosure of geographic earnings in order to conceal their corporate tax behaviours. Moreover, the litigation cost hypothesis posits that the fear of legal liability and penalization make a manager reluctant to voluntarily disclose management earnings forecasts and be more forthcoming with bad news disclosures (Skinner, 1994). As the firm size increases so does the risk for stakeholder interventions and therefore larger firms are expected to report more cautiously and conservatively (Watts and Zimmerman, 1986). Likewise, by comparing U.S. and Canadian firms, Baginski, Hassell and Kimbrough (2002) find that Canadian firms, operating in a less litigious environment than U.S. firms, have greater frequency of management earnings forecasts.

The aim with this section was to present to the reader the incentives and economic effects of voluntary disclosure. Similarly, this thesis builds on the premise that disclosure is driven by the extent of information asymmetries and agency problems, and that litigation cost and public scrutiny concerns are also important disclosure determinants. Nonetheless, there is a large amount of literature examining other factors explaining firms’ disclosure quality, including board composition (Lim, Matolcsy and Chow, 2007), manager characteristics (Bamber, Jiang and Wang, 2010) and manager empire building (Hope and Thomas, 2008). Because of the focus of this thesis, it is fair to admit that alternative disclosure determinants are not covered in this work. In sum, this section notes that firms are incentivized to disclose due to contractual arrangements and benefits of reducing agency costs. So why then is disclosure regulation so prevalent in capital markets? The next section discusses the rationales for regulating disclosure.
2.5 Economic rationales for regulating disclosure

In deciding the level of disclosure, rational managers can be expected to consistently balance the costs and benefits associated with it and only when the benefits in doing so outweigh the costs will disclosure be provided. At the same time, regulation and standardization of disclosure and reporting practices are widespread in capital markets. As the assumptions needed for complete disclosure to take place were seen to be unrealistic, firms will normally disclose less information than shareholders wish. Rather, firms will trade off their gains from disclosure against costs, and over time many actors like public regulating bodies and political decision-makers have decided that they provide too little information. In a world where proprietary information, heterogeneous investors and managers’ differing reporting incentives exist, the unravelling result theorem fails to explain why some firms provide more disclosure than other firms. Thus, because firms’ decisions in disclosing information are a trade-off at a firm-incentive level, it is unlikely it will result in socially optimal disclosure levels (Leuz and Wysocki, 2016). As such, when disclosure incentives are absent or insufficient there are rationales for mandating disclosure. However, regulators constantly struggle to find an optimal level of disclosure regulations, as firms are better informed about the costs of disclosure than the regulators themselves (Leuz and Wysocki, 2008).

As noted, firms’ disclosure incentives are not always sufficient in mitigating information asymmetries between the firm and its contracting parties. There are at least six reasons for firms to not provide disclosure voluntarily. First, information that could affect the firm’s competitive advantage can lessen its disclosure incentives, which is known as the proprietary cost argument (Verrecchia, 2001). Second, litigation costs can decrease managers’ incentives to provide voluntary disclosure, in particular forward-looking information (Healy and Palepu, 2001). Third, because of reputational concerns, managers are strategic and disclose information only when it is in their interest to do so (Beyer and Dye, 2012). For instance, stock-based compensation contracts may induce strategic disclosure by managers to increase stock-price (Aboody and Kasznik, 2000). Fourth, disclosure entails direct costs, including the preparation, certification and distribution of accounting reports (Leuz and Wysocki, 2008). Fifth, the availability of alternative information sources may substitute the need for additional corporate disclosures. This includes forecasts by security analysts that act as information providers in capital markets (e.g. Lang and Lundholm, 1996). Sixth, the possible substituting or complementing role of governance structures, including independent boards (Klein, 2002) and active investors (Jensen, 1993) may determine firms’ disclosure practices. Consequently, a firm would only voluntarily disclose if the benefits in doing so outweigh the
costs. Therefore, in order to assure a certain degree of disclosure and that it is credible, accounting standards and regulations have been developed.

According to Beyer et al. (2010) there are at least four rationales for financial disclosure regulation. These include: 1) financial externalities, 2) real externalities, 3) agency costs and 4) economies of scale. Financial and real externalities exist when firms avoid disclosing information regarding other firms and that can affect their business decisions, e.g., entering new markets. In theory, disclosure regulations can save both financial and real externalities by providing socially optimal levels of disclosure and improve social welfare. However, it is empirically difficult to assess what socially optimal disclosure levels are and whether there is an over- or under-production of information in the market (Leuz and Wysocki, 2008). Furthermore, disclosure regulations can reduce agency costs and force firms to provide useful and detailed disclosures that principals need in their monitoring of the management. Similarly, mandatory disclosure is particularly valuable for protecting new contracting parties by assuring commitment to certain information and the possibility of sanctions that are unavailable in privately produced disclosure levels (Leuz and Wysocki, 2008). Lastly, regulated disclosure generates economies of scale, by providing a common accepted language to communicate with investors and as such reducing information production costs and enhancing comparability of disclosures across firms. In such cases, disclosure regulations can provide market-wide cost savings, as long as the regulated disclosure level is limited to disclosures that almost all firms are willing to provide (Mahoney, 1995).

In sum, we note that firms’ disclosure practices include firm-level costs and benefits, which are not always sufficient in providing socially desirable disclosure outcomes. This in turn justifies disclosure regulations that are intended to save total costs and create positive externalities. However, the potential costs and benefits of regulating disclosure are plentiful and multifaceted and it remains an empirical question of whether regulated disclosure is preferable over market-based disclosure solutions (Leuz and Wysocki, 2008; Beyer et al., 2010). Firm-level incentives and the institutional context, including the governance structure, are important determinants to consider in understanding firms’ disclosure practices and the possible effects of mandatory disclosure requirements. Paper I and II of this thesis aim to add to this debate by utilizing an institutional context where disclosure incentives are driven by controlling owners and where their power is enhanced via various control-enhancing mechanisms. In addition, Paper I examines how firms’ executive compensation disclosure incentives are affected during a time period of increased mandatory disclosure regulation.
2.6 Measures of accounting quality

One of the main challenges in empirical accounting research is to measure disclosure in a valid and reliable manner (e.g. Healy and Palepu, 2001; Beyrer et al., 2010). In their review on economics of disclosure and financial reporting regulations, Leuz and Wysocki (2016) divide accounting quality measures into two categories: the narrow and the broad category. In the narrow category, measures aimed at capturing the quality of firm’s reported earnings are included. In the broad category, measures on disclosure quality include binary measures (e.g. whether the firm reports under a specific reporting regime), disclosure indices (professional and self-constructed indices) and text-analysis with techniques from linguistic disciplines. The following text provides a review on widely applied accounting quality metrics in disclosure and financial reporting research by starting off with reviewing measures belonging to the narrow category.

2.6.1 Earnings quality

The narrow category of disclosure measures includes measures on the quality of firms’ reported earnings. Several earnings quality models have been derived to measure the properties of a firm’s reported earnings, which among others include models on earnings persistence, earnings smoothness and timely loss recognition (Dechow, Ge and Schrand (2010) provide a comprehensive review on earnings quality proxies). This way of assigning the quality of earnings has possibly become one of the most frequently used methods in empirical accounting research and its easiness can be one reason for it (i.e. not labour intensive as compared to self-constructed disclosure indices, which will be further discussed in the broader category section).

Next to the earnings quality measures, a large body of research has also estimated the extent of “abnormal” accruals derived from various accrual models. In this approach, abnormal accruals are applied as a proxy for earnings quality (alternatively a proxy for earnings management, since in the presence of earnings management it is assumed that reported earnings are of lower quality). A common feature for accrual models is distinguishing “abnormal” accruals (i.e. discretionary) from “normal” (i.e. non-discretionary) accruals, where the definition of “abnormal” accruals generally differentiates the models from one another. For instance, both the Healy (1985) and DeAngelo (1986) models use the estimated total accruals as a proxy for non-

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9 A typical procedure followed in the application of accrual models is to first estimate the total accruals of a firm. Generally, total accruals are defined as the difference between change in working capital and depreciation and amortization (e.g. Dechow et al., 1995, p. 203). Total accruals are the sum of estimated “normal” and “abnormal” accruals, where commonly “normal” accruals are estimated from accrual models and the error term (i.e. unexplained portion) proxies “abnormal” accruals.
discretionary accruals and any deviation from the current period’s total accruals is regarded as discretionary accruals. However, the models differ in the examined time period the nondiscretionary accruals are derived from, where the former model considers the average of total accruals during the estimation period and the latter model considers the previous fiscal year’s total accruals as a proxy for non-discretionary accruals. Nonetheless, a limitation with both models is the assumption that non-discretionary accruals are constant over time (Dechow, Sloan and Sweeney, 1995), an assumption that Kaplan (1985) claims is unlikely as non-discretionary accruals are sensitive to changes in a firm’s economic circumstances.

Another well-applied accrual model is the Jones model (1991, 1995), which relaxes the assumption that non-discretionary accruals are constant over time and where the possible effects of a firm’s economic circumstances on non-discretionary accruals are controlled. Specifically, in estimating non-discretionary accruals, the Jones Model controls for revenues, accounts receivable and property plant and equipment, which account for a firm’s “normal” business activities. In the modified Jones Model (1995), revenues for credit sales (i.e. accounts receivables) are also adjusted for. This is intuitive as revenues may be accrued to the next period in cases when cash has not been realized yet. Nonetheless, both models suffer from high correlation issues between estimated abnormal accruals and firm performance (e.g. Dechow et al., 1995) and with total accruals (Dechow, Richardson and Tuna 2003).

An alternative accrual measure is the Dechow and Dichev (2002) approach, which compared to previous accrual models (e.g. Jones Model) does not separate between discretionary and non-discretionary accruals. Instead, the proxy for accrual quality is the extent to which working capital accruals map into operating cash flow realizations, where a poor match signifies a low accrual quality. This model also suffers from identification issues, as it cannot account for long-term accruals (e.g. goodwill impairments) (Dechow et al., 2010).

Collectively, one concern regarding the reviewed accrual models is that abnormal accruals tend to be positively related to the level of accruals (Dechow et al., 2010). This means that a firm reporting high accrual levels due to its business activities, consequently, obtains high levels of abnormal accruals derived from the accrual models. However, this does not have to necessarily indicate the existence of earnings management, but could instead reflect a firm’s core business activities (i.e. earnings quality and abnormal accruals models both struggle with the difficulty of separating a firm’s reporting system from its underlying economics). This is in line with the Leuz and Wysocki (2016) statement: “... essentially all commonly used proxies for disclosure and reporting are likely to comingle the firm’s underlying economics with the reporting constructs that they are trying to measure”.
While earnings quality proxies have been a good attempt at achieving methodological consensus in disclosure research, they all suffer from conceptual and measurement problems (e.g. Dechow et al., 2010). The continuous discussion on applicable earnings quality proxy has resulted in studies applying an array of quality metrics to validate their results (e.g. Burghstahler et al., 2006; Barth et al., 2008). Yet, earnings quality measures offer an efficient way for the researcher to measure disclosure quality and to replicate results than for instance what self-constructed disclosure indices do (as will be furthered discussed in 2.6.2).

In sum, commonly for accounting quality measures in the narrow category is their focus on the quality of reported accounting numbers in the financial statements. Thus, these metrics solely focus on reported accounting numbers and automatically disregard qualitative financial disclosures made beyond the financial statements. Strictly speaking, the quality of earnings pertains to a firm’s performance rather than its decision to disclose information, or the quality of that information. To the extent that analysts and other users of information value persistent and smooth earnings, they may regard disclosure of information from firms that can credibly be expected to have such earnings more highly than information from firms that expect more volatile earnings. However, we regard earnings quality measures as a somewhat different breed from the other metrics in Table 2, which are attempts at describing qualities of disclosure as such.

