Stockholm School of Economics
Department of Accounting
Master's Thesis in Accounting and Financial Management
Autumn 2012

REPORTING WHAT MATTERS

AN INTRA-FIRM STUDY ON FACTORS AFFECTING MATERIALITY DETERMINATION IN SUSTAINABILITY REPORTING

Abstract

This paper identifies and investigates the driving factors behind differences in sustainability reports of companies. The aim of the study is to examine intra-firm approaches, views and attitudes in seven Swedish companies regarding materiality determination of sustainability information. Through interviewing preparers and auditors of sustainability reports, we identify differences in this process between firm practices and the GRI Framework, and the impact of such differences on sustainability report content. Sustainability disclosure theories are used to explain the differences. Two approaches to materiality determination have been identified; internal or operations-driven and external or stakeholder-driven. Our findings lead to the identification of a *materiality gap* – a gap between how the GRI proposes that materiality should be determined and how it is determined in practice. To amend this gap, we propose two changes to the current GRI Framework: (1) sector-specific materiality guidelines and stakeholder group lists, and (2) explicit stakeholder involvement guidelines issued by the GRI.

Keywords: Intra-firm, Materiality, Stakeholders, Legitimacy, Sustainability, Reporting, Preparers, Corporate Social Responsibility, CSR, Global Reporting Initiative, GRI, Framework, Standard-setting

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Date: December 10th, 2012

Acknowledgements
This thesis could not have been written without the support from a large number of people to whom we are very grateful. Our tutor, Henrik Nilsson, has enabled us to approach our research with an academic mindset, and with his enthusiasm and clear-sightedness drawn our attention to central aspects and issues for this thesis. We also wish to thank all our interviewees that have devoted valuable time in order to facilitate increased knowledge in this area. We hope that this thesis can provide interesting insights to all parties involved.

December 10th, 2012

Björn Thelin Mattias Thurang

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1. Introduction

During the past decades, corporations have become increasingly criticised for the environmental and social impact of their activities. Firms of the 21st century are being pressured not only to maximise shareholder profits, but also to minimise the potentially negative effects of their operations. As part of this, firms are requested to communicate to their stakeholders the environmental and social impact of their operations as well as the measures introduced to reduce the same. This communication has evolved over the past two decades into what is today known as sustainability reports. The scope and content of such reports differ considerably, decreasing their usefulness. This has been attributed to the lack of a common standard, which is why the Global Reporting Initiative (hereinafter referred to as the GRI) was launched at the turn of the millennia. Its purpose is to enable transparency regarding sustainability performance, and it has grown to become the most widely used sustainability reporting framework globally.

Although the GRI has gained wide acceptance, there are still substantial discrepancies regarding how sustainability information is reported – sustainability reports differ in both scope and content in a way that financial reports do not. Not only does this hinder comparability, it also leads to confusion among readers and preparers about the nature of the information that is supposed to be included in a sustainability report. This identified discrepancy leads to our problem statement:

Why do sustainability reports differ?

Among other things, the GRI stipulates that information in sustainability reports should be *material*. Similarly to financial reporting, sustainability report content should be decided through determining materiality of the information – if it is material, include it, otherwise, do not include it. However, we expect that the application of the GRI Framework, specifically in terms of materiality determination, differs and that this difference is a key factor to the identified discrepancy in sustainability reports. Thus, in order to answer our problem statement, this thesis aims to investigate how preparers determine materiality of sustainability information. Through examining intra-firm approaches, views and attitudes regarding materiality determination in a sample of Swedish companies, we seek to identify and examine if and how practice in determining materiality of sustainability information differs from the GRI Guidelines. Given our findings we also aim to provide recommendations for improvements to the current GRI Framework.

1.1. Scope and Approach

In order to best capture the mindset among preparers in determining the materiality of sustainability information, individuals responsible for the preparation of the sustainability reports will be interviewed. Several companies from different industry sectors that employ different GRI Application Levels have been included in the study in order to examine possible discrepancies between corporations. Furthermore, preparers receive assistance from assuring bodies in producing the sustainability report. In order to triangulate our results and get another perspective on how the materiality determination is performed, opinions from auditors of sustainability reports, and a former specialist auditor focused on the GRI, have been included.

As a tool in operationalizing the study, the sustainability reporting framework issued by the GRI will be applied. As mentioned, it contains guidelines on how to determine materiality of sustainability information. The GRI was selected because it is the most comprehensive framework and the only framework that has gained widespread, global acceptance. Alternative sustainability reporting frameworks, such as the UN Global Compact or AA1000, will not be considered.

According to the GRI Framework, materiality should govern decisions about sustainability report content. We expect differences in determining materiality of sustainability information to be a key factor for

differences between sustainability reports. Therefore, we have opted to focus on how this concept is approached in practice and how differing approaches may explain the discrepancies in the scope and content of sustainability reports.

We have decided to focus on annual sustainability reports because this is the main and most widely used (although not the only) channel for communicating sustainability-related information (Gray *et al.*, 1995; Deegan and Rankin, 1997). Further, the GRI Framework applies specifically to the annual sustainability reports. We will not investigate the quality of reported information i.e. the accuracy, timeliness, reliability, and clarity; this is deemed not to affect the materiality determination of sustainability information and thus falls outside the scope of this thesis.

We have chosen to exclude the element of sustainability performance from the range of possible explanatory factors as to why the sustainability reports differ between firms. Thus, we will not conduct a systematic analysis of firms' sustainability performance, or take any sustainability performance rankings into consideration, the reason for this being the substantial difficulty in assessing sustainability performance; we are not in a position to do this ourselves, and not seldom do the plethora of public rankings and indices yield contradictory results.

1.2. Contribution

Prior literature in this area has extensively examined factors influencing sustainability reporting. In attempts to find explanatory factors as to why organisations disclose sustainability information, and why levels of disclosure differ, corporate characteristics such as size, profitability, industry etc. have been examined. However, researchers have predominantly employed an outside-the-firm approach, examining annual reports and other publicly available documents without reference to the internal organisational context, such as the reporting processes and attitudes which influence decision making regarding reporting (Adams, 2002). Bebbington *et al.* (2008) stress that the sustainability reporting phenomenon is under-explored in terms of report characteristics, who produces the reports and the organisational routines surrounding them. Adams and Larrinaga-González (2007) find that literature in the field of sustainability accounting and reporting has largely ignored practice within organisations, and call for scholars to give increased attention to internal processes. Furthermore, no studies have examined preparer practice in determining materiality of sustainability information. It is in this area that we seek to contribute.

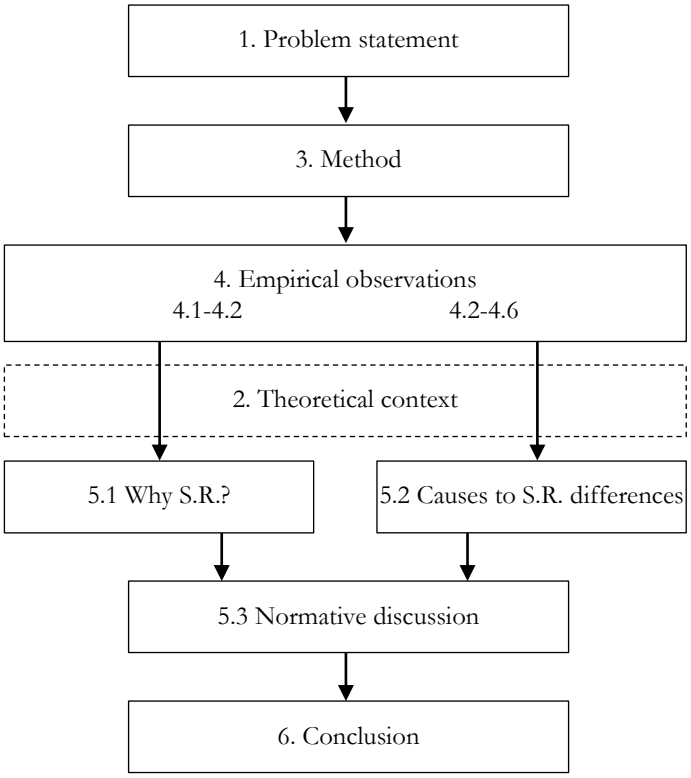
1.3. Outline

The next section explores the GRI Framework, the concept of materiality and theories deemed relevant to our study. The third section outlines the chosen method and its implications for our findings. The fourth section contains our empirical observations, followed by an analysis in the fifth section of those observations based on previous research. Our findings are emphasized in order to facilitate the reading process. The sixth and final section contains our conclusions and recommendations, as well as suggested avenues for future research.

1.4. Model for Thesis Operationalization

Figure 1 aims to facilitate understanding of the outline of this thesis by illustrating how the different thesis parts are interconnected.

Figure 1; Model for Thesis Operationalization



2. Theoretical Context

In order to analyse our findings, a theoretical context needs to be established, within which our empirical findings will be analysed and interpreted. Thus, the aim of this section is to provide a theoretical background as well as to establish a context that will enable us to analyse our collected data.

This section is outlined as follows; it starts with a brief historical background to sustainability and sustainability reporting. Subsequently, intra-firm research on sustainability accounting will be examined. As mentioned, such research is scarce, however, we have identified a few studies which are particularly important to our research topic, and we wish to stress their importance to the reader. This is why these studies are grouped in a separate section. After that, the characteristics of the GRI Framework as well as the intended purpose and view on materiality displayed in the same will be outlined. Although it has been argued that accounting frameworks can hardly be considered accounting theory (Alexander *et al.*, 2007), it will be included here to facilitate understanding for the reader; we believe it is crucial to be familiar with the Framework at an early stage of the reading process. Following the GRI overview, previous research on materiality in financial and sustainability accounting will be examined. The term *materiality* is a central term in our thesis – the issue of materiality in financial accounting has been debated for decades, and since sustainability reporting has an even wider range of stakeholders than financial information, the concept is even more difficult to define in

this context. Finally, a number of theories that potentially hold explanatory value to our empirical findings will be briefly outlined.

2.1. Sustainability and Sustainability Reporting

The idea that corporations' responsibilities go beyond that of economic profit maximisation is by no means novel; the book "Social Responsibilities of the Businessman" (Bowen, 1953) is an early source that mentions the concept of CSR. Although the book sparked some debate upon publication, it was not until the 1970s that the CSR concept had been firmly established. From it sprung the term "sustainable development", defined in the UN Report "Our Common Future" (Brundtland, 1987) as "*[to] meet the needs of the present without compromising the ability of future generations to meet their own needs"*.

According to Elkington (1998), corporate sustainability consists of three parts; environmental, social and economic. It is conceptualised as the Triple Bottom Line, which has grown to become a commonly used term for the responsibility of a corporation. Elkington stated that the Triple Bottom Line view should be added to the traditional financial statements through including social and environmental impact. This type of non-financial reporting evolved over the turn of the millennia into today's sustainability reporting, through which corporations aim to integrate the three aspects of sustainability reporting. However, as of today there is no single, universally accepted definition of sustainability reporting (Bartels *et al.*, 2008).

Sustainability disclosures can be published in different formats; as a separate report, as a separate section in the annual report or completely integrated into the annual report. The GRI defines a sustainability report as "*an organizational report that gives information about economic, environmental, social and governance performance*" (GRI n.d.) and states that the sustainability report should "*provide a balanced and reasonable representation of the sustainability performance of a reporting organization*". Trends have shifted, from including sustainability information in the annual report, to presenting the information in a separate report, to yet again combining the sustainability report with the annual report. Currently, efforts are being made to "fully integrate" sustainability information into annual reports, i.e. to combine sustainability disclosures with financial disclosures in an integrated way.

2.2. Intra-firm Research on Sustainability Reporting

Although intra-firm research is rather scarce in the area of sustainability reporting, a small number of studies have been published. This area of research is of particular relevance to our topic of study.

Stressing the lack of research on how internal contextual variables impact reporting decision making, Adams (2002) examines a number of such factors through an interview-based study. Only two internal variables had been previously examined; changes in chairman of the board and the presence of a corporate social reporting committee. The study examines several additional intra-firm aspects of the reporting process and attitudes to reporting, its impacts, legislation and audit. A key finding is that internal contextual variables are likely to significantly impact extensiveness, quality, quantity and completeness of reporting. The main motivation for reporting, according to the interviewees, was found to be *"[enhancing] corporate image and credibility with stakeholders"*. It was further found that sustainability reporting stems primarily from public pressure, which is also an important reason for developing and changing reporting practices. There was a general view that reporting bad news would enhance credibility, but there was only a very small amount of negative news included in the organisations' reports, explained by the fear of unknown reactions from the public. All these attitudes indicate *"an absence of a desire to be accountable"*, which in turn affects reporting practice. Another key observation, relating to sustainability disclosure theories (discussed in section 2.6.), is that although these theories probably all have some relevance; they *"have limited explanatory power and there is no conclusive evidence in support of any one of them."*

Through attending and observing corporate meetings, Adams and McNicholas (2007) studied the process of producing a sustainability report in a company. They observed lack of experience and knowledge among

managers involved in the process. This included: lack of knowledge as to what constitutes "best practice" sustainability reporting; lack of understanding as to how sustainability goals could be incorporated into the strategic planning process; lack of experience in engaging stakeholders in the reporting process; and difficulty in choosing between the variety of reporting guidelines and styles available. The researchers show how they facilitated the process, assisting managers in producing the sustainability report, and how managers were enabled to gain further knowledge about sustainability reporting and performance. Two forces working against the managers – time and resource constraints – are pointed out as the reasons for lack of stakeholder committee involvement and lack of external report verification.

Owen *et al.* (2001) question the role of stakeholder involvement in practice in sustainability reporting. Through interviewing corporate managers, representatives of the "big five" auditing firms, consultants and NGOs, they suggest that despite the fact that firms seemingly welcome active stakeholder involvement, current reporting practice amounts to *"little more than corporate spin"*. They claim that firms engage in stakeholder dialogue as part of the process to build and establish a reputation, and that power differentials between companies and non-financial stakeholders prevent the latter from being democratically included in the reporting process. They further note that their observed stakeholder dialogues and engagements did *"not appear to achieve much in the way of generating credible social reports"*.

O'Donovan (2002) investigates decisions on disclosure and the perceptions of the managers in relation to decisions to disclose certain information. More specifically, he explores how senior managers would employ legitimation tactics in response to four fictional events. Through interviews with managers from three Australian companies, it was concluded that different legitimation tactics are employed for different purposes. Furthermore, decisions on the contents of environmental disclosure were found to be made on the basis of presenting the corporations in a favourable light. Consequently, the decision usefulness value of such information may be questionable.

O'Dwyer (2002) examines managerial perceptions of the motives for sustainability disclosure, conducting interviews with senior managers in 27 Irish companies. Contrary to the results of O'Donovan (2002), he finds that although sustainability reporting may occasionally be part of a legitimation process, ultimately this approach will fail since a state of legitimacy is rarely achieved. In fact, sustainability disclosure is found to increase societal scepticism rather than decrease it; hence some companies had stopped engaging in sustainability reporting. An explanation to the findings, proposed by the author, is the *"cynical, demanding and questioning"* public in Ireland. Nevertheless, despite the fact that sustainability reporting is found to fail as a legitimisation tool, many of the investigated organisations still engage in it. This suggests that other motives than legitimation exist. Furthermore, the finding of a critical public suggests that sustainability report credibility needs to be increased if it is to be widely accepted.

For the Swedish case, Hedberg and von Malmborg (2003) interview all ten Swedish companies that applied the GRI Framework at the point in time when the interviews were conducted. They find that organisations produce sustainability reports mainly to seek legitimacy from the public, and that the GRI Framework is used primarily to increase report credibility.

It should be noted that, with the exception of Adams and McNicholas (2007), these studies were all published some ten years ago, during the earliest stages of the GRI and the concept of sustainability reporting. During the past ten years, significant developments have been made in the field of sustainability reporting which may reduce the applicability of the findings on the practices applied at present by companies.

2.3. The Global Reporting Initiative

Since we have chosen to study how firms apply the GRI Framework in general and its definition of materiality in particular, it is relevant to provide an overview of the Framework, its structure and view on

materiality in order to provide the reader with an understanding of the context in which our analysis is carried out.

2.3.1. History and Purpose

The launch of the GRI project can be attributed largely to the lack of comprehensive guidelines regarding the nature of the information a sustainability report should contain. As a result of the lack of such comprehensive guidelines, it was not possible to compare reports from different companies (Hedberg and von Malmborg, 2003). The GRI was founded in 1997 through the establishment of a "Global Reporting Initiative" project department by the US non-profit organisation Coalition for Environmentally Responsible Economies (CERES). The aim was to create an accountability mechanism to ensure that companies were following the CERES principles for responsible environmental conduct. The originally intended target audience of the GRI Framework were the investors, but at an early stage it was substituted with a broader multi-stakeholder approach. In 1998, a multi-stakeholder steering committee was established to develop the GRI's Guidelines, which became the first version of the sustainability reporting framework. The GRI Guidelines were published in 2000 and were followed up in 2002 by the second generation of Guidelines, the G2 (GRI n.d.). The current version of Guidelines, G3, was released in 2006 and updated to G3.1 in 2011. The fourth generation of Guidelines, G4, is expected to be released in May 2013.

Today, the GRI is a multi-stakeholder, network-based organisation and its global network includes more than 600 organisational stakeholders and some 30 000 people representing different sectors and groups. The framework is the most widely used for sustainability reporting with 4 865 reporting organisations to date. The mission of the GRI is *"to make sustainability reporting standard practice by providing guidance and support to organizations"* (GRI n.d.).

2.3.2. The Framework

The GRI Reporting Framework is *"intended to serve as a generally accepted framework for reporting on an organization's economic, environmental, and social performance"* (GRI, 2011). The purpose of the Framework is to enable organisations to be more transparent regarding economic, environmental, social and governance performance. It is intended to be a generally accepted framework and is therefore designed in order for *"organizations of any size, sector, or location"* (GRI, 2011) to be able to apply it. The Framework consists of four parts; (i) the Sustainability Reporting Guidelines, (ii) the Indicator Protocols, (iii) the Technical Protocols, and (iv) the Sector Supplements. These parts will be described in more detail below.

The Sustainability Reporting Guidelines make up the core of the GRI Framework and is twofold. The first part is called Reporting Principles, and describes the outcomes a report should achieve. The Reporting Principles are divided into two categories; principles that define report content and principles that define report quality. The first category covers the topics of materiality, stakeholder inclusiveness, sustainability context and completeness. The second category covers balance, comparability, accuracy, timeliness, reliability, and clarity. Both principles consist of a definition and an explanation together with a test for the organisation to assess its use of the principle. The second part of the Sustainability Reporting Guidelines is called Standard Disclosures, and contains all performance indicators that the GRI Framework encompasses.

Combining the Reporting Principles with the Standard Disclosures determines which indicators and topics the organisation should report on. The Standard Disclosures are divided into three parts; Strategy and Profile, Management Approach and Performance Indicators. The first two parts concern general information about the organisation and qualitative information regarding its approach to sustainability issues whereas the Performance Indicators outline the indicators of comparable sustainability information which the organisation reports on. Performance Indicators are organised into three categories: Economic, Environmental and Social. The GRI defines the Performance Indicators as "*qualitative or quantitative information about results or outcomes associated with the organization that is comparable and demonstrates change over time*" (GRI, 2011).

The second part of the Framework, the Indicator Protocol, provides guidance on how to report on all performance indicators. The third part, the Technical Protocol, provides further guidance to some of the Reporting Principles, for example, how to determine materiality. In combination, the principles and the protocols provide information as to how to report, whereas the standard disclosures provide information on the nature of the information to be reported.

