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**THE INFORMATIONAL VALUE OF CORPORATE RESPONSIBILITY  
REPORTING**

The Global Reporting Initiative in Finland

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**ABSTRACT**

The directive 2014/95/EU as regards to non-financial and diversity information by certain large undertakings and groups will bring the previously voluntary practice of corporate responsibility reporting under regulation in the European Union in 2017. The Global reporting initiative's framework for corporate responsibility disclosures is the most recognized guideline for corporate responsibility reporting. With the endorsement from the new 2014/95/EU directive the GRI framework will most likely continue to grow as the most applied responsible reporting guideline.

In light of the new directive it is seen appropriate to investigate the informational value the GRI reporting guideline currently has for investors making investment decisions in the stock market. This thesis examines the effect releasing a first GRI report has on firm long-term information asymmetry measured by a liquidity variable, the turnover rate. The study is conducted on Finnish data and consists of 117 publicly listed companies from the Nasdaq OMX Helsinki Stock Exchange between 2001 and 2014. Furthermore, it is studied to what extent the GRI framework is recognized by companies listed in the exchange during the same timeframe.

The empirical methodology applies a fixed effects panel regression model where a binary GRI variable in addition to the control variables for firm size, stock price, leverage and profitability are regressed on share turnover rate. The empirical regression could not find any statistically significant evidence that initiating a GRI report in Finland between 2001 and 2014 affected firm turnover rate. In light of the results it cannot be supported that the GRI guideline inevitably lowers firm information asymmetry and that reports based on the guideline would inherently offer investors valuable information in the Nasdaq OMX Helsinki Stock Exchange. The possible reasons for this can stem from the fact that the disclosed GRI reports are not third-party verified for the accuracy of their contents leaving the framework vulnerable to corporate misuse.

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**KEYWORDS:** Information asymmetry, Global reporting initiative, voluntary disclosure, corporate social responsibility.



## 1. INTRODUCTION

The concern for corporate effects on environmental and social matters has been a topic of academic conversation for over 50 years and corporate social responsibility (CSR) has been evolving into an integrated part of business regime for the past couple of decades. The traditional financial bottom line is slowly transforming into a triple bottom line where the social and environmental performance of business are also accounted for (Norman & MacDonald 2004). Corporate responsibility reporting is the means of reporting the social and environmental efforts of business and so far the reporting has been voluntary by nature. In 1997 a group of people begun constructing a standard that was directed to enable harmonized corporate social responsibility reporting practices across the globe. In 2000 this group had grown to be the Global Reporting Initiative (GRI) when it launched its first responsibility reporting guideline, the G1. Now the GRI reporting guideline is living its fourth generation and an increasing amount of corporations have committed to the standard.

Whilst corporate responsibility reporting is not yet considered a legally mandatory act the world seems to be moving into that direction. In 2014 the European Commission (EC) passed a new directive that will integrate responsible reporting to the reporting practices of the largest publically listed corporations within the European Union (2014/95/EU 2014). The GRI reporting practice is currently the most popular responsible reporting guideline and will probably continue to grow in consequence of the new European Commission's directive 2014/95/EU. Therefore, it is only seen appropriate to investigate whether the GRI report is an efficient reporting standard. The approach used investigates whether corporations are able to reduce information asymmetries between their stakeholders by disclosing the GRI report. Also, the rate at which the GRI has gained popularity in corporate reporting practices and what kind of businesses have committed to the guideline is investigated.

### 1.1. Introduction to the topic

Literature on corporate voluntary disclosure, information asymmetry and corporate responsibility are in the center of this thesis. Corporations are required to disclose their annual financial information but some corporations have also committed to disclosing more than what has been set as the legal and regulatory minimum. Such disclosures are referred to as corporate voluntary disclosures. The academic research has been

interested in the motives and possible causal effects that voluntary disclosures may induce, since the ultimate purpose behind all corporate acts should be to increase shareholder wealth (Friedman 1970). The Global reporting initiative's guideline falls into the category of voluntary disclosure. Academics have proposed that voluntary disclosures may reduce informational imbalance between market participants and thus lower market speculation upon company's securities (Diamond 1985). Alleviated speculation can help to collapse the risk-protective measures market participants set up to price protect themselves against more informed investors (Glosten & Milgrom 1985). Such price protection often induces stock illiquidity (Diamond 1985, Welker 1995). The incentive for corporations to lower their information asymmetries may be to lower market speculation, increase the liquidity of their stock and thus attract investors willing enough to hold the stock (Kraus & Stoll 1972).

Information asymmetry has been described as the informational imbalance between market participants i.e. between investors but also between the corporation and its shareholders (Glosten & Milgrom 1985). In high information asymmetry some market participants are more informed than others about the future returns of the business. In such situations the more informed participants will try to take advantage of their information and exploit the less-informed investors. In high information asymmetry market speculation is high and the less-informed investors price protect themselves with wider spreads, weaken the trade volume and eventually increase stock illiquidity. Therefore, information asymmetry is used as the determinant for the effects of voluntary disclosure in alleviating market speculation and imbalanced information (Amihud & Mendelson 1986). The effects of lowering information asymmetry have been researched to increase stock liquidity, since with less imbalanced information among investors the less illiquidity premiums are set when trading the stock (Leuz & Verrecchia 2000). Liquidity is therefore often used to proxy information asymmetry. Such measures as the bid-ask spread, daily dollar trading volume and the turnover rate have been used as liquidity measures, which all rely on determining how effortlessly the stock can be traded on the market (Leuz and Verrecchia 2000, Amihud 2002). The theory is that the more liquid the stock the easier it is to buy and sell at the market place. The increased liquidity can be induced when investors are less afraid of being in a weaker informational position and are thus less speculative (Kyle 1985). Increased liquidity thus enables investors' confidence that they can buy and sell the security with little risk. For the corporation increased liquidity has been studied to lower their cost of capital (Diamond & Verrecchia 1991, Botosan 1997).

The Global reporting initiative's guideline is directed to give companies a comprehensive framework to disclose their corporate responsibility and sustainability efforts (GRI b 2015). Since the reporting is based on choice the reporting guideline falls under corporate voluntary disclosure. Responsible disclosure is strongly related to corporate social responsibility, which began to appear in academic discussion around the 1950's. The motives and effects of both corporate social responsibility (CSR) and responsible reporting have evoked research in the area. In the beginning of the 1950's corporate responsibility was seen as the duty of the businessmen from where it gradually evolved into being an expectation that stakeholders began to demand from businesses (Bowen 1953, Carroll 1999). Social accounting was developed as a tool for corporations to gather information of their corporate responsibility and to help in disclosing this information (Abbott & Monsen 1979). Academic research has for decades attempted to find the benefits that responsible performance has on financial performance. Corporate responsible disclosures have been connected to corporate voluntary disclosures and Dhaliwal, Li Tsang and Yang (2011) studied the effects of non-financial disclosure on cost of capital. Also, information asymmetry and corporate responsible performance have been studied. Cho, Lee and Pfeiffer (2013) found empirical evidence that CSR performance can reduce information asymmetry, which was proxied by a liquidity variable. Schadewitz and Niskala (2010) conducted a research on the Finnish market with data spanning from 2002 to 2005 about the informational value of the GRI and found evidence that supported the role of responsible reporting in mitigating information asymmetries.

## 1.2. Purpose of the study and intended contribution

This thesis is an attempt to examine whether the information disclosed by abiding to the Global reporting initiative's guidelines helps to alleviate information asymmetry among corporate stakeholders. The statistical methodology tests for the possible effects when a company releases its first GRI report. The proxy for information asymmetry is a liquidity variable: the monthly share turnover rate. Furthermore, the data gathered offers an excellent ground to examine what kinds of corporations have committed to the GRI guideline and how extensive the commitment is at the target stock exchange.

The setting for this study is placed at the Finnish stock market. Finland is chosen since it is a developed western country with advanced corporate social responsibility practices. The Finnish government has listed in its government program for 2011–2015

an objective to become a forerunner in corporate social responsibility and actively supports local businesses in efforts towards complying with international norms in the area of corporate social responsibility (Ministry of Employment and the Economy 2015). Moreover, as a member country in the European Union the Finnish corporate responsibility reporting will be affected by the passing of the 2014/95/EU non-financial disclosure directive in which the responsibility reports of large corporations go under regulation in 2017 (2014/95/EU 2014). This offers a unique opportunity to examine how well large corporations have committed to responsible reporting as well as the possible effects the reports may have on information asymmetry before the new directive goes into effect.

The area of voluntary CSR disclosures and their effects on information asymmetry is rather new and most previous studies linking responsible disclosures to information asymmetry have been conducted on US data. Many European countries, especially the Nordics, have advanced practices in corporate responsibility, which creates an optimal environment to examine how the effects and practices of responsible disclosures have evolved. Finland offers a good cross-section being a Nordic country but also part of the European Union. This study therefore contributes to the existing body of research by examining whether voluntary responsible reporting affects information asymmetry and does this with non-US data. Also, the thesis investigates what kind of businesses listed in the Nasdaq OMX Helsinki Stock Exchange have taken up standardized responsible reporting before the reporting becomes regulated in the EU. The Global Reporting Initiative (GRI) is the most well-known and widely applied responsibility reporting standard and it is therefore taken under examination.

### 1.3. Research question and hypotheses

Previous literature has established a firm link between voluntary disclosures and information asymmetry. Some evidence exists that responsible corporate practices may enhance firm market performance by lowering the cost of capital or by mitigating informational imbalance. However, few studies have combined voluntary responsibility disclosures and information asymmetry. Encouraged by the results from previous literature this thesis examines whether voluntary responsibility reports following the Global reporting initiative (GRI) guidelines reduce information asymmetry after publishing the report for the first time. This effect is examined in long-term timeframe i.e. for six months after the release. This is since a new commitment to a reporting standard can be seen as a permanent alleviator of imbalanced information. Also the

extent to which and what kinds of companies in Finland have committed to the Global reporting initiative's disclosures is of interest. These two research questions lead to two hypotheses:

*H1: An increasing amount of corporations have disclosed a responsibility report following the GRI guidelines in Finland between 2001 and 2014.*

*H2: Releasing the GRI responsibility report for the first time lowers information asymmetry for companies listed in the Nasdaq OMX Helsinki Stock Exchange between 2001 and 2014.*

#### 1.4. Construction of the study

The thesis is divided into eight chapters. After introduction a closer look is taken at the previous literature related to the topic. This includes literature on corporate governance and corporate responsibility in the context of their effects on information asymmetry and some other related indicators. Next, in chapter three, an introduction to the field of corporate social responsibility, its history, development and current state is presented. Chapter three is intended to give a comprehensive review of how CSR has evolved into being a core factor within corporate strategies by the 21<sup>st</sup> century. Following in chapter four is a thorough introduction to responsibility reporting, its history, practices and current trends. Chapter four reviews the historical path that resulted in the demand for a global framework for responsible disclosure. Chapter five explains some most relevant financial literature referred to throughout the chapters including literature on voluntary disclosure, information asymmetry as well as liquidity. The empirical part of the thesis begins in chapter six with describing the data and the empirical methodology whereas in chapter seven the results of the statistical analysis are presented. Chapter eight concludes.

## 2. PREVIOUS LITERATURE

The literature review takes a look at academic papers closely related to the subject of this thesis. Whilst the academic research conducted on voluntary disclosure, information asymmetry as well as corporate responsibility is extensive the aim of this chapter is to focus on those articles that are most closely related to the research conducted here. The reviewed studies intertwine all three research areas or parts of them. These papers have also been the inspiration for choosing the present topic. The papers below will give insight to how academics have attempted to link either responsible disclosures or responsible performance to information asymmetry as well as some papers close to such research. Chapter three and four instead concentrate on corporate social responsibility (CSR) and CSR disclosure research and chapter five gives a closer look at the standalone financial research conducted on voluntary disclosure and information asymmetry alone with a slight dedication to liquidity studies as well.

### 2.1. Corporate governance

Corporate social responsibility can be thought of as a branch of corporate governance and perhaps the first studies beginning to examine the corporate governance–information asymmetry dilemma have inspired the corporate responsibility literature too. Some studies investigating corporate governance and information asymmetry are thus presented here. This branch of literature examines the different aspects related to corporate governance and firm performance and how these matters show in information asymmetry. Bad corporate governance practices can be prone to encourage self-advantageous managerial decisions and ultimately lead to agency costs. Agency costs arise when the interests of shareholders and managers are not aligned.

Chen, Chung, Lee and Liao (2007) connect poor corporate governance to bad disclosure practices and increased levels of information asymmetry. They hypothesize that poor corporate governance is reflected in higher agency costs and in higher information asymmetry and that this transfers to a wider bid-ask spread due to price protection by liquidity providers. They suggest that improved transparency and disclosure practices mitigate agency problems via helping investors and smaller shareholders to better understand different managerial decisions. They find significant evidence that better corporate governance, measured by rankings in the Transparency and Disclosure Study



(T&D, a study published by Standard and Poor's in 2002), lowers information asymmetry and increases liquidity (Chen et al. 2007).