2.6.2 Disclosure quality

Disclosure measures classified in the broad category share the feature that they focus on narrative disclosures and financial information provided in addition to the financial statements. This category of accounting quality measures can be separated into two approaches. The first approach includes measures that indicate whether a firm publishes quarterly financial reports according to the IFRS standards or local GAAP regimes (e.g. Barth et al., 2008; Daske et al., 2008). Other measures include whether and how often management forecasts are released or conference calls are held. These measures are commonly of a binary ordinal nature and measure the existence or absence of certain type of disclosures and how often they occur. One advantage of using a broad measure, e.g. management earnings forecast, as a voluntary disclosure proxy is that they can be precisely measured and replicated (Healy and Palepu, 2001). Nonetheless, such measures tend to focus on only capturing the quantity, rather than the quality of the released information (Leuz and Wysocki, 2016).
## Table 2. Overview of earnings and disclosure quality measures

<table>
<thead>
<tr>
<th>Narrow Category</th>
<th>Rationale</th>
<th>Note</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Earnings quality models</strong></td>
<td></td>
<td></td>
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<tr>
<td>Earnings persistence</td>
<td>Persistent earnings equal high earnings quality and are a useful proxy for future firm performance.</td>
<td>Earnings persistence may be due to both firm characteristics and earnings management.</td>
<td>Sloan (1996)</td>
</tr>
<tr>
<td>Earnings smoothness</td>
<td>Smoothing earnings, by avoiding reporting high earnings fluctuations, is a sign of earnings management and thus low earnings quality. Earnings smoothness equals earnings relative to cash flows: ( \sigma(\text{Earnings})/\sigma(\text{Cash flows}) )</td>
<td>Smoothness is not only a result of earnings management, but also an outcome of firm performance, firm size and accounting choices.</td>
<td>Burgstahler et al. (2006)</td>
</tr>
<tr>
<td>Timely loss recognition</td>
<td>Profit and losses are recognized conservatively.</td>
<td>Assumes market efficiency and that all information is value relevant.</td>
<td>Basu (1997)</td>
</tr>
<tr>
<td>Earnings response coefficients (ERC)</td>
<td>Earnings that are informative and fully compounded in firm's stock prices. In an earnings-relation analysis a high R² signifies high quality earning numbers.</td>
<td>Suffers from omitted variables that affect investors’ reaction (Dechow et al., 2010)</td>
<td>Francis and Schipper (1999)</td>
</tr>
<tr>
<td><strong>Accrual models</strong></td>
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<tr>
<td>The Healy Model</td>
<td>Non-discretionary accruals (NDA) is the average of total accruals (TA) in the estimation period, i.e. NDA=TA/T, where T = the number of years included in the estimation period.</td>
<td>Assumes non-discretionary accruals are constant over time.</td>
<td>Healy (1985)</td>
</tr>
<tr>
<td>The DeAngelo Model</td>
<td>Last period’s (i.e. t-1) total accruals (TA) assumed to be this period’s (i.e. t) “normal” accruals (NDA). Hence, DA= TA - NDA</td>
<td>Assumes non-discretionary accruals are constant over time.</td>
<td>De Angelo (1986)</td>
</tr>
<tr>
<td>Jones model</td>
<td>The non-explained portion of the Jones model obtained from following model; ( \text{Acct} = \alpha + \beta_1(\Delta \text{Rev}_t) + \beta_2\text{PPE}_t + \epsilon ), equals the discretionary accruals.</td>
<td>Difficult to separate discretionary accruals from “normal” accruals, as total accruals are strongly correlated with firm performance.</td>
<td>Jones (1991)</td>
</tr>
<tr>
<td>Modified Jones model</td>
<td>Adjusts the Jones Model by excluding growth in receivables in estimating the discretionary accruals; ( \text{Acct} = \alpha + \beta_1(\Delta \text{Rev}_t - \Delta \text{Rec}_t) + \beta_2\text{PPE}_t + \epsilon ).</td>
<td></td>
<td>Dechow et al. (1995)</td>
</tr>
<tr>
<td>Dechow and Dichev approach</td>
<td>Accrual quality equals the extent to which working capital accruals map into operating cash flows realizations: ( \Delta \text{WC} = \alpha + \beta_1\text{CFO}_t - 1 + \beta_2\text{CFO}_t + \beta_3\text{CFO}_t + 1 + \epsilon ). A poor match signifies a low accrual quality (denoted by the error term).</td>
<td>Suffers from including long-term accruals (e.g. goodwill impairments).</td>
<td>Dechow and Dichev (2002)</td>
</tr>
<tr>
<td><strong>Broad Category</strong></td>
<td><strong>Rationale</strong></td>
<td><strong>Note</strong></td>
<td><strong>References</strong></td>
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<tr>
<td><strong>Binary variable</strong></td>
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<tr>
<td>Reporting regime</td>
<td>Does the firm report under local GAAP or IFRS?</td>
<td>Restricted to certain countries and time period where local GAAP applies.</td>
<td>Barth et al. (2008)</td>
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<tr>
<td>Management forecasts</td>
<td>How frequent (if any) does management release earnings forecasts?</td>
<td>Captures quantity rather than quality of disclosures. Bias to only issuing firms.</td>
<td>Nagar et al. (2003); Bamber et al. (2010)</td>
</tr>
<tr>
<td>Conference calls</td>
<td>How frequent (if any) does management hold conference calls? Content of conference calls (e.g. Hollander et al., 2010; Matsumoto et al., 2011)</td>
<td>Captures quantity rather than quality of disclosures.</td>
<td>Matsumoto et al. (2011)</td>
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<tr>
<td><strong>Textual analysis</strong></td>
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<tr>
<td>Fog Index</td>
<td>Assess the difficulty of the text by applying techniques borrowed from linguistic subjects.</td>
<td>Relatively new measure in empirical accounting research and unclear what it really captures.</td>
<td>Li (2008); Lehavy, Li and Merkley (2011)</td>
</tr>
<tr>
<td>Flesch reading ease formula</td>
<td>Assigns number of syllables per word and the average sentence length in words.</td>
<td>See comment above.</td>
<td>Smith and Smith (1971)</td>
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<tr>
<td><strong>Disclosure indices</strong></td>
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<tr>
<td>Consultant or analyst based</td>
<td>Disclosure rankings by financial analysts.</td>
<td>Suffer from size bias and coverage issues.</td>
<td>Kanton.se</td>
</tr>
<tr>
<td>KANTON Best Annual Report</td>
<td>Ranking of international annual reports prepared by an U.K. consultant firm.</td>
<td>400 international annual reports evaluated. Size bias issues.</td>
<td>Reportwatch.net</td>
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<td>ReportWatch</td>
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<tr>
<td><strong>Self-constructed indices</strong></td>
<td>An index including disclosure items preselected by the researcher.</td>
<td>Labour intensive. Validity and reliability concerns.</td>
<td>Botosan (1997); Francis et al. (2008); Muslu (2010)</td>
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</tbody>
</table>
The second approach in the broad category of measures is disclosure indices. A disclosure index summarizes a firm’s disclosure of a list of selected items that may be disclosed in the financial report of a firm. To date, disclosure index studies have taken two methods to measure disclosure. The first method is based on financial analysts’ ranking, the Association for Investment Management and Research (AIMR) index, on overall corporate disclosure practices with investors (i.e. an aggregated disclosure measure on e.g. annual reports, quarterly reports, analyst meetings and conference calls). This ranking is based on professional users’ (e.g. financial analysts’) perception of disclosure usefulness and captures both the quality and quantity aspects of disclosure (Leuz and Wysocki, 2016). Nevertheless, the AIMR rankings are only available for large U.S. firms and until year 1995, which makes it limited in terms of sample coverage and time-period. Moreover, it is unclear what arguments were made by analysts in the selection of firms included in the ratings and biases brought in to the scoring (Healy and Palepu, 2001). Other rankings provided by professional organisations include; Standard and Poor’s Transparency and Disclosure score, and the Center for International Financial Analysis and Research (CIFAR). A more “local” focused ranking is the one prepared by the Swedish Stockholders’ Association, which annually organizes a competition, “Best Annual Report”, and scores the annual reports of all listed firms at the Stockholm Stock Exchange. The advantage of using a pre-developed disclosure index is the possibility of comparing results with prior work. However, a disadvantage of analyst prepared disclosure indices is that they mainly cover large firms and suffer from coverage and size bias issues. Furthermore, the aim behind their construction differs, as the AIMR score aimed to capture disclosure practices of U.S. listed firms and the S&P transparency score and the CIFAR index were developed with an aim to compare disclosure practices globally (Leuz and Wysocki, 2016).

The second method, in the group of disclosure indices, consists of self-constructed disclosure indices. In spite of the existence of readily available disclosure indices it is not unusual that researchers choose to develop their own indices for the specific research question being examined. Self-constructed disclosures indices have a long history in disclosure studies and date back to Cerf’s study in 1961, and have been a technique that has characterized disclosure studies over the years (e.g. Cooke, 1989; Depoers, 2000; Hope 2003; Francis et al., 2008; Muslu, 2010). A general assumption in disclosure index studies is that the amount of disclosure of specific topics proxies for the quality of disclosure (Beattie, McInnes and Fearnley, 2004). These types of indices are based on a checklist with preselected disclosure items, where generally the presence or absence of each item in firms’ financial statements or other financial documents is recorded. Scoring for each disclosure item can take several forms, but maybe the most common is a binary nominal score to indicate presence or absence of a certain item, or an
ordinal score level (i.e. weighted) to indicate the preciseness of a disclosure item described (Beattie et al., 2004). A well-cited disclosure study that uses a self-constructed disclosure index is the one by Botosan (1997). According to her index, quantitative disclosure information is worth more than qualitative disclosure and thus a three level scoring is applied in the recording of each disclosure item. Indeed, authors (e.g. Chen and Jaggi, 2000; Archambault and Archambault, 2003) have highlighted their concerns regarding the subjectivity involved in weighted disclosure items. However, due to less subjectivity, unweighted disclosure items seem to have become a more common method in annual report disclosure research (Ahmed and Courtis, 1999). For further evaluation on this matter, the interested reader is referred to Paper IV, which examines whether index-based disclosure measures are sensitive to weighting.

Perhaps the main limitation of self-constructed indices is that they are labour intensive and require subjective decisions made by the researchers, which in turn make the findings difficult to replicate and generalize. In addition, as discussed by Leuz and Wysocki (2016), disclosure indices are limited to equal or subjective weights to disclosure items that probably differ significantly in their importance and informativeness and capture the existence of a particular item rather than information quality. However, a self-constructed index increases the researcher’s confidence that the measure captures what is intended to be captured (Healy and Palepu, 2001) and can be tailor-made to the sample of firms and setting being studied.10

The limitations of each of the reviewed disclosure measures bring calls for the development of improved measures of disclosure quality (e.g. Core, 2001). Researchers have recently begun to borrow techniques used in natural language processing in fields like computer science and linguistics (Li, 2008, Miller, 2010; Loughran and McDonald, 2014). Li (2008) is one of the first studies employing textual-analysis based techniques borrowed from the linguistics discipline. Li (2008) examines the readability of annual reports with the so-called Fog Index and shows that annual reports of firms with poor performance are more difficult to read. Essentially, the Fog Index calculates a weighted average of the number of words in a sentence, and the number of long words per word. However, just as with the AIMR ratings and self-constructed disclosure indices, the natural language processing technology measures capture both voluntary and mandatory disclosure (Beyer et al., 2010). Using text-based measures in disclosure studies is relatively new and it is yet unclear what the proxies capture and how well they work in empirical studies (Leuz and Wysocki, 2016).

10 Botosan (1997) constructs an index limited for U.S. manufacturing firms in year 1990. S&P’s Transparency and Disclosure index was constructed for international firms, with the aim to capture variation in disclosure practices across countries, not within countries (Francis et al., 2008).
To summarize this review section on accounting quality measures, it ought to come clear that an empirical accounting researcher faces a variety of measures to assess reporting quality. Each one of the measures comes with its qualities and limitations, which should be weighed when choosing a measure. Ultimately, disclosure quality and its relevance depend on the decision context, which is possibly the main determinant in the selection of a suitable disclosure measure. Because of the purpose of this thesis and that it examines the determinants and consequences of disclosure in corporate annual reports, this thesis employs a self-constructed disclosure index in each paper to test for the relationships pictured in Figure 1. As was discussed in the broad category of disclosure measures, self-constructed indices are subject to discretionary choices made by the researcher, which may have implications on the results. Therefore, Paper IV of this thesis analyses whether different disclosure measures are sensitive to the discretionary choices taken in deriving them.
3. The Swedish setting and regulations

Since this thesis focuses on disclosure practices of Swedish publicly listed firms, it is of importance to be familiar with the features of the Swedish capital market and corporate governance. This chapter aims to introduce the reader to the Swedish setting, which contrasts in several aspects when compared with Anglo-Saxon countries. Moreover, financial reporting regulations and standards during the studied period 2001-2013 are presented in sub-section 3.2. Lastly, in sub-section 3.3, the main data sources and the sample selection of this thesis are presented. However, for a detailed description of the procedure of sample selection and databases used for extraction of firm data, please refer to the individual studies.

3.1 A transparent economy with influential owners

There are at least four features that make Sweden an interesting setting for studying disclosure practices of firms. First, ownership of Swedish listed firms is concentrated and family firms constitute a common form of ownership structure. Second, Swedish firms have remarkably informative and high quality annual reports in an international perspective. Third, the Swedish setting is also characterized by the presence of strong extra-legal mechanisms in the form of high newspaper circulation, and furthermore media plays an important role in the society. Fourth, in international comparison, Swedish CEOs are underpaid and the use of stock options is uncommon. Evidently, there are a few features that make the Swedish setting interesting in studies of firms’ disclosure practices. This section continues by elaborating upon the four abovementioned features, by first starting to describe the specifics of the ownership structure of Swedish listed firms.

Ownership structure

In contrast to Anglo-Saxon firms, a typical Swedish publicly listed firm has high ownership concentration and there is a known controlling owner (see Table 3). These controlling owners are commonly family members or a private investor (long-term private owners) who has acquired control (Agnblad, Berglöf, Högfeldt and Svancar, 2002). Alternatively, the founding family owner remains in management positions. For example, in H&M, the Persson family holds this dual position. The dominant ownership and control by fam-
ilies and long-term owners has largely influenced the development of the Swedish capital market in the past decades (e.g. the Wallenberg business empire).