The fourth part of the Framework, the Sector Supplements, adds additional, sector-specific performance indicators for certain industries that face unique issues. These supplements are today available to ten industries, but are not mandatory in order for companies to which the supplements are available to adhere to the GRI Framework.

In order to show that a sustainability report is GRI-based, the reporting organisation declares at which "level" it is reporting through the GRI Application Level system. The available Application Levels are A, B and C and the "*reporting criteria at each level reflect a measure of the extent of application or coverage of the GRI Reporting Framework*" (GRI, 2011). Furthermore, a plus sign is added after the Application Level letter to indicate if the report has been externally assured. Table 1 shows the criteria for each Application Level. The GRI only accepts to publish reports on its website that meet the requirements of at least Application Level C. However, according to the G4 exposure draft (GRI, 2012) the Application Levels will be removed in the next generation of guidelines.

Table 1; The GRI Application Level Criteria (GRI, 2011)

Report application level	C	C+	B	B+	A	A+
Profile disclosures	Report on: 1.1 2.1 - 2.10 3.1 - 3.8, 3.10 - 3.12 4.1-4.4, 4.14-4.15	Report externally assured	Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5 - 4.13, 4.16 - 4.17	Report externally assured	Same as requirement for Level B	Report externally assured
Disclosures on management approach	Not required		Management Approach Disclosures for each Indicator Category		Management Approach disclosed for each Indicator Category	
Performance Indicators & Sector Supplement Performance Indicators	Report fully on a minimum of any 10 Performance Indicators, including at least one from each of: social, economic, and environment.		Report fully on a minimum of any 20 Performance Indicators, at least one from each of: economic, environment, human rights, labor, society, product responsibility.		Respond on each core and Sector Supplement indicator with due regard to the materiality Principle by either: a) reporting on the indicator or b) explaining the reason for its omission.	

2.3.3. Materiality in the GRI

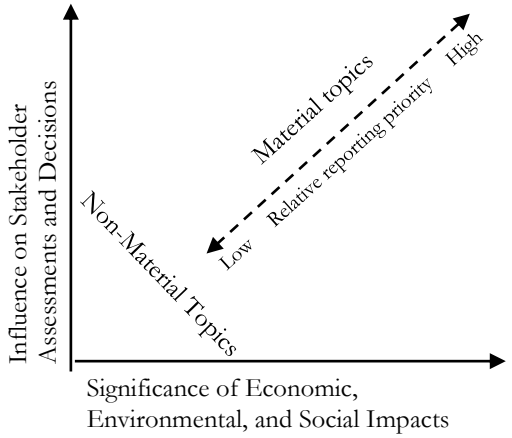
The process for defining the content of a sustainability report, as described in the Technical Protocol, starts with the reporting organisation identifying the relevant topics. These topics should then be prioritised as material aspects. Materiality is then the first Reporting Principle on which aspects will be judged and it is also the first outlined Reporting Principle. The GRI defines materiality as:

"The information in a report should cover topics and Indicators that:

- *reflect the organization's significant economic, environmental, and social impacts or that*
- *would substantively influence the assessments and decisions of stakeholders."*

It is evident from this definition that materiality consists of two important factors; the organisation's impact and the importance to stakeholders. The GRI states that a combination of internal and external factors should be used in order to determine materiality of information. This is illustrated in a materiality diagram, see Figure 2. The GRI further stresses that the report should reflect the most material topics, however "other relevant information" can be included but should have less prominence in the report. Since the definition of materiality in the GRI Guidelines includes the importance to stakeholders, the Reporting Principle on stakeholders will be briefly outlined. According to the GRI's principle of stakeholder inclusiveness, the reporting organisation needs to identify its stakeholders and explain in the report "*how it has responded to their reasonable expectations and interests*" (GRI, 2011). The Framework defines stakeholders as "*entities or individuals that can reasonably be expected to be significantly affected by the organization's activities, products, and/or services; and whose actions can reasonably be expected to affect the ability of the organization to successfully implement its strategies and achieve its objectives*".

Figure 2; The GRI's Defining Materiality Diagram (GRI, 2011)



During the autumn of 2012, the GRI started a project called Material Topics Research. The project aims to define a reference list of topics considered material for 52 different industry sectors (GRI, n.d.). The list is to be created based on the perspectives of different stakeholder groups. We believe that this project indicates the relevance of our study, since it shows that materiality in sustainability reporting is a current hot topic.

2.4. Materiality

Having examined the GRI Framework and the view on materiality expressed therein, we will turn to a close examination of the term materiality from a more general accounting perspective. Being one of the cornerstones of accounting[1], the basic meaning of the term is that an organisation should release no more – and no less – information to its stakeholders than is material. It is not within the scope of our thesis to criticise the conceptual definition of materiality. However, it is relevant to examine how the notion of materiality is transformed into practice because as conceptually simple as it might seem, this procedure is a challenging task with a critical effect on firms' disclosure decisions (Lo, 2010). Thus, this section will examine relevant issues regarding materiality, and also discuss the concept in a voluntary reporting context.

2.4.1. The Definition Problem

The issue of how to define materiality in an accounting context is not new. Scholars and standard-setters have struggled in defining the concept, theoretically and through empirical observations, for a long time. Frishkoff

[1] Both the GRI and the IASB regard materiality as one of the foundational characteristics of accounting information (GRI, 2011; IASB, 2010).

(1970) examines definitions of other authors and finds that *"not one of these definitions is by itself operational"*. In a review of empirical research on materiality in accounting, Holstrum and Messier (1982) concludes that up until that point, research had not provided any definite implications for audit practice or policy formulation. A probable explanation to the difficulty in defining materiality is the distinction between materiality as a concept and in practice (Lo, 2010). This is a crucial observation in the context of our area of research; materiality in concept is continuous, a matter of degree, where some information might not be completely immaterial for users, however its effect is expected to be smaller than the materiality threshold decided through judgement. On the other hand, materiality in practice is a discrete categorisation – information is either included or excluded.

A recent study (Acito *et al.*, 2009) maintains that materiality definitions in accounting are still too vague. Vance (2011) defines materiality as *"an amount that would make a user change his or her mind about a company"*. He notes that this definition is subjective in its nature, and therefore it is no surprise that individual materiality decisions differ.

2.4.2. The Judgement Problem

Evidently, the materiality concept is not easily defined. One explanation to this is that the question of what is material requires, in most cases, a portion of judgement (Hicks, 1964; Vance, 2011). Extensive research on judgement when determining materiality was performed in the 1970s, identifying, among other things, a lack of consistency among preparers of financial statements regarding how to interpret materiality (Trotman *et al.*, 2011). Iskandar (1996) reviews prior research on materiality, and indicates that there is not one single threshold that is constant – it will always depend on the item, the context and personal characteristics. Relevant results are summarised as follows:

- There is a large degree of diversity about materiality thresholds between users, preparers and auditors.
- There is a lack of consensus in materiality thresholds within each of these groups.
- Personal characteristics have an impact on individuals' confidence in materiality decisions.
- Non-financial (contextual) information is used by auditing practitioners in making materiality judgements. Industry is one such contextual factor.

Based on these findings, it is concluded that industry type is an important contextual variable in judgements of materiality, and that it may be a reason as to why there have been inconsistencies in judgment in the past. It is proposed that industry effects on materiality judgements be investigated further, and the need for industry-specific materiality guidelines is suggested.

Bernstein (1967) claims that even if judgement needs to be applied, some sort of description of judgement processes in determining materiality is important and necessary, and a reasonable degree of uniformity is needed. Responding to this, Ro (1982) explores conceptual issues of accounting materiality using a theory of choice under uncertainty. He concludes with four guidelines for determining materiality:

- Materiality should be measured in terms of information value.
- The accounting item must be material in itself, not only its magnitude.
- Materiality is not an all-or-nothing concept – there exists degrees of materiality.
- The degree of materiality for an item is not the same in all situations – it differs from situation to situation.

Clearly, judgement has been, and continues to be, significant for both preparers and auditors when dealing with materiality in financial statements. A number of factors influence materiality decisions and consequently, consistency is difficult, on the verge of impossible, to achieve. Hicks' (1964) main conclusion is that the materiality of an item entering into financial statements lies in its *impact on the user*. In other words, if it is likely

that the piece of information under consideration would influence the actions of a "reasonable person" of the financial statements in his/her investment decision, that piece of information is material and should be disclosed. In other words, it is important to consider who the stakeholders are.

2.4.3. The Stakeholder Identification Problem

Although seemingly obvious, the observation that different stakeholder groups consider different information material ought to be made. Since there are several user groups of financial statements, Hicks (1964) proposes that a mapping of stakeholders' interests needs to be performed in order to understand the type of information which is considered material. Frishkoff (1970) discusses the dilemma for researchers of having to identify some "ideal" group of users, whose view on materiality should count, and claims that it would be extremely difficult to generate valid results from such a study. Holstrum and Messier (1982) find that, in general, stakeholder groups demonstrate lower materiality thresholds than preparers or auditors do. Lo (2010) points out that since materiality is considered in relation to decision usefulness, it is dependent on the decision context: a piece of information might be irrelevant for a certain decision, but be extremely important for another.

2.4.4. The Information Overload Problem

A consequence of the stakeholder identification problem discussed above is the risk of causing information overload. This is emphasised by Bernstein (1967); most users cannot distinguish between material and immaterial information, meaning that when non-material information is disclosed and mixed with material information, analysis of information becomes difficult. Consequently, more information does not always mean increased materiality. With regards to sustainability disclosure, Neumann *et al.* (2012) call attention to the risk that the increasing demand for information might result in information overload for both preparers and users. This is confirmed by a survey among readers of sustainability reports (KMPG, 2008), stating that survey respondents contend that reports contain "'too much information, too little meaning".

2.4.5. Observations on Materiality

As seen, defining materiality is not easy, and even with a definition in place it is by no means uncontested. We have seen that the concept of materiality is inherently connected to decision usefulness, which makes it difficult, perhaps impossible, to define in theory. Determining the materiality of information is clearly a challenging task, both in theory and practice. Since academia have such differing views it is highly likely that corporations also have different views on how to interpret the definition of materiality in the GRI. Firms may have altogether different views on how to identify stakeholders, how wide the stakeholder circle should be or how stakeholders should be ranked and considered. Therefore, one must employ a practical perspective through stakeholder consideration and applying judgement in individual cases. Consequently, this is likely to influence which sustainability topics are deemed material and thus also the content of sustainability reports.

2.5. Materiality in Sustainability Reporting

Turning to materiality in sustainability information, the focus is broader than in financial reporting. In financial reporting, which has a predominantly quantitative orientation, materiality is thought of as a threshold for influencing economic decisions of users, investors in particular. Although the concept of thresholds is important also in sustainability reporting, such information is more qualitative in its nature, making threshold determination in some aspects irrelevant. Additionally, the stakeholders of sustainability information is not limited to investors; several other stakeholder groups are normally also seen as users of sustainability information. These factors make the determination of materiality in a sustainability reporting context even more complex.

An issue for users when examining and comparing sustainability reports is the lack of similarity and consistency. The formats of such reports vary considerably, hindering the user from understanding how organisations' environmental and social impact compares between each other and across time. Through analysing annual reports of six Danish companies, Ellerup Nielsen and Thomsen (2007) find that sustainability information in annual reports is very dissimilar, regarding discussed topics and perspectives, stakeholder priorities, contextual information and ambition levels. This is claimed to stem from the fact that organisations are surrounded by different sets of stakeholders, affecting report scope and content, thus affecting what is deemed material and consequently impairing comparability. They call for adoption of *"consistent discourse types which interact according to a well-defined pattern or order"*.

Zhou and Lamberton (2011) argue that the definition of materiality in the context of sustainability reporting is based on extending the content of financial materiality definitions. It is further argued that the GRI's materiality definition means taking all stakeholders as a group into account. Thereby, materiality of sustainability information is aggregated into an overall view of all stakeholders, ignoring their diverging interests. They argue that current definitions of materiality cannot recognise stakeholder diversity, thus creating a gap between materiality and stakeholder theory. A possible solution to this problem is presented through the concepts *negative/positive/conflicting materiality* and *stakeholder materiality*, and it is explored how they can develop interpretations of materiality. These concepts are argued to be useful when there is a conflict in materiality between stakeholders; however, since the paper is purely conceptual, they have yet to be tested in practice.

Eccles *et al.* (2012) propose that the solution to the materiality problem is to remove general guidelines and definitions for materiality altogether and instead impose sector-specific guidelines. One of the co-authors, Robert G. Eccles, is the Chairman of the Sustainability Accounting Standards Board (SASB), a U.S.-based, recently founded sustainability reporting framework. The SASB is constructed, as prescribed in the article, with only sector-specific guidelines without a common framework. It emphasises the concept of materiality and creates specific materiality definitions for different industries. Also, the investor is identified as the only considered stakeholder which makes materiality focus of the SASB similar to that of financial reporting.

2.6. Sustainability Disclosure Theories

This section outlines a number of theories that explain primarily why firms release sustainability information to the public, in other words, the reasons for making such information public at all. Although our most central purpose is to investigate how preparers determine materiality of sustainability information, the theories outlined below are relevant to us since they can help to identify different reasons for disclosing certain sustainability information in our sample of companies. Thus, if reasons for disclosing are found to differ, it will be a potential reason for differences between sustainability reports.

Researchers have used a multitude of theories in attempts to investigate and explain the phenomenon of sustainability disclosure. Despite the plethora of studies on the topic, and the fact that it has been widely researched since the early 1980s, there is no broad consensus in academia regarding the explanatory value of these theories. The lack of a comprehensive theoretical foundation was lamented as early as the 1980s (Ullmann, 1985). Parallels can be drawn to financial reporting where many competing theories, all of which have some explanatory value, have prevented arrival at theory closure (Gray *et al.*, 1996).

In order to structure the theories we have used the classification in Gray *et al.* (1995). Three avenues of research on sustainability disclosure are identified; socio-political theory studies, economic theory studies and decision usefulness studies. This categorisation has been much cited, and has not been questioned by other authors (Orij, 2007).

2.6.1. Socio-political Theories

While economic theorists (Friedman, 1970) have claimed that organisations have no other responsibilities than maximising monetary profit for their stakeholders without paying attention to environmental or social effects of their activities, others argue that they do. Socio-political theories originate from the notion that organisations and society are tightly interwoven – one cannot function without the other. Inevitably this affects how organisations communicate their activities; hence it is relevant to examine theories on the business-society relationship. The most widely used socio-political theories are political economy theory, stakeholder theory and legitimacy theory, while institutional theory has played a minor part in sustainability disclosure research.

The distinction between socio-political theories is often blurred, and the theories are to a certain degree similar. They are all concerned with the societal pressure on corporations to provide disclosure, and the desire from corporations to legitimate themselves. Although not explicitly denying the moral reasons to disclose, they primarily view organisations as wishing to be "left alone", thereby using disclosures as means to achieve this. A further common trait is that organisations with poorer sustainability performance are expected to provide more extensive environmental disclosures in their annual reports (Clarkson *et al.*, 2008; Cho and Patten, 2007).

Political Economy Theory

Political economy theory has been defined as *"the social, political and economic framework within which human life takes place"* (Gray, *et al.*, 1996). The main idea is that regardless of what activity one undertakes, one must always consider all three elements. In an organisational context, any business needs to consider not only economic matters, but also society and politics (Deegan, 2009).

Two variants of political economy theory can be distinguished; *classical* and *bourgeois*. The difference between the two lies mainly in the level of analysis; the classical approach analyses power conflict and structural inequalities, while bourgeois theorists take these elements for granted and instead focus on interactions between organisations and society (Gray *et al.*, 1996). We deem the issues that the classical approach is concerned with to fall outside our chosen research area; we focus on how organisations act and react within the system in which they operate, rather than on the system itself. Consequently, our focus will be on the bourgeois approach, from which two main theories have been derived: stakeholder theory and legitimacy theory (Gray *et al.*, 1995).

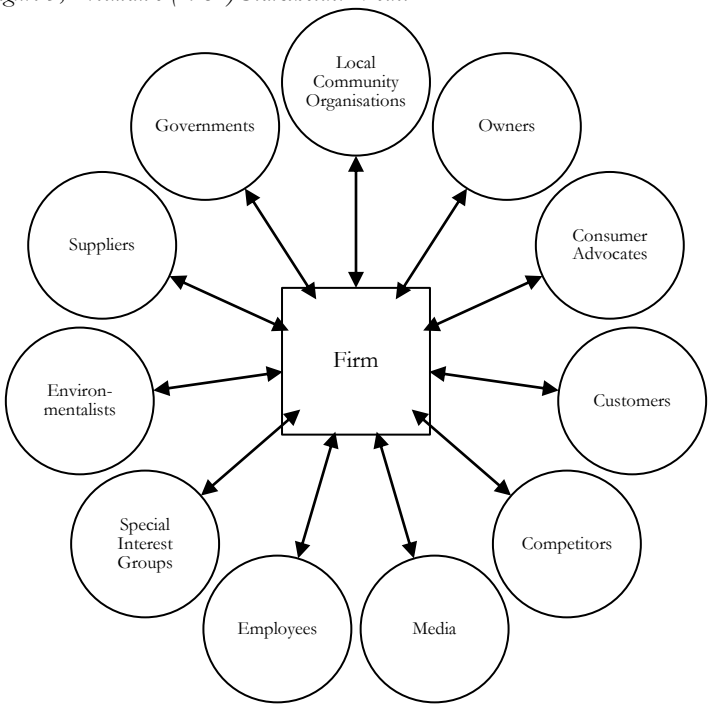
Stakeholder Theory

Stakeholder theory rests on the assumption that an organisation is part of the social system. Consequently, for an organisation to achieve its targets it needs to interact with its stakeholders and fulfil their interests. Thus, organisational decisions cannot be made without taking stakeholders' interests into account, and firms will aim to fulfil the long-term expectations of stakeholders that can impact their performance (Deegan, 2009). Such relationships incentivise organisations to disclose particular information about their activities to its stakeholders in order to show that they comply with stakeholder requirements.

In his landmark[2] book, Freeman (1984) develops the most well-known version of the stakeholder theory; see Figure 3 for the model of the firm and its stakeholders.

[2] According to Clarkson (1995), Donaldson and Preston (1995) and Mitchell *et al.* (1997) amongst others.

Figure 3; Freeman's (1984) Stakeholder Model



Freeman (1984) defines stakeholder as *"any group or individual who can affect or is affected by the achievement of the firm's objectives"*. Since then, the definitions of a stakeholder and stakeholder theory have grown and Donaldson and Preston (1995) argue that anyone looking into stakeholder literature will find that the concepts "*are explained and used by various authors in very different ways and supported (or critiqued) with diverse and often contradictory evidence and arguments*". Mitchell *et al.* (1997) identify 27 different definitions of stakeholders in academic literature between 1963 and 1995 and state that the difference is mostly due to how widely the stakeholder circle should be drawn, i.e. how many groups should be considered as stakeholders. Freeman's classic definition is one of the broadest, and also the most recognised. For example, a narrower definition is found in Clarkson (1995); *"persons or groups that have, or claim, ownership, rights, or interests in a corporation and its activities, past, present, or future"*. This highlights the dilemma for firms to identify their stakeholders – there are several accepted stakeholder definitions and it is not clear for firms how to relate to them.

Applying stakeholder theory in a sustainability context, Patten (2000) confirms the validity of stakeholder theory, finding that new environmental legislation in the US not only increased the level of legislation-related disclosure, but also non-legislated disclosure. This indicates that the level of environmental disclosure is, at least partly, a function of exposure to social/political environment and not only legal requirements.