Chung, Elder and Kim (2010) go back to the purpose of corporations trying to establish how corporate governance can increase shareholder wealth. They suggest that better corporate governance lowers information asymmetry and increases liquidity by improving financial and operational transparency. More transparent organization is seen to mitigate for example management's shirking, concentration of power or distorting disclosure processes. The paper establishes the importance of lowering information asymmetries between insiders and outsiders, e.g. between large shareholders and smaller retail shareholders but also among different smaller investors. The liquidity measures used in the paper include quoted spreads, effective spreads and index for market quality. The study also accounts for measures proxying information asymmetry: the price impact of trades and the probability of information-based trading. Chung et al. (2010) also contribute to the corporate governance literature by constructing a corporate governance index, which they use as proxy for measuring internal corporate governance. The results drawn support the hypothesis that better corporate governance amounts to better liquidity and to lower information asymmetry across the different measures. Also, the results suggest that the adoption of more sufficient corporate governance standards may alleviate information asymmetries and improve liquidity.

## 2.2. Corporate responsibility

While chapter three of the thesis is devoted for reviewing corporate social responsibility more thoroughly here are presented those academic publications that most closely motivate the research conducted in this thesis. Whereas several studies exist on relating voluntary disclosures and corporate governance to information asymmetry and liquidity research extending this line of examination to corporate social responsibility and responsible disclosures is in its infancy. However, some studies come close to the subject chosen for the present paper investigating the performance of market-based measures against voluntary non-financial disclosure and corporate social responsibility.

Schadewitz and Niskala (2010) produce a research extremely close to the one in this thesis and factually their paper partially motivated the chosen topic. Their research is focused on whether communication through responsible reporting affects firm valuation. The data is based between years 2002 and 2005 and as proxy for responsible

reporting they use the Global reporting initiative (GRI) disclosures published by listed Finnish companies. They motivate the practice of responsible reporting by noting that it can work as a tool in providing investors with information that may be absent from standard financial reports. Responsible reports can thus complement financial statements and offer information on, for example, human capital, corporate governance, possible environmental risks as well as environmental management. Schadewitz and Niskala employ a valuation model introduced by Ohlson (1995) and determine the market value of equity as a function of the book value of equity, accounting earnings and responsibility reporting. Their results support that in this setting GRI responsibility reporting is significant in the formation of firm's market value. Such results encourage further studies to be conducted on the importance of responsible disclosures on market performance. Therefore, this thesis will take a closer look at whether the publication of a GRI report has grown in popularity since the study by Schadewitz and Niskala (2010) extending the time period from 2001 to 2014. Also, the study conducted here differs from that of Schadewitz and Niskala (2010) by only including the initiation of a GRI report and investigating its long-term effects on lowering information asymmetry.

Dhaliwal, Li, Tsang and Yang (2011) examine how voluntary nonfinancial disclosure, as in corporate social responsibility reporting, affects the cost of equity capital. The cost of equity capital can be interpreted as the internal rate of return, or discount rate, that the market applies to firm's future cash flows to determine its current market value (El Ghoul et al. 2011). The hypothesis presented in the paper matches closely the ones suggested by Diamond and Verrecchia (1991) as well as Leuz and Verrecchia (2000). These studies hypothesized that voluntary disclosure alleviates information asymmetries and thus lowers the cost of equity capital. The study is conducted on the initiation of responsible reporting practices, similarly to this thesis. However, their approach is more closely related to examining the changes in cost of equity capital when a firm decides to initiate a standalone corporate social responsibility (CSR) report. Their paper is among the first to study the effects of standalone CSR reports, which is a new type of setting as responsible performance indicators are often disclosed within annual reports. They find evidence that firms with better CSR performance are able to lower their cost of equity capital, attract better analyst coverage and are more likely to conduct seasoned equity offerings (SEOs). A further inference made from the results is that the possibility for lower cost of equity capital may motivate firms to begin disclosing responsible information. The study by Dhaliwal et al. (2011) is an important step in the research area of voluntary responsibility disclosures and their encouraging results offer excellent motivation to continue researching voluntary CSR disclosures.

El Ghouli, Guedhami, Kwok and Mishra (2011) also research the linkage between CSR and the cost of equity capital. El Ghouli et al. (2011) hypothesize, holding other factors fixed, that firms incorporating high CSR performance have lower cost of equity capital than firms with poor CSR performance. The hypothesis could be backed up by, for example, a difference in perceived risk for high and low CSR firms. El Ghouli et al. (2011) choose an implied cost of capital model. The implied cost of capital is vouched to allow for an attempt to separate the cost of capital effects from effects caused by growth and cash flows. The corporate social responsibility data is acquired from the KLD STATS database. The KLD database is one of the most used databases among empirical CSR research and is considered as one of the top sources of data for corporate social performance (Jiao 2010). El Ghouli et al. (2011) reach the result that firms with better corporate social responsibility scores achieve lower costs in equity financing. Additionally, involvement in so-called *sin* industries such as tobacco and nuclear power has an elevating effect on firm's cost of equity. As a conclusion, the study finds a significant linkage between corporate social performance and the cost of equity capital. The authors reach the conclusion that by enhancing responsible actions firms can attempt to reduce their cost of equity financing. In addition to El Ghouli et al. (2011), the study by Goss and Roberts (2011) examines the effects corporate responsibility might have on the cost of bank loans; the other side of cost of capital. Their study finds a significant but modest linkage between the price of bank loans and corporate responsibility.

The study by Cho, Lee and Pfeiffer (2013) is closely related to the topic of this thesis. They are among the first to link corporate social responsibility and information asymmetry but in contrast with the research conducted here they concentrate on CSR performance rather than disclosures. The paper uses the KLD STAT database as source for CSR rankings. Differing from other studies conducted with the KLD data (e.g. El Ghouli et al. 2011) Cho et al. divide CSR into positive and negative performance. For example, positive CSR performance can appear as better environmental management and negative performance as unnecessary pollution. Both performance indicators offer investors information on the company's risk levels or possible changes in future earnings. Secondly, Cho et al. (2013) include an examination of how institutional investors affect the relation between CSR performance and information asymmetry. The paper uses the bid-ask spread as proxy for information asymmetry and controls for the level of institutional investors, size, leverage, stock price and stock return volatility. They find statistically significant evidence that CSR performance can reduce information asymmetry and more interestingly that the negative CSR performance has

greater impact. Furthermore, the results support that where there are large institutional investors with capacity to acquire private information on CSR performance, these investors exploit their positions ultimately attenuating the reductions in information asymmetry. All in all, Cho et al. (2013) open the door for research relating corporate social responsibility and information asymmetry. Their results encourage studying how responsibility in terms of disclosure might affect market indicators.

A slightly different view to firm responsible disclosures is given by Aerts, Cormier and Magnan (2008). They study the implications of environmental disclosure both in European and North American context as well as account for both web- and print-based disclosures. Similarly in this thesis the responsible disclosure material is entirely web-based and extracted from a European setting. Their paper also accounts for the public pressure for firms to disclose on their environmental performance and such pressure is proxied by the firm's exposure to media. Furthermore, an analysis of the environmental disclosure's relevance in financial markets is included where they measure the effect by errors in analysts' forecasts. The results show that enhanced environmental disclosures may bring more precise earnings forecasts by analysts but is mostly relevant for companies with less extensive analyst following. The results were also more pronounced in the European setting.

A very recent study by Kim, Li and Li (2014) examines if CSR performance can be related to lower stock price crash risk. While this study does not directly contain the aspect of information asymmetry or disclosure it is relevant in revealing how CSR performance can be used in investment decisions and risk management. The paper also contains a good reference to corporate *greenwashing*, which is a theory within CSR literature about exploiting corporate responsibility in attempts to conceal improper behavior. In the setting of stock price crashes greenwashing appears if managers continuously choose not to report bad news up until to the point where all the hidden information becomes public at once. The accumulated bad information reflects as a crash in stock price. The study uses corporate responsibility rankings from the MSCI ESG database and measures crash risk by the negative conditional skewness of firm-specific returns. Their study finds a significant negative connection between CSR performance and stock price crash risk but expects that in these cases the firm has high level of transparency in financial reporting and is less prone to hoarding bad news.

### 3. CORPORATE SOCIAL RESPONSIBILITY

As the thesis at hand is devoted to corporate responsible disclosures it is seen only suitable to include a section describing what is corporate social responsibility. This chapter takes a thorough look at when and how corporate responsibility became an important theme in organizational regime and who have been the most influential authors in the field. In addition to a historical review here are introduced some more recent trends seen in social responsibility as well as the measures developed along the way. Lastly, an intensive selection of academic papers examining the relation of corporate social responsibility and firm financial indicators is included in order to provide an more extensive view of CSR research and how the thesis at hand continues to complement it.

#### 3.1. Evolution of corporate social responsibility

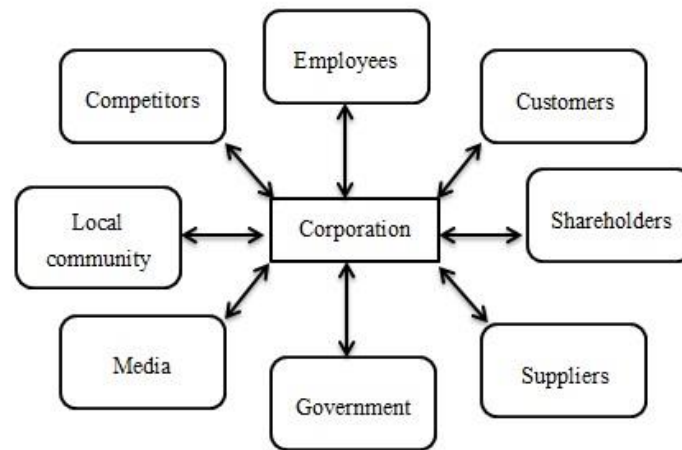
Corporate social responsibility has been defined in numerous ways throughout its existence. In its earliest forms corporate social responsibility was mostly referred as social responsibility (SR). In 1950's social responsibility begun to emerge in scientific literature (Carroll 1999). Bowen (1953) is considered among the first to introduce corporate social responsibility and give CSR its initial definition. In his book *Social responsibilities of the businessman* Bowen assesses: "*It refers to the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in the terms of the objectives and values of society*" (1953: 6).

Further on, in the 1960's and 1970's, more precise and up to date descriptions of CSR begun to appear. Noteworthy names include Davis, who inclined that a well performing business requires a healthy society (1967: 46). A business is required to sacrifice profits in order to execute its social responsibilities. An idea originated that short-term expenses on social responsibility reward business with long term profits (Davis 1960: 70). It is to be pointed out, that socially responsible acts were still in the 1960's considered as the duties of the businessmen, not the business or corporation itself. An important development in the definition of CSR is its extension beyond economic and legal obligations, implying that social responsibilities rely on some degree of voluntarism (Carroll 1999).

During the 1970's social responsibility became increasingly considered as a corporate act instead of an individual act. Davis characterizes corporate social responsibility as follows: "-- it [CSR] refers to the firm's consideration of, and response to, issues beyond the narrow economic, technical, and legal requirements of the firm. It is the firm's obligation to evaluate in its decision-making process the effects of its decisions on the external social system in a manner that will accomplish social benefits along with the traditional economic gains which the firm seeks" (1973: 312–313). An important notation is how Davis refers firms being the executive part when it comes to social responsibility. Therefore corporate social responsibility seems to have become a more correct term instead of just social responsibility. It is also to be pointed out how Davis ties corporate social responsibilities with the ability to sustain economic gains effectively differentiating it from sheer philanthropy.

In contradiction to all the positive expectations loaded on corporate social responsibility, in 1970 Milton Friedman joined the CSR conversation with a controversial theory. According to Friedman (1970) the only social responsibility of business is to increase profits in order to maximize shareholder wealth. During the decade, also first attempts to empirically prove corporate social responsibility's effects on stock performance were published by Moskowitz (1972) and Vance (1975).

While the 1970's and 1980's mark the first decades of empirical CSR research, the 1990's is a decade when rather compatible themes evolved around CSR. These include such as the *stakeholder theory* and *corporate social performance* (CSP) (Carroll 1999). The stakeholder theory assumes that in addition to shareholders, corporations are responsible for other groups and individuals, which can affect or are affected by the accomplishments of organizational purpose (Freeman 1984: 25). In other words, according to stakeholder theory businesses are required to cherish their relationship with stakeholders in order to guarantee functional operations within all its interest groups. However, the before-mentioned ideas of Milton Friedman (1970) are contradictory to the stakeholder theory. The so called *Friedman Doctrine*, also known as the *stockholder theory*, highlights that increasing stockholders' wealth is the only social responsibility of corporations (Friedman 1970). The stakeholder theory and the stockholder theory became more or less contested with one another resulting in an academic quarrel within the CSR literature. In chapter four the thesis takes a closer look at stakeholder theory in respect to social accountability and responsible reporting as it is considered one of the main theories within voluntary responsible reporting.



**Figure 1.** Stakeholder theory: Illustration of Stakeholders' and corporation's influence towards one another (Modified from Freeman 1984: 25.)

Along the years corporate social responsibility has gone through definitional change and has evolved into a modern corporate strategy. Starting from the 1950's with such outdated terms as the businessmen and coming all the way to 1990's where CSR has been placed as a point of origin for other theories, such as the stakeholder theory. In addition to this, the academic literature remains active on the topic especially when it comes to measuring CSR. CSR continues to interest among academics, corporates and global organizations, and is increasingly expected by the public (Carroll 1999). In the beginning of the 21st century, CSR was no longer considered only a research subject among academic literature, but a pressing global matter.

### 3.2. Global frameworks and current trends of CSR

Corporate social responsibility has received a lot of attention in academic literature but global organizations have also taken part into the discussion. Several well-recognized organizations have given their own perceptions and guidelines on CSR during the past two decades. Such organizations include the European Union (EU), the Organization for Economic Cooperation and Development (OECD) and the United Nations (UN). It speaks for the importance and need of worldwide sustainability, for CSR to be acknowledged by these globally influential organizations.