In a European perspective, Sweden is not unique when it comes to family-controlled firms. Instead, a majority of European firms, except in the UK, have concentrated ownership where control is primarily in the hands of families (e.g. La Porta et al., 1999; Barontini and Caprio, 2006). One strategy to retain the influence of these large shareholders has been by enabling the application of so-called control-enhancing mechanisms (CEMs), e.g. issuing shares with privileged voting rights via dual-class shares. This way, the control by the largest owner can be strengthened, while only a small portion of equity ownership is retained, known as controlling minority shareholder (Bebchuk et al., 2000; Cronqvist and Nilsson, 2003). The allowance of CEMs has likely contributed to the high presence of long-term controlling owners in Swedish publicly listed firms.

The wide usage of CEMs among Swedish listed firms is somewhat unique when compared internationally. In fact, Sweden has the highest proportion of firms with dual-class shares and the second-highest proportion of pyramid ownership structures of all countries (Faccio and Lang, 2002; ISS, 2007). Moreover, Sweden is among the few countries to allow the use of dual-class shares and pyramids at the same time (La Porta et al., 1999). However, research suggests that a strong separation between ownership and control put minority shareholders at a disadvantage because of the possible rent extractions by the controlling owners (e.g. Shleifer and Vishny, 1997; Claessens et al., 2002; Cronqvist and Nilsson, 2003). Interestingly, Sweden provides an interesting setting given the allowance of strong separation of ownership and control and a relatively weak investor protection (e.g. La Porta et al., 1998; Leuz, Nanda and Wysocki, 2003), which contradict the well-developed Swedish equity market. To illustrate the prevalence of controlled ownership in Sweden, Table 3 presents data on ownership structure in Swedish publicly listed firms.

In Panel A, we note that the largest owner in the sample, on average, controls 33% of the voting rights in a firm and the five largest shareholders control 55.8% of the voting rights. In other words, the five largest owners have absolute control in the average firm. Furthermore, in 21.4% of the firms, the largest owner possesses more than 50% of the voting rights, making him or her the majority owner. 56.7% of the firms have an owner with at least 20% of the voting rights and only 10.4% of the firms are widely held (i.e. no owner controls more than 10% of the voting rights). Thus, the ownership data presented in Panel A in Table 3 clearly demonstrates that Swedish listed firms are concentrated and that the average firm has a clear controlling owner in place.
Table 3. Corporate ownership structure in Sweden

<table>
<thead>
<tr>
<th>Panel A</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>% Voting rights held by the largest owner</td>
<td>33.0%</td>
</tr>
<tr>
<td>% Voting rights held by the five largest owners</td>
<td>55.8%</td>
</tr>
<tr>
<td>% of firms with an owner &gt;50% of voting rights</td>
<td>21.4%</td>
</tr>
<tr>
<td>% of firms with an owner &gt;20% of voting rights</td>
<td>56.7%</td>
</tr>
<tr>
<td>% of firms with dispersed ownership &lt;10%</td>
<td>10.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>% of firms employing CEMs</td>
<td>55.4%</td>
</tr>
<tr>
<td>% of family firms employing CEMs</td>
<td>68.8%</td>
</tr>
<tr>
<td>% of firms employing DVR</td>
<td>51.2%</td>
</tr>
<tr>
<td>% of family firms employing DVR</td>
<td>66.9%</td>
</tr>
</tbody>
</table>

Note: The sample consists of listed firms on the Stockholm Stock Exchange during the years 2001 to 2013 (2,670 firm-year observations, of which 1,242 firm-years are family firms), excluding financial firms (investment and banks), foreign firms, firms with revenues less than SEK 25 M and firms with negative equity at the end of the year. Reported numbers are averages.

Furthermore, Panel B of Table 3 presents data on the prevalence of CEMs among the Swedish listed firms during the studied period. Specifically, the data shows that every second firm in the sample employs some form of CEMs, which includes differentiated voting rights, pyramiding or cross-shareholding. Moreover, about 70% of the family firms in the sample employ CEMs. Lastly, 51% (67%) of the firms (family firms) employ shares with different voting rights. Collectively, this data demonstrates that Swedish firms have a clear dominant owner where control is frequently enhanced via usage of various types of CEMs and controlling minority shareholders are common.

Essentially, the Swedish setting characterizes strong influential owners and a well-developed equity market where individuals actively invest in one of the most transparent economies of the world. This setting, allows this thesis to investigate disclosure practices of firms where the primary conflict of interest is Type II equity agency problems and where controlling owners play an important role in the corporate governance of a firm. In such, the potential influence of controlling owners on disclosure practices can be studied, a feature that is less identified in Anglo-Saxon settings. Furthermore, as mentioned above, Sweden is one of the few countries allowing various mechanisms to separate control and ownership, a feature that research suggests leads to greater risk of minority shareholder expropriation (e.g. Claessens et al., 2002; Villalonga and Amit, 2006). Whether disclosure is used to aggravate or solve this problem remains an empirical question as yet.
Although, Swedish ownership structures appear different from the typical Anglo-Saxon setting, several firms around the world are comprised of large owners (e.g. La Porta et al., 1999) and thus findings of this thesis could apply to other settings as well.

**Accounting quality**

A second distinctive feature is that Swedish listed firms are known for their high quality annual reports and low earnings management levels (e.g. La Porta et al., 1998; Burgstahler et al., 2006). A yearly report prepared by an independent consulting firm, Report Watch (2016), confirms this by documenting that among the top ten best annual reports, six are Swedish listed firms.\(^\text{11}\) Leuz et al. (2003) argue that the properties of a firm’s reported earnings can be explained by a country’s legal and institutional environment. In their international comparison of pervasiveness of earnings management across 31 countries, Leuz et al. (2003) classify Sweden in the group with a moderate investor protection level and strong legal enforcement, whereas countries of English origins are generally classified as having strong investor protection and legal enforcement. Interestingly, though, Sweden together with the Anglo-Saxon countries of the U.S., Australia and Ireland score among the lowest on their earnings management measure (Ibid.). Furthermore, Sweden also exhibits the highest disclosure index score and obtains 83 points of a total of 90 disclosure items. The UK and Singapore, which obtains 78 points out of the total 90, share the second place in the disclosure index rating (Ibid.). Lastly, Swedish ownership and control data are also remarkably detailed and transparent (Agnblad et al., 2002). Evidently, despite the moderate investor protection and highly concentrated ownership, Swedish firms exhibit low levels of earnings management in comparison with countries where investors are supposedly better protected.

**Extra-legal mechanisms**

Undeniably, Swedish firms’ annual reports excel in international comparisons and it is a quite compelling view considering the dominant controlling owners present in the majority of Swedish listed firms. Earnings management is expected to be more pervasive in countries with less developed stock markets, more concentrated ownership and lower disclosure levels (Leuz et al., 2003). This description, however, does not suit Sweden, as annual reports of Swedish listed firms continue to rank among the top in international evaluations of annual reports. In addition, ownership structures are transparent and the ultimate owner of a pyramidal structure can be identified (Cronqvist and Nilsson, 2003). As argued by Agnblad et al. (2002), this

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\(^{11}\) The following six annual reports include: Trelleborg, Boliden, Atlas Copco, VOLVO, SCA and Electrolux (in ascending order). In this survey, 400 annual reports of worldwide publicly listed firms (excluding the financial sector) are evaluated (Report Watch, 2016).
enigma can be explained by informal enforcement mechanisms, such as reputational concerns and social status that may limit minority abuse. Certainly, the third distinctive feature of Sweden, i.e. high media coverage, is an important governance mechanism that substitutes or complements formal law in that firms behave “well” to protect their reputation (Dyck and Zingales, 2002; Sinani et al., 2008). The underlying idea is that the risk of losing a good reputation may serve as a governance mechanism, which may stimulate managers to be effective. Therefore, in the case of Sweden, the independent media has likely had an important role in supplementing the relatively weak formal investor protection in place. It is therefore expected that firms that are frequently followed by media are more concerned regarding their disclosure practices, which is indicated in Paper I.

CEO pay
Sweden is generally regarded as an egalitarian society where power distance is low and there is a strong trust in institutions (Hofstede, 1983). The fourth distinctive feature of Sweden is the moderate pay levels of Swedish CEOs when compared internationally (e.g. Fernandes, Ferreira, Matos and Murphy, 2013). As argued in Chapter 2, disclosure behaviour is influenced by manager-level incentives, which is why it is relevant to understand the pay structure of CEOs. On average, the Swedish CEOs earn about one third of their European colleagues in comparable firms when excluding pension costs (Hallvarsson and Halvarsson, 2010). Similarly, the variable compensation component is smaller among Swedish CEOs compared to their European counterparts. For further discussion on CEO compensation in Sweden, please refer to Chapter 5, where a background story to Paper I of this thesis concerning the executive compensation disclosure practices in Sweden is provided.

In sum, this sub-section introduced the reader to four distinctive features of Swedish capital-markets and the corporate governance of firms. In specific, it has been asserted that Sweden is an interesting setting to study voluntary disclosure practices of firms and this is particularly the case with the highly concentrated ownership structure of Swedish publicly listed firms and its possible impact on corporate disclosures. Additionally, the exceptionally high quality annual reports, the importance of extra-legal mechanisms and low CEO pay levels were also briefly touched upon. The next sub-section continues by introducing international accounting standards and laws that have contributed to the development of accounting standards applied by Swedish publicly listed firms.
3.2 Regulations

During the study period of this thesis 2001 to 2013, Swedish financial reporting regulations underwent two major changes: the introduction of the International Financial Reporting Standards (IFRS) and the corporate governance code in 2005. These two changes were likely a result of major revisions in accounting standards and increased demand for transparency of corporate governance experienced around the world.

As a consequence of the dot-com bubble in late 1990s and the impact of numerous corporate and accounting scandals, such as the ENRON and Tyco scandals in the U.S., confidence in regulators and in the reliability of financial information in corporate annual reports was jeopardized. The new regulations in response to the financial scandals were introduced to increase the accuracy of financial information in annual reports. One of them is the Sarbanes-Oxley Act of 2002, which requires stricter responsibilities for all U.S. publicly listed firms’ boards, management and auditors. Nonetheless, the increased regulations on disclosure and corporate governance practices did not only have an effect on U.S. listed firms, but also on cross-listed foreign companies, which had to adhere to local accounting standards. This in turn spurred discussions on accounting regulation amendments at an EU level, as well as work towards increased transparency and comparability across European firms’ financial reporting. In 2002, the European parliament decided that from 2005 all European listed firms would be required to follow one single set of accounting standards, i.e. the IFRS. For Swedish listed firms, this meant a change from local accounting standards (the Swedish Financial Accounting Standards Council, SFASC) to the IFRS.

Until the introduction of the IFRS in 2005, Swedish firms listed on the Stockholm Stock Exchange (SSE) were obliged to comply with or explain deviations from recommendations issued by the local major accounting body at the time, Redovisningsrådet (the Swedish Financial Accounting Standards Council (SFASC)). However, the existence of a large amount of Swedish multinational firms created the demand for an investor-oriented accounting system and reporting according to International Accounting Standards (IAS) (Hellman, 2011). This led to the recommendations issued by the SFASC largely being based on IAS and IFRS with minor deviations when necessary due to Swedish law (Ibid.). Accordingly, with the mandatory introduction of IFRS in 2005, a majority of Swedish listed firms had already gradually started to prepare their annual accounts according to IFRS and the Swedish adoption of IFRS during 1991-2004 is therefore generally seen as a soft adoption.

12 In Sweden, there are two regulated securities markets, (1) NASDAQ Stockholm OMX, (2) Nordic Growth Market, NGM, (which is owned by Börse Stuttgart since 2008).
(Hellman, 2011). Consequently, with the introduction of the IFRS in 2005, there were no major changes in the accounting regulations. However, as illustrated in Table 1 in the Introductory Chapter there was an incremental increase of disclosure levels in the adoption year, where an annual report was 18 pages longer as compared to 2001.

The Swedish corporate governance code, based on the principle of “comply or explain”, was introduced in 2005 and has undergone revisions in 2008, 2010, 2015 and 2016. The code provides recommendations to boards and accounting systems to prohibit corporate governance scandals and accounting frauds. In 2005, the code only covered Swedish listed firms with a market value above SEK 3 billion and three years later in 2008, the code was broadened to all Swedish firms traded on a regulated market. The Swedish corporate governance code is a result of the international development of governance codes, among which the Cadbury code implemented in the UK in 1993 was a response to the major corporate scandals in the early 1990s. Nonetheless, there are certain distinctions with the Swedish model when compared to the Anglo-Saxon world. In particular, it includes a positive view of an active and responsible ownership, which as discussed in section 3.1 is evident by the dominant presence of controlling owners on the boards of directors.