Legitimacy Theory

While stakeholder theory can be used to explain some sustainability practice, legitimacy theory has been said to explain a little more (Gray *et al.*, 1996). It is built on the notion that organisations gain legitimacy from abiding to "social contracts" with its stakeholders. The primary difference compared to stakeholder theory is that legitimacy theory problematises the stakeholder relationship; if the organisation is even perceived to break a contract with stakeholders, a legitimacy gap arises (Savage *et al.*, 2000). In reaction to this, the organisation will employ one or several legitimation strategies in attempting to regain legitimacy. This theory has received much attention in connection with voluntary disclosure, and has even been called the only satisfactory theory for explaining sustainability reporting (Savage *et al.*, 2000).

A large number of studies (Adams *et al.*, 1998; Alnajjar, 2000; Bowman and Haire, 1976; Cho and Patten, 2007; Cowen *et al.*, 1987; Hackston and Milne, 1996; Ness and Mirza, 1991; Patten, 1991; Roberts, 1992) have

examined how different corporate characteristics (primarily size, industry and profitability) relate to sustainability disclosure. Results are mixed, but there seems to be a positive relationship between corporate size and level of sustainability disclosure. Hackston and Milne (1996) argue that this is because larger companies undertake more activities, make a greater impact on society and have more shareholders. Another interpretation, presented in Ullmann (1985), is that before devoting resources to meeting social demands, organisations need to achieve an acceptable level of economic performance – smaller companies simply cannot afford to comply. Regarding impact of industry category, results are mixed. A notable study, focusing solely on this matter, is Cho and Patten (2007). They group companies in "environmentally sensitive" and "non-environmentally sensitive" groups, and find that companies from the environmentally sensitive group disclose more environmental information.

Institutional Theory

The institutional theory provides a complimentary perspective to both legitimacy theory and stakeholder theory, and overlaps to a certain extent with both theories. It concerns itself with why organisations tend to take on similar characteristics and forms or behave similarly. Companies pursue such conformity because they are rewarded for it through increased legitimacy, resources and survival capabilities (Scott, 1987). Thus, institutional theory clearly links organisational practices to societal norms and values. Two main mechanisms of institutional theory are isomorphism and decoupling (Deegan, 2009). Isomorphism is the process of forcing one unit of a population to resemble other units. This can happen through coercion (stakeholder pressure), mimicry (adopting similar practices as leading organisations) or following of norms. Decoupling means that the displayed practices might differ from the actual ones – for example, the organisational image conveyed to the public might be one of social and environmental responsibility when actual targets are profit maximisation.

Institutional theory has not been central for analysis of sustainability reporting. Its main interest is longitudinal studies of institutional change and how organisations became institutionalised (Larrinaga-González, 2007). The main study that uses the theory in this context is Kolk (2005), who compares differences in patterns and trends in environmental reporting in three regions, the U.S., Europe and Japan, during the period 1999-2002. The main results are that differences in reporting between U.S. and European/Japanese companies increased, while some convergence between European and Japanese companies could be noted. Within Europe, differences increased. Furthermore, analysing environmental report content, the divergence between regions was even more notable, with country of origin noted as an important factor. Thus, the study finds some support for institutional theory as an explanation for sustainability reporting practices.

2.6.2. Economic Theory Studies

A number of economic theory-based studies have been claimed to hold explanatory value for the disclosure of social information. These theories do not focus on voluntary disclosures or sustainability reporting specifically, but since they have been used to explain these phenomena in research, they do merit attention in this theoretical overview.

Positive Accounting Theory (PAT)

PAT tries to explain and predict the choice of accounting policies and approaches across organisations, recognising that economic consequences exist. Accordingly, firms will choose accounting policies to minimise costs and maximise profits, although such profits may be gained in future periods. In a voluntary disclosure context, this can take the form of authorising expenses for sustainability reporting and/or performance in order to avoid costly repercussions and thus postponing current earnings. PAT is therefore driven by a notion of pure wealth maximisation among managers. Although predominantly dealing with financial accounting policies, the rationale of positive accounting theory has been said to have bearing on explaining social disclosure (Ness and Mirza, 1991).

Economic Agency Theory
In an organisational context, agency theory problematizes the relationships between capital providers and management. The core of this theory is the misalignment of interests between these groups. Ideally, managers would intrinsically act to maximise shareholder value, but according to agency theory they instead use their position for personal gain. A tool to mitigate such behaviour is to force managers to provide certain disclosures (Cotter *et al.*, 2011). Additionally, managers themselves also have incentives to disclose information –managers can through disclosures assure that they act in the interests of capital providers. Such information, however, will only be disclosed if benefits outweigh costs (Ness and Mirza, 1991).

Although agency theory has not been central in explaining voluntary disclosure, we believe it is worth considering since our sample consists exclusively of large companies. Some owners can have specific agendas that need to be addressed. For example, ethical investors, who have become increasingly important in recent years, can demand specific information, which in turn could influence actions of top management.

Signalling Theory
Related to economic agency theory, signalling theory concerns the issue of information asymmetry and how to reduce it. One way of signalling is through voluntary disclosure, through which managers can assist stakeholders in making better decisions. Several studies confirm that "high quality firms", or firms with good news, do not refrain from signalling this (Cotter *et al.*, 2011). Managers of firms with neutral news have incentives to report positive news, while managers of firms with poor news will have incentives to withhold bad news. However, firms with bad news sometimes attempt to "pre-empt" bad news in order to lessen their effects. Therefore signalling theory assumes that firms will disclose more information than what is required of them.

Resource-based Theory
From a resource-based perspective, sustainability endeavours are seen to provide internal and/or external benefits. Internal benefits are obtained through intangible resources being created, primarily employee know-how. External benefits come in the form of improved corporate reputation and thus increased attractiveness among customers, suppliers and prospective employees (Branco and Rodrigues, 2006). Thus, the motive for sustainability work and reporting is profit maximisation.

Proprietary Cost Theory
Managers have incentives to withhold voluntary information if they believe it can be harmful for the firm (Dye, 1986). Managers will determine the potential costs and benefits of disclosures before deciding what information to disclose. Hence, firms will only disclose a piece of information if: (a) the benefits of disclosure will exceed the costs, or (b) it will not harm the firms' share value (Cotter *et al.*, 2011).

Voluntary Disclosure Theory (VDT)
Similar to proprietary cost theory, VDT suggests that firms will disclose "good" news and withhold "bad" news. Thus, they both contradict socio-political theories in that superior environmental performers are hypothesised to disclose more information than firms with poorer sustainability performance. There are also similarities with socio-political theories; firms with more news media coverage and higher environmental sensitivity are more likely to disclose sustainability information.

This theory is supported by Clarkson *et al.*, (2008), who find that firms whose legitimacy is threatened make more soft statements about being committed to the environment. Bewley and Li (2000) find further support for VDT in that more media coverage of environmental exposure, higher pollution propensity and more political exposure lead to a higher level of sustainability disclosure. Deegan and Gordon (1996) find that environmental disclosures are self-laudatory, promoting positive aspects and omitting negative aspects. Similarly, Deegan and Rankin (1996) find that organisations are reluctant to provide negative environmental information in their annual reports.

2.6.3. Decision Usefulness Studies

Decision usefulness studies can be categorised into two types – ranking of decision usefulness of qualitative and/or quantitative information among investors, and analysis of how information affects share prices.

In ranking studies, financial user groups (analysts, bankers etc.) are asked to rank various pieces of accounting data in order of perceived importance. Several studies have indicated that the financial community find sustainability disclosures *"better than useless"*, having ranked it in categories such as "moderately important" (Gray *et al.*, 1995). Other studies have attempted to investigate whether stock market participants treat social disclosure as information, and, although results are inconclusive, Mintzberg (1983) concludes tentatively that *"it pays to be good, but not too good"*. Although rather dated, a relevant study by Shane and Spicer (1983) studied market response to firm-specific environmental information produced outside the firm, and found that large negative abnormal returns could be attributed to publication of such information.

Deegan and Rankin (1997) find that shareholders and individuals within the organisation deem environmental information to be material for decision-making whereas other stakeholder groups find it immaterial. All stakeholder groups in the survey found the annual report to be significantly more important than other means of communication.

Despite the number of studies regarding decision usefulness, Gray *et al.* (1995) dismisses the significance of this approach as an explanatory factor for sustainability reporting decisions, calling it "largely unsatisfactory". This is in part because it lacks a solid theoretical foundation, but also because improving decision usefulness for investors is normally considered a minor justification for disclosing sustainability information – financial participants are far from the most vocally active stakeholder group in the demand for sustainability disclosures (Gray *et al.*, 1995).

2.6.4. Observations on Theories

Having examined theories that seek to explain sustainability reporting as well as the concept of materiality, we will below draw attention to some observations that can be made from this. Figure 4 at the bottom of this section illustrates our interpretation of how these theories relate to each other.

It seems obvious that the socio-political theories are to a certain extent overlapping. As we have seen, they all regard increased societal pressure as the main catalyst for sustainability disclosure, and consequently they recognise the perceived need of corporations to legitimise themselves, and using disclosure to do so. Although ethical reasons to disclose are not denied, studies employing socio-political theories point to external pressures as the primary motivation. Since corporations with larger environmental/social impact are more pressured by external actors, these theories predict that worse performers will disclose more information than better performers (Clarkson *et al.*, 2008; Cho and Patten, 2007). To conclude, these theories can be viewed as building on each other; the political economy theory forms the basis for both stakeholder and legitimacy theory, while legitimacy theory incorporates the stakeholder theory and problematizes the stakeholder relationship – it is also concerned with what happens when corporations are perceived to be non-compliant with societal demands/expectations. Although institutional theory also overlaps with other socio-political theory, its perspective differs; it is more concerned with long-term societal change and its effects on organisations, while the other theories attempt to determine in the short term why an organisation is making particular sustainability disclosures (Larrinaga-González, 2007).

The fact that socio-political theories predict more disclosure among worse performers contrast with the predictions of economic theories, specifically voluntary disclosure theory and signalling theory. These theories are explicitly built on the notion that better performers will emphasise this through extended disclosure, while firms with bad news will not report on them unless forced to. However, VDT and other economic theories, particularly PAT as argued by Milne (2002), have come to incorporate socio-political explanations for

voluntary disclosure into their previously strictly wealth-maximising stance. This blurring is interesting – it indicates that theories are not exhaustively explanatory on their own, but instead, when confronted with a phenomenon, they are sometimes driven to find explanations outside the theory itself.

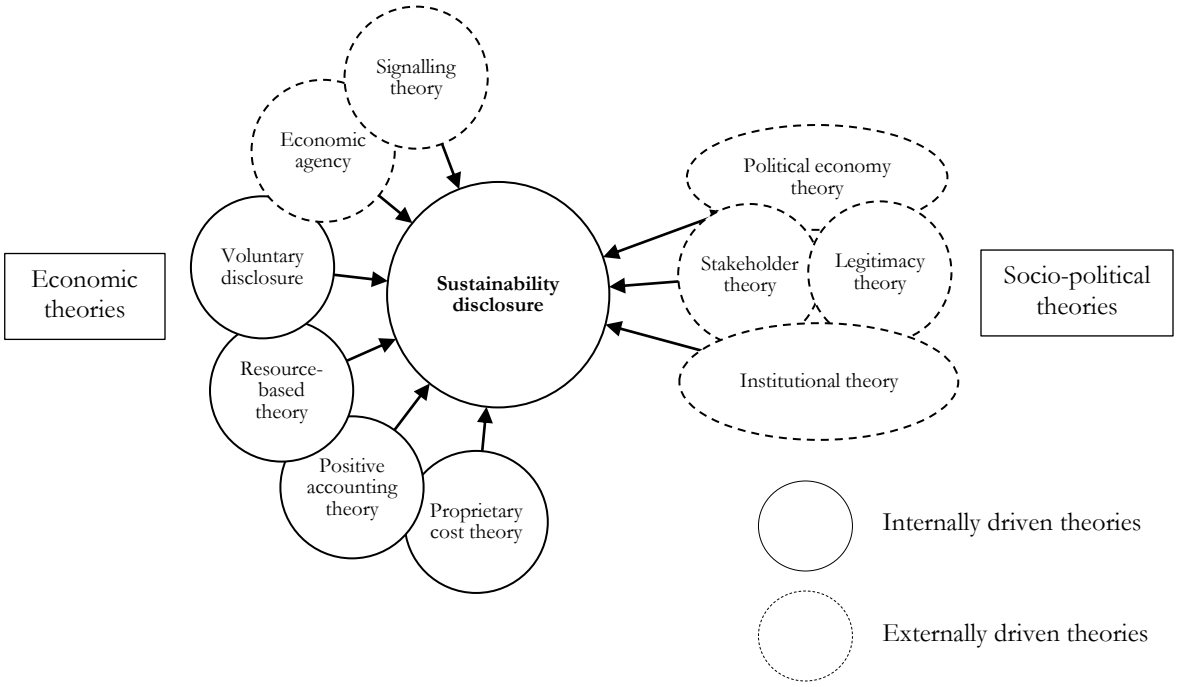
Also contributing to the blurring of theories, but in another way, is the fact that different theories can be used to explain similar phenomena. For example, signalling theory and socio-political theories draw on similar notions, namely that organisations and managers need to convey to external actors that they act in accordance with external expectations. However, instead of conveying information for the sake of seeking legitimacy, signalling theory concerns itself with firms signalling "good behaviour". Furthermore, such behaviour can be performed in order to reduce agency costs, linking it with agency theory. This example illustrates the difficulties for researchers in answering the question *why* corporations disclose – explanations for observed phenomena can often be found in more than one theory.

Although criticism against economic theories has been harsh, the theories arguably remain relevant. Critics state that capital investor groups are not the main target for sustainability disclosure, but we contend that they are nonetheless important. The arguments proposed by economic theorists may be morally questionable, but their explanatory power still needs to be examined.

The theories used to explain sustainability disclosure, and our interpretation of how they are related, are illustrated in Figure 4. Note specifically our interpretation of some theories as primarily "internally driven", in other words that the reasons for disclosing sustainability information come from inside the firm, while other theories have been interpreted as "externally driven", meaning that the pressure to disclose is exerted from external actors.

To conclude this discussion, we have seen that researchers, employing quantitative methods, find different reasons as to why corporations engage in sustainability reporting. We are therefore surprised that not more qualitative attempts, exploring management perceptions and behaviour in relation to sustainability reporting, have been performed.

Figure 4; Interpretation of Relations Between Sustainability Disclosure Theories



3. Method

3.1. Empirical Method

In order to be able to answer our research question, we have chosen to conduct a qualitative research. It is normally stated that quantitative studies are more generalizable than qualitative studies (Ercikan and Roth 2006). However, regarding qualitative research Lincoln (2002) states that "*what we have given up in an assumed universality – and therefore, generalizability – we have gained in richness, texture, flavor, vicarious experience and deeper understanding".*

Qualitative research, broadly defined, means *"any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification"* (Hoepfl, 1997). Qualitative research methods can be used to better understand a phenomenon about which little is known or to gain more in-depth information that may be difficult to convey quantitatively. Thus, through a naturalistic approach, assuming multiple views of reality influenced by social contexts and environments, this study seeks to understand phenomena in context-specific settings rather than attempting to test theories and reach generalizable results.

Much of the previous research in the area attempts to explain *why* companies report sustainability information through different theories. As our research question revolves rather around *how* companies report, a qualitative approach is preferred, whereas *"quantitative studies emphasize the measurement and analysis of casual relationships between variables, not processes"* (Denzin and Lincoln, 2005). A quantitative approach is not suitable to investigate the reasoning behind materiality decisions, since it is only able to examine what has actually been deemed material enough to be included in the actual report. In other words, it can only examine the discrete categorisation of information as material or not, and not the preceding process of determining the threshold along the materiality range. *Rich-thick description* will be used when conducting this research, unlike quantitative research which sets out to generalise the findings beyond the sample from where the data was gathered. Qualitative research provides rich-thick descriptions, allowing the reader to determine if the situations described apply to the reader's specific situation.

Data collection was performed primarily through interviews with individuals responsible for preparing and/or communicating company sustainability reports. As Glesne and Peshkin (1992) state, *"qualitative researchers seek to make sense of personal stories and the ways in which they intersect"*, a description that matches our research question well. According to Rowley (2012) interviews are useful when "*research objectives centre on understanding experiences, opinions, attitudes, values, and processes*".

3.2. Data Selection

A purposive sampling method was chosen in order to gather information-rich cases. Since *"sample selection has a profound effect on the ultimate quality of the research"* (Coyne, 2008), time and effort was devoted to defining selection criteria that would guide our sampling. This type of purposive sampling is called criterion sampling; it means that, in order assure quality in the sample, all cases must meet a set of specified criteria. Our criterion sampling is not based on theoretical selection but rather chosen in order to ensure information-rich cases. Table 2 shows our selection criteria and underlying motivation.

Table 2; Selection Criteria and Motivation of Sample

Selection criteria	Motivation
Swedish company	We have chosen to limit the sample to include only Swedish companies because we want to eliminate language barriers as a source of error. Additionally, we are familiar with the Swedish economic environment, market and corporations.
OMX large/mid-cap or government-owned	This limitation was made on order to capture only firms of a certain size. Smaller companies might not have the resources to devote sufficient time and effort into the issues we want to investigate.
Manufacturing company	We have chosen to limit our sample to manufacturing companies, because they are affected by the largest number of aspects and indicators in the GRI, thus obliging the companies at hand to get a comprehensive view of the GRI Framework and how to determine materiality of different types of indicators.
HQ in the Stockholm region	We wanted to conduct our interviews in person. Thus, traveling to headquarters in other cities would have been too costly and time-consuming given the scope of this thesis.
Applying the GRI Framework	The companies need to produce a sustainability report in accordance with the GRI Framework in order for us to be able to analyse its application.

These selection criteria singled out 14 companies, which were approached by e-mail. The e-mail contained a brief introduction of the authors, the research question and scope of the thesis, suggested dates for interviews and the estimated time of the interviews, all in accordance with Rowley (2012). Seven companies, which are listed in Table 3, reverted with positive responses and interviews were scheduled. We decided to start conducting the interviews before considering changing our selection criteria to include more companies. If it was deemed that data saturation was not reached after the seven initial interviews, the criteria would be changed in order to include more companies. Interviews with only a few respondents may result in the individual characteristics of each interviewee tainting the findings in an undesirable way. However, if it is found that further interviews are not adding new data to analyse, there is no need to extend the sample.

After conducting all seven interviews, we felt that new relevant data was gathered in all interviews; however the data collected in the latter interviews was predominantly of firm specific character and thus did not provide any new points of analysis. Consequently, the sample was not extended. Instead, we chose to include an additional perspective on the identified issues – the auditor perspective – which is elaborated upon below.

Table 3; Participating Companies

Company	Main product	Ownership structure	Turnover 2011 (MSEK)[1]	First sustainability report	Application Level	Assured
Atlas Copco	Machinery & Equipment	Publicly listed	81 203	2003	B	No
Billerud	Paper	Publicly listed	9 343	2009	A	No
Boliden	Metals	Publicly listed	40 323	2005[2]	B	No
Sandvik	Machinery & Equipment	Publicly listed	94 084	2006	B	Yes
SCA	Paper products	Publicly listed	81 337	2006[3]	A	Yes
Sveaskog	Forest products	Government owned	6 724	2005[4]	B	Yes
Vattenfall	Electricity & Heat	Government owned	181 040	2003	B	Yes

[1] From company annual reports
[2] First environmental report was published in the end of the 1990's
[3] First environmental report was published for 1998
[4] First environmental report was published in the beginning of the 1990's

In our sample we have captured companies on Application Levels A and B. Also, both assured and not assured companies are included, as well as companies who act in industries with a GRI Sector Supplement

available, in order to investigate what effects, if any, these parameters have. From Table 3, the lack of participating companies reporting on GRI Application Level C is evident. Five out of the 14 initially approached companies report on the C level. The implications of this will be discussed in the analysis. A possible reason that none of them chose to participate in the study is that they are on the entry level of applying the GRI Framework and thus do not feel that they have put enough work into the issue of materiality. Another reason might be that they have a small sustainability reporting function, thus lacking the resources to participate in studies of this kind.