The European Commission published a new policy on corporate social responsibility in 2011. The European Commission is responsible for running the day-to-day tasks of the European Union. It is responsible for proposing legislation and implementing decisions.

In this policy corporate social responsibility is defined as “*the responsibility of enterprises for their impacts on society*”. To fully meet their social responsibility, enterprises “*should have in place a process to integrate social, environmental, ethical human rights and consumer concerns into their business operations and core strategy in close collaboration with their stakeholders*” (EC 2011). In continuation of EU’s interest towards corporate responsibility the Commission passed a new directive in 2014 that will transform the previously voluntary practice of responsible reporting to a more regulated regime (2014/95/EU 2014). This directive is reviewed more closely in chapter four.

With the European Commission’s policy couple of other established guidelines and principles together form a coherent global framework for CSR. The other guidelines and principles include for example OECD Guidelines for Multinational Enterprises, The 10 Principles of the United Nations Global Compact and ISO 26000 Guidance Standard on Social Responsibility. The OECD Guidelines for Multinational Enterprises is a government-wide approved package that encourages multinational enterprises to exercise sustainable development and social responsibilities. The UN Global Compact determines a set of core values in socially responsible areas, such as the environment, anti-corruption and labor standards. Companies can sign up for the Global Compact and commit into submitting a progress report annually. The ISO 26000 standard is a set of voluntary recommendations on how organizations can operate in a socially responsible way. The standard is aimed for all organizations, not just businesses. Unlike other well-known ISO standards, the ISO 26000 doesn’t award certifications. (EC 2013.)

Even though universally applicable definition for CSR has not been established by the 21st century, many currently used definitions have a lot of similarities. Altogether, CSR can be seen as an approach by which companies integrate social and environmental concerns in their business operations and in their interactions with stakeholders on a voluntary basis (IFC 2011). The important part of all definitions is how CSR actions should be an extension of corporation’s legal obligations (McWilliams & Siegel 2001). If this was not the case, then all firms would act responsibly only by abiding the law. In order to preserve prestige among firms that implement CSR practices voluntarily, a reach over corporation’s legal obligations must be a prerequisite for corporate social responsibility.



### 3.2.1. Terminology

For the purpose of this paper it is seen fit to introduce some commonly used terms in the literature concerning CSR research. Most of the following terms introduced here have been developed during the past 20 years. Moreover, the following terms are actively used in the empirical research introduced later in this paper. In order to fully absorb the following chapters, understanding these terms is a necessity.

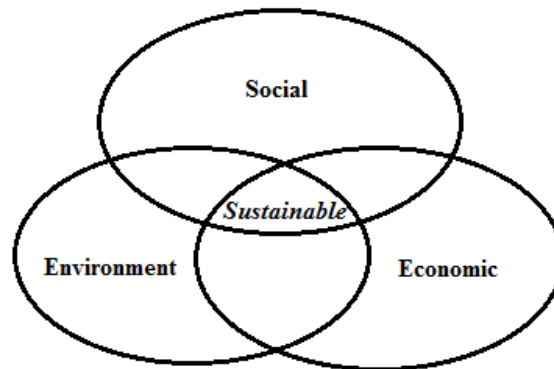
Corporate social performance (CSP) is comprised of the configurations, which corporations use to implement corporate social responsibility. For example, the principles, which drive corporations' social performance and the effectiveness of socially responsible processes, are in the core of defining CSP (Wood 1991). To get a practical idea of corporate social performance, let's say a chemical firm announces itself to be socially responsible. For instance the act of refraining from animal testing is the firm's way to implement responsibility and this act can be seen as a part of the firm's CSP.

ESG, short for environmental, social and governance, is a term used to capture and measure the corporate social responsibility actions of businesses (Starks 2009). So called ESG factors are those derived from the explanatory terms of the acronym. For example, from the word environmental such factors as clean water and amount of pollution can be derived. Social factors could be for example human rights and child labor. With governance it is often referred to corporate governance of a firm. Corporate governance can be seen as the collection of control mechanisms that an organization adopts to prevent potentially self-interested managers from engaging in activities detrimental to the welfare of shareholders and stakeholders (Larcker & Tayan 2011). From a stakeholder perspective, corporate governance should support policies that produce stable and safe employment, provide acceptable standard of living to workers, mitigate risk for debt holders and improve the community (Larcker & Tayan 2011).

Corporate social responsibility is distinctly a strategic viewpoint from the corporate perspective. So it is only appropriate that investors have their own perspective on socially responsible acts. *Socially responsible investing* (SRI) is considered an investor's way to support the ethical values of businesses. SRI investors and ethical mutual funds also use the acronym ESG in the context of screening. That is, companies are screened with environmental, social and governance related factors in order to assess their acceptability for SRI portfolios (Monks & Minow 2011: 84). Socially

responsible investors commonly abandon such industries as tobacco, alcohol and gambling from their portfolios.

Discussion has been placed on how well the revenue on a financial report, the so called bottom line, determines a good business. For example, if a business generated positive revenue whilst polluting heavily at some geographical area, how successful the business actually is? A concept called the triple bottom line (TBL) tries to account for profits on environmental and social level in addition to monetary profits. That is, the ultimate success or wealth should be measured not just by the traditional financial bottom line, but also by social and environmental performance (Norman & MacDonald 2004). TBL reporting can simply be seen as a way for corporations to bring their CSR efforts into public knowledge.



**Figure 2.** Triple bottom line: By combining social, environmental and economic bottom lines corporation takes a step towards sustainability.

### 3.3. Measuring corporate social responsibility

This chapter introduces the most common measurements for CSR. For decades the quantification of qualitative information of different dimensions of responsible actions has been a challenge. However, in the 21<sup>st</sup> century with more advanced ways of collecting data three sources for measuring corporate responsibility emerge above others. These are The Domini 400 index (recently renamed to MSCI KLD 400 Social Index but here both names are used interchangeably) based on the KLD STATS database, FTSE4 Good index and SAM used by Dow Jones Social Index. The KLD database is considered the leading data source by academics and it is also among the first databases mapping CSR activities across businesses (Jiao 2010).

Domini 400 Social Index is recognized as a CSR benchmark. It is a stock market index for social responsibility (Becchetti, Ciciretti, Hasan & Kobeissi 2011). The Domini Index is created by an independent rating agency Kinder, Lydenberg and Domini Research & Analytics, Inc. (KLD). KLD upkeeps a database (STATS), which contains a wide range of CSR related ratings. The information in the database has been comprised of various sources such as government agencies, non-governmental organizations, global media publications, annual reports, regulatory filings, proxy statements, and company disclosures (El Ghouli, Guedhami, Kwok & Mishra 2011). The KLD database is one of the most used databases among empirical CSR research and is considered as one of the top sources of data for corporate social performance (Jiao 2010). The KLD database has been used as a source of data for CSR ratings already in the 1990's. Since then it has expanded extensively. At the beginning it comprised of the S&P 500 firms with the Domini 400 Social Index added later. Further on, indices such as the Russell 1000 Index, Large Cap Social Index and Russell 2000 and Broad Market Social Index, were added to the KLD STATS database (El Ghouli et al. 2011).

FTSE4Good is an index mapping CSR performance of hundreds of firms around the world (Deng, Kang & Low 2013). The index is constructed by the Financial Times Stock Exchange with support from Ethical Investment Research Services (EIRIS). FTSE4Good Index was designed to measure and rank companies' CSR activities and work as a useful tool for investors interested in constructing socially screened portfolios (Curran & Moran 2007). The index evaluates companies on social and environmental criteria in five categories: environmental sustainability, human rights, countering bribery, supply chain labor standards and climate change (Deng et al. 2013).

SAM (recently renamed as RobecoSAM), also known as the Sustainability Asset Management Group GmbH, is an international investment company working as ESG research provider for the Dow Jones Sustainability Indices (DJSI). The companies chosen for the DJSI are evaluated by their economical, environmental and social activities. The Sustainability Asset Management specializes in sustainability research and is considered an industry leader in ESG research (Humphrey, Lee & Shen 2012). During the years SAM has constructed one of the most comprehensive CSR databases. It has some strengths over the KLD STATS, which rates corporate SR activities only on a binary scale. SAM offers a wider perspective on the effectiveness of CSR activities that companies execute compared to that of the KLD (Humphrey et al. 2012).

### 3.4. Research in corporate social responsibility

A brief introduction to the research history in corporate social responsibility will help to motivate the research question of this thesis. Studies on corporate responsibility have been trying to link corporate responsible actions to financial indicators ever since the 1970's. Most research has been aimed towards linking CSR performance and market performance. Studies have also been conducted in the area of cost of capital and accounting performance. As results throughout studies have not been consistent in attempting to link CSR and market returns academics have turned to other measures, liquidity and information asymmetry being among them and expanding the literature to responsible reporting. This chapter will briefly introduce most relevant articles among CSR studies that have made way for the newest research questions.

During the 1970's first studies trying to prove corporate social responsibility's effects on market performance were published. Moskowitz (1972) issued a paper where he attempted to prove that corporate social responsible strategies affect businesses positively. He believed that the vivid discussion around social responsibilities worked as a wake-up call for investors and that the stock market would thus favor more sustainable businesses. Moskowitz (1972) constructed a portfolio of 14 socially responsible companies. He measured the changes in value by examining capital gains and losses in the stock market. This portfolio achieved 7.28% increase in its value during the six-month evaluation period. In contrast to Dow Jones Industrial Index and New York Stock Exchange Composite Index Moskowitz's (1972) portfolio beat the market by 2.18–2.88 percent. The 14 companies were handpicked by Moskowitz himself after four years of analyzing different businesses on the basis of consistency on social responsibilities. It is worth to mention that in 1970's no databases or indices that measured CSR existed for investors to take advantage of in their portfolio construction. In his study Moskowitz (1972) also attempted to satisfy this information need of sustainably aware investors in addition to empirically measure corporate social performance effects on stock value.

Even though conducting a pioneer research in responsibility Moskowitz (1972) became a subject of criticism. From the results of his study Moskowitz implied socially responsible stocks being good investment choices. However, Aupperle, Carrol and Hatfield (1985) noted that Moskowitz never revealed the criteria that he used in picking the 14 companies for his portfolio. He only assessed them to be socially responsible. This exposed Moskowitz's study to subjectivity (Aupperle et al. 1985). More criticism

arose when Vance (1975) challenged Moskowitz's (1972) hypothesis on the profitability of corporate social performance. In his article Vance first introduced data on stock returns for Moskowitz's 14 company portfolio during 1972–1975. Almost all companies had performed considerably poorly compared to the Dow Jones and New York Stock Exchange indices on this time period. In the same paper Vance also introduced new empirical evidence on the linkage between CSR and market gains. He used two studies that ranked businesses according to their corporate social responsibility aspects. He then measured the capital gains of firms with high and low rankings. In contradiction to Moskowitz (1972), Vance (1975) found a negative correlation between CSR ranking and stock market performance during 1974. This result would support a theory that socially responsible firms are in a disadvantage resulted by their increased costs due to investments made in CSR (Alexander & Buchholz 1978). Since the results of Moskowitz (1972) and Vance (1975) were controversial, more researchers joined the quest to determine the financial impact of corporate social responsibility.

Alexander and Buchholz (1978) found deficiencies in the studies by Moskowitz (1972) and Vance (1975). Both Moskowitz and Vance evaluated stock performance only for a short time period, six and 12 months respectively. In addition, neither of the studies took risk adjustments into account. Alexander and Buchholz (1978) thus revised Vance's study with risk-adjusted values. They found no significant correlation between firm's financial performance and corporate social performance. In addition, Alexander and Buchholz linked the efficient market theory by Fama (1970) into their study. According to the efficient market theory, they concluded that all positive or negative effects associated with CSR actions should instantly reflect in stock prices. Since their study did not observe any significantly different stock returns compared to the market, corporate social responsibilities were either not relevant information or the information was already reflected to the stock prices prior to their research (Alexander & Buchholz 1978).

Aupperle, Carroll and Hatfield (1985) attempted to measure the relationship of corporate social responsibility and profitability by using the so-called Carroll's construct. Their aim was to create a more objective and empirical study compared to Moskowitz (1972), Vance (1975) and Alexander and Buchholz (1978). Even though Alexander and Buchholz took an advanced step towards reliable results by implementing risk adjustments to their study, Aupperle, Carroll and Hatfield (1985) saw the original sample data borrowed from Vance to be poor. The Vance study used reputational surveys from a subjective source and it had a response rate of only 11

percent. By using Carroll's construct Aupperle, Carroll and Hatfield (1985) aimed to take the first step in standardizing empirical CSR research. According to their paper, many previous studies suffered from methodological issues, especially since no consistency in CSR measurement existed. It is to be pointed out, that in the 1980's the exact definition of corporate social responsibility was not yet established. Carroll's construct attempted to define and measure CSR by using four components: economic, legal, ethical and discretionary; the last is sometimes also referred to as philanthropy. After creating a forced-choice survey that measured the four components, it was sent to over 800 Chief Executive Officers and received a 30% response rate. A forced-choice method was used in order to minimize the social desirability of responses, that is, to minimize respondents' bias. The results of Aupperle, Carroll and Hatfield (1985) failed to support the view that a relationship between corporate social responsibility and profitability would exist. Additionally, their study used return on assets (ROA) as a measure of profitability by which we can only draw conclusions about tangible value. ROA is an accounting based measure of the relationship between net income and total assets; it gives insight to how efficiently company's assets are used to generate earnings.