In contrast to the executive intensive boards in Anglo-Saxon countries, Swedish law only allows one executive on the board of directors, which is usually the CEO. Moreover, the law prohibits dual-chair responsibilities, implying that the same individual cannot hold the CEO and chairman positions at the same time. The Swedish Code also states that the majority of the board members are to be independent of the company and its management. Additionally, at least two board members must also be independent from the major shareholders (i.e. a shareholder with more than 10 percent of the capital or votes of the company). Hence, in contrast to the strong influence of executives in Anglo-Saxon boards, Swedish boards encourage controlling owners to take an active part in the governance of the firm. Consequently, the CEO’s actions are largely dependent on the preferences and interests of the controlling owners. These active owners are expected by minority shareholders, and Swedish society at large, to take a long-term responsibility and hold on to their shares even in tough times (Lekvall, 2009). A typical example is the Wallenbergs who have owned and controlled several Swedish publicly firms for five generations.

Beyond the IFRS, the Swedish corporate governance rules are made up of the Annual Accounts Act of 1995 (Årsredovisningslagen), the Companies Act of 2005 (Aktiebolagslagen), the Book-keeping Act of 1999 (Bokförings-
lagen) and a self-regulatory system including statements on generally accepted practices on the securities market. The Annual Accounts Act is essentially based on EU directives and provides the legal framework for the preparation of the annual accounts of Swedish listed firms and ensures that the accounts are in compliance with the IFRS standards.

Furthermore, firms listed on the SSE are obliged to follow the standards issued by SFASC according to their listing contract. The SFASC based all its standards on internationally accepted standards and only differed when IAS standards conflict with the Annual Accounts Act. In 2007, the SFASC was taken over by the Swedish Financial Reporting Board (Rådet för finansiell rapportering, SFRB).14 Lastly, the Swedish Financial Supervisory Authority (Finansinspektionen) is the governmental authority responsible for the oversight and sanctioning of financial markets and their participants. Their tasks also include certification of reliable corporate disclosures so that they are made clear and complete.

3.3 The data sample of this thesis

This thesis utilizes data gathered on Swedish publicly listed firms during the years 2001 to 2013. The main data of this thesis is collected from Swedish publicly listed firms’ annual reports. The annual reports are obtained from corporate websites, where primarily data on the disclosure construct has been gathered from these reports. In addition, information on financial accounting data and firm data is obtained from several databases including, DataStream, Sixtrust and Affärsdata. Moreover, in Papers II and III, ownership data is used in the analysis and obtained from the annually prepared booklet Owners & Power in Swedish Corporation by Sven-Ivan Sundqvist.

The sample, presented in Table 4, consists of non-financial Swedish publicly listed firms on the Stockholm Stock Exchange during the years 2001 to 2013.15 During this 13-year period, several regulatory changes concerning Swedish listed firms took place. This primarily includes the mandatory adoption of the International Financial Reporting Standards in 2005, but also the introduction of the Corporate Governance Code in the same year (amended two times during the studied period; in 2008 and 2011), the amendment of

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14 A private body, the Swedish Financial Reporting Board (Rådet för finansiell rapportering, earlier: Redovisningsrådet). The SFRB aims to develop interpretations of IFRS standards for consolidated financial statements for issues that are very specific to the Swedish environment. This includes additional disclosures that must be included in consolidated financial statements based on Swedish law. In addition, it ought to develop standards for the separate financial statements of a company (subsidiary or parent) that is included in consolidated financial statements prepared in accordance with the IFRS.

15 However, the sample period in the single papers differs, where Paper I and II examine the period 2001 to 2010 and Paper III and IV extend to 2013.
the Industry Stock Exchange Committee (Näringslivets Börskommitté: NBK) in 2002 and the Swedish Companies Act in 2005. Although, disclosure practices of firms may be argued to be sticky across years, a benefit of employing panel data is the ability to examine firms’ responses to changes in disclosure regulations.

Except for the financial and investment sectors, all industries are included in the sample. Moreover, foreign companies are excluded from the analysis. These exclusions are made due to different disclosure requirements. In total, the sample consists of 3,419 firm-year observations (405 firms) and the distribution of the sample is presented in Table 4. Because of the unbalanced panel data the number of firms each year varies (this may be due to delisting, acquisition or bankruptcy). As noted in Table 4 the majority of the firms in the sample are classified within the manufacturing industry (1,609 firm-years observations).
Table 4. The sample

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
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<td>37</td>
<td>40</td>
<td>571</td>
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</tbody>
</table>

Note: Foreign include foreign listed firms. Financials include financial institutions and real estate firms.
4. The disclosure index

In this chapter, I present the methodological choices made during the research process of this thesis. This primarily includes the choice of a suitable disclosure measure. More specifically, this thesis employs a self-constructed disclosure index to measure voluntary disclosure in annual reports. The aim with this chapter is to present the justifications for the choice of employing a self-constructed disclosure index. Moreover, the content of the disclosure index, data collection, and coding of the data, is provided. For a more extended discussion, the interested reader is referred to Paper IV, the purpose of which is to examine the applicability of this index and evaluate alternative choices available in constructing an index.

4.1 Measuring voluntary disclosure

This thesis focuses on the topic of corporate disclosure, particular on voluntary disclosure in annual reports. As Figure 1 in the Introductory Chapter shows, voluntary disclosure has different roles in Paper I-IV and is correlated with various disclosure determinants and capital-market effects. Thus there is a need to measure disclosure. As discussed in sub-section 2.6.2, no unique and generally accepted metric for disclosure exists, and it is obvious that preparers and users may differ in their preferences for disclosure. Voluntary disclosures may be measured either through existing analyst-based or through self-constructed indices that are more tailored to specific research inquiries. Whilst this thesis adopts the latter approach, both options have their own benefits and drawbacks. These are briefly presented below, together with the motivation behind why I chose to build a self-constructed index for this work.

One example of an existing analyst-based disclosure index is the Swedish Stockholders’ Association (SSA) annual “Best Annual Report” competition. However, a limitation of employing an existing disclosure index is that the objective of gathering the disclosure data is not always obvious (Leuz and Wysocki, 2016). For instance, the ranking of SSA’s disclosure score is estimated by providing a score to firms that disclose an item, which is included in the SSA’s index. This assessment, however, does not consider the quality of the disclosed item, but rather its presence or absence. As such, the disclosure score obtained from the SSA’s ranking can be viewed as capturing dis-
closure volume rather than quality (Anchev, Hellström and Olsson, 2016). Because of this researchers have come to derive their own metrics for disclosure by using observable characteristics in annual reports, such as volume and inclusion of certain information that is expected to be useful for the target user.

In principle, an alternative is to adopt an index used in prior studies in the field. A potential benefit of this approach is that it allows comparability. However, it is often difficult to find appropriately tailored extant indices. Hence, some researchers prefer, like myself, to develop their own tailor-made indices (see review by Ahmed and Courtis, 1999). A self-constructed index has the obvious advantage of adapting to the situation under study, but may raise concerns about the researcher’s influence on the results through the choices made in designing her index (e.g. Beyer et al., 2010). To alleviate such concerns and contribute to the research community’s understanding of the impact of discretion in index constructions, Paper IV reports on comparisons I made between several possible index constructions. Thus, the choices made in Paper I-III are put into context by applying modified indices to the same set of data. Collectively, this study develops an index that is employed in the somewhat differing research aims in Paper I-IV. Several reasons motivate me to choose this as an appropriate method to measure disclosure.

First, to fulfil the aim of this thesis I need to empirically measure voluntary disclosure of accounting information in Swedish publicly listed firms’ annual reports. As such, this requires a measure that takes the Swedish institutional setting into consideration and captures variations in voluntary disclosure practices across firms. Second, the interest is to measure some specific disclosure areas, as for instance in Paper I the focus is on executive compensation disclosure. In Paper II-IV there is a broader interest in the type of disclosure information, where in addition to executive compensation, notes to the financial statements, governance and strategy disclosures are added. Important to mention is that in all four papers the perspective of capital providers is taken in the consideration of valuable disclosure items. Third, employing a self-constructed index allows me the possibility to study a time period and setting of interest. As such, I am not limited to a certain selected group of firms in a specific capital market and time period (e.g. compare with the AIMR disclosure score as discussed in section 2.6 and SSA’s “Best Annual Report”). For instance, in Paper I, we are interested in examining how firms react to changes in mandatory disclosure regulations. Swedish publicly listed firms experienced such a change with the introduction of stricter rules on executive compensation disclosure in 2003 (issued by the

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16 Furthermore, this pre-existent disclosure ranking is not provided for 2006 and some disclosure items are allocated weights (e.g. strategy, product/service, business model, operations, markets and competitors are allocated most weight) (Anchev et al., 2016).
Swedish Industry Stock Exchange, i.e. the NBK) and the implementation of the IFRS in 2005. Consequently, the index constructed for this thesis covers the time period 2001 to 2013, a time when several regulatory changes took place. Essentially, in the four studies disclosure is employed as either the explained-(Paper I, II and IV) or explanatory variable (Paper III and IV) in the analysis.

In sum, being fully aware of alternative disclosure measures, I argue that there are valid reasons that justify my choice of constructing a disclosure index for this thesis project. More specifically, this technique provides me the advantage of tailoring a measure to the specific aim of each study. Moreover, manually gathering the disclosure information allowed me to assess whether the disclosed item is informative or not. As such, the process of building a self-constructed index made sure that the index captures what is intended to capture. The following subsection continues by describing the choices made in designing the index of this thesis.

4.2 The construction of the disclosure index

To design the index for this thesis, I make different discretionary subjective choices. First, I create an index that solely captures information provided in companies’ annual reports. Although, I am well aware that firms may use alternative information channels in their communication with capital-market participants, e.g. conference calls, websites and press releases, there is consensus that the annual report still remains a valid proxy of the level of voluntary disclosure provided by a firm across all disclosure avenues (Lang and Lundholm, 1993; Botosan, 1997).

Second, in order to capture cross-sectional disclosure variations across firms, I select disclosure items that are voluntary (see Table 5). However, due to the regulatory reform on executive compensation disclosure in 2003, # items 12-21 in Table 5 became mandatory. At the same time, Paper I shows that after the reform the disclosure on these items still vary across the examined firms. Although, it could be argued that some of the selected items in Table 5 capture both voluntary and mandatory disclosure, the main purpose is to measure disclosure variations and this is not possible on an index that is solely based on mandatory disclosure items.

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17 The complete index is employed in Paper II-IV and a partial of the index is utilized, i.e. information on executive compensation, in Paper I.
18 This concern is, however, taken into consideration in the analysis in each paper by controlling for firm size as generally larger firms have a more active communication role via different venues. Furthermore, Lang and Lundholm (1993) show that disclosures in annual reports are positively related with a firm’s corporate information environment and thus serve as a good proxy of firms’ disclosure levels.
Furthermore, the disclosure items are selected to meet the need of investors and creditors in their valuation decisions. More specifically, disclosure is expected to be appreciated if specific items are a) available, b) can be trusted, and c) are clearly defined, reliable and valid. Beyond capital providers, financial analysts also constitute a large user group of the financial reports and act both as information intermediaries and complements in capital markets (Lang and Lundholm, 1996). Since analysts’ forecasts may aid in investors’ decision-making and confirm disclosure quality, the index is constructed to represent relevant information to investors and financial analysts. Thus, disclosures on, for instance, corporate social responsibility and sustainability are not covered by this index, as this sort of information is likely to be more of interest to environmentalists and labour unions.\(^{19}\) Additionally, my selection of disclosure items is also to a certain degree guided by prior studies (e.g. Botosan, 1997; Ali et al., 2007). Essentially, the disclosure index consists of 37 disclosure items as listed in Table 5, where each item represents information that can be potentially disclosed by any firm.

\(^{19}\) The reason for this choice is mainly due to the fact that the majority of previous studies focus on capital providers and that according to several accounting standards the primary users of accounting information are capital providers (e.g. IFRS).