Through our interviews with the persons listed in Table 4 it was indicated that they received substantial assistance from their auditors during the report production process. Therefore, we made the decision to widen the empirical scope and also interview people in the auditing function. Another reason for contacting the auditors was to triangulate our empirical findings from the preparer interviews in order to validate them. We contacted sustainability report auditors at five auditing firms using a similar approach as when the preparers of the sustainability reports were contacted. Four auditors, listed in Table 5, returned positive responses.

In order to gain a more comprehensive view of the GRI Framework and the intentions of the GRI, as well as to complement the auditor interviews, an interview with Mr. Lars-Olle Larsson was conducted. Mr. Larsson is one of the most experienced individuals within sustainability reporting in Sweden and the author of several books on the topic. After working within various auditing functions for 16 years focusing on sustainability issues, he is currently the Manager of ESG (Environmental and Social Governance) Affairs at Swedfund, a government-owned company that invests in developing markets. Additionally, he has held board positions in various international organisations that work with improving sustainability work and reporting.

3.3. Data Collection

3.3.1. The Interviewees

Generally, we have gained good access to the participating reporting companies. In most cases, we were able to interview the person directly responsible for the sustainability report content. Only in two cases (Atlas Copco and Vattenfall) did we speak to someone who was not ultimately responsible for the report. Although the interviewees from Atlas Copco and Vattenfall are not directly responsible for the report content, they are either involved in the process of producing the report (Atlas Copco) or acting as mentor/coach to the workforce in the sustainability department (Vattenfall). Thus, we feel that we have gained access to appropriate people given our chosen area of study. Table 4 below outlines the company, name of the interviewee, job title, and main responsibilities (as described by themselves) of our interviewees in each of the reporting companies.

Table 4; Preparer Interviewees

Company	Name	Title	Main responsibilities	Employed since	Interview date
Atlas Copco	Ms. Mala Chakraborti	Sustainability Coordinator	Preparing sustainability report, follow-up on sustainability report progress	2011	2012-10-09
Billerud	Ms. Stina Blombäck	Group Sustainability and Energy Director	Responsible for the content of, and data gathering to, the sustainability report	2001 (2 years in current role)	2012-10-11
Boliden	Ms. Marcela Sylvander	Director Group Communications	Responsible for all internal and external communication	2004	2012-10-19
Sandvik	Mr. Bo Berglund	Manager Non-financial Assurance	Responsible for preparing the sustainability report and follow-up of CSR issues within the Group	1980	2012-10-04
SCA	Mr. Per Brattberg	Sustainability Reporting Director	Responsible for sustainability reporting	2001 (1 year in current role)	2012-10-15
Sveaskog	Ms. Charlotte Jönsson	CSR Manager	Work 50% with CSR issues. Identifying improvements in CSR activities as well as responsible for preparing the sustainability report	2006 (3 years in current role)	2012-10-15
Vattenfall	Mr. Magnus Enell	Senior Advisor	Mentor and coach for director and employees in the sustainability department	2008 (1.5 years in current role)	2012-10-05

The interviewees at the auditing firms are listed in Table 5 together with their titles. Upon the request of KPMG, we met with two individuals in the same interview, Ms. Kernell and Ms. Sundell. In our opinion, this did not affect the data gathered from this interview.

Table 5; Auditor Interviewees

Company	Name	Title	Employed since	Interview date
Deloitte	Mr. Andreas Drugge	Manager	2006	2012-11-05
KPMG	Ms. Helena Kernell	Manager	2010	2012-10-30
	Ms. Erika Sundell	Specialist	2012	
Mazars SET	Mr. Markus Håkansson	Approved Public Accountant	2002	2012-11-06
PwC	Mr. Fredrik Ljungdahl	Director, Sustainable Business Solutions	2007	2012-10-30

3.3.2. Structure and Conduct of the Interviews

When deciding on the most suitable way to conduct the interviews, we consulted research articles and books on qualitative research and research interviews. We determined that a semi-structured interview approach would be the most suitable since it allows the researcher to understand the way in which the "*interviewees perceive the social world under study*" (Qu and Dumay, 2011). More specifically, we wanted the interviews to

provide in-depth understanding through follow-up questions and discussions in order to explain, clarify and confirm that answers are interpreted correctly. Consequently, the semi-structured approach provides the most suitable technique and was therefore chosen.

The semi-structured interview method involves questions or themes that guide the interview. We used an interview guide because we wanted to ensure that the same questions were covered in all interviews (see Appendix A for interview guides). The basis for formulating our questions was the GRI Framework and the theories covered in the section on theoretical context above. The interview guide was divided into different themes, beginning with introductory questions to set the tone and familiarise the interviewee with the situation (Qu and Dumay, 2011). The guide follows the themes of the GRI, materiality, stakeholders, legitimacy, voluntary disclosures and information usefulness. The questions are primarily open-ended in order to capture the interviewees' views and opinions and to stimulate discussion rather than work as a questionnaire. We have aimed to formulate the questions in a way to allow easy understanding and thus avoided vague and leading questions as well as closed questions that merely invite the interviewee to give a yes/no answer (Rowley, 2012). Before every interview, we presented our thesis and ourselves as well as the scope and aim of the interview. It was also stressed at the start of the interviews, that the interviewee should inform us if anything during the interview was unclear or whether they had any questions. During the preparer interviews, discussions regarding their specific sustainability reports were held.

The interview guide was not sent out prior to the preparer interviews in order to be able to have a discussion without answers that were prepared beforehand. However, in the interviews with the auditors and Mr. Lars-Olle Larsson, the interview guide was sent to the respondents prior to the interview because several of them specifically requested this. Since these interviews are not our primary source of information but rather worked more to confirm the data we gathered from the companies, we do not believe that the respondents' familiarity with our questions is a methodological problem.

The interviews with company representatives lasted between 40 and 90 minutes with an average length of 60 minutes, whereas the interviews with the auditors lasted between 35 and 70 minutes with an average of 45 minutes. The interview with Mr. Lars-Olle Larsson lasted for 105 minutes. All interviews were recorded using recording devices. All interviews except the one with Mr. Bo Berglund from Sandvik were made in person. The interview with Mr. Berglund was conducted over the telephone because he is not working from Sandvik's headquarters in Stockholm. The fact that the interview was conducted via telephone did not, in our view, affect the quality of the data collected from this interview. This is supported by the findings of Sturges and Hanrahan (2004), who find that there are no significant differences between conducting face-to-face interviews as compared to telephone interviews. All interviews were conducted in the native language of the interviewees[3]. Thus, language barriers were avoided, which added to the quality of the interviews.

Both authors were present in all preparer interviews, as well as in the interview with Mr. Lars-Olle Larsson. The auditor interviews were, due to practical reasons, conducted by one of the authors. Since Mr. Markus Håkansson at Mazars SET is a colleague of one of the authors this interview was conducted by the unrelated author in order to avoid risk of bias – informal interviewer-interviewee relationships can lead to information being omitted from the interviewee's answers, in part because the topic might have been discussed beforehand outside the scope of the interview.

We contacted five out of the seven interviewees, all except Atlas Copco and Billerud, with a follow-up question[4] after the interview, since we felt that this question had not been discussed thoroughly enough in the interviews and needed clarification.

[3] Swedish for all interviews except the one with Ms. Mala Chakraborti (Atlas Copco), which was held in English.
[4] See Appendix A for this question.

3.3.3. Other Sources of Data

In order to get a more comprehensive picture of the companies' sustainability reporting work, we have made use of their sustainability reports and other information publically available on the companies' web sites that describe their sustainability efforts and reporting. The sustainability reports were read prior to all the company interviews, extra attention was devoted to sections that describe their materiality process and stakeholder identification and dialogue. We have also examined the sustainability sections of the company websites in order to get a more comprehensive view on their sustainability reporting. The information that was used from the websites was the GRI indices, which in most cases is published separately from the sustainability report itself. We have also made use of SIS Ägarservice, a database that lists the largest shareholders in public Swedish companies, in order to examine potential influence that shareholders might have on materiality determination reporting. A table listing the ten largest owners in each of the listed companies is found in Appendix B.

3.4. Data Analysis

As soon as collection of empirical data had started, analysis began. Data was discussed and analysed between the researchers and with our tutor. From analysing and collecting data simultaneously, additional understanding of studied phenomena was gained, which were incorporated in subsequent interviews and thus helped shape the study. As the body of collected data grew larger, patterns and trends emerged. At this stage, a structured way of analysing the data did not exist; analysis was performed as relevant issues were identified, often immediately following interviews.

After concluding the interview stage, a more structured way of analysing data was adopted. The recorded interviews were transcribed manually into a word processing program. According to Rowley (2012) this is an important familiarisation process and it is also best practice to transcribe entire interviews rather than parts of them. When the final interview had been transcribed, the documents were read through and sections and passages of the interviews that were deemed relevant were identified as a form of initial data analysis. The passages were highlighted in the transcribed documents, coded with different colours according to the theme of the discussion. After this process was finished, five main categories of data had been identified.

1. General comments on sustainability reporting
2. The GRI
3. Materiality
4. Stakeholders
5. Other

The formulation of these categories emerged in conjunction with the read-through process. The marked sections were organised under the appropriate category, in accordance with Attride-Stirling's (2001) recommendations. Some data was categorised in more than one of the five identified categories, while some data, which was considered irrelevant to the research purposes, was not categorised at all. When all relevant data had been thematically categorised, it was read through again and 17 specific subcategories were identified.

In the next step, the text was synthesised into our empirical observations section. The empirical chapter was structured using the same categories as the coded data, since this was deemed the best way to coherently convey patterns and trends. When several interviewees expressed similar views and attitudes, either one quote was chosen to illustrate this, or words like "several/a majority/most/all" were used. It was in this state that the material was translated from Swedish to English.

When the empirical observations text was finalised, all respondents were contacted with information and quotes that were used from their respective interviews in order to confirm that we had interpreted answers

correctly. Some interviewees responded with minor clarifications on information and quotes, but overall our interview data had been interpreted and synthesised without distorting the meaning of the interviewees.

Subsequently, as the drafting of the analysis commenced, the next step of data analysis began. When drafting the analysis, the primary focus was to fulfil the purpose of the study by answering our problem statement. The identified differences between sustainability reports, mentioned in the introduction, were constantly kept in mind. Although a theoretical interpretation of sustainability reporting practice was sought, we also aimed to analyse important empirical observations that have practical implications. This can sometimes be done without theoretical concepts (Kraus, 2007). Therefore, connections to the theoretical context were made where deemed relevant but it was not actively sought; the primary aim was to answer our problem statement.

3.5. Reflection on Research Quality

Trustworthiness, i.e. how to persuade an audience that the findings are worth paying attention to, is a key characteristic of qualitative research (Lincoln and Guba, 1985). This concept is divided into four issues that the researcher needs to be aware of. These four issues are credibility, transferability, dependability and confirmability, which will guide reflection on the quality of our research. These issues and their implications will be discussed below. The quantitative counterpart of each issue is included in their respective heading.

3.5.1. Credibility (internal validity)

Credibility concerns the "truth value" of the research (Lincoln and Guba, 1985). Specifically, it deals with compatibility between the researcher's constructed reality and the reality that exists in the minds of the respondents. The degree to which our collected data depicts reality is subject to our interpretations and analysis. First, we have reached data saturation in our sample of firms, and then our findings were triangulated through the auditors' views of the issues. These are two means of reaching credibility (Lincoln and Guba, 1985). According to Patton (1999), "*rigorous techniques and methods for gathering high-quality data that are carefully analyzed"* is a way of reaching credibility. The interviews were recorded and transcribed word-for-word, called *referential adequacy* (Lincoln and Guba, 1985), which we claim to have achieved. Furthermore, the empirical data has been synthesised in a way that minimises the impact of our depiction of reality on interpretations. The credibility of our study is further increased by the fact that we are two authors, giving us the ability to rectify each other's misinterpretations when needed.

3.5.2. Transferability (external validity)

Transferability is concerned with the *applicability* of the research conducted (Lincoln and Guba, 1985). Most researchers view applicability in terms of generalizability whereas a truly naturalistic researcher argues that no true generalizability is really possible; all observations are defined by their specific context, however, knowledge gained from one context could have relevance for other contexts.

Regarding the applicability of our results, it cannot be assumed that our empirical observations are representative for all the GRI reporting companies. Companies in a different reporting environment might view and apply the GRI Framework differently. However, since we have defined the scope under which our research is conducted it might be possible to apply our conclusions to settings in a similar context. Lincoln and Guba (1985) present two means of increasing the transferability; thick description and purposive sampling. If the researcher reports sufficiently detailed descriptions of the data, the reader is enabled to make judgements about its transferability. We have attempted to provide a comprehensive empirical observation section without crowding it with redundant information. Purposive sampling is suggested instead of random sampling as a means of increasing transferability since it depicts how samples are selected, and in what context. A detailed purposive sampling has been employed, which can be easily followed. This allows for judgement regarding whether the data is applicable to alternative contexts.

3.5.3. Dependability (reliability)

Dependability is the amount of *consistency* employed when conducting the research (Lincoln and Guba, 1985). It concerns providing the reader with evidence that if the research was replicated with the same (or similar) respondents in the same (or similar) context, the findings would be repeated. The evidence provided for this study is the interview guides that were used when conducting the interviews. However, qualitative research requires interpretation of collected data, which inevitably will be subjective to some degree.

If attempting to replicate this study, the researcher will need to consider that questions were adapted to the individual interview situations, that is, not all questions were asked during every interview, and follow-up questions were asked to clarify statements in order to collect as much information as possible and confirm that we understood the interviewee correctly. This is the nature of a semi-structured interview; it relies to a certain extent on social interplay between the interviewer and the interviewee, which indicates that different data could be obtained if another researcher attempts to replicate the interviews. The interviews were also conducted at a certain point in time and the respondents might receive new information or change opinions and/or perceptions, which might render a different answer.

3.5.4. Confirmability (objectivity)

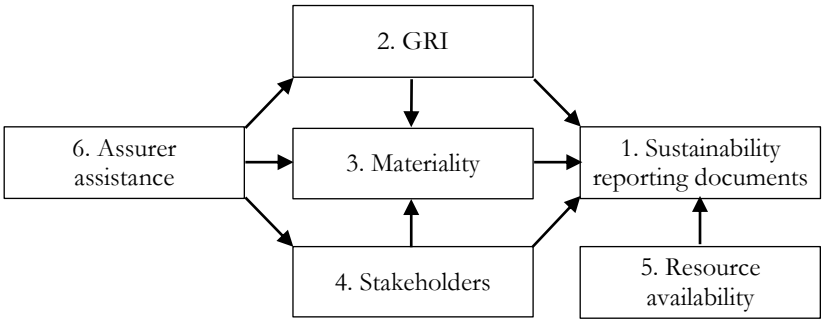
Confirmability concerns the *neutrality* of the authors, which is the degree to which the findings are the product of the respondents, and not of researcher biases (Lincoln and Guba, 1985). Researcher bias occurs *"when the researcher has personal biases or a priori assumptions that he/she is unable to bracket"* (Onwuegbuzie and Collins, 2007). This may be transferred to the respondents so that their behaviours, answers, or experiences are affected. Furthermore, *"researcher bias does not occur only at the data collection stage, it can also prevail at the data analysis and data interpretation phases"* (Onwuegbuzie and Collins, 2007).

The researcher inevitably affects the respondent in several ways. Firstly, the respondents are affected by the framing of concepts in the initial e-mail approach, where the research question was stated. This inevitably draws the respondent's attention to the concept of materiality in sustainability reporting in ways they might not have thought of it previously. Secondly, during the interview the respondents are affected by further framing of questions and concepts. In order to minimise this distortion, a research approach could be employed that involves attending meetings where materiality of sustainability information is determined. Through such an approach, our questions would not affect the answers of respondents. However, it was deemed unlikely that we would gain access to such meetings. Furthermore, even if we would gain access, our sheer presence might also have influenced discussions at the meetings. Instead, throughout the data gathering and analysis processes, bias has been limited through awareness of our personal assumptions and how they might influence our interpretations and findings. Additionally, two explicit measures were taken; (1) the interview guide was not shared with the preparer interviewees prior to interviews, and (2) the interview with Mr. Markus Håkansson at Mazars SET was conducted only by the unrelated author.

4. Empirical observations

This section will account for our empirical findings. The data will be presented thematically. First sustainability reports and reporting in our sample of companies is examined. After that, we outline views on different aspects of the GRI in our sample companies. Further, materiality in practice is described in detail, and finally a few other minor aspects are outlined. The outline and logic of this section is illustrated in Figure 5.

Figure 5; Disposition of Empirical Observations



4.1. The Sustainability Reporting Documents

This section describes in what format our sample of companies report sustainability information, and their respective logic. We have chosen not to make any subjective comments about scope and content of the reports, because we do not believe that we are in a position to make such judgements. Furthermore, we do not deem it appropriate to describe at length the features of the companies' respective reports. Key content will be described when relevant, but to get the full picture the reader can find sustainability reports on the respective company's web site. The reports that we have examined are from the 2011 fiscal year.

First of all, since no explicit description of the observed differences between sustainability reports is included in this thesis, it should be stated that there *are* in fact large differences between the sustainability reports of the respective companies. Miljörapporten's examination (Miljörapporten, 2012) of sustainability reports in Swedish companies finds that the supply differs considerably in terms of scope, availability and content; everything from two pages to over 160, integrated reports, separate documents and continuous updates on company websites were observed. For further enlightenment, the reader is encouraged to access the sustainability reporting documents to get their own view.

Sandvik have included their sustainability disclosures in the final section of the annual report. The section is 12 pages long and describes the company's objectives/targets, strategies, controls, responsibilities, risks and opportunities from a sustainability perspective. They also publish a separate GRI document in which they disclose whether or not they report on all the GRI indicators and, if they report, where to find the information. They argue that these issues are an integral part of their operations and therefore it is natural to include them in the annual report. They have plans to integrate even further, disseminating sustainability disclosures across the annual report.

Vattenfall released two separate documents for 2011. One "Performance Report", which contains a GRI content index and reports on environmental, social and economic performance through a GRI perspective. The other document is the company's "CSR Report", in which its sustainability strategy and role in society is outlined. A number of operations-specific questions are addressed and an outlook for the future is included. For 2012, Vattenfall's sustainability reporting disclosures will be included in their annual report. The reason is that their separate report fails to reach the intended audiences, while the annual report is read by stakeholder groups such as owners and investors, as well as by NGOs such as Greenpeace and WWF.

Sveaskog include their sustainability disclosures in the annual report, located between the Report from the Directors and the Financial Section. The sustainability section is 30 pages long and contains information on performance, progress and targets. It also contains a GRI section with reading references and discussions for each sub-category of GRI indicators.

Boliden have also released two documents, one GRI report and a sustainability report. The GRI report is structured according to GRI, while the sustainability report describes their social, environmental and economic responsibility in a more narrative manner. Boliden's sustainability work is described from the starting point of a number of challenges. Developments in these areas are compared with and measured against the social, environmental and financial goals set. The sustainability report is around 40 pages long, but for 2012 it will be abolished and the information will instead be integrated into Boliden's annual report.

SCA also release two documents, one separate sustainability report and one GRI indicator report with reading references. The sustainability report is 70 pages long and contains descriptions of the environmental, social and economic perspectives of SCA's sustainability initiatives. It is divided into five main sections; strategy, economic value, value for nature, value for people and control/assurance of the report.