Towards the 1990's the definition of corporate social responsibility got solidity based on Carroll's construct, extending it over the legal obligations of business. Additionally, the different views of CSR's effects on corporate performance became more precise. McGuire, Sundgren and Schneeweis (1988) presented three perspectives on the relationship between corporate social responsibility and corporate financial performance based on perspectives introduced in previous studies. According to their first perspective, firms using resources on CSR can suffer from financial disadvantage due to a rise in costs. For example the study by Vance (1975) supported this theory. The second perspective presents that costs in CSR are minimal and benefits generated, such as improved employee morale and productivity, reward the business for choosing a sustainable strategy. The thoughts of Moskowitz (1972) were closely aligned with this perspective. Third and newest perspective presented by McGuire et al. (1988) states, that the costs created by CSR are significant but reductions in other costs resulted by applying CSR offset the original costs.

McGuire et al. (1988) had a new approach on the topic of CSP and CFP. Contrary to many previous studies, their study's purpose was to measure whether previous financial performance had an effect on future socially responsible actions in addition to the traditional question of CSR's effect on future financial performance. They derived a

theoretical argument based on the third perspective presented in the previous paragraph; by reducing risk via corporate social responsibility businesses can lower costly explicit expenses. For example, before the usage of asbestos in construction was prohibited by law, businesses could attempt to avoid future law suits by refraining from using asbestos as a responsible act. (McGuire et al. 1988.) By using Fortune magazine's annual corporate reputational rankings as data for CSR, McGuire et al. (1988) tested their hypotheses on both accounting-based, such as ROA, and market-based performance measures, such as risk adjusted returns. The Fortune magazine survey rated companies on eight attributes using industry professionals in 20–25 different industry groups. The attributes used were: financial soundness, long-term investment value, use of corporate assets, quality of management, innovativeness, quality of products or services, use of corporate talent and community and environmental responsibility. With a response rate usually over 50% and the extent of the Fortune survey it had good grounds for objectivity. McGuire et al. (1988) also presented previous studies that confirmed the Fortune study to appropriately correlate with accounting- and market-based performance measures. The study of McGuire et al. (1988) suggested several conclusions. They found that prior financial performance is generally a better predictor of CSR than subsequent performance; firms with high performance and low risk can better afford to act responsibly. In addition, their results suggested that firms with low CSR, experience lower ROA and market returns than firms with high levels of social responsibility. Also, accounting- based measures proved to give better predictions of CSR than capital gains. (McGuire et al. 1988.)

The study by Waddock and Graves (1997) is among the first to take advantage of the KLD database in assessing the levels of corporate social responsibility among corporations. The studies written at this time mark a beginning for a new period in CSR research. The first corporate social performance ratings created by KLD were done for the entire Standard and Poor's 500, which consists of the 500 largest U.S. publicly traded companies. Another study by Griffin and Mahon (1997) was also among the first to use the KLD corporate social performance rankings. They additionally used the Fortune magazine reputational survey, which could be used as a reliability check for the study by McGuire et al (1988).

The study by Waddock and Graves (1997) aimed to prove a link between corporate social performance and financial performance. They found positive association between prior financial performance and corporate social performance. Giving a confirmation to the results by McGuire et al. (1988) with different data. Additionally, CSP was also

found to have positive linkage with future financial performance. They used return on assets (ROA), return on equity (ROE) and return on sales (ROS) as financial performance instruments, which they measured against the CSP rankings of most of the S&P 500 companies. The authors conclude that the results acquired from using the vastly improved measurement system for corporate social performance support *the slack resource theory*. According to the slack resource theory, firms with good past financial performance can better afford investments on responsible strategies (Waddock & Graves 1997). This theory was also supported by McGuire et al. (1988). Waddock and Graves (1997) additionally implied, that with possibilities to invest in positive corporate social performance firms may indirectly gain long-term intangible value in the form of better relationships and increased corporate image. This supports the stakeholder theory as a viable business strategy.

The time before the 21st century marks 30 years of research in the financial advantages of corporate social responsibility. Starting from subjective and handpicked data the research developed into using more and more objective data from sources such as the Fortune magazine survey and the first CSP ratings from KLD. Along the 21st century the KLD database achieved a benchmark role in CSR studies and new research methods and datasets for measuring the effects of corporate social responsibility on financial performance arose as well. At the beginning of the new century, academics had not been able to achieve a consistent answer whether there is a significant linkage between corporate social responsibility and financial market indicators. Even though a benchmark for measuring corporate social performance had been established via the KLD database, other rivaling measurement approaches have begun to appear during the new century. Moving towards the beginning of the current decade, multiple different databases, indices and performance measures are used in CSR research.

At the beginning of the century McWilliams and Siegel (2001) hypothesize through logical thinking that corporate social responsibility should have a neutral effect on firm financial performance. Their logic follows the idea that CSR is perceived just like any other investment or factor among all the factors that a firm would spend money on. Thus an efficient manager would only spend so much on CSR what is required to maximize the investment's profits. To comprehend the idea behind this logic, one could think of a situation, where a firm kept hiring more secretaries than needed. Obviously, the efficient amount of secretaries would be the number that is needed to sufficiently handle the designated secretary duties. The same principle applies for CSR as well, according to McWilliams and Siegel (2001). Whether this ideology is a reflection of the



research done on the link between financial performance and CSR or whether it is not, the hypothesis seems logical.

A different way to determine the effects of corporate social responsibility on market factors is used in a study by Becchetti, Ciciretti, Hasan and Kobeissi (2012). They examine the market reactions to firms entering and exiting the Domini 400 Social Index between 1990 and 2004. By using a simple market model to calculate abnormal returns Becchetti et al. (2012) find a significant negative effect on abnormal returns after an exit announcement from the Domini index. Abnormal returns are generated returns that differ (positively or negatively) from the expected rate of return. It is to be noted, that the entering and exiting to or from the Domini 400 are announced the same day the event occurs, making it a reliable source for measuring causality. The study also tested for control variables such as financial distress and stock market seasonality, even so, the results remain persistent. In the light of their results, it seems that the market “punishes” firms exiting a social index but doesn’t react on entry events. The authors conclude that ethically screened mutual funds forced to sell a stock after a responsibility violation might be a reason for the examined penalty after an exit from the index. In another words, a violation of ethical criteria leads ethical mutual funds to sell a stock independent of its expected financial performance.

Together with Becchetti et al. (2012) also Curran and Moran (2007) investigate the impact of index entries and exits on firm market metrics. Instead of the Domini 400 Social Index Curran and Moran (2007) apply their study on the FTSE4Good Index to measure abnormal daily returns. By using a market model, where the abnormal return is calculated by subtracting the expected return from the realized return, Curran and Moran (2007) find no significant linkage between the entries and exits from the index and abnormal returns. The study concludes that firms are not thus penalized or rewarded when exiting or entering the index. This result would be convergent with the results by Becchetti et al. (2012) if the FTSE4Good index wasn’t a victim of ethical mutual funds forced to sell a stock upon the violation of their responsibility criteria. At the end of their study, Curran and Moran (2007) additionally note that the long-term reputational effects of being in an ethical index were not tested and that they might be significant. In other words, companies may gain positive public image by being able to present their ethical standings when being listed to the FTSE4Good index.

The study by Humphrey, Lee and Shen (2012) differs from the other studies presented since they use an alternate data source for responsibility rankings. While the KLD

STATS database has been used predominantly, the Sustainability Asset Management Group GmbH (SAM) offers a good alternative for environmental, social and governance (ESG) ratings. SAM rates industries with both general and industry-specific criteria. For example the Global Reporting Initiative and study by Griffin and Mahon (1997) recognize that different industries face different kinds of ESG concerns. The KLD STATS treats all industries equally. Humphrey et al. (2012) additionally criticize that the KLD ratings are binary; companies are only rated, for example, whether they pollute or not, but not in any way by the severity or the level of the pollution emitted. SAM, however, uses a scoring system from 0 to 100 for each criterion, which allows for differentiation between firms engaging in same ESG activities.

The article by Humphrey, Lee and Shen (2012) asks whether corporate social performance, which is increasingly pressured on businesses, can increase firm value or is it a waste of resources. The study examines the impacts of corporate social performance on cost of capital and risk. Specifically, they use total returns, standard deviations to measure total risk, risk and reward ratios measured by total return divided by standard deviation and Sharpe ratios for risk-adjusted performance. Sharpe ratio is defined as the total return minus the risk-free rate divided by standard deviation (Humphrey et al. 2012). Additionally the authors use two different market models, first to determine a one-factor alpha for each portfolio and second to control for size, book-to-market and momentum risk factors. The latter model is also known as the Four-Factor Carhart (1997) model. The study by Humphrey et al. (2012) finds no difference in risk-adjusted performance of the sample companies between firms with high and low CSP ratings. Exceptionally, the sample population was gathered from firms in the U.K. As a conclusion the empirical evidence indicated that firms do not suffer or gain any significant costs or benefits by implementing CSP. It is to be noted that since the study by Humphrey et al. (2012) applies CSR ratings previously unused in the articles mentioned in this thesis with a sample collected from U.K. firms, their results don't necessarily receive much congruence with the results from other studies. However, if future research confirms SAM as a competent source of CSR data, it may be used to apply reliability checks for the studies conducted with the KLD STATS.

## 4. CORPORATE RESPONSIBILITY REPORTING

Corporate responsible disclosures have been found from corporate annual reports already in the beginning of the 1900's but the topic reached wider academic interest during the 1960's and 1970's. Especially the economic despair during the 70's made researchers ask the question: does economic welfare and orientation to profit maximization reflect the ultimate social benefits that corporations contribute to society? Ever since academic research has focused on explaining the different phenomena found in the field of corporate social responsibility, what it means for corporations and how it is communicated to stakeholders. This chapter focuses on explaining the main theories often discussed in the field of corporate social disclosure. Furthermore the chapter gives a deeper insight into the Global Reporting Initiative. (Guthrie & Parker 1989; Ramanathan 1976)

### 4.1. Theory and terminology of responsibility reporting

While chapter five focuses on the financial literature explaining such topics as voluntary disclosure from financial perspective some theories shall be opened in the area of social reporting. These theories and terminology fulfill the role of explaining and categorizing different phenomena repeatedly met on the field of corporate ethics and responsible standards. Academia has mostly concentrated on examining and hypothesizing the corporate motive behind social disclosures as such information release has for the most part been voluntary. By understanding the theoretical and terminological aspect one can come into comprehension of the mechanisms behind responsible reporting and social standards both from the corporate and from the stakeholder perspective.

#### 4.1.1. Social accounting

For a long period it was the belief that the corporate purpose is to maximize profits and by abiding to this belief corporations were contributing to the society. However, a new way of defining corporate responsibility arose during the 1960's that was in contrast with the earlier beliefs. The big oil depression in the 1970's along with arising concerns in environmental issues attributed to the criticism that perhaps generating profits was not an all-inclusive criterion for corporate social performance. Social disclosures began to appear in the business world and academia more notably in the 1970's when corporations began to recognize the informational value of their social and environmental impacts (Abbott & Monsen 1979). Responsible deeds and social

reporting became the status quo and for example in 1973 altogether 298 Fortune 500 companies had disclosed some sort of social performance information on their annual reports. Along with this new line of reporting became the need to define it. The term *social accounting* was introduced as the practice for reporting on corporate social performance and to differentiate from financial accounting. Corporate social reporting or social accounting is the means for corporations to disclose information concerning firm's actions that affect its implicit and explicit stakeholders, the environmental impact of its actions and contributions of its products or services (Anderson & Frankle 1980). (Ramanathan 1976.)

Ramanathan (1976) took a practical approach towards developing a systematic information system for corporate social performance. Looking back at the steps taken in the development of financial accounting systems Ramanathan defined that the theory and practice of financial accounting has evolved through a set of themes and predicted similar development path for social accounting. According to Ramanathan (1976) the themes that accounting practices have evolved around include framework objectives, valuation concepts, measurement methodology and reporting standards. From the perspective of theoretical framework Ramanathan (1976) defines social accounting as “*the process of selecting firm-level social performance variables, measures and measurement procedures; systematically developing information useful for evaluating the firm's social performance; and communicating such information to concerned social groups, both within and outside the firm.*” The definition essentially recognizes that not all businesses can be measured with the same metrics to produce comprehensive information on corporate social performance. Furthermore, the definition insists social measurement procedures to become an integrated part of corporate processes. Lastly it references to the importance of consistent internal and external communication of social performance across businesses. That is, consistent data collection and reporting practices are essential in ensuring the comparability of corporate social disclosures across all unique corporate entities. These inferences are also echoed from set of objectives Ramanathan (1976) defines as integral to the theoretical framework of social accounting. Even though corporate social reporting was in its infancy during 1970's Ramanathan's (1976) definition is still relevant today.