**Table 5. The disclosure index**

<table>
<thead>
<tr>
<th># Item</th>
<th>Name</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Counting</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Pages</td>
<td>Total number of pages the annual report contains.</td>
</tr>
<tr>
<td>2</td>
<td>Notes</td>
<td>The number of notes.</td>
</tr>
<tr>
<td>3</td>
<td>PagesNotes</td>
<td>The number of pages devoted to the notes.</td>
</tr>
<tr>
<td>4</td>
<td>AccPrin</td>
<td>Length of the note covering accounting principles.</td>
</tr>
<tr>
<td><strong>Governance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Governance</td>
<td>The number of pages devoted to corporate governance matters.</td>
</tr>
<tr>
<td>6</td>
<td>Internal control</td>
<td>The number of pages devoted to internal control.</td>
</tr>
<tr>
<td>7</td>
<td>Firm’s share</td>
<td>The number of pages devoted to information concerning the company’s share.</td>
</tr>
<tr>
<td>8</td>
<td>Meeting</td>
<td>Board members’ attendance on board meetings.</td>
</tr>
<tr>
<td>9</td>
<td>Experience</td>
<td>Board members’ previous working experience.</td>
</tr>
<tr>
<td>10</td>
<td>Owners</td>
<td>Information on more than the ten largest owners.</td>
</tr>
<tr>
<td>11</td>
<td>Analysts</td>
<td>The names of analysts following the firm.</td>
</tr>
<tr>
<td>12</td>
<td>CEOComp</td>
<td>Information on CEO’s compensation components.</td>
</tr>
<tr>
<td>13</td>
<td>CEOVarComp1</td>
<td>Some information that CEO variable compensation exists.</td>
</tr>
<tr>
<td>14</td>
<td>CEOVarComp2</td>
<td>An elaborate discussion regarding the CEO’s variable component pay.</td>
</tr>
<tr>
<td>15</td>
<td>Retire1</td>
<td>Retirement age of the CEO.</td>
</tr>
<tr>
<td>16</td>
<td>Retire2</td>
<td>Retirement age for other executives.</td>
</tr>
<tr>
<td>17</td>
<td>Termin</td>
<td>CEO’s termination conditions.</td>
</tr>
<tr>
<td>18</td>
<td>Sever</td>
<td>CEO’s severance conditions.</td>
</tr>
<tr>
<td>19</td>
<td>NonCEO1</td>
<td>At least two pay components are provided.</td>
</tr>
<tr>
<td>20</td>
<td>NonCEO2</td>
<td>A discussion on compensation package.</td>
</tr>
<tr>
<td>21</td>
<td>NonCEO3</td>
<td>Compensation info. is provided in a table with adjoining text.</td>
</tr>
</tbody>
</table>
Table 5 presents the items that comprise the disclosure index. I classify the items into three categories based on their content commonalities (for a detailed description of each disclosure item, please refer to Table 1 in Appendix). These categories relate to information on accounting policy in the notes (i.e. counting), corporate governance and strategy. To the best of my knowledge no prior study has considered these disclosure areas aggregated in one index. As such, a firm’s disclosure score obtained from this index is not biased towards a certain disclosure category and captures different aspects of disclosure quality in a firm’s annual report. By creating a broad disclosure index, the index is therefore expected to provide a good proxy for a firm’s overall disclosure environment. Admittedly, the index construction is due to subjective decisions, which may have incremental impact on the results in the different studies of this thesis. Therefore, additional tests are made on the index where different setups of the index are compared and tested for in Paper IV. In addition, in Paper IV, I also provide a detailed reasoning behind each disclosure category included in the index.

4.3 Collecting the disclosure data

Essentially, the purpose of the disclosure index is to assign an aggregated disclosure score obtained from the index for each firm in every financial year during the time period 2001-2013.

I gather all accounting information from the annual reports and systematically code it into an Excel document. Furthermore, I use a dichotomous scoring procedure in the process of data collection. This means that I award one point to a firm that fulfills the disclosure item criteria stated in the comment.
column in Table 5 (see Appendix for a detailed description of the disclosure items). Important to mention though is that the disclosure is assessed by its content, clarity and relevance, and thus zero points are awarded in cases when information is insufficient. In such cases, my assessment of accounting information does not “simply” note the presence or absence of a disclosure item, but rather considers its quality. Furthermore, certain disclosure items require less subjective judgement and are assessed by e.g. counting the number of pages of a certain disclosure component. This includes for instance disclosure item #3 in Table 5, which regards the number of pages devoted to the notes of the financial statements. As such, disclosure items that are counted are converted to a binary score based on the average of the sample.

As a final step in obtaining the total disclosure score (denoted as the CGS-SCORE in the papers), the total scores of the three categories are added and divided by the total possible disclosure score (i.e. 37). Hence, the total disclosure score a firm-year observation can possibly obtain is 1 point, where a higher disclosure score indicates higher disclosure levels and thus quality.

As I present the above, I treat each disclosure item as being of equal worth and employ a binary scoring procedure. However, it could be argued that certain disclosure areas or characteristics are more appreciated by the user of accounting information and therefore these firms deserve an additional score for disclosing precise and useful information. Similarly, prior disclosure studies assign weight to items that are regarded as more valuable. For instance, Botosan (1997) assigns additional points to disclosure that are of a quantitative manner. Consequently, this method is a subjective choice based on the researcher’s own judgement and could therefore have a significant impact on results as it underestimates the potential quality provided by qualitative information. Therefore, accounting researchers tend to employ unweighted disclosure indices (Ahmed and Courtis, 1999). The consequences and implications of employing a weighted index are further discussed and examined in Paper IV, which is why interested reader is referred to this study.
This chapter provides a background story to each one of the four papers in this thesis. The purpose is to position each study in a broader context, by addressing the current debate surrounding the topics of each paper. Paper I focuses on disclosure of executive compensation practices, which is why a background to the pay-performance issue and CEO compensation structures in Sweden is compared internationally. Paper II centres on founding-family firms and their disclosure practices. Therefore the background story of Paper II focuses on the particulars of founding-family firms and the prevalence of mechanisms used to enhance their power. Paper III investigates the capital-market effects of firms’ disclosure practices and the recent concern with ‘information overload’ is related. Lastly, Paper IV examines the applicability of a self-constructed disclosure index and thus a discussion regarding disclosure measures in empirical accounting research is provided.

5.1 Paper I. Determinants of Executive compensation disclosure incentives: The Case of Sweden

The purpose of Paper I is to examine firm-level determinants of executive compensation disclosure among Swedish publicly listed firms in the years 2001 to 2010. This is motivated by the increased disclosure requirements on executive compensation from both international and national levels and the fact that these kinds of disclosures are entangled with management’s disclosure incentives.

Undoubtedly the pay level of executives in publicly listed firms has drawn large attention from both media and the academic research community (see review by Bushman and Smith, 2001). Remunerations that were seen as outrageous by many, including minority owners, not least because they had only vague links to performance, gave rise to calls for increased transparency on executive pay levels and a stronger link between pay and performance. The European Commission has proposed to strengthen shareholder’s involvement in executive compensation formation by introducing the “say-on-pay” principle for Europe’s largest firms (EC, 2014). Essentially,  


64
this practice allows shareholders the right to vote on executives’ compensation packages at the annual general meeting. The say-on-pay rule was adopted in the U.S. in 2010 as a part of the Dodd-Frank Wall Street Reform, which requires firms to give shareholders a vote on executive compensation at least every three years. In Sweden, the “say-on-pay” principle was implemented in 2006, which implies that at the annual general meeting shareholders are required to vote for or against the suggested executive pay guidelines (Swedish Company Act 7 Ch. 61§). One motive for the “say-on-pay” principle is for shareholders to raise their voice for unreasonably high compensation schemes and in such influence the board of directors’ decision on the pay level. However, research shows that after the implementation of say-on-pay, CEO pay levels did not decrease in the UK (Ferri and Maber, 2013).

Compared to the U.S., total executive compensation levels in Sweden are relatively low (Fernandes et al., 2013). Swedish CEOs are also low paid when compared to Europe and rest of Nordic countries. In a report by the consulting firm Hallvarsson and Halvarsson (2010), the results show that on average the Swedish CEOs earn about one third of their European colleagues in comparable firms (excluding pension costs). On average, CEOs of Sweden’s 30 largest companies earned SEK 13.1 million in salary in 2009, where the highest paid was the CEO of the media company MTG who had a salary of SEK 25.3 million (compared with the lowest paid CEO of steel company SSAB who had a pay level of SEK 4.9 million).

Moreover, the composition of Swedish CEOs’ compensation packages also stands out when compared internationally. Figure 2 presents CEO pay composition of different countries. The figure clearly illustrates the low proportion of total pay that comprises variable pay for Swedish CEOs. In particular, variable pay constitutes a small fraction of Swedish CEOs’ total pay, whereas stocks, options and bonus compose the majority of U.S. CEOs’ total pay. An explanation to lower CEO pay levels in Sweden may be influenced by the egalitarian norms and low power distance (Hofstede, 1983).

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21 Similarly, Armstrong et al. (2013) show that shareholders voting on suggested CEO incentive plans have neither decreased the level nor changed the composition of future CEO incentive-compensation plans.
Nevertheless, in light of stricter regulatory reforms for efficient pay contracts, we observe a trend towards increasing total pay levels for executives around the world. In 2014, a U.S. CEO earned about 300 times more than the average worker, which can be compared to 1995 when the CEO-to-worker ratio was 123-to-1 (EPI, 2015).

Swedish CEO pay levels appear low in international comparisons and it seems that Swedish CEOs are not overpaid. However, if we take a closer look, we notice a similar increasing trend in the payment of Swedish CEOs. Table 6 presents the average total compensation, variable and fixed pay for CEOs of Swedish listed firms in the years 2001 to 2010. The data in Table 6 shows that CEOs of firms in the sample receive, on average, a total cash compensation of about SEK 5.2 million. This pay increased steadily during the examined period, with a small decline in 2002 and 2009.

Table 6 also shows the total pay breakdown, i.e. variable and fixed salaries of CEOs in the sample. The average variable pay for CEOs is on average SEK 1.0 million. Similar to the total salary, the variable pay component decreases in the years after the financial crisis, but a decline is also noted in the recession years 2003 and 2003. In addition, the average fixed salary of CEOs is about SEK 1.7 million in 2001 and doubles in 2010. From Table 6 we also note that on average 11% of total cash compensation is composed of performance sensitive components. All things being equal, this data indicates that the average total pay of Swedish CEOs and the proportion of variable pay have increased. This in turn raises concerns regarding whether CEOs are actually paid for firm performance. To evaluate this important relationship, disclosure of executive compensation becomes necessary.
Table 6. Average compensation level of Swedish CEOs

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tot</td>
<td>3.9</td>
<td>3.8</td>
<td>3.9</td>
<td>5.2</td>
<td>5.2</td>
<td>5.4</td>
<td>5.9</td>
<td>6.2</td>
<td>5.9</td>
<td>6.5</td>
<td>5.2</td>
</tr>
<tr>
<td>Var</td>
<td>1.3</td>
<td>0.5</td>
<td>0.5</td>
<td>1.4</td>
<td>1.0</td>
<td>1.2</td>
<td>1.2</td>
<td>1.0</td>
<td>0.9</td>
<td>1.2</td>
<td>1.0</td>
</tr>
<tr>
<td>Fix</td>
<td>1.7</td>
<td>2.1</td>
<td>2.2</td>
<td>2.4</td>
<td>2.6</td>
<td>2.9</td>
<td>3.1</td>
<td>3.2</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>Var/Tot</td>
<td>8%</td>
<td>7%</td>
<td>7%</td>
<td>10%</td>
<td>14%</td>
<td>15%</td>
<td>14%</td>
<td>12%</td>
<td>12%</td>
<td>13%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Note: The sample consists of Swedish publicly listed firms (2,232 firm-year observations) in the years 2001 to 2010 (financial and foreign firms excluded). Tot is the total CEO cash compensation including fixed, variable, pension and other pay. Var and Fix are variable and fixed compensation respectively. Var/Tot is the ratio between variable pay and total cash compensation.

A few years ago, the Swedish corporate world faced changes in the disclosure of executive compensation levels, both imposed by local and international regulations. Until 2006, the so-called NBK rules (Näringslivets Börskommitté) were mandatory for Swedish listed firms to be followed. Thereafter, the Annual Accounts Act (AAA) took over the disclosure rules for compensation practices. More specifically, the Annual Accounts Act requires firms to disclose total compensation pay to executives and CEOs. In addition, the different components of compensation packages, including bonus, benefits and pension costs, are required to be separately disclosed (AAA). The corporate governance code, which was revised in 2010, requires additional information on outstanding shared-based incentive systems.

One main argument for increased executive compensation disclosures is the improvement of both board members’ monitoring abilities and evaluations of managers. On the other hand, the main argument against greater disclosure of executive compensation is the risk of it leading to a CEO pay competition, which in turn may result in an upward trend in pay levels.

In sum, Sweden represents an egalitarian society, with high transparency and where the acceptance towards large income gaps is low. Interestingly though, the Swedish business environment has been dominated by large family groups that have maintained the controlling power over several listed firms for decades. This is a setting where controlling owners, rather than managers, influence governance decisions in firms. In light of this, Sweden provides a complex setting to study firms’ executive compensation disclosure incentives which is the purpose of Paper I. Given this, we find that mandatory disclosure reform increased executive compensation related disclosure, but that firm-level disclosure incentives still matter after the reform. This adds to the overall knowledge by showing that local specifics are important determinants in the formation of international accounting standards.
5.2 Paper II. Voluntary Disclosure practices by Founding-family firms

The purpose of Paper II is to examine how ownership structures, i.e. founding-family ownership, matter in voluntary disclosure practices of firms. This is particularly interesting due to two reasons. First, prior research documents that shareholders are not a homogenous group and have different preferences for accounting information (Dou et al., 2016). Second, due to the large impact of controlling founding-family owners in Swedish corporations their preferences are likely to be crucial in disclosure decisions.