Billerud include sustainability disclosures in a 20-page section of their annual report, and the GRI index is also included. They describe their code of conduct, stakeholder interactions, employee commitment and product responsibility. Reasons for including it in the annual report are twofold; firstly to signal that sustainability is an integrated part of their operations, and second to avoid additional work; *"if it wasn't integrated, we would have to have an introduction from the CEO, describe the market and our products etcetera, and this is already included in our annual report."*

Atlas Copco include their sustainability disclosures in the annual report, between the financial statements and the corporate governance report. The reason is that *"we don't want people to think of it as a separate thing"*. The 20-page section reports on the company's environmental performance, sustainable product improvements, employee and business partner commitments, shareholder considerations and a performance summary on reported GRI indicators. The company also publishes a separate GRI index which includes reading references.

4.2. The GRI

4.2.1. Sustainability and GRI Reporting History in Companies

As the concept of sustainability reporting was introduced in the beginning of the 2000s, our case companies soon began to account for their environmental and social performance in what they call sustainability reports. However, before this concept was launched, some companies already published such information in connection with their annual reports. Sveaskog published their first "environmental report" in the early 1990s, and Boliden and SCA started disclosing similar information in the years preceding the new millennium. The sustainability reporting format was introduced around the year 2000, and early introducers of reports in this more comprehensive format included Atlas Copco (in 2001) and Vattenfall (in 2003). However, annual sustainability reports were broadly established in the middle of the decade; Sveaskog and Boliden issued their first comprehensive sustainability disclosures in 2005 and Sandvik and SCA the following year. The last of our studied companies to issue a sustainability report was Billerud (in 2009).

Most of our studied companies started applying the GRI Framework in the same year as they issued their first sustainability reports. Vattenfall applied the second version of GRI, G2, in their first sustainability report in 2002. Boliden began applying the GRI in 2005, and Sandvik's introduction of the GRI application coincided with the issuance of the third generation of GRI Guidelines, G3, in 2006. In the following years up until 2008, SCA state that they followed it *"where it is appropriate and applicable"*. In 2008, SCA formally started applying the GRI Guidelines. In the same year, the Swedish government issued a directive that all government-owned companies should report in accordance with the GRI Guidelines. Billerud has applied the GRI since the issuance of the company's first sustainability report for the year 2009.

4.2.2. General Comments on the GRI

Generally, our interviewees display a positive attitude towards the GRI. However, the attitude is not entirely positive – the framework is claimed to have some problems and weaknesses.

Looking first at the positive side, the common view among all interviewees is that the existence of a common sustainability-reporting framework is crucial. According to Sandvik and Atlas Copco, the GRI facilitates comparisons between companies which is a big advantage. Sveaskog mention the advantage of having companies across the globe adhering to a common framework, that the GRI increases the status of the reports and also that it allows for integrating sustainability information with the annual report (integrated reporting, see more below). SCA emphasise that although measurement is still difficult, the GRI provides guidance for companies in what parameters to measure and report – something which did not exist at all before the GRI was introduced. Billerud stress the completeness of the GRI, while both Atlas Copco and Sveaskog appreciate the assistance in structuring the report that the GRI Framework provides.

Turning to the problems and challenges of the current Framework, several of our interviewees expressed aversions towards the relevance of some of the indicators. The number of indicators is claimed by Atlas Copco to be *"a lot, a LOT"*. Furthermore, since the Framework is global, some indicators are claimed to be irrelevant for firms operating in the Nordics – Boliden mention that particularly the social indicators fit them poorly, stating that it feels like the Framework is written more for firms operating in developing countries and that it is too resource-demanding to reporting on all the requested indicators. Similarly, Sveaskog stress that different issues have different importance in different countries. The resource requirements for reporting are also mentioned by Sveaskog; *"GRI as of today is quite detailed, therefore it is a bit difficult to relate to it, and it demands resources"*. Vattenfall note that the current the GRI Framework is written with extensive input from readers of the report, and does not focus much on the preparers. They further stress that the social part of the Framework is too heavy in G3; *"I believe the social indicators are twice as many as the financial and environmental together […] and since they are equally important, the split should be 1/3 for each"*. SCA focus on measurement difficulties, and state that although the GRI today provides some assistance there are still misunderstandings regarding measurement that need to be clarified.

Assurers are also generally positive; PwC mention that although the GRI Framework has some childhood diseases, it is a very good framework, which is made evident by how fast it has established itself as the leading sustainability reporting framework. Both KPMG and Mazars SET express the opinion that a common framework is needed. Deloitte mention that no one sees the Framework as a "perfect fit", but also state that it is easy to be critical and difficult to put a global framework together. Mazars SET stress that there are no alternatives today; it is the only comprehensive framework available. This is echoed by Mr. Lars-Olle Larsson; *"it is not a good armchair, but it is the best armchair of the house"*, also claiming that *"pretty much, it can be applied in any way you want"*. Mazars SET also mention that it is easy for auditors to work with; *"you can tell that auditors have been involved in the development"*. PwC acknowledge that the Framework is sometimes misinterpreted or applied in the wrong way, mentioning for example that some companies pick indicators based on how easy they are to report on rather than how relevant they are for the company's activities.

4.2.3. Introduction of Annual Sustainability Disclosures and Adhering to the GRI

From our data material, it is apparent that the primary reason as to why our interviewed companies have introduced sustainability disclosures in connection with the annual report is that they started to experience an increased external demand for this kind of information. Although they might (or might not) have carried out CSR work for a long time, in most cases the primary reason for starting to *report* was perceived pressure from external stakeholders. However, it is not the only reason; regulatory demands and strategic factors were also stated as drivers for starting to report.

Although Sandvik acknowledge that the primary driver for starting to disclose was a great wish for transparency from different external stakeholder groups, they also recognise the importance internally, to *"comprehensively account for our activities, thus giving "a more complete picture of what we regard as important"*.

SCA, having disclosed environmental information for around 15 years, stress that external national demands for such information have been present for a long time, and since they operate in developing countries the social aspect has also been central. Therefore, when the GRI was introduced it did not mean any revolutionary changes to their sustainability reporting; *"it was rather easy when GRI came to put it in that form"*.

Boliden state that since *"we operate in a high risk industry, there are risky work environments, large machines, dangerous substances, high temperatures, everything you can think of. This means that we feel the need to report thoroughly"*. They have chosen to apply the GRI because it allows for followers of companies in general, and the metals and mining industry in particular, to understand the operations and compare performance.

Billerud mention the increasing interest for sustainability issues among their stakeholders as the main driver for disclosing such information. Furthermore, they regard their sustainability work as good and want to communicate it – consequently the sustainability report is the natural place for this.

Atlas Copco mention that *"it looks really bad if you don't produce [a sustainability report], but also stresses that an important driver for their sustainability disclosures is the internal view on sustainability as "in the spirit of things""*. Since it is important within the company, they feel they want this to be reflected to the outside world. Furthermore, they state that its management is on the verge of starting to see sustainability reporting as truly strategically useful instead of a primarily compliance-driven activity.

The two government-owned companies in our sample, Vattenfall and Sveaskog, started reporting for entirely different reasons. Vattenfall stress the communication with external stakeholders as the main driver, to *"increase reputation a little bit"* through opening up to stakeholders and engage in dialogue with them – in short, as a marketing tool. When the regulations on Swedish government-controlled companies to report according to the GRI were introduced in 2008, Vattenfall already adhered to the Guidelines. Sveaskog, on the other hand, did not report according to the GRI prior to 2008, but claim that they had probably started using the Framework eventually anyway because they felt a need for better structure, *"a little more focus in the reporting"*.

4.2.4. Application of the GRI Framework

As we have seen earlier, the GRI Framework contains quite clear process descriptions on how to apply the GRI and incorporate the Guidelines into the preparer's task of compiling sustainability disclosures. However, we have found a large disparity with regard to how this task is performed in practice. A few follow the Guidelines to a certain extent, while some instead allow internal- or stakeholder interests to govern the process. Particularly, the GRI process of determining materiality is sparsely used, in some cases even unknown to the preparers. Below we will elaborate on how the Framework is used in the report production process.

Sandvik do not use the GRI work processes at all, stating that the decision is taken internally on which parameters are important to report. However, there are a few parameters that are included because the GRI requests these. After that, the GRI Guidelines are used to determine how to report these parameters. They feel they do not follow the Guidelines very closely but when they do, they are regarded as a useful tool.

Sveaskog claim that the work process is *"a spider web of everything – in some way we try to weigh what we think is important, what our stakeholders think is important, and then try to weigh this against the Framework"*. In some cases, they try to fit the GRI parameters into their operations, for example, through modifying the indicators in some ways. Additionally, the GRI has led them to begin reporting social indicators; *"corruption and human rights issues, they were not really something that we focused on earlier, and that has also enabled us to develop within the company"*.

SCA put a lot of attention to the actual measurement of parameters – how to gather the information and what information to include in the report. The interviewee is not familiar with the materiality determination process, and is not deeply involved in materiality analysis or stakeholder dialogue. Furthermore, the GRI has helped them improve the completeness of their report

Boliden's sustainability report is not at all influenced by the GRI; they have instead chosen to make it more "popular". However, in their separate GRI report, they follow the Guidelines *"purely by the book; tick, tick, tick, and if we don't deem information to be relevant, we write it"*. They have established internal reporting routines for all parameters on which they report, and if an additional parameter is considered, they weigh the need to include it against the resources needed to establish a reporting routine for that parameter. The GRI has led Boliden to establish many new reporting routines, particularly for personnel-related indicators.

The preparers at Billerud use the Guidelines internally in their work with producing the sustainability report, but in order to make the report more interesting to read, they state that it has to be drafted in an entirely different way, otherwise it would not be worth reading. They claim that the main content change that the GRI has meant is the internal development of goals, and thus the reporting of them – they wanted to communicate the improvement efforts they were looking to make.

Vattenfall stress that the GRI is not only a way of reporting, it is also a way of working with sustainability. They start by going through the entire list of the GRI indicators, and think about how to incorporate each of them into the operations of the organisation. An emphasis on the internal processes is mentioned; *"if you do a good job internally, then you will capture the GRI and your stakeholders automatically"*. Both Vattenfall and Atlas Copco claim that they have started reporting on a substantial amount of additional indicators. The interviewee at Atlas Copco expresses a certain discontent with the compulsory indicators; *"this is really annoying because when a company chooses not to report on something, some people read that as is you have something you're hiding […] so we report on a few not-so-material indicators mostly just to say that we have had zero […] an example for us is HR9, violation of indigenous peoples' rights, since our operations are built and carried out in urban settings"*.

Assurers agree that there are large differences in how the Framework is applied. PwC stress that interpretations of the Guidelines differ, and that although their primary task as an auditing firm is to assure that firms *do* follow the GRI, they also discuss with some clients how to interpret the GRI Guidelines and indicators. Deloitte confirm that companies do not follow the technical protocol to a large extent, and mention that if the GRI wants to govern the preparers' processes, they should put more emphasis on this protocol. KPMG state that although the GRI is helpful for companies who want to start managing their material sustainability issues, some companies who report according to the GRI only include a GRI index and refer to where they report on it, thus missing the point that they should also report on how these issues are controlled and dealt with.

Mr. Lars-Olle Larsson emphasises a more overarching problem, that most management groups in today's companies do not perceive sustainability as a strategic issue; *"some have realised it, but most do not understand that they need to place themselves in a larger context with a longer time perspective, and therefore they don't understand the necessity of transitioning to a sustainable development. They do not grasp that the market preferences will change […] because their planning horizon is too short; normally not longer than one year"*. He also mentions that many companies are not prepared to listen to other stakeholders than their owners.

4.2.5. The Application Level System

The Application Level system, described in section 2.3.2, is castigated by most of our interviewees. As we have seen earlier, this system may be abolished in G4, but as of today it is still in place and therefore merits a discussion. The biggest perceived problem with the system is the misinterpretation it causes; the Application Level is often interpreted as a quality stamp of the report, or in some cases even of the reporting company's

sustainability performance. This misinterpretation exists among both managers, preparers and readers, and even some cases in academia can be noted (Giannarakis and Theotokas, 2011; Greiwe and Schönbohm, 2011).

A very vocal opponent to Application Levels is the interviewee at Sandvik; *"it is a total misunderstanding that A is better than B. It is not a quality stamp at all […] we have no ambition at all to go from B to A. Many of the indicators are completely irrelevant for us and that is why we don't report on them"*. A similar view was expressed at Sveaskog; *"there is nothing that says that an A report is better than a C report, and this thing with counting indicators can actually lead to a blurring of what is material to report. So I welcome the abolition, it will lead to more focus on report quality"*. Atlas Copco concur, claiming that some see the Application Levels as a grade; *"all it means is that you are more transparent, it doesn't mean that you are better at sustainability at all […] I think it is the least impressive thing the GRI has delivered"*. SCA further dismiss that view as incorrect; *"there is major confusion about what the A level really means […] everyone believes that A means you deliver high quality, but it only means you report on many parameters, which is not to say that you are good or bad at it! It is in the nature of A-B-C, I mean it is easy to think that if the report is A, of course it is good!"*

Furthermore, SCA speculate that *"since we consider ourselves to be at the forefront of sustainability work and a very responsible company […] I can imagine that earlier this misunderstanding was present that A [level] was the best. Another reason was probably that we had a lot of data, so why not report it?"* The internal confusion was also mentioned by both Atlas Copco and Sveaskog, where finance people had wanted to report at the A level, more or less for the sake of it.

Boliden mention that they intentionally try to be careful not to oversell their report by stating that they report on a too high level. They have no ambition to reach the A level for the sake of it, and would rather stay at the B level and keep the materiality high. They have not experienced any external pressure to start reporting on an A level.

Mazars SET mention that the levels sometimes create the wrong incentives for companies; *"instead of reporting on, for example, 16 relevant indicators, companies stop at 10 because they fulfil GRI requirements"*.

In recent years, both Atlas Copco and Vattenfall have changed their reporting level from A to B. Atlas Copco explain this partly with limited resources, stating that they would rather focus on putting together a solid B report than reporting on more indicators but with worse reliability of the numbers. The other reason to change to B was that they found the materiality of their report to be increased if they reported on a more limited set of indicators. Similarly, Vattenfall's primary reason was to decrease the number of pages for their sustainability report, thus imposing a focus on what really matters for their stakeholders. On the other hand, to change from A to B to increase materiality is criticised by PwC; *"to step down from A to B in order to increase materiality can have the opposite effect […] I think they have applied it improperly in that case. That is the point with the A level – to effectively force companies to address material indicators – in fact, everyone should be able to report on the A level"*.

There is also some confusion about what the Application Level system really consists of. For instance, the interviewee at SCA had been informed by the GRI experts that a company could report at A level by stating that they *will* start reporting on more parameters, which is incorrect. Boliden's interviewee concedes that she is not very familiar with the Application Level system, and believes that if the report is not externally assured, it would automatically be "downgraded" one level.

The views on the Application Level system are not exclusively negative. Although conceding that it is not at all an indicator of quality, Vattenfall claim that there is a big difference between reporting at A and C level, likening the A level to Elitserien[5] and C to the beginner's level. Billerud mention that it puts high demands on the reader in order to understand the difference between the levels, but maintain that it is good for small

[5] The highest tier in the Swedish ice hockey division system.

companies who want to start reporting according to the GRI, that they can enter at a C level so that the Framework does not immediately feel too cumbersome. PwC also emphasise the advantage for the GRI beginners to start out with a C report as a sort of entry level, which is echoed by Deloitte. Deloitte also mention that although a C report need not necessarily be "worse" than an A report, if you look at the entire population of reports, such conclusions could probably be drawn. PwC claim that the system has a signalling effect; *"if the report is at level A, it means they take GRI seriously and do what they can to report as good as possible"*.

4.2.6. Sector Supplements

The view on sector supplements among our interviewees is generally that it is/would be useful, since different topics have different relevance for most industries, even within manufacturing goods. In our sample of companies, Boliden and Vattenfall have applicable Sector Supplements which they use.

Sandvik mention that the more industry-specific and customised the Framework is, the better it would be. Vattenfall concur with this, and stress the importance of using sector supplements if they are available. Boliden note the difference between different industries, resulting in that a common Framework would be too general, too broad. However, they are not completely satisfied with the Sector Supplement for their sector, Mining and Metals, claiming that a large part of it is irrelevant since a lot of it assumes that the company is operating in developing countries. Nonetheless, the interviewee at Boliden is generally positive. PwC think that there should be a Sector Supplement for all industries, stressing that *"sector supplements are the reason to why good reports are created for the companies who apply them"*. This is echoed by Deloitte, who see it as a step towards more material reporting. They also mention that supplements can be made for other factors too, for example which countries a company operates in.

The interviewee at Sveaskog does not see the direct benefit of a Sector Supplement for their reporting, claiming that *"if it is good I would welcome it, but it is nothing that I miss, and I do not see that we need it to improve our reporting"*. Similarly, Billerud feel that they already cover the most important issues, and cannot think of any indicators that are missing and that would be important to their industry.

4.3. Materiality

Having examined broadly how companies approach the GRI Framework, we will now turn to a description on how they regard the concept of materiality and how it is transformed into practice in determining report content. As we will see there are large discrepancies in how our sample of companies approaches the concept of materiality and how to determine it, which has extensive consequences for the scope and content of their sustainability reports.

Sandvik determine their report content internally and have *"no focus on making [the report] flashy, it is purely fact-driven"*. They regard all information in the report as material *for them*, and also stress that no stakeholders have commented on missing information. Billerud's report is also primarily based on internal assessments, stating that they appreciate the option allowed in the GRI to explain why some information is not material for the company. *"Otherwise, it would lead to reporting for the sake of reporting, if the A level would require reporting on all indicators. We have reported the indicators that we find most material."*

As a stark opposite to this view, some of our interviewed companies produce their report with a strong focus on making it accessible and easy-to-grasp for a multitude of stakeholder groups. A clear example of this is Vattenfall, who see a purely fact-based report as too inaccessible for most stakeholders; *"many think that the numbers section… It is damn boring, [the report] needs to be easy to read, easy to understand. People still speak "different languages" which is why it needs to be made as simple as possible"*. Furthermore, they concede that they used to account for all indicators, regardless of relevance, but through stakeholder dialogue (see section 4.4.) they have recently found that it is unnecessary to account for everything; *"simply because we have [the information] available, do we need to report on it? No!"* Although they have now changed reporting level from A to B, the

important issues are still claimed to be included, and they do also consciously include some non-material information: *"I believe it would get a bit too boring if we would only focus on material information"*. Mr. Lars-Olle Larsson also claims that such sections as interviews, that would normally not be captured by a materiality analysis or a GRI indicator, still can be worthwhile to include; *"it increases the reading value, makes it more communicative and interesting"*.

Vattenfall also have other ways of reporting sustainability information internally: *"it is part of the education; it is included in our policies and code of conduct, so [the report] is more for the external stakeholders"*. SCA concede that there are some information that they probably should have refrained from reporting, but also describe a problem with excluding non-material information; *"a problem with GRI and how to follow the instructions is that you are punished for it by different rating institutes, they give you zero points, because you have deemed it immaterial and not reported on it"*. They exemplify this with how their product packaging is not reported because they represent only a tiny part of SCA's environmental impact, and is thus deemed immaterial. This led to Dow Jones awarding them zero points for not reporting their strategy on the issue.