At the beginning of social accounting the first step was to acknowledge that there is a collective pressure from stakeholders and the public to get information on business activities and their effects on the social community and the environment. *Social accounting* arose as the practice for answering these needs. To successfully report on

social contributions new methods needed to be developed since responsible information is often found in qualitative form or requires advanced measuring to obtain quantitative data. However, at the beginning of social accounting businesses mostly concentrated on investigating those aspects of their business that could be reported on, since at the time they lacked proper methods to measure the relevant quantitative data and to execute social audits. Social audits can be seen as one way of collecting data on the social and environmental impacts of businesses but at the beginning of social accounting this method lacked credibility. Reputational surveys can be considered another way of collecting the public's opinion on such impacts. Some earlier studies introduced in chapter three such as Vance (1975) and Aupperle et al. (1985) used surveys in collecting their data. However, reputational surveys are subject to the respondents' image of the firm, which ultimately leads the surveys to be biased. This is because such image-based perceptions are influenced by company size, age and visibility in the mass media. Another limitation of reputational surveys is the quantity of data the respondents are able to produce. For example, assessing multiple reputational factors of an index constructed of hundreds of companies is an overpowering task for any individual. Next to social audits and reputational surveys, social accounting has also applied content analysis in order to collect information. Content analysis is the method of establishing the informational value by codifying the content devoted to, for example, social responsibility of any written document, such as annual reports, press releases or other company disclosures intended for communication purposes. For example, content analysis could be applied to examine how much space or pages in an annual report is used for reporting corporate social responsibility. (Abbott & Monsen 1979.)

#### 4.1.2. Sociopolitical theories

Social and political theories have had a central role in the specification of corporate motives behind social disclosure. Sociopolitical theories are based on the notion that the financial aspect is only one element in business organizations and that it cannot be studied in sole isolation from political and social elements. The sociopolitical theories within voluntary disclosure are ultimately intertwined and many similarities can be found across the field. However, two theories arise in this category above others in terms of amount of research, support and contestation; these are the *legitimacy theory* and the *stakeholder theory*. Whereas these theories aim to explain the motives for disclosure, *greenwashing* can be considered as an unfortunate phenomenon attempting to exploit corporate disclosures to further strategies with obscure ethics (Gray, Kouhy & Lavers 1995; Laufer 2003).

The legitimacy theory has been a popular title in research trying to explain corporate motives behind voluntary social disclosures. Legitimacy theory has to do with corporations seeking to enhance their reputation, legitimize their actions and be considered as good corporate citizens. The theory proposes that positive corporate responsible disclosures may be used to communicate the corporate efforts in social and environmental areas. The purpose of such communication is to receive societal acceptance and legitimize corporate operations with the ultimate goal of justifying its continued existence within the society. (Guthrie & Parker 1989, Bebbington, Larrinaga & Moneva 2008.)

Four strategies have been defined within legitimacy theory that corporations may take in order to upkeep, define or regain their role as a legitimized corporate citizens applicable in different circumstances (Bebbington et al. 2008). The first strategy involves utilizing corporate social disclosures as vessels in communicating new information of those actions that the firm has taken in response to societal and stakeholder expectations. For example, the first strategy might be used in situations where the status quo of what is expected from corporations from the social and environmental field has changed and the firm knowingly takes actions towards complying with the new public expectations. In the second strategy corporations may use lobbying, education and informing to influence the public's opinion of those goals or methods the company uses in its corporate strategy. That is, the second method is not about changing corporate practices but convincing the community of the appropriateness of them. The third strategy is an extension to the second in that it doesn't involve a change in corporate practices but nor does it involve the effort of attempting to change the public opinions. Rather in the third strategy the organization merely focuses on being publicly associated with such methods, achievements or goals that are popularly perceived as appropriate. For example, the organization might ignore its environmental polluting and draw attention from this by emphasizing its involvement in charitable causes (Gray et al. 1995). The fourth strategy is based on the corporation affecting the popular perception of what ultimately is accepted as the goals and methods of organizations. That is the firm attempts to change the status quo of what is collectively considered acceptable via education and information and therefore does not involve a change in the corporate practices but rather in societal expectations. (Bebbington et al. 2008.)

The stakeholder theory in corporate social reporting resonates from the stakeholder theory introduced earlier in this thesis. Freeman (1984: 25) conducts that a stakeholder is "any group or individual who can affect or is affected by the achievement of the firm's objectives." In the core of stakeholder theory is stakeholder management so that corporate strategy can be put into effect without suffering from interruptions from stakeholders with the ability to influence the performance of the firm. Therefore, stakeholder theory suggests that stakeholder needs must be considered when planning corporate strategy. This aims to secure the firm from possibly harmful actions of the most influential stakeholders. For example, some stakeholder groups may be crucial for the business in acquiring corporate resources or whose support is required for the corporation to continue to exist. In order to achieve the strategic objectives the firm must assess stakeholder demands and attempt to optimize corporate resources to best match these demands. Social reporting has been seen to offer an appropriate channel for corporate management to inform of these actions taken in consideration of important stakeholders. (Ullmann 1985, Roberts 1992.)

Ullmann (1985) and Roberts (1992) can be considered in the core of developing stakeholder theory into its current form (Gray et al. 1995). Ullmann (1985) developed a three-dimensional model in explaining stakeholder theory against corporate social and financial performance as well as social disclosure. The first dimension states that the more influential the stakeholder is, for example in corporate resource management, the more inclined the corporate management is in adjusting business strategy to align with stakeholder demands. Roberts (1992) shows support for the first dimension with evidence that corporate disclosures can have a positive effect in stockholder, creditor and political management. The second dimension hypothesizes that businesses with more active stakeholder relationship are also more active in corporate responsibility as with more active stakeholder management also comes better understanding of stakeholder needs. The third dimension concerns the relation between financial performance and corporate responsibility. It states that better economic performance enhances corporate capabilities in launching responsible programs. Ullmann (1985) therefore suggests that better financial performance may indicate better corporate responsibility. Such hypothesis is also known as the *slack resource theory*, which is taken into consideration in the empirical part of this this thesis, (Waddock & Graves 1997).

Corporate motives for voluntary disclosures have received their share of criticism. For example, some research supporting the legitimacy theory have suggested that voluntary

social disclosures may be used more as tools in corporate reputational management than as constructive disclosure of actual social and environmental impacts (Laufer 2003). An issue among the responsible reporting field that reaches beyond reputational exploit of voluntary disclosures is *greenwashing*. Greenwashing is described as a deceptive presentation of firm objectives, commitments and accomplishments (Laufer 2003). Laufer (2003) categorizes confusion, fronting and posturing to be the three different elements of deceptive greenwashing aimed for creating an appearance of ethicality when the truth is in fact reverse. Confusion greenwashing relies on the complexity of corporations and decentralized decision-making where information is lost or controlled within documentation. Internally, fronting may take the form of several ethics and responsible committees where the objectives can seem relevant. Whereas fronting in the external environment may arise as corporate scapegoating. With posturing corporate decisions, programs, projects and culture are promoted as ethical or responsibly aware when the final outcome might be something else. In light of such deceptive practices among corporations the voluntary nature of responsible disclosures have been questioned. The Global Reporting Initiative has relieved such distress by offering standardized measures and guidelines for responsible reporting but has not managed to lift all concerns due to not enforcing third party verification for corporate disclosures released under the initiative. (Laufer 2003.)

#### 4.2. The European Union's directive for non-financial information

Until recently corporate social reporting has been widely regarded as a voluntary practice and vast amount of research has been committed to investigating the motives behind such voluntarism. However, in late 2014 the European Union passed a new directive, the *2014/95/EU on disclosure of non-financial and diversity information by certain large undertakings and groups*, which has become the starting point for turning the previously voluntary practice into regulated organizational duty. The directive amends the accounting directive 2013/34/EU, which was passed 26<sup>th</sup> of June in 2013. The accounting directive's main elements are the European Union's policies for corporate annual financial statements, consolidated financial statements and related reports. The Directive 2014/95/EU complements the accounting directive with more advanced policies on non-financial disclosure in the European Union.

The directive 2014/95/EU promotes the disclosure of non-financial information as a tool for measuring, monitoring and managing sustainable risks, increasing trust within



investors and stakeholders as well as accounting for the impact businesses have on society and the environment. However, the European Union is still far from having developed one universally applicable guideline for responsible reporting. In fact, one of the goals for the new directive is to offer great flexibility and take into account the dynamic nature of CSR. Therefore, the new directive was constructed so that it would allow the diverse responsibility policies already implemented by businesses but also to guarantee sufficient comparability among entities. The directive sets the financial year 2017 to be the first year of which the concerned organizations are required to report, thus resulting for the first reports to be published in 2018. (2014/95/EU 2014.)

The directive 2014/95/EU requires the disclosure of at least environmental matters, social and employee-related matters, respect for human rights and anti-bribery and corruption matters. The disclosure should extend to include a description of relevant risks, implemented policies and possible or proven outcomes for all of the required matters. The organizations that fall under the new directive are set to be “-- *those large undertakings which are public-interest entities and to those public-interest entities which are parent undertakings of a large group, in each case having an average number of employees in excess of 500, in the case of a group on a consolidated basis.*” Thus, SME’s are preliminarily relieved from the increased burden of regulatory reporting. Conclusively the new directive aims to increase the relevance, consistency and comparability between large organizations within the Union. At the same time the directive will bring extinction to the sheer voluntarism social disclosure has been previously based on. Therefore the current state offers an excellent ground for investigating how responsible reporting has developed before going under regulation. (2014/95/EU 2014.)

#### 4.3. The Global reporting initiative

The Global reporting initiative is a sustainability reporting framework launched in 2000. Its aim is to increase organizational transparency and help in the understanding and communication of sustainable matters both inside and outside organizations. The framework relies on a multi-stakeholder approach, which enables diverse possibilities to develop the model. Since its inception in 2000 the GRI guideline has become the global benchmark for sustainable reporting (Vigneau & Humphreys 2014). Even as a voluntary guideline the GRI framework has become a standard report throughout industries and now over 93% of world’s 250 largest corporations report on their responsible

performance (GRI b, 2015). However, with popularity also comes criticism. Several academic authors have taken an interest towards the GRI and several studies research the effects the guideline is having on organizations and their corporate responsibility.

#### 4.3.1. A global reporting standard

GRI is a global independent organization whose main task is to develop and maintain the Global reporting initiative: a comprehensive reporting guideline for sustainability reporting. GRI collaborates with the United Nations, which has also given the GRI reporting guidelines their endorsement as the leading standard in creating globally applicable guidelines for reporting corporate economic, environmental and social performance (GRI 2015 b, UN 2015). GRI was established in 1997 in the United States. Three organizations were mainly involved in the establishment, namely an US non-profit organization: the Coalition for Environmentally Responsible Economies (CERES), the Tellus Institute, a non-profit research and policy organization and the United Nations Environment Programme (UNEP). A preliminary version of sustainability reporting guidelines directed for global use was drafted already in the early 1990s within CERES by Dr. Robert Massie and Dr. Allen White. After the establishment of GRI this preliminary version was developed into the first Global Reporting Initiative guidelines, which were launched in 2000. (GRI a, 2015.)

In 2002 the second generation of GRI guidelines, the G2, was launched. In the same year the organization was officially inaugurated as a collaborating unit with UNEP. The early 2000's were focused on developing the organizational governance of GRI including the establishment of several new organs aimed to develop and support the organization in all aspects. For example, the Organizational Stakeholders Program helped to develop the governance mechanism and secure funding from financial contributors. The GRI Stakeholder Council was appointed to cover stakeholder interest and to assist the Board. Also a Technical Advisory Committee was established in order to develop the quality and coherence of the GRI framework. During the latter part of the decade GRI concentrated on obtaining a foothold as an established organization. The steps included the launch of G3, the organization's third reporting standard. The G3 encouraged multiple businesses to take on the sustainability reporting practice and thus increased global awareness of the standard. (GRI a, 2015.)

With the new decade, the 2010's, GRI continued to expand and gain credibility. Several collaborations with other organizations also contributing to social responsibility have

vastly increased the applicability of the reporting initiative. With the UN Global Compact, most well known for its 10 principles for corporate sustainability (UNGC 2015), GRI signed a letter for mutual understanding including the integration of the 10 principles into the reporting standard. Also guidelines for applying GRI in collaboration with the ISO 26000, a set of recommendations for organizations to act responsibly, as well as with the Carbon Disclosure Project, an organization promoting the measurement and disclosure of corporate environmental performance (CDP 2015), were launched. (GRI a, 2015.)

In the recent years the most significant step for GRI has been the launch of its fourth reporting guideline, the G4. This generation of guidelines offers reporting principles, standard disclosures and a manual for implementation that is applicable by organizations of any size or sector. Also, the passing of the new directive in the European Union, mandating corporate social reporting for certain large undertakings guaranteed the future demand for developing a globally applicable and meaningful reporting standard for sustainability. Most notably, the directive itself recommends the usage of already existing well-recognized reporting frameworks including the Global Reporting Initiative (2014/95/EU 2014). Whilst the directive also lists other frameworks applicable such as the UN Global Compact and the ISO 26000, GRI would seem to have advantageous position to emerge as the preferred choice for reporting framework. This is due to the efforts made in earlier years to ensure the standard's compatibility with the other existing systems and guidelines concerning corporate and organizational responsibility. (GRI a, 2015.)

#### 4.3.2. Research in the Global reporting initiative

Naturally, the Global reporting initiative has awakened an interest in academic research since its inception. Academics have investigated the positive and negative aspects of the reporting standard as well as the aspects that come with complying the standard, both internally and externally to the reporting organization. It is clear that the Global reporting initiative has not managed to avoid all criticism. However, GRI's multi-stakeholder approach, that is the framework is constantly developed in collaboration with different stakeholder groups, such as NGOs and businesses, may help the framework to turn constructive criticism into practical solutions (Vigneau & Humphreys 2014). Such development though is not yet present in the most recent research.