It is well acknowledged that a common ownership structure in publicly listed firms around the world is one of being controlled and owned by families (La Porta et al., 1999). This includes one of the world’s largest family businesses the German Volkswagen, the retail stores of Wal-Mart, H&M and Samsung (Fortune Global 500). Anderson and Reeb (2003) report that families exist in one-third of the S&P 500 and that they account for 18 percent of outstanding equity in the United States.22 In Europe, the presence of family-firms is even stronger, where just under 50 percent of Western European corporations are family controlled (Faccio and Lang, 2002). Undoubtedly founders and their family members comprise an important group of owners that have a large influential role in the performance and governance of a corporation. The success of family-firms has often been linked to the characteristics of personal commitment, long-term perspective, continuation and entrepreneurial skills (Anderson and Reeb, 2003). Similarly, numerous studies in finance document family-firms’ performance superiority compared to non-family owned firms (e.g. Anderson and Reeb, 2003; Barontini and Caprio, 2006; Isakov and Weisskopf, 2014).23

However, one of the main challenges in family-firms involves succession to the next generation. The unique entrepreneurial skills and knowledge of the founder are not guaranteed by the successor. Thus, when we talk about family-firms, it is important to also consider how they are defined and in particular whether different generations of the family firm have different impacts on firm value. Inherited control or nepotism has been documented to have negative impact on firm performance by disadvantaging skilled workers through an inclination to hire family relatives (Pérez-González, 2006). Similarly, Villalonga and Amit (2006) find that firm value is destroyed when the descendant is the CEO, although firm value is created when founders act as the CEO or chairman of the board. The preservation of control in the fam-

22 Generally in both finance and accounting research, a family-firm is defined as a firm whose founder or a relative by either blood or marriage is an officer, a director, or the owner of at least 5% of the firm’s equity, individually or as a group (Anderson and Reeb, 2003).
23 Firm performance is measured as return on assets or the Tobin’s Q ratio. The latter is the ratio between the market value of added equity and debt and the book value of added equity and debt.
ily is obviously a motivation in such decisions. However, there are other methods through which the founding-family can retain control. Installing so-called control-enhancing mechanisms (CEMs) allow controlling owners increase control by leveraging their voting power.

In a European survey conducted by Institutional Shareholder Services Europe (ISS, 2007), multiple voting rights shares appear to be one of the most frequently used CEMs among European largest listed firms. This mechanism allows firms to issue two types of share classes in which the proportion of voting rights differ between the two types of shares. Usually the share that is offered to the market has discounted voting rights. In this way, family owners continue to retain controlling voting power while also issuing shares to outsiders. Pyramid structures are other mechanisms that allow family firms to enhance their control. This occurs when the family firm controls another firm, which in turn controls another firm. Just as the structure of a pyramid this can continue in several steps and the more steps the larger the deviation between control and ownership. Although, disproportionate control rights may seem unfair from a minority investor perspective, these mechanisms are widely applied in Europe, though with higher presence in some countries.

In cross-country studies examining the prevalence of CEMs, one country that stands out is Sweden (Faccio and Lang, 2002; ISS, 2007). In the survey by ISS (2007), Sweden appears to be the European country that most frequently employs CEMs including multiple voting rights, pyramid structures and cross-share holdings. In figure 3, the prevalence of multiple voting rights in 464 European companies in 16 countries is illustrated. Followed by Sweden, France and the Netherlands employ multiple voting rights most frequently to separate ownership from control. Likewise, the Swedish largest firms apply pyramid structures most frequently as compared to the European countries in the sample (see figure 4). Cross-shareholding ownership is also a way to enhance control, but is not as commonly applied as the aforementioned mechanisms. In Sweden, one of the largest cross-shareholding, the one between Svenska Handelsbanken, SCA and Industriäarden, was abolished in the summer of 2016.

![Figure 3. Multiple voting rights usage in Europe](Source: Institutional Shareholder Services, 2007).
The high acceptance of CEMs in Sweden has likely resulted in the tradition of strong controlling long-term owners that have ensured sustainable growth in the business. The Wallenbergs are a typical example of a long-term controlling owner, a family business that has controlled and owned publicly listed firms for five generations. Furthermore, the family controls about one third of the Stockholm stock market for and are present in large public corporations including, Ericsson, Atlas Copco, Electrolux and SKF. Indeed, we note that CEMs allow controlling owners to enhance their control and align managers’ interests, however, opponents would propose that CEMs also increase the risk of entrenchment at the cost of minority investors. This is subject to the notion that in presence of CEMs, voting and cash-flow rights can be separated, which may incentivize controlling owners to pursue selfish agendas as they only suffer a fraction of invested capital in cases of negative valuation consequence (Villalonga and Amit, 2006). In the publicly listed firm, this possible problem brings us back to the ideas of the principal-agency conflict.

Accordingly agency theory suggests that the benefit of monitoring management increases with the proportion of equity shares invested in the company (Jensen and Meckling, 1976; Shleifer and Vishny, 1997). This, in turn proposes that family-owners would mitigate agency conflicts between managers and owners. On the other hand, increased controlling owner power creates Type II equity agency problems, the one between the controlling and non-controlling owners. As such, controlling owners may get entrenched and pursue self-interested decisions at the cost of the non-controlling owners, as a result of being subject to less control. And in the case of family-firms, it is not uncommon that family-members possess management and board positions, which interplays with the independence and monitoring function of the board. Hence, the demand for increased disclosures as a monitoring mechanism becomes vital in these circumstances.

As discussed in Chapter 2, disclosure is fundamental in the contractual relationship between managers and its contracting parties. Nevertheless, as noted above, agency conflicts may resolve differently in founding-family
firms, which in turn may have a significant impact on their disclosure practices. The long-term presence of family members and their close ties with management members create less demand for disclosure. Such controlling owners can have a beneficial monitoring effect in the firm’s governance and secure long-term investments. This may help long-term investments, but also trigger opportunistic decisions by the controlling owner. Paper II examines how disclosure practices are determined by variations in ownership structures and whether different mechanisms mediate this relationship. Given the purpose of Paper II, I find that differences in agency conflicts in founding-family and non-family owned firms result in variations in voluntary disclosure practices. This adds to the overall knowledge by documenting that market-based solutions may not always be appropriate and mandatory disclosure regulations are appreciated when they are absent.

5.3 Paper III. Family matters: The capital-market effects of voluntary disclosures by founding-family firms

The purpose of Paper III is to examine whether the market reacts to varying degrees of disclosure levels triggered by differences in ownership structures. Given the purpose of accounting information to be valuable to its users and the recent concerns regarding “information overload” in financial reports (EFRAG, 2012), it is of particular interest to assess whether disclosure levels matter and have an incremental impact on capital-markets.

One major step towards efficiently operating equity-markets came with the implementation of the International Financial Reporting Standards (IFRS). For Swedish publicly listed firms, this led to a mandatory adoption of IFRS in 2005. Financial reports that follow the principle-based IFRS are dependent on management’s professional judgement in the preparation procedure. By allowing managerial discretion in the preparation of financial reports, the anticipation is to deliver faithfully represented information on the current economic state of the firm. However, the lack of guidance and restriction on how much to disclose has questioned the materiality and usefulness of reported information (IASB’s Feedback Statement, 2013). Managers are facing different demands on accounting information and are constantly attempting to fulfill these demands. It is therefore likely that managers provide additional information to ensure clear communication and avoid criticisms. Likewise, some argue that annual reports have turned into a “compliance procedure” to avoid failure at the cost of delivering high quality information (IASB’s Feedback Statement, 2013). Moreover, there are concerns as to whether annual reports are becoming too complex and less readable (e.g. Li, 2008; Rennekamp, 2012) and suffering from a so-called “information overload” (EFRAG, 2012).
To illustrate this matter, Table 7 presents data on the length of annual reports of the ten largest (in total assets) publicly listed firms on the Stockholm Stock Exchange (SSE) in the financial years 2001, 2005 and 2013. Although, it may be regarded as a simplistic measure, the number of pages of annual reports gives us an indication of the complexity of annual reports and has been used by prior research as a proxy of readability (Li, 2008; Miller, 2010). The data in Table 7 shows that compared to 2001, the volume of annual reports increased in the adoption year of IFRS in 2005. When comparing the average length of a report in 2005, we note that for the majority of the firms the length of the report doubled in 2013. One should refrain from drawing drastic conclusions from descriptive data, however, a clear observation is that the annual report got thicker, which probably put more pressure on the users to process more information.

Table 7. Number of pages in annual reports

<table>
<thead>
<tr>
<th>Company</th>
<th>2001</th>
<th>2005</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlas Copco</td>
<td>60</td>
<td>120</td>
<td>134</td>
</tr>
<tr>
<td>Skanska</td>
<td>86</td>
<td>137</td>
<td>201</td>
</tr>
<tr>
<td>Electrolux</td>
<td>78</td>
<td>118</td>
<td>170</td>
</tr>
<tr>
<td>Ericsson</td>
<td>57</td>
<td>123</td>
<td>174</td>
</tr>
<tr>
<td>Sandvik</td>
<td>68</td>
<td>88</td>
<td>130</td>
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<tr>
<td>SCA</td>
<td>81</td>
<td>109</td>
<td>118</td>
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<tr>
<td>SKF</td>
<td>83</td>
<td>124</td>
<td>208</td>
</tr>
<tr>
<td>Volvo</td>
<td>99</td>
<td>154</td>
<td>194</td>
</tr>
<tr>
<td>Scania</td>
<td>78</td>
<td>100</td>
<td>142</td>
</tr>
<tr>
<td>TeliaSonera</td>
<td>76</td>
<td>98</td>
<td>146</td>
</tr>
</tbody>
</table>

*Note: The data is on the ten largest firms (in total assets) listed at SSE in years 2001, 2005 and 2013.*

Although accounting standards are introduced to enhance transparency and comparability, they may not always have the desired effects, which is why one of the main questions capital-market researchers and regulators are interested in is whether accounting numbers and disclosures prepared in line with new accounting standards have the intended economic effects in capital-markets (e.g. Barth et al., 2008; Barth, Landsman, Lang and Williams, 2012; Horton, Serafeim and Serafeim, 2013). Thus, a relevant question is whether additional disclosure adds value or confusion in investors’ valuation and analysts’ forecasting? In Paper III, the aim is to investigate the market effects of differences in voluntary disclosure and to examine whether founding-family firms who are shown in Paper II to be more opaque in their disclosures exhibit different market effects as compared to the more transparent non-family firms. In this context, capital-market researchers are interested in whether disclosure decreases agency costs between the firm and its contracting parties and as such the question does it benefit to be transparent?
Prior research adopts different capital-market effects in investigating the potential effect of disclosure. For instance, stock liquidity and bid-ask spread are two empirical measures used to capture information asymmetries in capital markets. More specifically, theory suggests that higher levels of disclosure minimize information asymmetries and increase investors’ confidence in trading in stock markets (e.g. Verrecchia, 2001). Similarly, the difference between buy and sell price is expected to be smaller in cases where market participants are equally informed (Welker, 1995). Contrary, small investors are less willing to trade in firms with longer and less readable annual reports (Miller, 2010). Moreover, disclosures’ effect on financial analysts’ forecasts properties is also a well-examined relation (Hope, 2003; Lang, Lins and Miller, 2004; Yu, 2010). The overall prediction is that high quality disclosure attracts more analysts and enhances their earnings forecast predictions. However, Lang et al. (2004) document that the corporate governance structure plays an important role in analysts following a firm. In particular, they find that analysts are less willing to follow firms with a controlling family owner and that this relationship is more pronounced in countries with weak investor protection (Ibid.). Paper III adds to this stream of research and examines the capital-market effects of voluntary disclosure in Sweden, a setting where investor protection is moderate (La Porta et al., 1998) and controlling owners have a large influence on corporate governance. Given the purpose of Paper III, I find that there are positive capital-market effects of high disclosing firms and that controlling family firms matter in this association. These findings are timely with the IASB’s Disclosure Initiative project (Feedback Statement, 2013), which aims to improve presentation and disclosure in financial reports, by adding to the overall knowledge that disclosure is incorporated by capital market participants and that governance structure of firms matters.

5.4 Paper IV. Measuring disclosure in empirical accounting research: Examining the applicability of a self-constructed disclosure index

What determines and what are the capital-market effects of disclosure? These are questions that have interested empirical accounting researchers since the early 1970s (Singhvi and Desai, 1971; Francis et al., 2008; Melis, Gaia and Carta, 2015) and are still of interest for both the research and regulatory communities (Beyer et al., 2010). However, in order to test the relationship of interest, one needs to empirically measure various constructs that sometimes are even unobservable and difficult to quantify. An issue for most empirical disclosure studies is finding an appropriate way to measure corporate
annual reports’ disclosure and this is still today a prevailing issue for accounting researchers (Leuz and Wysocki, 2016).