As mentioned above Sveaskog have a mixed approach, using a combined method of internal and external views on order to determine report content. They claim all content in their report to be material; *"we have compressed quite a lot, and it contains material information […] our report is 30 pages, and that is the maximum in some way. A sustainability report shouldn't have to be longer. I believe you can communicate what is material to the company and its stakeholders within that scope."*

Boliden's report is clearly externally focused; they aim to *"produce a report that is easy to read for as many as possible"*. This makes it difficult to balance exhaustiveness with clarity – if it is too short *"no one would understand it"*. Similarly, Atlas Copco's report has shifted focus to being more externally influenced, which is also perceived to have improved its materiality. Certain information is reported even though it is not deemed as high-priority from an internal perspective, because there are external groups who request it .On the other hand they have gotten external feedback that some of the issues they addressed earlier are not important to stakeholders, and through integrating further they aim to shrink the report, to *"clean it up"*.

4.3.1. Intended target audience of the report

While firms may have identified different (or similar) stakeholders for their sustainability *work*, the intended target group of the *report* cannot be assumed to be the same. Therefore, we asked the companies which stakeholder groups they regarded as the targets of their sustainability report.

The focus group of Sandvik's report is, just as for the annual report, shareholders, but state that they *"try to write it so that all stakeholders can find what they want"*. Similarly, Billerud have chosen to target only capital investors with their report. Information and indicators relevant to other stakeholders are communicated via other information channels such as the website. Atlas Copco also view analysts/investors as the main target group of their report.

Boliden address two stakeholder groups in their sustainability report; finance/ethics analysts and employees. For 2012, they plan to integrate their sustainability report with the annual report, thereby leading to a clearer focus on shareholders and finance analysts. Their separate GRI report will focus on ethics analysts, and they will also publish a more popularised document targeted at students, visitors and customers.

Vattenfall believe that their sustainability report, which for 2012 will be included in the annual report, will have largely the same readers as the rest of the annual report, namely *"owners, analysts/investors, competitors and different groupings within investor relations"*. For other stakeholder groups, Vattenfall are currently developing the sustainability section of their website to continually satisfy their information needs. This is where information that is excluded from the sustainability report will be found, and the aim is to make it relevant for everyone.

Although NGOs are the main stakeholder for Sveaskog's sustainability performance, they are not the only ones considered when determining report content. The primary target groups for their report are their owner (the government), the capital market, media and different NGOs. Secondary target groups are employees, students, customers and suppliers.

SCA are very clear with what parts of their reports are aimed at different stakeholder groups; they include a table in their sustainability report where they account for their different stakeholder groups, their interests and in what parts of the report these interests are addressed.

4.3.2. Materiality analysis

Above we have discussed materiality from a general perspective. This section describes more in detail how the materiality analysis is performed. The major discrepancies in the general mentality of sustainability work are clearly reflected in the ways in which materiality analyses are performed. Table 6 describes what dimensions are considered in the companies' materiality analysis, as described in the sustainability report.

Table 6; Materiality Analysis Dimensions

Company	Materiality analysis described in report	Dimension 1	Dimension 2
Atlas Copco	Yes	Significance to external stakeholders	Significance to Atlas Copco
Billerud	No	n/a	n/a
Boliden	No	n/a	n/a
Sandvik	No	n/a	n/a
SCA	Yes	Significance to external stakeholders	Significance to internal stakeholders
Sveaskog	Yes	Significance of issues for Sveaskog's stakeholders	Importance to Sveaskog and ability to influence
Vattenfall	Yes	Importance for external stakeholders	Vattenfall's ability to influence

First of all, the materiality analysis is not performed by the same people in all companies. Some use external consultants while others perform it internally. Vattenfall point out the credibility problem with performing it in-house; *"the advantage of having it done externally […] is that it is performed objectively"*. When Sveaskog started reporting according to the GRI, they used consultants to determine what was material for their operations; *"when we started reporting, […] we thought that everything was equally material"*. Furthermore, they have used external consultants in order to make sure that the materiality analysis is communicated in an understandable way; *"it was very much made according to GRI, and […] to make it a bit more popularised I have discussed it with consultants"*. Billerud use some help from consultants with their materiality analysis but also work with it in-house. Boliden also perform their materiality analysis internally, but acknowledge suggestions from external stakeholders and consultants, and also use some input from GRI experts. At SCA, the internal communications and sustainability teams produce the materiality analysis together, and both Sandvik and Atlas Copco also perform their analysis in-house.

Turning to how the materiality analysis is performed, most indicators that Sandvik report on are determined on a basis of *"materiality to their operations"*, being tied to targets and improvement processes. The overall strategy governs their focus areas and ambitions, which in turn are broken down into performance indicators and improvement targets. Groups working specifically with environmental, health and safety issues suggest what indicators to report to group management, who have the final decision. However, some indicators are reported even though they are *"less material to the operations"*, primarily because this information is easily

obtained. Since Sandvik started adhering to the GRI Guidelines there have been no major changes in which indicators have been reported.

Vattenfall consider two factors when performing their materiality analysis; importance to stakeholders of the issue, and the company's ability to influence it. The "importance to stakeholders" factor is based on seven focus areas[6], which have been imposed on them by their owners (the government). Within each focus area, they ask their external and internal stakeholders what issues are material to work with and report on. In some cases, interests of stakeholder groups are given different priorities.

Sveaskog have performed a materiality analysis following the recommended GRI process more or less "by-the-book". External stakeholder interests are used as a basis for discussion in something called the GRI group, where external stakeholders' interests are weighed against what the group feels is important to report on, and Sveaskog's ability to influence. The group consists of representatives from different parts of the organisation. Every second year Sveaskog also carry out an internal survey in all departments, in which they ask employees to rank the three most important sustainability issues.

Atlas Copco also perform their analysis by following the GRI Guidelines closely through mapping internal and external stakeholder interests. There are no other criteria for determining materiality. The GRI indicators are used as a basis, and when the report is published, a stakeholder meeting is held with analysts and NGO representatives on what they feel is missing or lacking in detail. This feedback is then incorporated into the process of producing next year's sustainability report.

SCA's materiality analysis weighs internal and external stakeholders' interests against each other, but they have found that interests of those groups are very much aligned which has led them to consider refining the analysis through grouping all stakeholders together and introducing another factor. They use the materiality analysis primarily *"to give us answers to things that we mostly already know, and that we are focusing on the right things […] hopefully our efforts will be reflected in the materiality analysis"*.

Boliden's materiality analysis is described as *"probably not a textbook example of a materiality analysis"*. Materiality is determined internally through considering what is relevant for their operations, and also, to a lesser extent, what is important to their stakeholders. External input is reported to our interviewee from her subordinates, and is considered when determining report content. There are two criteria for determining what to focus on, quantifiability and ability to affect. They also apply *"a little gut feeling, what has happened during the year? What has been important during the year? […] Every year there are a few areas that we try to highlight a little extra, but that won't necessarily be captured by this materiality analysis"*.

The materiality of Billerud's report is determined partly through opinions of the employees working with sustainability, partly through media analysis and partly through stakeholder dialogue. The media analysis is performed by investigating how many news items can be found in a specific area. The report audience is restricted to capital investors, and discussions with this stakeholder group have been held to determine which indicators to report on.

4.4. Stakeholders

Inevitably, different companies have different stakeholder groups with different agendas, demands and interests. The companies operate in different industries and markets, and therefore one cannot expect any two companies to have identified exactly identical groups of stakeholders. However, the way in which stakeholder interests are taken into account could potentially be similar in companies, particularly since the GRI states that such interests should be considered, for example (as seen above) when determining

[6] Environment, human rights, labor rights, diversity, equality, business ethics and anti-corruption.

materiality. Below, we will describe how companies work with their stakeholder groups and how these groups affect report content.

Sandvik's stakeholder dialogues are predominantly performed with major owner groups, and the feedback they have received has mostly been positive. They state that they have not been affected by any external stakeholder group to change or adjust their report. Although internal discussions have been held regarding the need to improve dialogue with other stakeholder groups, at present this dialogue is held reactively rather than proactively through a statement in their report that if a stakeholder wants to discuss sustainability issues with Sandvik, they are welcome to get in touch. Regarding stakeholder meetings, they state that *"there are companies who invite different stakeholders to big meetings, and I get the feeling sometimes that they do it to get a point from GRI, and in that case I don't think it is relevant"*.

Vattenfall, on the other hand, have an altogether different view on how to work with stakeholders. Their approach is to identify stakeholders at the beginning of the sustainability reporting process; *"the ideal thing is to invite each and every one to a big meeting […] and ask, who wants to work with us on this?"* They also mention stakeholder interviews and surveys as the key reason why they changed reporting level from A to B; *"we have found that they think it is unnecessary to have everything"*. The strong stakeholder focus is exemplified by our interviewee; *"it might very well be that we find an indicator/area unnecessary to work with, but Greenpeace disagree. Then we cannot say that they are wrong – if we find that it is important "out there", then we need to include it!"*

When Sveaskog started reporting according to the GRI in 2008, they carried out stakeholder interviews to learn in which areas of their sustainability report they could improve. They perform semi-annual customer and supplier surveys, where sustainability issues is one part. These surveys have been held for a long time, but since Sveaskog started using the GRI Guidelines they have become more structured. In the surveys the stakeholders get to have their say on which issues are most important to work with as well as to give input on Sveaskog's current efforts. On top of this, dialogues are held throughout the year with other stakeholders who contact Sveaskog, such as the Swedish Society for Nature Conservation.

SCA regularly send surveys to different stakeholder groups such as customers, suppliers, employees and investors, to get feedback and input to their sustainability efforts. Additionally, they perform a semi-annual study with external and internal stakeholder groups in which they ask stakeholders to assess the importance of different sustainability issues, which then forms the basis for their materiality analysis (see section 4.3.2.). Additionally, they are regularly approached by different stakeholder groups with which they establish and maintain dialogues.

Boliden concede that they are lacking in the stakeholder communication area, and mention that they discuss every year how they should improve it. They do not have any proactive stakeholder dialogue such as surveys or meetings or any stakeholder dialogue model. However, they receive feedback on their report, primarily from owners and investors, both on their sustainability report and the GRI report. This feedback is *"fairly positive […] they very rarely miss some kind of information"*. Boliden are *"surprisingly seldom"* approached by NGOs, and our interviewee expresses a wish that they would get more feedback *"because they are often very sharp and could contribute a lot"*.

Billerud's main identified stakeholder group is capital providers, which has *"helped [them] identify how to work [with sustainability] […] the most important analysis for capital providers is to find companies with good potential […] and we believe that we have good products that suit tomorrow's society. So through communicating this, we try to make them understand and appreciate it"*. Meetings are held regularly with analysts and investors to understand what they want to see in the report. Dialogues with other stakeholder groups are held at lower levels in the company through various forums, but the only stakeholder group that influences report content is capital investors.

Atlas Copco hold some formal events where analysts and NGOs get to give input on their report. They also participate in events and meetings throughout the year with NGOs, where they learn what their stakeholders

perceive as material issues to report on. They are also influenced by questionnaires that are regularly sent to them by analysts. They want to be included in the Dow Jones Sustainability Index, so they aim to fulfil their reporting criteria.

4.4.1. Inspiration from peers

A possible factor that could influence report content is how a company's competitors communicate their sustainability performance. Below we will describe how companies are influenced by what and how their peers report.

Sandvik claim to be aware of what their competitors report, but they are not influenced by it. They feel that this would be the wrong way to go; *"it can create a kind of strange spiral […] I don't think it belongs in a discussion about materiality – [the information] has to be material for your own operations"*. They have no ambition to be best-in-class, but instead state that they strive to give a fair view of their activities.

Vattenfall on the other hand claim to be substantially influenced by their competitors; *"we read them, closely. And that is very much because we want to find – or to not have to invent ourselves – good ideas […] there is so much to find, for example if we find that E.ON have certain priorities in their work, it would be strange if we didn't have the same thing […] we must always be aware to see what the others do"*.

Atlas Copco examine reports from industry peers, for example what GRI indicators that they report on. They also follow who wins awards for good sustainability reports and analyse them to see if they can incorporate something into their own report.

Sveaskog are influenced by other reports when it comes to the structure, but not the content; *"I look how they are structured and where they put their focus […] it is stupid to reinvent the wheel"*.

SCA claim to not be influenced by competitors when determining report content, instead their content is decided by their materiality analysis and the structure is determined internally. However, they look at competitors' innovation efforts, and are also members of networks where discussions are held on how to organise for sustainability.

Boliden are influenced *"a little bit"*, but mention that maybe they should look more at what others report. However, they also stress that many of their competitors are a lot larger than them, making much of what they report to a certain extent irrelevant for Boliden.

Similarly, Billerud are influenced by what other competitors, and other producing companies in other industries, report. They meet sometimes with people in other companies who work with sustainability reporting, for example in seminars, but there is no continuous dialogue.

4.5. Reporting resource availability

Generally, the interviewees are satisfied with their resources for producing the sustainability report. Sandvik, Vattenfall, SCA and Billerud all state that they have sufficient resources at their disposal. Boliden are also generally satisfied but mention that further down in the organisation, on the operational level, there is probably a perceived lack of resources. Atlas Copco claim that they have sufficient resources, but that there is potential to create a better report if they had more people; *"unfortunately at Atlas [Copco] it has always been something that they felt is good with what they have, which means a lot of work for some key people."* Sveaskog are satisfied with their report given the current resources, but would want additional resources to create *"a more communicative […] report, that is a little freer"*.

Some discrepancies in actual budget for producing the report can be identified. Sandvik claim that they devote one half-time position during six months, while SCA estimate the resources allocated to be 20 full-time months. Vattenfall's budget is approximately two million SEK. The other interviewees could not, or would not, disclose this information.

4.6. Assurer assistance to sustainability report preparers

Generally, the assurers have toned down their importance in the process of preparing sustainability reports. They underline that their primary role is that of an assurer, auditing finishing reports and giving general feedback. However, they do sometimes help companies with different kinds of input.

PwC stress that most companies want to do as much as possible themselves, and that PwC primarily help them by discussing different issues and confirming that the client is on the right track. Through their auditing, they give general feedback on the entire report, but also mention data gathering as a particular area where they give a lot of feedback.

Deloitte also act primarily as a partner for discussing different issues such as materiality, report layout and how to communicate issues in a clear way. Through their auditing process they control so that the most material issues are included, and go through the client's materiality analysis. Although they do not perform any stakeholder analyses or dialogues themselves, they often discuss the result of the client's own stakeholder mapping. KPMG state that they assist companies in a broad range of areas including assurance and advisory services and that they, in their role as a sustainability advisor, do help companies throughout the process, and mention stakeholder dialogue as an example of an area where they have assisted companies.

As part of the auditing process, Mazars assist in making sure that their clients fulfil the completeness criteria. Sometimes this leads to discussions – many companies are said to be reluctant to describe negative aspects or report bad news. Related to this, PwC mention that they are reluctant to assure a GRI report that contains irrelevant indicators, for example child labour. If it is included, PwC urge the company to exclude it and include a more material indicator instead.

5. Analysis

Having described views, attitudes and approaches to sustainability reporting among preparers and auditors, we now turn to answering our problem statement – why do sustainability reports differ, and, given our identified reasons, what possible improvements to the GRI Framework can be observed? In order to answer these questions, this section begins by identifying theoretical support for the observed organisational behaviour to see if sustainability disclosure theories can explain differences in sustainability reports. Thereafter we move on to discuss more specifically the identified reasons in practice as to why sustainability reports differ. Finally, a discussion on proposed changes to the GRI Framework is included.

5.1. Why do firms disclose?

In this section we analyse *why* our sample of companies engage in sustainability reporting, in order to find different theoretical explanations. If different theories can be used to explain organisational behaviour, differences in their sustainability reports can then be derived to these different theoretical explanations. Furthermore, this analysis puts our study in the context of previous research in the area. This section draws on empirical observations in section 4.1 and 4.2.

In our sample of companies, we have found different factors for reporting sustainability information. These factors are in line with the previous research made in the sustainability reporting field. In most cases, the

preparer interviewees express views, attitudes and approaches that are compatible with several theories. This makes it difficult to deduce a specific theory as the definite reason for disclosing sustainability information. Through an interview-based study like this, the explanatory power of some sustainability disclosure theories are difficult to determine – for example, company representatives are unlikely to reveal hidden or "real" agendas for sustainability reporting, i.e. pure risk minimisation or profit maximisation. This might be a reason why we have found no support for positive accounting theory, proprietary cost theory and voluntary disclosure theory in our empirical data.

However, some observations can be made. In line with Adams (2002), it is apparent from our empirical data that the primary motive as to why our sample of companies chooses to disclose sustainability reporting is external rather than internal pressure. In most cases, an increased demand for this kind of information was identified from outside the firm, i.e. a perceived pressure from external stakeholders. This notion goes hand in hand with both stakeholder and legitimacy theory; stakeholder theory claims that organisational decisions cannot be made without taking the stakeholders into account, and that the firm will aim to fulfil the expectations of its stakeholders. Drawing on this, legitimacy theory stipulates that organisations will try to legitimise their behaviour to stakeholders. Boliden for example, operating in the mining industry, state that since they operate in a high-risk industry they *"feel the need to report thoroughly"*. This is supported by Cho and Patten (2007), who conclude that companies in "environmentally sensitive" industries tend to report more in order to gain legitimacy.

The trend to start disclosing sustainability information can be observed in our sample of companies, with most of them starting to publish sustainability report in the mid-2000s, supports institutional theory as a potential explanatory factor. Institutional theory dictates that if an organisation's peers display certain behaviour – in this case disclosure of sustainability information – other organisations will be pressured into displaying similar behaviour through isomorphism. Atlas Copco's claim that it looks bad if you do not produce a sustainability report may indicate institutional theory as a possible, at least partial, cause for starting to disclose. Another such indication is the inspiration that several firms draw from other companies' sustainability reports, suggesting that firms attempt to "fit in" with their peers.

As pinpointed in our theoretical discussion (section 2.6.4.), different theories are sometimes used to explain similar phenomena. Through our empirical data, it is not possible to distinguish between reasons attributed to socio-political theories and signalling theory respectively. An example is one of Vattenfall's stated reasons for starting to report; to *"increase reputation a little bit"*. This attitude can be seen as an indication of either "signalling" sustainable behaviour, or a way of increasing organisational legitimacy to stakeholders, or both. Furthermore, voluntary disclosure theory can also be put forward as indicating why Vattenfall report; more media coverage of environmental exposure, higher pollution propensity and more political exposure lead to higher levels of sustainability disclosure (Bewley and Li, 2000). These characteristics are attributable to Vattenfall, being a government-owned company operating in the Electricity and Heat sector. Thus, VDT might very well be the theory that best explains why Vattenfall engages in sustainability reporting.

Billerud stress strategic motives and competitive advantages gained from disclosing sustainability information as the primary reason to start reporting. This view could be explained by all economic sustainability disclosure theories since they are all based on the economic gains from reporting. Although it is hard to single out one of them as having significant explanatory power for this view, the presence of an economic motive for reporting in our sample of companies is worth noticing.

From the discussion above, it is clear that drawing conclusions about reasons for disclosing sustainability information is not possible. One explanation to this is that different theories interrelate with each other in complex ways, hindering derivation of views, attitudes and approaches to a specific theory. Although tentative support by some theories have been identified, our lack of general conclusions is supported by the discussion in Adams (2002), who also employs sustainability disclosure theories in an interview-based study and finds that they *"have limited explanatory power and there is no conclusive evidence in support of any one of them"*. All

sustainability disclosure theories can probably be claimed to have some explanatory power, but no conclusions can be drawn regarding the extent of this power.