After the launch of the first GRI guidelines in 2000 Hedberg and Malmberg (2003) were among the first to examine the corporate motives behind choosing to report according to the GRI and how adopting the new standard has affected corporate social responsibility and environmental management in the firms under investigation. Hedberg and Malmberg (2003) examined a sample of ten companies based in Sweden in 2001 and completed their empirical research mostly through qualitative research methods. Their study gives a comprehensive look at how companies began to utilize the new reporting guideline, what were their motives to choose the GRI and what kinds of effects they saw in their organizations after taking on the GRI. Hedberg and Malmberg (2003) found that there were various practices for utilizing the GRI in sustainability reports, which is made possible by the flexibility of the guideline. Some companies merely used GRI as inspiration for responsible reporting whereas others followed the guideline more closely. When it came to the motives for choosing to apply the GRI companies reported that they found the standard to be a widely accepted framework or that they believed the standard to soon become more widely recognized and thus utilizing the GRI would lend credibility to their sustainable reporting (Hedberg & Malmberg 2003). Moreover, all of the companies studied were eager to develop their responsible reporting and some found that the GRI guideline provided a good structure to follow as well as insight to the indicators relevant for sustainable reporting. Most notable message that came from the effect of utilizing the guideline was an improvement in internal communications, improved data collection and firm's increased apprehension of itself. Hedberg and Malmberg (2003) conclude that utilizing the GRI standard in addition to external communication, therefore offers also internal benefits. In the end they however criticize that GRI does not require verification of the reports made using its guideline, which is imminent to cause misconception. GRI has recognized the problem but at the time referred that the guideline is only a recommendation for what sustainability reporting can withhold, not a regulated directive (Hedberg & Malmberg 2003). This ultimately transfers to great variability in the sustainable reports in the early 2000's.

Willis (2003) succeeds in communicating some of the characteristics of the GRI framework whilst researching the possibilities the new reporting guideline offers for the social screening of investments. Four points are emphasized that describe the main qualities of the GRI guideline: first, it is noted that the GRI guideline is intended to be a voluntary framework. Secondly, the framework is directed for all types of companies but GRI does offer some more practical instructions for sectors with special characteristics such as financial services. Thirdly, reporting by the GRI guidelines

cannot be considered a performance standard but rather a tool for understanding business performance from the social and environmental aspect. Lastly, GRI has recognized that the demand for sustainability report verification will likely increase but currently have decided not to offer such service due to lack in resources as well as wanting to offer businesses time to gain more experience in their reporting framework (Willis 2003). Toppinen and Korhonen-Kurki (2013) validate some of these characteristics in their paper focusing on sustainability reporting of companies operating in the forest industry between 2005 and 2009. They motivate choosing this industry since it is heavily driven by natural resources and thus its business is directly linked to environmental responsibility. They find that reporting and social disclosures have increased as well as improved during the examined time frame. However, their research gives way to criticism towards GRI as well. While being a flexible framework for sustainability reporting, this characteristic also reduces the comparability between organizations. Since the framework does not verify GRI reports nor judge the effectiveness of corporate responsible performance the variability among corporations' reporting practices is big. When it comes to the forest industry the study cannot prove that adopting the GRI would have increased reporting transparency either. They conclude that GRI is mostly used in managing corporate sustainability efforts and protecting or promoting corporate reputation as well as enhancing sustainable brand values (Toppinen & Korhonen-Kurki 2013).

The study by Vigneau and Humphreys (2014) continues with similar research to Hedberg and Malmborg (2003), only over a decade later. At this point in time GRI had launched its fourth generation of reporting guidelines and had an established role as the most recognized and globally applicable sustainable reporting standard (Hahn & Lülfs 2014). Nowadays a multinational corporation (MNC) is most likely to differentiate from competitors and attract stakeholder pressure if it is not disclosing information on corporate responsibility (Vigneau & Humphreys 2014). Vigneau and Humphreys (2014) examine how the *intended* application of the GRI framework differs from the *actual* end result and how this consequently affects organizational practices in MNCs. The study finds that adopting the GRI framework for sustainability reporting has a causal effect on both reporting practices as well as on corporate management. As the GRI becomes an established part of business reporting it is at the same time becoming institutionalized within the business routine, ultimately transforming into another mandatory norm the firm must comply to secure legitimacy and to assess its responsible performance. Such ideology was studied to influence the process of collecting CSR information and to

increase responsible disclosure instead of increasing the responsible *performance* of the business (Vigneau & Humphreys 2014).

GRI's institutionalization within the business can also shift the organizational practices around social responsibility. Vigneau and Humphreys (2014) found that constructing the GRI report molded CSR practices to better match the key performance indicators (KPIs) defined under the framework therefore affecting the selection of responsible activities launched in organizations. Also, reporters could become blind to responsible processes that were not designated a specific KPI in the GRI guidelines. Such behavior entails that if a responsible activity within the firm cannot straightforwardly be reported by following the GRI guidelines, it may not be reported at all or discontinued even if the activity is an important part of business strategy (Vigneau & Humphreys 2014). Conclusively, the GRI framework is on its way of changing the corporate perception of what is social responsibility and sustainability; complying by a sustainability reporting guideline is being regarded as CSR whereas the importance of increasing actual responsible performance is being forgotten. Probably the most critical perspective on GRI is by Milne & Gray (2013) who continue with the ideology that reporting guidelines are making businesses more focused on reporting than on responsible performance. Taking a step further on this discussion their paper concerns the disconnection between corporate practice on sustainability reporting and the issue of sustaining the ecological systems on which the society, the environment and other species depend on. Milne and Gray (2013) especially criticize GRI's role in strengthening the consensus that reporting on the economic, environmental and social aspects of business is becoming interchangeable to corporate sustainability.

Due to the pressing literature reviewed here criticizing GRI reports becoming a "taken-for-granted" -type of organizational norm this thesis only concentrates on the publications of firms that disclose a GRI report for the first time. This method is seen to minimize the possible institutionalization effect of GRI and the evidenced causality on CSR measurements and activities.

## 5. FINANCIAL LITERATURE

This chapter focuses on reviewing the main financial literature relevant to this study. The topics in review include voluntary disclosure, information asymmetry and liquidity. The idea is to give a deeper look at the definitions of these topics and the most relevant studies in these areas in respect to the topic of this thesis. The literature on voluntary disclosure aims to reveal the main motives and economical consequences behind the public disclosure of information. Information asymmetry is in the core of voluntary disclosure and how its effects on businesses and market trading are determined. It is important to recognize that even though often proxied by liquidity, information asymmetry and liquidity are not interchangeable. Therefore, the main concepts and qualities that have been developed around liquidity are briefly discussed.

### 5.1. Voluntary disclosure and information asymmetry

Disclosing financial information is mandatory and regulated by law and businesses are expected to disclose their financial performance on a regular basis to stakeholders. However, most firms also choose to disclose information voluntarily in addition to what is required legally. The financial literature has taken an interest in examining and explaining the motives behind voluntary disclosure as well as the possible effects it has on the business, the market and investors. These effects are often described via changes in corporate information asymmetry. As the two themes are closely intertwined in academic literature it seems only appropriate to introduce them together.

Information asymmetry describes the informational imbalance between the firm and market traders but it can also refer to the imbalance between different traders. The informational imbalance most often concerns knowledge about the expected future returns of the firm's securities. Therefore, such information asymmetry between the firm and different investors makes some participants more informed than others. In such situations the market may be filled with speculation since the traders without information suspect to be less informed. In high information asymmetry security prices may include a premium with which less informed traders price protect themselves against the unknown risks held by more informed traders. (Diamond 1985; Glosten & Milgrom 1985; Diamond & Verrecchia 1991; Leuz & Verrecchia 2000.)

Diamond (1985) proposes a general equilibrium model with endogenous information collection as to mechanism where voluntary disclosure policies bring welfare upon

shareholders more than a policy of no disclosure. The proposition is built over a model where traders are able to acquire inside information but at a cost. In the case of public disclosure by the firm traders would be less inclined to acquire costly information since voluntarily disclosed information is more economical for traders as well as having an effect of reducing speculation on the market. The proposition is rationalized through the costs of acquiring and producing information. Diamond (1985) explains that the cost for each investor to acquire a unique piece of information about the expected returns of the firm highly exceeds the costs that the firm faces in producing a piece of information directed for all investors. The incentive for the firm to voluntarily disclose is to homogenize information and to reduce speculation upon its securities. That is, reducing speculation reduces the information asymmetries between market participants. High market speculation of a company's stock may cause shareholders to sell as well as to increase the illiquidity of the stock via the before-mentioned protective premiums. An illiquid stock is disadvantageous to the firm since it needs to discount the price of its shares to find willing investors to hold the stock. Discounting the share price consequentially increases firm's cost of capital, which is undesirable (Leuz & Verrecchia 2000). The paper by Diamond (1985) is among the first to establish a positive link between voluntary disclosures and shareholder wealth, which ultimately is the purpose behind firm endeavors (Friedman 1970).

Diamond and Verrecchia (1991) continue to examine the effects of public disclosures and relate the subject to lowered information asymmetry and consequentially to lower cost of capital. Their paper is related to the earlier works in the field, such as Kyle (1985), Glosten and Milgrom (1985) and Diamond (1985) in examining information asymmetry and the role of private and public information on the market. However, opposed to previous research Diamond and Verrecchia (1991) develop the ideas by modeling an illiquid market where market makers are risk averse and have limited risk-bearing capacity. Diamond and Verrecchia (1991) show that in such model public disclosures increase stock liquidity, which attracts large institutional investors to take large positions in the security. Due to the increased liquidity of the security the expected rate of return is lower since the security is less risky to the holder; that is its cost of capital is reduced. In this setting the firm gains benefits from the lower cost of capital and large traders benefit from securities with higher liquidity making them more responsive to liquidity shocks. Therefore, Diamond and Verrecchia (1991) show that both the firm as well as stockholders can benefit from the effects of public disclosures. The paper finds that these effects are more significant for larger firms. While Diamond and Verrecchia (1991) take a theoretical approach Botosan (1997) provides empirical



robustness to the benefits of voluntary disclosure. She manages to show that the cost of equity capital is negatively associated with firm size and positively to a security's beta when firm voluntarily discloses information on an annual report. Botosan (1997) however constructs her own disclosure index and the results hold only for firms with low analyst following. Additionally, the paper is constructed merely on one year of data and alone for the manufacturing industry. Thus the results cannot be guaranteed of universal validity.

More recently Balakrishnan, Billings, Kelly and Ljungqvist (2014) show in an empirical setting that managers can manipulate their share liquidity and plausibly firm value with voluntary disclosures. The paper finds that disclosures can causally have a positive effect on share liquidity, which in turn can increase firm value. They further suggest that voluntary disclosures are mainly aimed for smaller investors usually considered to be in informational disadvantage compared to institutional investors. The study by Balakrishnan et al. (2014) motivates the voluntary disclosure of information by corporations and encourages studying the area of voluntary disclosures further.

Many studies on voluntary disclosure evolve around a setting where a firm chooses to disclose information. Leuz and Verrecchia (2000) hypothesize a new setting, which differentiates a choice and a commitment to disclose more. The paper begins with explaining the already familiar theory that increased disclosure by firms reduces information asymmetry but that such effects have been difficult to measure empirically. In addition to inconsistencies in measurement practices, for example directly measuring cost of capital, they argue that many studies set in the U.S. face the fact that the reporting environment is already mature and rich in content. Therefore, a rise in voluntary disclosures might not be able to give substantially more informational value than what the current U.S. reporting standards already require. Leuz and Verrecchia (2000) choose to conduct an empirical test in a German setting since the German Generally Accepted Accounting Principles (German GAAP) have been criticized for low levels of disclosure. The paper studies firms making a switch from the German GAAP to a more informative disclosure standard such as the International Accounting Standard (IAS) or the U.S. GAAP. This change is seen as a substantial increase in disclosure and thus Leuz and Verrecchia (2000) believe this setting to be a valid strategy to measure the impacts of permanently increased levels of disclosure; that is a *commitment* to increased disclosure. Indeed the paper shows that firms committing to either of the new standards lower their information asymmetry proxied both by the bid-ask spread as well as the turnover rate, a measure also used in this thesis. The paper by

Leuz and Verrecchia (2000) also offers more than just robustness to the liquidity measure used here. The main component of their hypothesis: differentiating a choice and a commitment to disclose is readily applicable to the setting of this thesis as well. Conducting a GRI report can be considered a choice but which more or less necessitates a future commitment to the standard. This fact motivates the choice of only including first time publishers of the GRI in the empirics of the thesis ultimately examining the effects of a new commitment to a widely accepted responsible reporting standard.

A similar study to Leuz and Verrecchia (2000) is also conducted by Petersen and Plenborg (2006). They grasp onto the ideology of previous literature and hypothesize that increased voluntary disclosure lowers the information asymmetry component of firm's cost of capital and test this in the Copenhagen Stock Exchange. The motivation to conduct the study in a Danish setting is the institutional differences between Denmark and U.S. as well as an attempt to establish whether the theory of voluntary disclosure applies in a non-U.S. setting. The ownership structure in Danish companies is more concentrated and family-centered compared to data that has been used previously therefore serving as a new structural environment to test the theory. High ownership concentration and family ownership may reduce the enthusiasm to voluntarily disclose as inside information can be more readily obtainable. Petersen and Plenborg (2006) use the bid-ask spread as well as the turnover rate as their proxies for information asymmetry and end up constructing a disclosure index suitable for the Danish setting. The results complement the conclusions of earlier studies that increased voluntary disclosure lowers information asymmetries and their results are robust to the different firm characteristics present in Denmark. Furthermore, Petersen and Plenborg (2006) hope that future studies would examine the differences in effects from voluntary financial and non-financial disclosures.