Generally, there are two approaches available to measure disclosure: 1) Self-constructed disclosure index and 2) Analyst-prepared disclosure index. The former method implies high discretion to the researcher and allows tailor-making a measure for the specific research aim, whereas the latter is prepared by analysts for a selected market, sample and time-period. Both methods have their benefits and shortcomings and the choice between them is usually based on data availability and study objective. Paper IV of this thesis fits this discussion, as its purpose is to evaluate the alternative methods to measure disclosure and specifically examine the choices and implications of self-constructed disclosure indices. This is of interest because accounting researchers still lack an appropriate way to measure disclosure and at the same time there are very few studies (e.g. Beattie et al., 2004) that examine the implications that the specific design of a self-constructed index may have on the results.

More specifically, there are three central questions to consider in designing an index: 1) What type of disclosure is of interest? (i.e. the selection of disclosure components to be included in the index), 2) Should disclosure components be equally treated? (i.e. assign weight to disclosure regarded as more useful) and 3) How to aggregate the disclosure components to obtain a final disclosure score? The type of disclosure is generally driven by the objective of the study. This can, for instance, include the assessment of a new mandatory disclosure reform, which is the case in Paper I, which specifically examines executive compensation disclosure during a time when a new regulation on this matter took place. In addition, a main objective of researchers is to construct disclosure measures that capture variations in disclosure practices in the studied sample, which is why included components are chosen according to current accounting rules. Moreover, additional weight can be awarded to disclosure provided in a specific and precise manner. Indeed, this is a subjective assessment, but it is not uncommon that additional points are given to quantitative and detailed information (e.g. Botosan, 1997; Bozzolan, Trombetta and Beretta, 2009). Because of the large discretion involved in constructing an index and the lack of a “best model”, it should be of interest to accounting researchers whether different choices made in designing an index have an impact on the validity of the disclosure measure and consequently the study’s results. Given the purpose of Paper IV, I find that overall a self-constructed index is not sensitive to the discretionary choices made by the researcher and that a more naïve measure of disclosure that counts the number of pages of an annual report provides results similar to an index-based measure. This adds to overall knowledge on finding an appropriate way to measure disclosure as a more efficient, but naïve measure performs similarly to a labour intensive index-based measure.
6. Conclusions and implications

This thesis introduction started off by highlighting the importance of increased corporate disclosure as a vital factor in the process of restoring investors’ confidence in the financial reporting of corporations, after experiencing the effects of major accounting scandals in the corporate world. As a response to each recurrence of such events, regulators and policy makers evaluate possible shortcomings in current regulation and develop new regulations, which may lead to a costly overreaction of increasing regulation (Leuz and Wysocki, 2016). It is therefore important to understand firms’ disclosure incentives and the costs and benefits of disclosure in order to justify its regulation. This thesis is motivated by these questions and its aim is to examine the determinants and capital-market effects of voluntary disclosures provided in Swedish companies’ annual reports. The four empirical papers undertaken in this thesis provide valuable insights and the main conclusions are presented in the section below.

6.1 Main conclusions

Firms’ disclosure incentives
The four empirical studies of this thesis show that firms’ disclosure incentives are determined by the contractual relationships the firm engages in and information asymmetries that arise between two contracting parties, which create the need for additional disclosures to obtain cost efficient contracts and lower cost of capital. More specifically, the studies show that firms relying on external financing provide higher levels of disclosure to meet the information demand by contracting parties. This includes the relationship between the firm and its shareholders and the relationship between the firm and its creditors. For instance, Paper I and II document that firms with concentrated ownership and a high managerial stake are less incentivized to engage in disclosures. Moreover, highly leveraged firms provide additional disclosure to stimulate efficient debt contracting (Paper II-IV). Essentially, if disclosure is useful, it is expected that the market values this and incorporates it in their estimation of the certainty of the firm’s expected earnings and thus leading to more efficient capital markets. Likewise, Paper III shows that high disclosing firms reduce information asymmetries in capital-markets as indicated by increased liquidity and investor trading activity. Although, these
findings are in line with the majority of prior disclosure research (e.g. Ahmed and Courtis, 1999; Leuz and Wysocki, 2016), it confirms that agency problems between the firm and its owners and creditors also affect disclosure decisions of Swedish listed firms. Nonetheless, the primary agency conflict being studied in this thesis is the one between controlling and non-controlling owners, i.e. Type II equity agency problems, which may result in different disclosure practices. Similarly, recent accounting research has stressed the importance of identifying the type of controlling owner in understanding firms’ reporting choices and that their varying preferences may determine the outcome of financial reporting (Dou et al., 2016).

This thesis demonstrates that in a context with strong influential owners the ownership structures of firms matter in determining firms’ disclosure incentives and disclosure’s effects on capital markets. More specifically, Paper II documents that founding-family firms are less forthcoming in providing disclosures compared to non-family firms. This finding is explained by alternative explanations. First, family firms use internal communication channels to avoid disclosure of sensitive firm information. For example, family owners tend to control the board of directors and in this way have access to vital firm information. Second, founders commonly hold management positions, which is why the distance between owners and managers is smaller and therefore there is less demand for public information. Third, the opportunistic-based explanation suggests that controlling owners wish to keep disclosure opaque to facilitate pursuing their own agendas.

However, these findings do not necessarily imply that investors of these firms are “worse off”, rather, that these firms are governed differently by tradition. At the same time, Paper III shows that the disclosures by founding-family firms have a negative impact on capital markets by increasing investors’ uncertainty and unwillingness to trade in these stocks. These results indicate that the market negatively perceives the governance of founding-family firms. Additionally, poor disclosure creates information asymmetries among investors, resulting in reduced stock liquidity. These are important findings that add to the conflicting debate on family ownership effect on financial reporting practices and its consequences on capital markets (e.g. Ali et al., 2007; Attig, Guedhami and Mishra, 2008; Yang, 2010).

The institutional context
This thesis argues that it is important to understand the local governance structures in analysing firms’ disclosure incentives. The Swedish governance model emphasizes the influence of controlling owners in the governance of firms. Moreover, Swedish listed firms are known for their high usage of control-enhancing mechanisms (CEMs) that allows the controlling owners to increase their control, while only retaining a small portion of equity rights. These specifics enable this thesis to test and document novel effects that are difficult to identify in the much-studied Anglo-Saxon setting. Furthermore,
the literature suggests that the usage of CEMs aggravates the Type II equity agency problems leading to sub-optimal decisions by the controlling owner (Villalonga and Amit, 2006). Thus, all else equal, the non-controlling owner wishes more disclosure to compensate the risk of self-interested behaviour by the controlling-owner.

Both Papers I and II document different disclosure practices in firms where control is intensified by the usage of CEMs. Specifically, Paper I shows that executive compensation disclosure (ECD) decreases with the excess control of the controlling owner. Moreover, the results show that highly paid managers disclose more information, but not in firms where controlling owners hold excess control rights. Similarly, Paper II indicates that disclosure levels are lower in founding-family firms that employ CEMs as compared to founding-family-firms with no CEMs. Noting that the Swedish setting is dominated by Type II equity agency problems, these findings are worrisome. In other words, it appears as if agency problems do not drive disclosure practices in this sub-group of firms. When shareholders cannot enforce disclosure on their own, and reduced agency problems increase shareholder wealth, disclosure regulation may be justified (Beyer et al., 2010). In these cases, when firm disclosure incentives are lacking, it could be justified to mandate a certain level of disclosure, as it ought to level the playing field for all capital-market participants (Leuz and Wysocki, 2016).

However, a counterargument for mandating disclosure is that there are alternative governance mechanisms in place that may substitute the need for mandatory disclosure as a monitoring mechanism. For instance, Paper II indicates that founding-family firms provide more disclosure in the presence of a non-family blockholder, suggesting a monitoring effect of the blockholder. Thus, mandating disclosure may not be necessary when agency problems can be solved through alternative governance mechanisms.

Beyond the large influence of strong owners in Swedish listed firms, the Swedish setting is also characterized by strong extra-legal mechanisms in the form of high news circulation and strong media (Dyck and Zingales, 2002; 2004). Comparably, findings in Paper I indicate the importance of extra-legal mechanisms in Sweden and that firms that are frequently mentioned in newspapers provide higher levels of ECD. As such, the media acts as a “watchdog” over the corporate world and substitutes the need for formal law to protect minority investors (Sinani et al., 2008). Although Sweden is referred as having a “moderate investor protection” (e.g. La Porta et al., 1998) and a high tolerance for disproportionate ownership structures, this thesis strengthens the notion that informal mechanisms special for the institutional setting, may complement or substitute formal laws. These results should be of interest and add to the debate on whether minority shareholder protection in Sweden needs to be strengthened, as recently suggested by the World Bank (2014). Moreover, these findings are likely to add to the discussion on whether CEM ownership structures have economic impact on financial in-
vestors in the EU and whether restrictions on such structures should be imposed (e.g. ISS, 2007).

**Mandating disclosure - When the incentives are insufficient**

According to Beyer et al. (2010), the two major reasons to mandate disclosure is to improve the credibility of disclosed information and social welfare. This thesis examines a time period when two important disclosure reforms took place: the implementation of IFRS and the corporate governance code applicable to all Swedish publicly listed firms in 2005. With the aim of harmonization of financial reporting in Europe, the principle-based IFRS was hoped to provide faithful and transparent accounting information to the markets. Consequently, accounting researchers and standard setters are interested in evaluating the economic consequences of such regulatory changes. Similarly, with the increasing demand for disclosure by regulators and capital markets, this thesis shows that the overall level of disclosures in Swedish annual reports increased during the years 2001 to 2013. More specifically, this thesis introduction started by illustrating the increasing number of pages contained in an average Swedish listed firm’s annual report and that this increased with about 10 pages in the years surrounding the IFRS implementation. Furthermore, Paper I shows that ECD increased after the implementation of the *NBK rules* in Sweden in 2003. However, it is also documented that firms’ disclosure incentives continue to determine ECD after the reform and that controlling owners disclose less when they have disproportionate control. As such, it appears as if the reform was not effective in the group of firms where disclosure incentives were insufficient and where minority investors are probably the most disadvantaged.

These findings contribute to the scarce evidence on firms’ responses to changes in disclosure and reporting regulations outside the U.S. This is particularly emphasized by Leuz and Wysocki (2016) who encourage accounting researchers to seek settings outside the U.S. in order to obtain a richer understanding of the many features of regulatory effects together with countries’ institutional frameworks. As such, Paper I adds by utilizing the Swedish context, which allows examination of regulatory effects on firms’ disclosure incentives where control is commonly increased by the usage of CEMs and the main conflict is between controlling and non-controlling owners. Furthermore, the findings are timely and should be of interest to practitioners, as they add to the debate regarding the reforms of executive compensation disclosure in Europe and to the European Commission’s suggestion to strengthen shareholders’ engagement and rights by improving the corporate governance reporting by publicly listed firms more broadly.  

Essentially, this thesis suggests that despite increased disclosure regulations and revisions of corporate governance codes, economic incentives and local

governance structures drive Swedish listed firms’ overall voluntary disclosure practices. Nonetheless, this may not imply that international accounting standards are inadequate or that increased regulation is needed. Instead, we identify that local specific factors are important determinants of corporate disclosure practices, and that institutionally specific informal mechanisms may complement or substitute the need for formal laws.

Towards a disclosure framework
A possible consequence of harmonizing financial reporting is that firms disclose in order to comply with international standards although the disclosed information may not be of relevance to the firm itself. This has led to the concern that disclosures have increased in volume, are too generic and do not provide useful information; this so-called ‘information overload’ in annual reports has raised many questions in the financial reporting community (EFRAG, 2012; FRC, 2012). Some argue that annual reports have become more of a “compliance procedure” to avoid reporting failure, rather than communication of high quality information (FRC, 2012). As a response to these concerns in 2013, the IASB initiated the Disclosure Initiative project, which aims to overcome the information overload and materiality concerns currently observed in firms’ financial reporting practices. For instance, the amendments of IAS 1 Presentation of Financial Statements, which became effective for annual periods beginning on or after 1 January 2016, is a step towards increasing materiality of disclosed information.

At the same time, the implications of the ‘comply or explain’ approach in governance reporting are discussed and that the quality of disclosed information is insufficient when firms deviate from what is suggested by the code (EC, 2011). In 2014, the European Commission presented a recommendation on the quality of corporate governance reporting as a response to the call on the shortcomings of the ‘comply or explain’ approach. These guidelines ought to assist firms in improving the quality of their corporate governance reporting and reduce information overload in financial reports. Principally, in standard-setters’ work for a disclosure framework and improved corporate governance reporting, this thesis shows that it is important to consider local governance structures, where increased mandatory disclosure may not always serve its purpose. Therefore, understanding the drivers and incentives of firms’ disclosure decisions is crucial in formulating regulations that ensure that the objectives are reached. Without this understanding, there is a risk of overregulation, leading to suboptimal outcomes.

Overall, the four empirical studies show that firm-level disclosure incentives and ownership structures are important drivers of voluntary disclosure

25 EC 2011/164/EU: Green paper “The EU corporate governance framework”.
choices and that a mandatory reform does not homogenize disclosures across firms. This thesis also highlights the importance of local governance structures and mechanisms that determine firms’ disclosure practices and may substitute formal disclosure regulations. The Swedish institutional features may explain why Swedish firms are superior in financial reporting when compared internationally (Leuz et al., 2003). Notably, these findings are observed in a setting where controlling owners have a large influential power in the business decisions of firms and the crucial agency conflict concerns owners with different control power. This is an important contribution to the current disclosure literature as recent findings provide mixed effects of ownership structures with controlling owners on reporting choices (Armstrong et al., 2010).