Finding 1: *No evidence has been found in our empirical observations that any of the sustainability disclosure theories has superior explanatory power.*

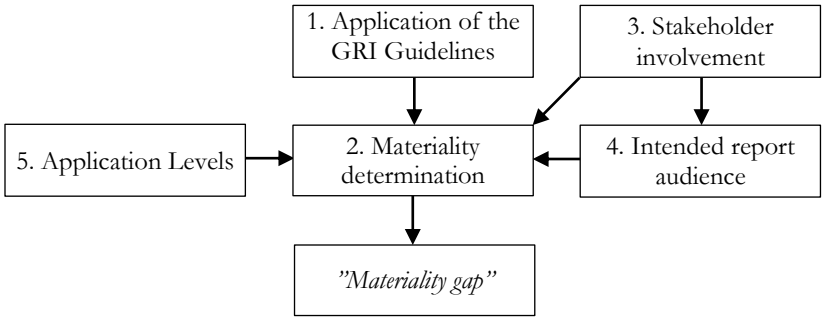
Next, we will turn to potential causes of differences between sustainability reports. Specifically, our observations regarding the GRI, materiality and stakeholder communication are analysed to identify whether views, attitudes and approaches to these elements can explain differences in sustainability reports. The lack of explanatory power of sustainability disclosure theories is not believed to affect our analysis in the next section.

5.2. Causes of Sustainability Report Differences

Through examining how materiality is determined in our sample of companies, as well as general views, attitudes and approaches to the GRI Framework, we have identified a number of potential reasons why sustainability reports differ in terms of scope and content. Drawing on empirical observations in sections 4.2.-4.6., this section will outline these reasons, and relate them to previous studies and sustainability disclosure theories.

We have identified five major factors in the sustainability report production process as to why sustainability reports differ. These factors interrelate, affecting each other as illustrated in Figure 6. This figure also illustrates the logic of the analysis in this section. The first factor identified in relation to the differences in sustainability reporting is that the firms' applications of the GRI Framework differ considerably. The second factor, stemming from the first, is that there is no standardised way of determining materiality – discrepancies can be observed in practice, both between companies and from the GRI's recommended approach. The third factor, interrelated with the second, is that the extent and nature of stakeholder involvement in the reporting process differs between firms. Fourthly, related to stakeholder involvement, the intended target groups of the reports also influence materiality determination. The last identified reason is that the GRI Application Level system creates confusion and misunderstandings amongst both preparers and users about what is material information. Together, these factors contribute to a phenomenon that we call *materiality gap*. It is a gap between how the GRI proposes that materiality should be determined, and how it is determined in practice.

Figure 6; Analysis Logic, Causes of Sustainability Report Differences



5.2.1. Application of the GRI Guidelines

First of all, it should be stressed that following the GRI Guidelines is not mandatory, except for Swedish government-owned firms. As long as firms report on at least ten indicators, they can call themselves GRI-adherent. This explains why firms can "pick and choose" according to their own needs and wishes which parts of the Guidelines they want to use, opening up to different applications of the GRI Framework.

Indeed, as illustrated in the empirics section (section 4.2.4.), our sample of companies display discrepancies in how they use the GRI Guidelines internally when producing their sustainability reports. Different parts are being used by different organisations; SCA, for example, have a lot of use of the measurement instructions, something which is not discussed by other interviewees. Sandvik apply the GRI's proposed report structure suggestion more or less to the letter, while other reports are structured in a more independent way. Boliden's sustainability report is not at all influenced by the GRI. Parallels can be drawn to Adams' and McNicholas' (2007) findings; namely that there are difficulties/challenges in choosing between the variety of reporting guidelines. In this case it is not so much about choosing *between* guidelines, since the GRI has now become the leading standard that all companies in our sample employ as the primary framework for reporting on sustainability issues, but instead this has been replaced with a lot of variety in *how* these Guidelines are employed. Possible explanations are that pre-GRI routines still exist among preparers, that there is a lack of familiarity with the Framework and that no "best-practice" way of approaching the report production process has been established.

First, there might be pre-GRI reporting routines that have "stuck" in reporting companies. As we have seen, the GRI Framework was developed as a response to a phenomenon that had already occurred, namely environmental reporting. Before the GRI, there were large discrepancies as to what environment and social reports consisted of, and it is likely that the differences in output were mirrored by different internal views and reporting routines. Thus, routines and practices that already had been established in companies when the GRI was launched carried over when companies started adhering to the GRI. These routines might have survived until today and, consciously or unconsciously, affect preparers in how they approach the sustainability reporting process. Since the GRI cannot prohibit such practices from continuing, it is unlikely that they will change.

Second, there are indications of a lack of familiarity with the GRI Guidelines among preparers. This finding is in line with that of Adams and McNicholas (2007). A probable explanation is that the GRI Framework has only existed for some ten years, and our studied companies have applied it for an even shorter period of time. Although our interviewees seem knowledgeable on what they need to do in order to be GRI-compliant, the area of sustainability reporting, and therefore also the GRI, is still surrounded with considerable challenges, for example regarding measurement, materiality determination and stakeholder involvement.

Third, no best-practice approach in relation to how a sustainability report should be produced has been established yet. Again, this finding supports that of Adams and McNicholas (2007). Numerous rankings of sustainability performance and awards for best sustainability report are being handed out, so clearly firms could find inspiration and ideas for how to produce their sustainability report. However, they simply have not gotten on the bandwagon yet, and we have observed no indications of widespread pressure on companies to fundamentally change/improve their sustainability report. If this movement were to be initiated, in line with the isomorphism phenomenon outlined by institutional theory it could potentially gain rapid spread. However, unless improvement is imposed from external parties, we deem this unlikely to happen.

Finding 2: *The GRI framework is applied differently in different companies, leading to a fundamentally different starting point for sustainability reporting in companies. This is not likely to change unless such change is externally imposed on companies.*

One possible reason that may explain the differences in how the Framework is applied is that firms do not view it as value adding. Instead, they choose to report according to the GRI for the sake of legitimacy rather than for strategic purposes, and therefore apply the Framework when needed in order to be GRI-compliant. If they would view the GRI Framework as value adding, it is likely that they would utilise it to a more comprehensive extent than has been observed. Another explanation, supported by institutional theory, is that the wide spread of the GRI Framework during recent years has led firms to start applying it because their peers do it rather than to increase accountability. Like legitimacy theory, this potentially leads to selective

application of the Framework for the purpose of compliance. However, if the aim of a company is to merely comply with the Framework, it would likely be reporting on the C level. This behaviour would be supported by Adams' (2002) findings, that attitudes among companies generally indicate an absence of desire to be accountable for their actions. However, no support has been found in our collected data supporting that the GRI is not seen as value-adding, which might be explained by the absence of C level companies in our sample. Because of the lack of support in our data, finding 3 should be cautiously interpreted.

Finding 3: *Legitimacy theory and institutional theory may be applied to explain differences in how the GRI Framework is applied.*

5.2.2. Materiality Determination in Sustainability Reporting

A crucial part in producing a sustainability report is the materiality determination. It is the method through which it is decided what information to include in the sustainability report. As part of the Technical Protocol included in the GRI Framework, a method for determining materiality is outlined (section 2.3.3.). However, as with other parts of the Framework, it is not widely employed – some interviewees are not even aware of its existence – and when it is employed, there are discrepancies in terms of how it is applied.

An observation made during the drafting of this thesis is the fundamental difference between materiality of quantitative and qualitative information. Although there are quantitative aspects also of sustainability reporting, to a large extent it focuses on the disclosure of qualitative information. This makes threshold determination, which is a significant part of establishing quantitative materiality, in many cases inapplicable in the materiality determination of sustainability information. Instead the materiality determination process in this case turns into more of a deliberation on what *topics* that are material to discuss. Parallels to this can be found in Ro (1982), who states that the accounting item must be relevant in itself, not only its magnitude. As further concluded in Ro's study, materiality is not an all-or-nothing concept which is made particularly relevant when determining materiality of qualitative information; there are no pronounced thresholds to lean against and therefore the preparer must often apply an even greater portion of judgement.

Finding 4: *Materiality determination in sustainability reporting is made more difficult by the absence of quantitative thresholds. Although sustainability report preparers/auditors* do *consider thresholds, materiality determination in this area deals primarily with topics.*

The GRI Framework proposes two dimensions to consider when determining materiality; organisational impact and influence on stakeholder assessments and decisions (stakeholder involvement is discussed separately in section 5.2.3.). The relative importance of these two dimensions is not explicitly stated, but the diagram illustrated in Figure 2 (page 8) can only be interpreted as indicating that the factors should have equal significance. In the practice that we have observed, however, this is not the case. In line with Trotman *et al.* (2011), we find a lack of consistency among preparers regarding materiality interpretation. All interviewed firms perform some sort of materiality analysis, and four of seven companies account for it in their report. However, as observed (section 4.3.2.), different dimensions are considered by different companies. External stakeholders are considered by all who account for their materiality analysis, but the other dimension varies between companies.

There is also a difference in *who* performs the materiality analysis. Some do it completely in-house, while auditors or external consultants assist some, and some outsource the entire process to external consultants. This is a possible factor for differences in outcome. If external actors perform the analysis, the topics that are deemed material are imposed on the preparers, which might give them less commitment to report on it. If they have been involved in the materiality determination process themselves, they may arguably have a more educated, integrated and committed view on what to report. They will also have a comprehensive picture on more fine-grained aspects of what their stakeholders regard as important issues to report on.

Finding 5: *Different approaches to the materiality analysis are employed, both regarding who performs it and which dimensions that are considered.*

Furthermore, the issue of prioritisation is important in the sustainability reporting context. With multiple stakeholders with different views and opinions on what is material to consider, the preparer sometimes needs to weigh different stakeholder groups' interests against each other in order to avoid information overload (Neumann *et al.*, 2012). The current GRI definition of materiality does not specify how to approach differences in stakeholder views. Consequently, this task requires a substantial amount of judgement from the preparer. An example of how such judgement is put into practice is Vattenfall, where the interests of stakeholders are given different priorities when their views differ.

Finding 6: *The current GRI definition of materiality does not specify how to deal with conflicting views and opinions about materiality among stakeholder groups. This means that a significant amount of judgement is required from preparers in determining material issues.*

One may question the auditor role in preparing the sustainability reports – it is part of their task in auditing reports to ensure that it fulfils the completeness criterion, in other words verify that the report covers the most material issues. However, is has been found that generally, they lack significant influence on sustainability report content. Two reasons can be identified. Firstly, assurance is not mandatory, except for Swedish government-owned companies. Therefore, they cannot exercise any legislative authority. Second, they do not assist the majority of their clients in the report production process – since they must remain independent, their primarily role is to audit the report when it is completed instead of acting as a support throughout the process of preparing it. Therefore, in many cases it is not possible for auditors to make major changes to the report if material information is excluded. These two factors mean that in sustainability reporting, auditors do not have significant influence on report content.

Finding 7: *There is no rigorous way to ensure that sustainability report content is material. Auditors do not have significant influence on materiality determination in sustainability reports. This determination is left for the preparers to make.*

5.2.3. Stakeholder Involvement in the Sustainability Reporting Process

Stakeholder involvement is suggested by the GRI to be a vital part of the sustainability reporting process. It is one of the two dimensions to consider when determining materiality. Thus, the results from stakeholder involvement should have a critical influence on determining materiality of sustainability information. As seen in the empirics section, the nature of stakeholder interactions differs greatly between firms, which in turn influences how stakeholders view sustainability report content and may influence it. We claim this is a primary reason for the identified differences between sustainability reports of different companies.

It should be noted that our sample of companies operate in different industries and different geographical markets, and therefore they will inevitably identify different stakeholders. This is in line with the findings of Ellerup Nielsen and Thomsen (2007). However, we claim that this explanation fails to account for the full magnitude of differences in sustainability reports – even firms in our sample who operate in the same/similar industries[7] publish sustainability reports that differ considerably.

There are large differences as to which the companies' stakeholders are, the way in which they are identified, how wide the stakeholder circle is drawn and how stakeholders are considered in terms of their importance to the companies' operations. At Sandvik, stakeholder opinions have no influence over the report at all, while in some of the others the report content is more stakeholder-driven. Stakeholder dialogues are held with different stakeholder groups, in different forums, at different intervals and different levels of the companies.

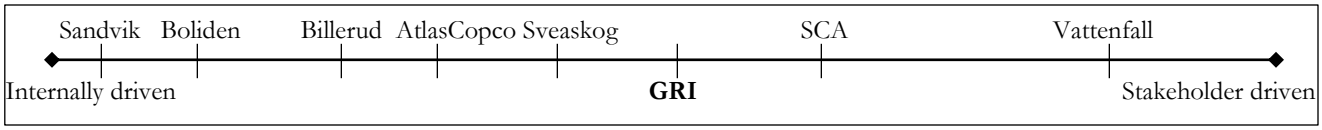
[7] 1. Atlas Copco and Sandvik (Machinery & Equipment) 2. Billerud, SCA and Sveaskog (Paper & Forest Products).

In short, there is no single approach for stakeholder communication or involvement in the report production process that is widely used by companies. The GRI does not suggest an approach in terms of *how* stakeholder communication should be performed, merely *that* it should be performed.

From the empirical findings, we conclude that there are two main ways of approaching the materiality determination process of sustainability information; it is either externally/stakeholder- or internally/operations-driven. Naturally, this is not a black-or-white categorisation; there are degrees of both drivers at work in companies. From examining sustainability reporting documents it can be observed that companies who determine materiality with primarily internal drivers have more concise reports, while companies who have a more externally driven materiality determination approach publish reports that are more extensive.

Based on our observations, we have plotted our sample of companies on a scale, illustrated in Figure 7. The GRI's assumed view, considering both factors as equally important, is also plotted in the figure. Although the main driver for our sample of companies to start reporting was observed to be external pressure, these external pressures are largely not reflected through comprehensive involvement in the materiality determination process.

Figure 7; Assessment of Sample Companies' Materiality Determination Approach



The GRI's view on the materiality determination process is that it should be determined considering both the organisations' own impact and outside-the-firm (stakeholder) views on what is important (material) to report on. As can be seen, Atlas Copco, SCA and Sveaskog are closest to what the framework recommends, while the other firms are further away at either side of the spectrum. In line with the findings of Adams and McNicholas (2007), and with the comment from Mr. Lars-Olle Larsson that firms are generally reluctant to listen to other stakeholders than shareholders, there is generally little experience from stakeholder dialogue among the companies. The three companies that have structured, regular and comprehensive stakeholder dialogues are SCA, Sveaskog and Vattenfall. These reports are longer and more comprehensive than the average report from our sample, supporting our finding that stakeholder-/externally influenced reports are more extensive.

One probable reason why stakeholder-driven reports are generally more extensive is what Holstrum and Messier (1982) discuss, namely that stakeholders generally demonstrate lower materiality thresholds than preparers or auditors. Thus, more information will be considered material for companies who are predominantly stakeholder-influenced in their materiality determination process. Additionally, the wider the stakeholder definition is the more views on what is material will have to be considered. As emphasised by the interviewee at Atlas Copco; *"everything is material for someone"*. However, the balance between which groups that should be considered as stakeholders, and which ones to listen to, is not an easy one. As illustrated by Mitchell *et al.* (1997), defining the term "stakeholder" is troublesome also in literature. Consequently, it is not surprising that determining which stakeholders to listen to is not an easy task for preparers.

Finding 8: *Stakeholder involvement in materiality determination is a key factor for differences between sustainability reports. Less stakeholder involvement leads to more concise reports, and more stakeholder involvement leads to more extensive reports. A probable reason is that stakeholders generally consider more information material than preparers or auditors do.*

Economic agency theory states that some owners have specific agendas that need to be addressed. This indicates that ownership might be a factor that affects the way in which stakeholders are considered. In line

with our empirical findings, two of the three companies (Sveaskog and Vattenfall) who engage in structured, regular and comprehensive stakeholder dialogues are owned by the Swedish government. This is a distinct indication that economic agency theory explains the extent and nature of stakeholder dialogue. The owners of the other companies in our sample have been deemed to have no influential interests through explicit sustainability agendas (see Appendix B for ownership structures). More specifically, the single largest owner in both Sandvik and SCA is Industrivärden AB, who have no such agenda. It is worth noting that these two companies have been plotted on each side of the scale in Figure 7. This indicates that investors have insignificant impact on stakeholder involvement.

It is worth noting that SCA and Vattenfall, the firms who have been found to involve their stakeholders to the largest extent, are the two most consumer-oriented companies in our sample, while customers of the other five companies are predominantly businesses. Especially in the case of Vattenfall, the end-consumer is mentioned as a vocal stakeholder group. On the other hand, Boliden, a clearly business-oriented company, explicitly mention that they do not experience a lot of pressure from external stakeholders. This indicates that stakeholder theory explains the extent and nature to which firms consider stakeholder views and opinions.

No broad consensus has been found regarding the value-adding potential of stakeholder communication – Sandvik's contention that stakeholder meetings are primarily a way to "get a point from GRI" stands in stark contrast with Vattenfall's approach to let their comprehensive stakeholder dialogue guide the process. In this context, it is worth mentioning that differences in reporting resources, for example between Sandvik and Vattenfall, might explain the difference in extent and nature of stakeholder dialogue between companies. Stakeholder dialogue can be seen as a tool to legitimise the organisation through signalling to stakeholders that their opinions are considered – behaviour supported by signalling theory and legitimacy theory. This can be related to Owen's *et al* (2001) findings that firms engage in stakeholder dialogues as part of a reputation building process, rather than as a valuable source of input.

To summarise this discussion, relating Figure 7 to our interpretation of the relations between sustainability reporting theories in Figure 4 (page 17) as either internally or externally driven, we argue that both veins of theories might explain why materiality determination is performed differently in different companies. In companies with a pronounced internal focus in the materiality determination process, the theories who propose internal drivers as the main factor for reporting sustainability information might have superior explanatory power. On the other hand, for companies with externally driven materiality determination processes the externally based theories might provide a better explanation to such an approach.

Finding 9: *Several sustainability disclosure theories might explain the extent and nature to which firms engage in stakeholder dialogue. Internally based theories might explain a predominantly internal materiality determination process, and externally based theories might explain a more stakeholder-based materiality determination process.*

5.2.4. Intended Report Target Audience

The GRI Framework does not specify who the intended readers of a sustainability report are. It is therefore deemed relevant to examine whether this differs between companies and if it can help in explaining differences between how materiality is determined. It was found that investors are the primary intended target group of our studied sample of companies. Four companies, including the two government-owned companies, identify additional stakeholder groups as target audiences, but all mention investors/the capital market as a primary intended target group. This contradicts the discussion by Gray *et al.* (1995) who claim that appeasing investors is normally a minor justification for sustainability reporting. The reports of the companies who identify additional stakeholders, on top of investors, are generally more extensive. This indicates that materiality determination is influenced by whom the intended target audiences for the report are.

When different stakeholder groups have different views on what is material, if the preparer wants to minimise information overload a prioritisation of views must be applied. It is reasonable to assume that financial stakeholders are often prioritised, simply because they are normally the most powerful stakeholder group. This is in line with the findings of Owen *et al.* (2001); non-financial stakeholders do not have enough power to influence sustainability reporting content on their own.

Finding 10: *The identified primary intended target audience for sustainability reports is investors. This affects materiality determination. This is unlikely to change unless the power balance changes or a more democratic stakeholder involvement process is externally imposed on companies.*

Taking this observation to the next step, the natural question becomes; if the primary target audience of the reports is investors, then how are other stakeholder groups' views and opinions on material topics considered? Signalling adherence to the expected behaviour of investors seems to be prioritised above legitimising the organisation to non-financial stakeholders, indicating signalling theory as having superior explanatory power to legitimacy theory.

Finding 11: *Signalling theory is indicated to have superior explanatory power to legitimacy theory.*

5.2.5. The GRI Application Level System

Before discussing the GRI Application Level system and its consequences, it should be mentioned that the GRI wishes to abolish this system in the next generation of guidelines. Thus, this discussion might no longer be relevant when G4 is released in May 2013. However, it has been observed that the application level system creates confusion regarding materiality of information today, and we therefore maintain that it merits a discussion.