## 5.2. Liquidity

Liquidity is elusive in its definitions and measurements, therefore the theoretical literature around liquidity consist of more than one approach. Black (1971) describes four attributes of a liquid market: (1) for investors that wish to buy or sell small amounts of stock immediately bid and ask prices are always available. (2) The spread, that is the difference between the bid and ask prices, is always small. (3) In the case of buying or selling a large amount of stock, the investor can expect to do the exchange over a long period of time with a price close to the current market price when there is no

special information. (4) A large amount of stock can be bought or sold immediately with a premium or discount depending on the size of the exchange. These themes are more or less found in other literature describing the different phenomena around liquidity and give a good preliminary overlook to the topic.

The liquidity effects of block trades, that is trades involving large amounts of stock, are studied by Kraus and Stoll (1972). They hypothesize a *distribution effect*, which can appear when investors have differing preferences or due to short run liquidity costs. In the first case, if the expectations of the buyer differ from those of the seller and trading can affect the price of the security. For example, a trader willing to sell a large quantity of stock may have to reduce the asking price (to increase the expected rate of return) to level with the expectations of a buyer willing to hold such block. Therefore, block trades can have an effect on the equilibrium price of a security. In the second case of the distribution effect the buyer or seller may have to provide a commission to a dealer if the trader has difficulties finding willing buyers or sellers in the short run. Here the dealer will pay a price lower than the equilibrium in the case of a sell. The expected rate of return is altered only for a short while and the price is expected to return to equilibrium shortly. Kraus and Stoll (1972) find evidence towards the distribution effect and conclude that pressure from institutional traders is a significant factor in the price effect of block trades.

Kyle (1985) connects inside information and liquidity. His study examines the price impacts of trades when the market consists of three types of traders: an insider with access to private information, uninformed noise traders who trade randomly and market makers with the agenda of setting efficient prices conditional on the aggregated quantity of trades. In such setting, the informed trader is able to make profits as the noise traders' exchanges offer camouflage so that the market maker cannot distinguish the different traders from the order flow. The important inference from this is that in semi-strong market efficiency private information can be used to increase profits. However, with strong market speculation private information may widen the spread as uninformed investors suspect the presence of insiders and thus demand a premium for their trades (Glosten & Milgrom 1985).

Glosten and Milgrom (1985) take similar approach to Kyle (1985). They hypothesize a situation where the market maker's profit is set to zero. If there are traders with private information the market maker faces an *adverse selection problem*. Adverse selection problem is a situation where decisions are made with potentially undesired results due

to information asymmetry among different parties. Hence, the market maker is vulnerable to losses when trading against informed investors. The market maker makes up for the losses by setting the bid and ask prices so that profits are gained by trading with non-informed liquidity traders. Glosten and Milgrom (1985) conclude that the width of the spread is dependent on multiple factors: the trading patterns induced by insiders and liquidity traders, the depth of supply and demand among liquidity traders as well as the level of information obtained by the insiders. They also confirm that the adverse selection problem can bring forth a wider spread between the bid and ask prices of a security.

Amihud and Mendelson (1986) study the relation of illiquidity and asset pricing where illiquidity is measured by the cost of an immediate trade which is reflected from the spread between bid and ask prices. They hypothesize that expected asset returns are an increasing and concave function of the bid-ask spread in the sense that higher spread assets yield higher expected returns. Their model additionally predicts that a longer holding period subjects for higher expected returns. They use 19 years of financial data and model both OLS (ordinary least squares) and GLS (generalized least squares) regressions where GLS is called for to unbiased the estimated variances of the regression coefficients. Amihud and Mendelson (1986) find that the risk-adjusted excess returns increase with the widening of the bid-ask spread. Their results also support that asset return-spread relation is increasing and concave as their model shows positive and generally decreasing slope coefficients of the spreads. In the light of their results Amihud and Mendelson suggest that the increasing and concave return-spread relationship should encourage firms to increase their share liquidity in order to reduce their opportunity cost of capital. Also, they encourage further studies to examine whether, for example, information disclosures may be utilized as investments in increased liquidity.

The bid-ask spread has been a widely used measure in liquidity related research. Apart from that also the daily ratio of absolute stock return to its dollar volume (Amihud 2002) as well as the turnover rate, which is employed for example by Datar, Naik and Radcliffe (1998) have been used as measures for liquidity. Datar et al. (1998) provide robustness to Amihud and Mendelson's (1986) paper by examining liquidity and cross-sectional variation in stock returns via the turnover rate. They define turnover rate as the number of shares traded divided by the number of shares outstanding and average it over a three-month period. Their paper motivates a new measure to use due to overall scarceness of bid-ask spread data for longer periods and propose that the turnover rate

might be a better proxy for transaction costs. Also, the data for calculating the turnover rate is relatively easier to obtain for a large number of stocks and for long periods of time. Datar et al. (1998) test whether there is a negative relation between stock returns and liquidity. The paper's hypothesis is derived from the logic used by Amhud and Mendelson (1986) implying that expected assets returns increase by the expected holding period; Datar et al. (1998) therefore hypothesize that asset returns must be a decreasing function of the turnover rate of the asset in question. The paper uses data from 1962 to 1991 from the New York Stock Exchange (NYSE). Datar et al. (1998) find that their liquidity measure, the turnover rate, is significantly negatively related to stock returns. The inference from the result is that illiquid stocks offer higher average returns compared to more liquid stocks.

## 6. DATA AND METHODOLOGY

The purpose of this chapter is to introduce the empirical framework for the statistical testing conducted. The data description gives an insight into the data sources used and details on the sample and timeframe. An introduction to the statistical methodology applied is also included in order to discuss the different statistical variables used in the empirics. The chosen variables are ultimately backed up by the previous literature closely related to the topic. The descriptive statistics will describe some aspects of the data, for example, the differentiations between the three sample sets. Chapter six also answers the first hypothesis made at the beginning of the thesis.

### 6.1. Data description

The financial data was acquired from Thomson Reuters Worldscope database. This data contains all companies listed in the Nasdaq OMX Helsinki Stock Exchange between 2001 and 2014 and totaled for 237 companies including all currently listed but also all delisted companies. The time period 2001 and 2014 was selected since the first GRI guideline was published in 2000 and in Finland the first responsibility reports following the guideline were released in 2001. The financial data available at the time of writing was limited to the year 2014. The timeframe selected gives an opportunity to investigate the GRI report releases and possible effects from the first year onwards when Finnish companies applied the guideline. The most relevant financial variables obtained were market capitalization, number of shares outstanding, share turnover, stock price, leverage ratio (% total debt by common equity), return on invested capital (ROIC) and industry classifications. In order for the sample companies to have statistically sufficient amount of data the financial data was sorted by the requirement of available financial information for the year the first GRI report was published and four consecutive years after the publication. Companies without GRI reports had to have five consecutive years of data. The process of calculating the main dependent variable for the empirical regressions, the turnover rate, further eliminated the scope of the data. Share turnover rate was chosen as the main dependent variable due to being proven as a robust measure by previous studies (see e.g. Datar et al. 1998; Petersen & Plenborg 2006). The dataset was left with 117 sample companies, which together form the base for further empirical testing.

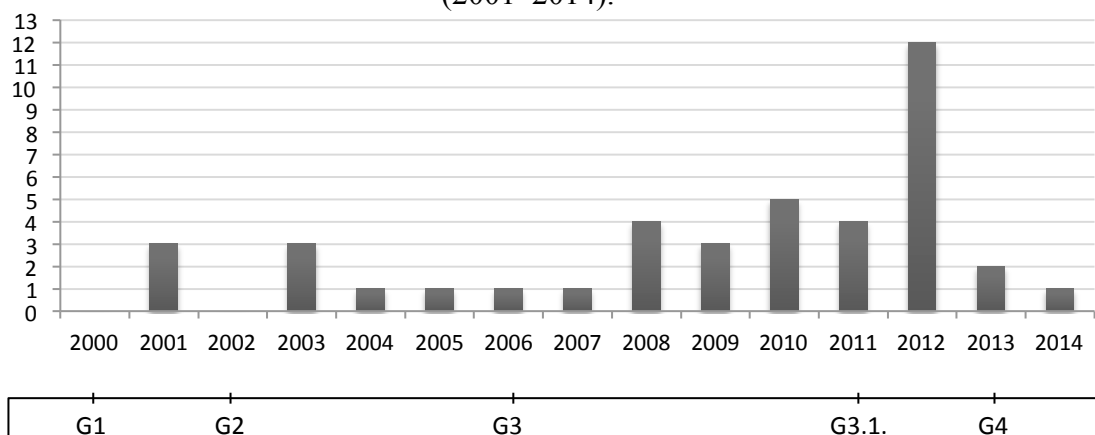
The second dataset was collected from the Sustainability Disclosure Database, which is maintained by the Global Reporting Initiative. This database was used to collect

information on companies that have published their *first* GRI sustainability report between the years 2001 and 2014. Both standalone reports and publications within an annual report were taken into account if they had been conducted by the GRI guidelines or at least referenced the guidelines. Such annotations were available at the database. All versions of the guideline were accepted, that is G1–G4. Companies publishing any responsibility reports, GRI or non-GRI based, are individually responsible for uploading their reports to the Sustainability Disclosure Database. In the case of Finnish companies the activity level of uploading material to the database was found to be high and a comprehensive amount of publishing data was collected from the database. To test for the robustness of the data collected any companies that did not have a report in the Sustainability Disclosure Database had their websites manually checked for GRI sustainability reports. Altogether 41 companies of the 117 companies with financial data available had published their *first* GRI report in 2001–2014. Furthermore, companies' website archives were used to collect the exact month each 41 initiating GRI reports were published.

By only including the event when a company first published or initiated a GRI report it was guaranteed that an event study based methodology could be applied in the empirical part of the thesis. Also, this perspective aims to minimize the institutionalizing effects GRI reporting practices were found to have in some studies presented in chapter four. The first release of a GRI report can additionally be seen as a new commitment towards increased information disclosure suggested after reviewing the paper by Leuz and Verrecchia (2000). As seen in Figure 3 the initiating reports spread well over the observed time period with 2012 differentiating as a cluster. It is to be noted that since the financial dataset required five years of consistent values, the reporting sample is omitted of companies that have only recently been listed in the target stock exchange. This makes the data used biased against companies recently available to public trading with or without GRI reports. The research is continued despite of this bias, which is alleviated by having considerable amount of years and GRI reports published in the time period utilized.

Table 1 represents division of industries by which the initiating GRI reports were published. The industry classification is based on the financial data acquired from Thomson Reuters Worldscope database but is slightly trimmed to suit the purpose of this thesis. Appendix 1 shows the specific company-industry classifications used as well

Initiating GRI reports by Nasdaq OMX Helsinki companies  
(2001–2014).



**Figure 3.** Released GRI reports between 2001 and 2014. The spread of first time releases of GRI reports by companies listed in the Nasdaq OMX Helsinki Stock Exchange between 2001 and 2014. Below the graph are the release years of the G1-G4 versions of the GRI guidelines.

**Table 1.** Released GRI reports by industries. Initiating GRI reports' distribution by industry and industry's proportion of all reports in the dataset.

Industry	No. Of Companies	Initial GRI reports	% All reports	Industry publishing rate
1 Construction	7	2	4,9 %	28,6 %
2 Electrical	1	1	2,4 %	100,0 %
3 Electronic and Electrical Equipment	10	2	4,9 %	20,0 %
4 Finance	8	1	2,4 %	12,5 %
5 Food and retail	11	7	17,1 %	63,6 %
6 Forestry	4	4	9,8 %	100,0 %
7 Healthcare	6	1	2,4 %	16,7 %
8 Industrial	23	13	31,7 %	56,5 %
9 Information technology	23	3	7,3 %	13,0 %
10 Media	7	1	2,4 %	14,3 %
11 Mining	2	1	2,4 %	50,0 %
12 Real Estate	3	3	7,3 %	100,0 %
13 Support Services	8	1	2,4 %	12,5 %
14 Travel and Leisure	4	1	2,4 %	25,0 %
<b>Grand Total</b>	<b>117</b>	<b>41</b>	<b>100,0 %</b>	<b>35,0 %</b>



as the release years of the GRI reports for the 41 companies. In the first draft there were altogether 30 industries, which were reduced down to 14 by combining very similar industries into bigger groups. Industrial and information technology groups represent the biggest industries in the sample with 23 companies each. The food and retail group with electronic and electrical equipment group represent the third and fourth largest industry sectors in the sample. Due to the relatively small size of the Helsinki stock exchange some industry groups are left with only one or two individual companies representing the whole industry.

In total the industrial group has the highest amount of GRI reports in the sample (13). The column *% All Reports* is the rate of published GRI reports per industry against the total of 41. This rate tells how many percent of the total reports were contributed by each industry. Since this measure is highly influenced by the industry size the table also has a publishing rate –measure. This is the amount of GRI reports in an industry divided by the amount of individual companies within that industry. Even though this measure too is affected by the small sizes of some industries it gives a new insight. Three industry groups, namely electrical, forestry and real estate have a 100% publishing rate. It is notable that Table 1 should be read with some precaution since such simple rates cannot be used for comprehensive industry analysis due to a small sample in several of the industry groups. However, Table 1 gives a good summation of how the published GRI reports are divided between industries during 2001–2014.