In sum, the findings of this thesis are vital in the process of regulating mandatory disclosures. As noted by Beyer et al. (2010) in deriving an optimal disclosure regulation, it is important that we consider the effects of a uniform disclosure standard on diverse firms. Similarly, this thesis demonstrates that disclosure incentives vary across firms and continue do so after a mandatory reform, and hence formulating a one-size fits all type of regulation is unrealistic.

### 6.2 Limitations and future research

Working with empirical analyses introduces a couple of common caveats and self-selection bias is one such caveat. This thesis relies on all Swedish publicly listed firms and employs an unbalanced data set, self-selection bias is of a smaller concern in this case. Nonetheless, Paper III likely suffers from this bias in the tests with analyst data, as analyst coverage tends to increase with firm size. As a consequence, large firms represent the sample in the regression analysis with analyst data.

Another drawback in Paper II-IV is the dominating effect of firm size on the explanatory variables, which is demonstrated in robustness tests. Paper IV discusses this matter in more depth and recognizes that firm size is a noisy proxy for commonly tested empirical accounting hypotheses including agency and political cost hypotheses, and that future research should consider alternative measures of firm size (e.g. Ahmed and Courtis, 1999).

A pervasive concern that empirical accounting work and association-based studies face is endogeneity problems, which according to Chenhall and Moers (2007) any empirical paper suffers from. Similarly, the studies in this thesis also contend with endogeneity issues and therefore hinder us from making causal inferences. Roberts and Whited (2013) mention three sources of endogeneity: 1) omitted variables, 2) simultaneity and 3) measurement error. Omitted variables in regression models become an endogeneity issue if the omitted variables are correlated with the explanatory variables. Working
with panel data, however, can sometimes offer a partial solution to this problem. By employing industry and year fixed effects models, I address the unobserved heterogeneity across industry groups and years (Gormley and Matsa, 2013). However, this technique does not control for unobserved heterogeneity within groups and sometimes removes relevant variation if there is limited or no variation in a variable researchers wish to explain (Roberts and Whited, 2013).

In Paper III, I examine whether disclosure levels affect various capital-market effects. One such effect is the association between disclosure and analysts’ forecast precision, where prior research shows that historical return volatility is shown to affect analysts’ forecast precision (e.g. Hope, 2003). In addition, return volatility is known to be an important determinant of bid-ask spread (e.g. Coller and Yohn, 1997). However, although endogeneity concerns due to omitted variables is likely not the case here, this study would benefit from incorporating additional control variables as suggested by prior research.

Moreover, the results in Paper III are likely to suffer from simultaneity issues. In the tests on disclosure and analysts following, two causal directions can be argued: high levels of disclosure lead to more analysts following, alternatively more analysts could pressure firms to provide more disclosure. To test the direction of causality, future studies should examine this association in relation to an event and if changes in disclosure levels affect the number of analysts following. Indeed to date, there is mixed evidence on this matter (e.g. Beyer et al., 2010). Furthermore, employing instrumental variable analysis is a common way to deal with endogeneity issues in empirical accounting and disclosure research. Nonetheless, a challenge with this method is to find an instrumental variable that is associated with changes in the explanatory variable but not with the dependent variable. In their review, Larcker and Rusticus (2010) document that in general accounting researchers provide limited justification and theoretical reasoning for the choice of instrumental variables. Paper III would benefit from such an analysis, though a thorough reasoning of applicable instrumental variables is required.

The four studies in this thesis employ a self-constructed disclosure index to measure the disclosure. In this regard, the presence of measurement error, being a source of endogeneity, is a result of employing proxies for unobservable or difficult to quantify variables (Roberts and Whited, 2013). My attempt to tackle this concern is presented in Paper IV, where I document that the index is robust to the alternative discretionary choices made in constructing it. However, I admit that employing a self-constructed index is one of many possible approaches to measure disclosure. As Section 2.5 discusses, there are alternative measures available of disclosure and earnings quality, such as analyst-based indices. Therefore, a suggestion for future research would be to compare the results of this thesis with an analyst-based disclosure index developed for Swedish publicly listed firms. The Swedish Stock-
holder Associations’ index used for the “Best Annual Report” competition is one possible alternative.

Furthermore, Paper IV shows that a simple disclosure measure based on counting the number of pages in an annual report provides similar results as a more sophisticated index-based disclosure measure. At the same time disclosure research has long struggled with finding an appropriate way to measure disclosure (Leuz and Wysocki, 2016). Based on the findings in Paper IV future disclosure research may also consider whether the effort and time required in gathering disclosure data based on an index is worthwhile when more simple measures can serve as a justifiable proxy.

The local context and extra-legal mechanisms (e.g. strong media) are argued to be important determinants of disclosure and may substitute the need for formal disclosure regulations. While this thesis focus solely on disclosure practices of Swedish listed firms, future research could benefit from further examination of cross-country disclosure differences. The link between culture and certain types of disclosure has already been examined in extant research. For example, Hooghiemstra, Hermes and Emanuels (2015) document that national culture determines internal control disclosure. Future work that looks more closely at the links between such contexts and different types of disclosure could shed further light on whether and to what extent country-level disclosure incentives determine different types of disclosures by firms.

This thesis does not cover disclosure on non-financial reporting, including social environmental aspects of disclosures. These represent a potentially interesting topic for future research. This will be of particular interest considering the implementation of the new EU directive 2014/95/EU regarding disclosure of non-financial and diversity information that became effective for the financial year starting on 1 January 2017. Considering that this thesis argues that disclosure incentives vary across firms, research on mandatory disclosure reforms effect on firms’ disclosure incentives will continue to be of high relevance.

Last, this thesis show that the overall disclosure levels in the annual reports of Swedish listed firms increased substantially during the years 2001-2013. Considering the recent concerns regarding information overload in annual reports, future studies could add to this debate by investigating whether the observed disclosure increases are also associated with more complex and less readable annual reports. One possibility would be to interview users of annual report disclosures such as financial analysts or investor representatives to understand what type of annual report disclosure is regarded as useful. This is a particularly important query in light of the fact that disclosure levels are likely to increase in consequence of mandatory environmental disclosure reform. Understanding how end-users are benefitted through increased disclosures thus represents a potentially rich area for future inquiry.


EC (2014). European Commission proposes to strengthen shareholder engagement and introduce a “say on pay” for Europe’s largest companies.


Global Accounting Alliance (GAA) (2008). Getting to the heart of the Issue – Can financial reporting be made simpler and more useful?


The Financial Reporting Council (FRC) (2009). “Louder than Words – Principals and actions for making corporate reports less complex and more relevant”.


Laws and Regulations


# Appendix

## Table 1. Detailed description on the disclosure items

<table>
<thead>
<tr>
<th>Disclosure Item</th>
<th>Comment &amp; Scoring (1= if condition is met, otherwise 0)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Counting</strong></td>
<td></td>
</tr>
<tr>
<td>1 Pages</td>
<td>The number of pages the annual report contains. Is the annual report longer than the average sample’s annual report?</td>
</tr>
<tr>
<td>2 Notes</td>
<td>The number of notes to the financial statements. Is the number of notes to the financial statements higher than the average sample’s number of notes?</td>
</tr>
<tr>
<td>3 PagesNotes</td>
<td>The number of pages devoted to the notes to the financial statements. Is the number of pages higher than the average sample’s number of pages?</td>
</tr>
<tr>
<td>4 AccPrin</td>
<td>The length of the note, counted in pages, covering the accounting principles (i.e. Note 1). Is the length of the note longer than the average sample’s length of the note?</td>
</tr>
<tr>
<td><strong>Governance</strong></td>
<td></td>
</tr>
<tr>
<td>5 Governance</td>
<td>The number of pages devoted to corporate governance. This includes the corporate governance report and the presentation of board members. Is the number of pages devoted to corporate governance higher than the average sample’s number of pages?</td>
</tr>
<tr>
<td>6 Internal control</td>
<td>The number of pages devoted to internal control. This includes description about the firm’s internal controls of financial reporting and potential risk assessments. Is the number of pages devoted to internal control higher than the average sample’s number of pages?</td>
</tr>
<tr>
<td>7 Firm's share</td>
<td>The number of pages devoted to information concerning the company’s share. Is the number of pages devoted to the company’s share higher than the average sample’s number of pages?</td>
</tr>
<tr>
<td>8 Meeting</td>
<td>Is information on board members’ attendance on board meetings provided?</td>
</tr>
<tr>
<td>9 Experience</td>
<td>Is board members' previous working experience provided?</td>
</tr>
<tr>
<td>10 Owners</td>
<td>Is information about a company’s largest owners provided? It is common that firms report at least their 10 largest owners, why those that disclose more than the 10 largest owners obtain 1 point.</td>
</tr>
<tr>
<td>11 Analysts</td>
<td>Are the names of the analysts following the firm provided?</td>
</tr>
<tr>
<td>12 CEOComp</td>
<td>Is information on the CEO’s compensation package provided? This should include information on at least three compensation components (e.g. fixed, variable, pension, options and/or other), provided in a table format or discussed in the text.</td>
</tr>
<tr>
<td>13 CEOVarComp1</td>
<td>Is there information regarding whether CEO variable compensation exists?</td>
</tr>
<tr>
<td>14 CEOVarComp2</td>
<td>Is an elaborate discussion regarding the CEO’s variable component pay provided? Variable compensation exists, and at least two of the following items are disclosed: (a) the extent to which bonus targets are met, (b) the maximum achievable level of bonus, and (c) how bonus targets are evaluated (formulas or procedures), alternatively it is clearly stated that no variable compensation is offered to the CEO.</td>
</tr>
<tr>
<td>15 Retire1</td>
<td>Is the retirement age of the CEO provided?</td>
</tr>
<tr>
<td>16 Retire2</td>
<td>Is the retirement age for both CEO and other executives provided?</td>
</tr>
<tr>
<td>17 Termin</td>
<td>Is there a discussion regarding how the contract with the CEO can be terminated?</td>
</tr>
<tr>
<td>18 Sever</td>
<td>Is there a discussion regarding the CEO’s severance conditions?</td>
</tr>
<tr>
<td>19 NonCEO1</td>
<td>Are at least two pay components of the non-CEO top executives provided? Only stating the total amount is insufficient.</td>
</tr>
<tr>
<td>20 NonCEO2</td>
<td>Is there a discussion on how non-CEO top executives are compensated?</td>
</tr>
<tr>
<td>21 NonCEO3</td>
<td>Are non-CEO top executives’ compensation levels provided in a table with adhering text describing the table?</td>
</tr>
<tr>
<td>Disclosure Item</td>
<td>Comment &amp; Scoring (1= if condition is met, otherwise 0)</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Strategy</strong></td>
<td></td>
</tr>
<tr>
<td>22  Where1</td>
<td>Is there a heading somewhere in the strategy section (if any) of the annual report with “Targets” or “Goals” in the title?</td>
</tr>
<tr>
<td>23  Where2</td>
<td>Does the table of content contain a specific heading titled “Targets” or “Goals”?</td>
</tr>
<tr>
<td>24  Mis/Vis</td>
<td>Is there information on the company’s mission and/or vision?</td>
</tr>
<tr>
<td>25  Target</td>
<td>Does the company disclose some kind of target?</td>
</tr>
<tr>
<td>26  MeasTarget</td>
<td>Does the company disclose measureable targets?</td>
</tr>
<tr>
<td>27  FinTarg</td>
<td>Does the company disclose measureable financial targets?</td>
</tr>
<tr>
<td>28  HisTarg1</td>
<td>Does the company provide an evaluation of its performance in relation to its targets (i.e. Mentions last year’s performance)?</td>
</tr>
<tr>
<td>29  HisTarg2</td>
<td>Is there an evaluation of previous years’ performance?</td>
</tr>
<tr>
<td>30  Strategy</td>
<td>Does the company provide information on its corporate strategy?</td>
</tr>
<tr>
<td>31  TargStrat</td>
<td>Does the company provide disclosure of strategies on how to reach targets?</td>
</tr>
<tr>
<td>32  Forecast1</td>
<td>Is there some kind of forecast provided?</td>
</tr>
<tr>
<td>33  Forecast2</td>
<td>Is a forecast regarding the financial targets and/or earnings per share provided?</td>
</tr>
<tr>
<td>34  Compete1</td>
<td>Is there information on the company’s competitors?</td>
</tr>
<tr>
<td>35  Compete2</td>
<td>Is there an elaborative discussion regarding the company’s competitors?</td>
</tr>
<tr>
<td>36  Market1</td>
<td>Does the company mention some information regarding its position in product markets?</td>
</tr>
<tr>
<td>37  Market2</td>
<td>Is an elaborative discussion on the company’s position in product markets provided?</td>
</tr>
</tbody>
</table>