Generally, our interviewees express dissatisfaction with the GRI Application Level system. It is not primarily the system itself that is the target for criticism; instead it is the misinterpretations and misunderstandings of what the different Application Levels entail that is lamented. The Application Level system is often interpreted as a quality stamp of the report, or in some cases even of the reporting company's sustainability performance. Preparers and auditors who work with GRI reporting have been found to have a good understanding, but on several occasions we have encountered situations where other company employees as well as different users of the reports display lacking knowledge of what the different Application Levels mean.

The most common misunderstanding is that level A reports are perceived to be better than B or C reports. Although Deloitte contend that this view is probably correct if you look at the entire population of reports, there is no automatic correlation between Application Level and report quality. This leads to potential signalling effects enjoyed by companies from reporting on A level, thus signalling to uneducated readers that they are producing a good report.

If this misunderstanding is allowed to influence report content, it might lead to information overload and lower materiality through disclosures on additional indicators that are not material for the company or its stakeholders. In line with Bernstein (1967), it is clear that more information does not always lead to higher materiality. For example, Vattenfall used to report on every available GRI indicator. Through stakeholder dialogue they found that they could increase the perceived materiality of their report by changing Application Level from A to B.

Finding 12: *Misunderstandings regarding the GRI Application Level system opens up to potential signalling opportunities for companies. Information overload through reporting on irrelevant indicators in order to produce an A report might thus be explained by signalling theory.*

On the other hand, in the current system, not reporting on non-material indicators could possibly lead to negative consequences for companies. Since SCA found that product packaging is non-material to report on and consequently chose to not report on it, they received a low grade on this aspect by a rating agency. This indicates support for legitimacy theory; the need to legitimise the organisation to stakeholders, in this case rating agencies, can potentially lead to "over-reporting", affecting materiality negatively.

An advantage with the Application Level system is that it allows for firms who wish to start adhering to the GRI Guidelines to use the C level as an entry level, and eventually switching to B level once appropriate routines have been established. Unfortunately our sample of companies does not contain any firms reporting on C level, so we have not been able to confirm if the Application Levels are used accordingly in practice.

Finding 13: *The GRI Application Level system creates confusion among preparers and readers of sustainability reports, both regarding the issues that are material to report and the quality of the reports.*

5.2.6. The "Materiality Gap"

The above listed phenomena, illustrated in Figure 6, can be conceptualised by a term that we have chosen to call *materiality gap*. It is a gap between how the GRI proposes that materiality should be determined, and how it is actually determined in practice. It explains why sustainability reports differ – the approaches to determining its content are simply heavily divergent from the Framework and from each other. There are several reasons as to why this gap exists, which have been emphasised throughout the analysis in "Findings". The relevant finding points are outlined below.

First, the way that the GRI Framework is applied today differs significantly between companies. There is simply no coherent way in which the Framework is applied at present. Through the Indicator and Technical Protocols, the GRI provides guidance on how to apply the Framework, but there are discrepancies as to how this guidance is followed in practice. These discrepancies lead to fundamentally different starting points for sustainability reporting in companies.

Determining materiality in a sustainability reporting context is more difficult than in financial reporting. There are several reasons for this. The absence of quantitative thresholds for preparers to rely on means that they need to determine materiality of qualitative information, predominantly through judgement. This is not an easy task. It is further complicated by the fact that they need to combine internal and external views on what is material, and these views might not always be coherent. Especially in the external environment, views and opinions on what is material to disclose can differ greatly. The current GRI definition of materiality does not specify how to deal with such differing views, leading to another element of judgement being involved in materiality determination.

Second, there is no rigorous way to ensure materiality in the same way as in financial reporting. Since assurance is not mandatory (unless the company is government-owned) the auditing body does not have any legislative power to exert on companies.

Turning to the practical process when determining materiality, there are different approaches to performing a materiality analysis and considering stakeholder views and opinions. The materiality analysis is performed by different people considering different dimensions, potentially leading to different interpretations and outcomes. It is however unclear how this affects report content.

The extent and nature in which stakeholder groups are involved in the reporting process is a key factor for differences between sustainability reports. Less stakeholder involvement leads to more concise reports, and more stakeholder involvement leads to more extensive reports. Although firms identify different stakeholders, and involve them to different extents and natures, the primary intended target audience for sustainability reports is investors. When conflicting views and opinions occur regarding materiality, this governs the

materiality judgements among preparers and consequently the contents of the report. A more uniform process for involving stakeholders in materiality determination decisions would likely result in a greater conformity of sustainability reports.

Third and finally, the GRI Application Level system has been found to confuse users of sustainability reports regarding what constitutes a good report, and risks creating confusion among preparers regarding what issues that are material to report on.

This materiality gap is in line with Iskandar's (1996) summary of past research; there is a general lack of consensus regarding how to interpret materiality. Having observed this *materiality gap*, the next step is to ask ourselves; how can this gap be bridged? With our findings and theoretical context as the foundation, this will be discussed in section 5.3.

5.2.7. Factors without Observed Effects on Materiality Determination

In this section we discuss factors that potentially could affect materiality determination, but for which no such evidence or indications were found.

GRI Application Level – only firms reporting on Application Levels A and B were studied, and no conclusive support for the view that A reports differed significantly from B reports was found. Since reporting on the C level is the most "basic" form of GRI adherence, we believe that such companies are generally less familiar with the GRI's Guidelines than our studied companies. Therefore, including such companies in the study could potentially have provided further support for our second finding.

Prioritisation of Sustainability Issues – our data collection method – interviews in rather informal settings – is not optimal to investigate this factor. No indications of different prioritisation of sustainability issues were observed. All interviewees stated that sustainability was an important aspect of company activities.

Size – no indications have been found that company size, measured by turnover, affects the materiality determination process. Notably, whilst Vattenfall is the largest company in our sample, also having the most comprehensive stakeholder dialogue, Sandvik is the second largest company and have been found to involve their stakeholders to the smallest extent of all studied companies.

5.3. Normative Discussion

Through identifying a materiality gap between the GRI Framework and preparer practice, we have found reasons for differences in sustainability reports. Such differences are undesirable, since they hinder both transparency and comparability. Two main areas of improvement have been identified.

First, as we have seen, the GRI Framework is interpreted, and thus utilised, differently in practice. Taking economic sustainability disclosure theories into account aggravates this issue, since these theories claim that the reason as to why firms engage in sustainability reporting is ultimately to increase profit. Signalling, proprietary cost and voluntary disclosure theory all suggest that firms with poor performance will have incentives to withhold information and that the potential costs and benefits of disclosures will be determined before deciding what to disclose. Thus, a framework that allows for different interpretations will, according to these theories, lead to unfaithful reporting approaches. Withholding of negative information has been observed in practice (Adams, 2002; Deegan and Gordon, 1996; Deegan and Rankin, 1996; O'Donovan, 2002). Taking this to its extreme, the Framework as it is currently designed could be used by companies to report on topics where they perform well and exclude negative aspects of their operations by deeming them non-material. The GRI Framework needs to curb such arbitrary behaviour.

Second, different approaches to performing a materiality analysis and considering stakeholder views and opinions have been observed. Our sample of companies identifies different stakeholder groups, and involves them to different extents and natures. This is rather intuitive when considering that there is no consensus, even in academia, regarding how to define a stakeholder – particularly how wide or narrow the stakeholder circle should be drawn. Additionally, we have identified that stakeholder prioritisation exists in our sample of companies, and that the primary intended target audience for sustainability reports is investors. This leads to a non-democratic stakeholder involvement process which is unlikely to change without external forces. This affects materiality determination, and consequently report content. These observations lead us to argue that the GRI should examine the possibilities to elevate its demands on companies through more detailed and specific guidelines on materiality determination as well as stakeholder definition and involvement.

These two areas of improvement lead us to suggest that the GRI should seek to explicitly govern the topics and indicators that are material for specific sectors as well as to identify lists of stakeholder groups that are relevant to consider within each sector. These recommendations echo those of Iskandar (1996). All topics and indicators that are deemed material by the GRI for a specific industry should be mandatory to report on in order to be GRI adherent. Such topics and indicators could potentially be determined through cooperation between standard-setters, preparers and stakeholder groups in a democratic process. In addition, the GRI-stipulated relevant stakeholder groups should be considered through a more standardised approach also put forward by the GRI, thus enabling greater stakeholder involvement in defining material topics to report on.

It needs to be pointed out that due to area-specific sustainability issues or stakeholder groups; there will always be topics and issues that are country and/or firm specific. If these topics are not captured by the sector-specific materiality definitions, the company should obviously still include them in their report.

As already mentioned, a currently on-going project directed by the GRI aims to define sector-specific lists of material topics. The results of this project will hopefully reflect the recommendations of our thesis – we believe that our two suggestions will lead to a significant improvement of reporting practices among the GRI-adherent companies.

Having a set of topics that are deemed material for entire industries will lead to increased comparability within industries. Inevitably, comparability across industries will be hampered, but we maintain that this sacrifice is worth making; comparability between industry peers is more valuable than comparability across industries. Additionally, by keeping a common framework, several topics and indicators might be deemed material for all, or almost all, industries. This will facilitate a certain degree of inter-industry comparability as well as maintaining reader familiarity with how the report is produced. Therefore, we argue that the GRI should not adopt the SASB approach, to only release sector specific guidelines without an overarching framework. This would diminish inter-industry comparability and, as long as the framework is voluntary, also risk decreasing its spread.

The Application Level system was not discussed in this section. This is because it will most likely be removed in the next generation of GRI Guidelines, G4. We endorse the suggestion by the GRI to remove it and therefore we deem a discussion on this system redundant.

6. Concluding Remarks

This section discusses our main findings and proposes a few avenues for further research.

6.1. Main Findings

Our thesis highlights the importance of studying the intra-firm perspective when investigating materiality determination. The analysis regarding how materiality is determined in practice has pinpointed possible areas of improvement within the current GRI Framework. It has also contributed to a deeper understanding of differences between sustainability reports.

First, no sustainability disclosure theory is found to have superior explanatory power as to why our sample of companies discloses sustainability information. Although indications that several theories do influence disclosure have been found, these indications are merely preliminary. We do not consider this to be a weakness of our study; the purpose has not been to examine why firms disclose such information. Furthermore, the lack of explanatory power of sustainability disclosure theories when conducting interview-based studies is in line with previous findings (Adams, 2002). Therefore, we are not surprised by this result.

Second, a conceptual challenge with determining materiality of qualitative information is identified. Although judgement has been argued to be part of any materiality determination situation (Iskandar, 1996), since quantitative thresholds are redundant when considering qualitative information, judgement becomes the *primary* governing tool for materiality determination. This judgement is predominantly focused on determining *topics*, while financial materiality determination primarily involves *thresholds*. In a sustainability reporting context, the preparer's task is further complicated by the need to combine internal and external view on what is material, particularly when stakeholder views differ.

Third, differences between companies in how the GRI Framework is applied are identified. Our observations are in line with those of Adams and McNicholas (2007). One area of identified differences relates to how materiality of sustainability information is determined. Several aspects of this are identified. This lack of consistency is in line with the findings of Trotman *et al.*, (2011). The lack of a rigorous materiality control function through assurance of sustainability reporting information is also observed.

Fourth, materiality determination is found to be greatly influenced by the extent and nature to which external stakeholders are involved in the process. Two main approaches to materiality determination are identified; internal/operations-driven and external/stakeholder-driven. Firms who involve their stakeholders to a greater extent generally publish more extensive reports than firms who involve their stakeholders to a lesser extent. A probable explanation is that stakeholder groups generally demonstrate lower materiality thresholds than preparers and auditors (Holstrum and Messier, 1982).

Fifth, it is found that the primary intended target audience for sustainability reports is investors. This indicates an uneven power balance between stakeholder groups – when stakeholder views contradict each other, financial stakeholders' views will normally be prioritised.

Our findings lead to the identification of a *materiality gap* – a gap between how the GRI proposes that materiality should be determined, and how it is determined in practice. To amend this gap, we propose two changes to the current GRI Framework: (1) sector-specific materiality guidelines and stakeholder group lists, and (2) explicit stakeholder involvement guidelines issued by the GRI.

6.2. Avenues for Further Research

This study underlines the importance of studying sustainability reporting practice from an intra-firm perspective. Evidently, decision-making regarding sustainability reporting is far from simple, being influenced

by differing organisation-specific processes and attitudes. This is illustrated by the large discrepancy in how materiality is determined in our sample of companies. We claim that more knowledge can be obtained from intra-firm studies on both sustainability reporting and materiality, especially focusing on preparer approaches, views and attitudes within the context of diverging views and opinions, both internal and external, on what is material to report on.

This interview-based study has been entirely focused on studying firms that adhere to the GRI Framework. We have not examined any firms who are not GRI-compliant. Naturally, it would be interesting to examine intra-firm processes of determining sustainability report content, to see if approaches, views and attitudes among preparers in such firms differ.

The approaches, views and attitudes of stakeholder groups towards sustainability information have not been incorporated in this study. Pursuant to the GRI Guidelines, the approaches, views and attitudes of stakeholder groups are a crucial factor in determining materiality of sustainability information, further research on their information needs and wishes could potentially yield results that would contribute to a more comprehensive understanding of how to improve sustainability reporting.

From our results, it is in most cases unclear how outcomes of the materiality analysis are transformed into actual sustainability report content. Therefore, a study specifically focusing on this process could yield results that show specifically how stakeholder prioritisation is made.

Finally, during the interview process the authors repeatedly reflected on how the length of the interviews seemed to correlate with the extensiveness of the company's sustainability report. Therefore, a behavioural study on differing personalities of preparers and its effects on reporting practices could potentially yield interesting results.

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7.10. Databases

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8. Appendices

8.1. Appendix A – Interview Guides

8.1.1. Interview guide, preparers

- **Introduction / general questions**
- What is your role in the company?
- Employed since?
- When did you start sustainability reporting?
- When did you start to follow the GRI guidelines?
- For what reason? (Internal / external requirements?)
- External Assurance, why (not)?
- External assistance in the preparation of the report? Consultants, PR agencies?
- Integrated / separate, why?
- Other ways to communicate sustainability efforts?

- **On GRI**
- In general, what is your perception of the GRI standard?
- How do you use the GRI Guidelines?
- Are you using the GRI's "process" to determine the content of the report?
- Do you think the GRI guidelines are easy to follow?
- Ambition to reach a higher GRI level?
- What do you think of GRI application level system?
- Are the indicators GRI ask relevant for you?
- Do you need sector supplement from GRI? (If you apply one today, what is our view of it?)
- **Materiality**
- Implemented a materiality analysis?
    - Who does this?
    - How is it performed?
    - Are there other important criteria?
    - How is the trade-off made, especially for qualitative information?
        - Industry standards?
        - In the previous year as the base?
        - Have you ever chosen not to report information that previously have been reported?

- **Stakeholders**
- What stakeholder groups have you identified?
- What interests do they have?
- How do you listen to them? (What communication channels?)
- (How) do they affect the content of the sustainability report?
- How do you involve your stakeholders in the sustainability reporting process?
- Have GRI led you to involve your stakeholders (further) in sustainability reporting process?

- **Other questions**
- Is there information that the company has started to report to GRI ask for it?
- Other external pressures that prompted it to start reporting more?
- Do industry peers influences you reporting? (Do you have a desire to be the best-in-class?)
- Does it affect the reporting of that you are a big company? (Need to be at the forefront?)
- How much resources are spent on the preparation of the report?

- Do you feel that you have the resources you need to produce the report that you want?
- How do you highlight areas where the company is prominent/making progress?
- How do you communicate potential negative information?
- What is the mindset about the length of the report?
- How reported information that is difficult measurable?
- Do you think that only "material" information is in the sustainability report?
- (if not) Why do you include "non-material" information?
- Anything you want to add?

- **Question asked in e-mail to 5 of the 7 companies:** - During the interview we spoke a lot about your stakeholders, which you identified for your sustainability efforts, but less about who you see as the target group for the report itself - so who is the intended reader of the report. Do you have a specific audience in mind when formulating the content of the report, or several? Do you see the same target group(s) as readers of the report, or is it different for different parts of the report?

8.1.2. Interview guide, auditors

- **Introduction / general questions**
- What is your role in the company?
- Your background?
- Worked with these issues since?

- **GRI**
- What is your general view of the GRI standard?
- Do you think the GRI guidelines are easy to follow?
- What do you think of the GRI level system?
- Do you think that the indicators GRI asks for are relevant?
- What is your view of the sector supplements from GRI?
- How do you follow GRI when you help companies put together their sustainability report?
- How do you feel that companies comply with the GRI framework in practice?

- **On sustainability reporting**
- What areas do your clients need the most help with?
- What help will usually a company when starting to apply GRI?
- What help do companies usually every year?
- How do you help companies concerning materiality?
- Do you evaluate if the information in the sustainability reports is material? How?
- How do you evaluate that all material information is included?
- What are your thoughts about the insignificant information? Do you advise companies to exclude some information, on what grounds?
- Do you help companies identify stakeholders? How?
- Anything you want to add?

8.1.3. Interview guide, Mr. Lars-Olle Larsson

- What is your background?
- What is GRI intended purpose?
- How do you think the GRI fulfill these purposes today?
- How does the reason GRI on material information? Do you think that non-material information also should be included in the sustainability report?
- How is intended that you should take your stakeholders into account?

- How is the work order when preparing the report supposed to look? S(tart with the GRI indicators (ie, determining which are relevant), internal assessments what is essential / material, or listen to stakeholders?)
- Do GRI want to standardise the design of sustainability reports? (Increase comparability with regard to content, wording, etc.)
- What problems have you identified when companies apply GRI? (Particularly with respect to the materiality but also other problems.)
- What are your thoughts on the sector supplements?

8.2. Appendix B – List of Owners

The ten largest owners of the publicly traded companies (voting %)

Atlas Copco	%	Billerud	%	Boliden	%	Sandvik	%	SCA	%
Investor AB	22,7	FRAPAG Beteiligungsholding .	21	AMF Försäkring & Fonder	4,2	Industrivärden AB	11,6	Industrivärden AB	29,3
Capital Group fonder	3,9	SHB fonder	1,9	Nordea fonder	3,8	Swedbank Robur fonder	4,2	Norges Bank Investment	8,0
Swedbank Robur fonder	2,8	Swedbank Robur fonder	1,7	Norges Bank Investment	3,4	SHB pensionsstiftelse	3,8	SHB pensionsstiftelse	7,4
Harbor Funds Inc	4,4	Fjärde AP-fonden	1,5	Swedbank Robur fonder	3,3	Harbor Funds Inc	2,9	Capital Group fonder	1,2
AMF Försäkring & Fonder	0,9	Evli fonder (Finland)	1,0	AFA Försäkring	2,9	Alecta	2,8	AMF Försäkring & Fonder	1,1
Alecta	1,5	Andra AP-fonden	1,0	SHB fonder	2,4	Norges Bank Investment	2,5	Swedbank Robur fonder	0,9
Norges Bank Investment	1,9	AFA Försäkring	0,9	SEB fonder	2,0	Lundbergs AB	2,2	Skagen fonder	0,6
SHB fonder	1,4	Avanza Pension Försäkring AB	0,6	Söderbloms Factoringtjänst AB	1,5	AMF Försäkring & Fonder	2,2	SHB fonder	0,7
SEB fonder	1,4	Crafoordska stiftelsen	0,5	Andra AP-fonden	1,5	Göransson stiftelser	2,1	Första AP-fonden	0,5
Fjärde AP-fonden	1,1	SEB fonder	0,5	Första AP-fonden	1,0	Nordea fonder	2,0	SEB fonder	0,5

Source: SIS Ägarservice, ownership data is verified 2012-09-28. Data collected 2012-12-03.