Before moving to the empirical analysis, Figure 3 and Table 1 provide a basis for some inference on the first research question made in this thesis. In addition to examining the effects of GRI reporting on information asymmetry this thesis aims to analyze the evolution of GRI reporting in Finland and in the Nasdaq OMX Helsinki Stock Exchange during the sample period. As mentioned previously the first GRI reporting standard, the G1, was published in 2000 so the time period utilized here is a good representation of how the GRI reporting standard has evolved in Finland during its existence. By taking a look at Figure 3 one can see that new GRI reports have consistently been published by the Helsinki Stock Exchange companies during 2001–2014 with 2002 standing out as an exception with zero initiating reports. In 2001 three companies were the forerunners of GRI reports in Finland. These three do indeed include some of the most influential companies listed in Helsinki, such as Nokia, which at the time was among the leading companies in mobile devices and networks. The amount of new companies publishing a GRI report remained subtle all the way to 2007. In 2008 the amount of new publishers began to rise and it peaked in 2012 with 12 new

companies publishing their first GRI report. One reason for such a peak might be the launch of the G3.1 guidelines in 2011 by the GRI. The launch of the G3.1 offered expanded guidance on such areas as gender, community and human rights –related performance (GRI 2015). By the end of 2014 altogether 41 companies out of the 117 or 35,0% had at least once published a GRI report. The Global reporting initiative's sustainable reports have therefore gained a mentionable foothold in the Finnish reporting practices for being a voluntary reporting standard.

## 6.2. Statistical methodology

This section introduces the construction of the pooled cross-sectional dataset used in the empirical analysis as well as the empirical methodology applied. The variables included in the dataset were matched against a company and month and pooled together resulting in pooled cross-sectional dataset. Altogether three datasets were created, the first representing the entire sample including all companies and every year of the collected data. Thereafter two datasets were created where the other included only companies that published a GRI report during 2001 to 2014 whereas the other dataset included all the non-publishers. These three datasets were used to run the descriptive statistics. The data was winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles to discard some extreme outliers present in the data.

An empirical analysis is conducted to answer the second hypothesis: *Releasing the GRI responsibility report for the first time lowers information asymmetry for companies listed in Nasdaq OMX Helsinki Stock Exchange between 2001 and 2014*. More specifically, the possible effects in information asymmetry are studied for six months after publishing the report. Such approach attempts to account for the long-term effects the publication might have and is motivated by the commitment corporations inevitably make by releasing the first report. Here, a *gri* variable is regressed on the information asymmetry proxy variable: the liquidity measure turnover rate. The *gri* variable aims to account for possible variations in the turnover rate. The variable is assigned a value of 1 for the release month and also the five consecutive months. Otherwise the value is zero. The chosen proxy for information asymmetry, the turnover rate, is calculated monthly for each firm in the sample by dividing the volume of shares traded during each month by the amount of outstanding shares by the end of that year. This variable is presented as *to* in the regression. The method for calculating the turnover rate is similar to that of Datar et al. (1998). The statistical testing is conducted by running the panel regression:

$$(1) \quad to_{i,t} = \beta_0 + \beta_1 gri_{i,t} + \beta_2 size_{i,t} + \beta_3 lev_{i,t} + \beta_4 price_{i,t} + \beta_5 roic_{i,t} + \varepsilon_{i,t},$$

with period and cross-sectional fixed effects. This is done to account for the unobservable differences between the companies and variations in their environment during the years. The variable  $to$  represents the turnover rate,  $\beta_0$  represents the intercept and  $\beta_1 - \beta_5$  represent the slope coefficients for the independent variable  $gri$  and the control variables. The variable  $\varepsilon_{i,t}$  is the error term. According to previous literature on voluntary disclosure some speculation has been made that bigger companies would be more active in social reporting (McGuire, Sundgren & Schneeweis 1988; Diamond & Verrecchia 1991; Waddock & Graves 1997). Therefore control variable for size is included in the regression. In this case the variable for  $size$  is the natural logarithm of market capitalization for each  $i$  and it is calculated annually. Additionally, the regression controls for leverage measured as % total debt by common equity ( $lev$ ) as well as for price, which is the monthly closing stock price for each firm ( $price$ ). These control variables are similar to those applied by Cho, Lee and Pfeiffer (2013). In addition to the control variables presented by Cho et al. (2013), a variable representing firm profitability was added to account for the *slack resource theory*. The theory states that when businesses have better financial performance they are more inclined to invest in corporate responsibility due to better availability of resources (Waddock & Graves 1997). Profitability is measured by return on invested capital ( $roic$ ), similarly to Petersen & Plenborg (2006). The purpose of the control variables are to examine the differences between publishing and non-publishing companies in the descriptive statistics as well as to control for these variable-effects in the regression to increase the robustness of the results.

**Table 2.** Descriptive statistics:

Panel A shows descriptive statistics for the whole sample data from 2001 to 2014.

Panel B shows descriptive statistics for firms with a GRI report from 2001 to 2014.

Panel C shows descriptive statistics for firms without a GRI report from 2001 to 2014.

Panel D shows results of tests of difference in key variables of firms with and without a GRI report. Data is winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. Significance of difference in means is tested with a t-test and in medians with a Wilcoxon signed rank test. \*\*\* Statistical significance at the 0,01 level.

<i>Panel A: Full Sample (n=17 996)</i>					
	Mean	Std dev	Min	Median	Max
<i>to</i>	0,043	0,061	0,000	0,021	0,755
<i>size</i>	12,034	1,941	7,398	11,910	18,440
<i>lev</i>	0,850	1,839	-11,945	0,557	25,923
<i>price</i>	7,863	8,171	0,031	5,000	56,123
<i>roic</i>	0,052	0,289	-4,268	0,073	1,674
<i>Panel B: Firms with GRI report (n=6 504)</i>					
	Mean	Std dev	Min	Median	Max
<i>to</i>	0,069	0,073	0,000	0,047	0,755
<i>size</i>	13,585	1,633	9,224	13,633	18,440
<i>lev</i>	1,038	1,759	-7,731	0,637	17,300
<i>price</i>	11,022	9,567	0,031	8,332	56,123
<i>roic</i>	0,097	0,157	-1,684	0,081	1,674
<i>Panel C: Firms without GRI report (n=11 556)</i>					
	Mean	Std dev	Min	Median	Max
<i>to</i>	0,029	0,048	0,000	0,014	0,755
<i>size</i>	11,192	1,533	7,398	11,121	16,894
<i>lev</i>	0,743	1,874	-11,941	0,514	25,923
<i>price</i>	6,252	6,810	0,031	3,725	56,123
<i>roic</i>	0,026	0,339	-4,268	0,069	1,674
<i>Panel D: Difference tests between firms with and without GRI report.</i>					
	t-test		Wilcoxon		
<i>to</i>	-44,16***		51,77***		
<i>size</i>	-98,14***		80,06***		
<i>lev</i>	-10,55***		14,20***		
<i>price</i>	-39,37***		37,92***		
<i>roic</i>	-15,87***		16,58***		

## 7. EMPIRICAL RESULTS

In table 2 are reported the descriptive statistics with separate sections for the whole sample and firms with a published GRI report as well as for firms with no GRI report. With such division in the descriptive statistics one can examine the differences between GRI firms and non-GRI firms. In the table *to* represents the turnover rate and *size* the natural logarithm of market capitalization for each firm, *lev* is the leverage variable, *price* the variable for stock monthly closing price and *roic* describes profitability as return on invested capital. The full sample consisted of 117 companies and as shown in table 2 the average amount of shares traded per all outstanding shares for each company was 4,3% monthly during 2001–2014. When compared against GRI and non-GRI firms the mean turnover rate was 6,9% and 2,9% respectively. Therefore, firms with an initiating GRI report had proportionally more shares traded per month than firms with no initiating GRI reports. Also, the differentiating tests confirm that the two samples have statistically different turnovers measured by t-test and Wilcoxon signed rank test. Also, all the control variables *size*, *lev*, *price* and *roic* prove to be statistically different between the firms with and without a GRI report in 2001–2014. This result supports that firms that released a first GRI report had higher market capitalization, were traded with a higher price, were more leveraged and more profitable measured by return on invested capital. The information presented in the descriptive statistics is consistent with the studies by Dhaliwal et al. (2011) and Cho et al. (2013) except for the leverage ratio. Even though the GRI publishers were on average more leveraged, the non-publishers had more extreme minimum and maximum values of leverage. Without data winsorization the variable *lev* was not significantly different between the datasets. All the other control variables remained with unchanged interpretation.

In Table 3 are shown the results of the empirical regression. The applied dataset included monthly data between 2001 and 2014 and only for firms with an initiating GRI report between the years. The aim was to examine the effects of releasing a GRI report on information asymmetry. In Table 3 statistically significant variables in determining the turnover rate are firm size, leverage, price and firm profitability thus indicating no statistically significant long-term increase in share turnover rate as a result of releasing a first GRI report. The results do not support the second hypothesis of this study, which suggested that publishing a first GRI corporate responsibility report would lower firm information asymmetry in the financial markets.

**Table 3.** Statistical results. Test of the effect of releasing a first GRI report on information asymmetry. Model A tests for long-term effects in turnover rate by the release of an initiating GRI report. Here  $gri = 1$  the month and five consecutive months of releasing a GRI report. Model A includes years 2001 and 2014 for all sample companies with an initiating GRI report in the timeperiod. \*\*Statistical significance at the 0,05 level. \*\*\*Statistical significance at the 0,01 level.

<i>Model A: Long-term effects in turnover rate (n=5868)</i>		
	Coefficient	(t-statistics)
<i>intercept</i>	0,200	(7,90)***
<i>gri</i>	-0,004	(-1,32)
<i>size</i>	-0,010	(-5,35)***
<i>lev</i>	-0,002	(-1,77)**
<i>price</i>	-0,001	(5,43)***
<i>roic</i>	0,025	(3,45)***
$R^2$	0,59	

## 8. CONCLUSIONS

The purpose of this thesis was to examine the informational value of responsible reports constructed by following the Global reporting initiative's reporting framework. The main motive behind this research was the new directive 2014/95/EU that was passed in 2014 by the European Commission by which responsible disclosures will go under regulation for the largest listed companies in 2017 in the EU. Since the Global reporting initiative is currently the most widely recognized reporting practice it will most likely continue to attract companies committing to the framework when the new EC's directive comes into effect. In terms of academic literature this thesis is closely related to research in voluntary disclosure, information asymmetry and corporate social responsibility.

This study offered an extensive review on the literature in voluntary disclosure, information asymmetry, corporate social responsibility and corporate responsible reporting. The intention was to give a comprehensive view of the different topics related to the purpose of the thesis. In the review it was shown how the different areas have evolved in academic literature and how they are intertwined in the context of this thesis. After reviewing the most relevant previous literature, corporate social responsibility literature and responsible reporting literature the thesis continued by introducing some of the financial literature connected to the topic. This financial literature covered phenomena often discussed by academics around the areas of corporate voluntary disclosures, information asymmetry and liquidity.

An empirical study examining the informational value of an initiating GRI report was conducted beginning in chapter six with a description of the data and empirical methodology next to some descriptive statistics. The data included selected financial variables from listed companies in the Nasdaq OMX Helsinki Stock exchange from 2001 to 2014 as well as data on the released GRI reports by the listed companies in the same timeframe. The aim was to examine whether the initiation of a GRI report lowered firm information asymmetry by increasing its market liquidity measured by the turnover rate. Also, the data offered grounds to examine how the GRI reporting practices had evolved in Finland between 2001 and 2014. The descriptive statistics showed that companies with an initiating GRI report during the timeframe had higher stock turnover rate, were bigger measured by market capitalization, were more leveraged, were traded with a higher price and had better profitability measured by return on invested capital. The data also showed that from the first year the GRI framework was available to the

last year included in the data the amount of firms disclosing the report increased from three initial reports in 2001 to 41 initiations between 2001 and 2014 which was 35% of the 117 companies included in the sample.

In the empirical regression the act of initiating a GRI report was regressed on the turnover variable with additional control variables for size, leverage, price, and profitability. The empirical results could not confirm that initiating a GRI report affected share turnover rate. This result supports the conclusion that the GRI report does not lower information asymmetry when it is measured by the liquidity variable turnover rate. The inference from such result is that investors might not recognize the GRI report as a valuable informational source when making investment decisions in Finland. However, the circumstances from where the corporate social disclosure theory stems from may offer some explanation to the result. It can be that GRI has not been able to establish a credible role in being a relevant corporate disclosure and the reason for this can be speculated to lie in the root problems corporate responsibility is based on.

Corporate responsibility has suffered from measurability issues since its inception and theories such as greenwashing have further aggravated the situation. Corporate social responsibility and responsible reporting have long been regarded as voluntary acts with little scrutiny from regulatory entities. The fact that the contents reported within a GRI report do not undergo any kind of auditing or third-party verification when it comes to the truthfulness of what is reported is a crucial issue in the reporting framework. This leaves the framework vulnerable to corporate misuse in the attempt to enhance corporate image or even to greenwash. As long as such abuse of the GRI framework is an aspect to be concerned about, that is as long as the reports relying on the framework are not thoroughly audited, the framework cannot be considered a relevant source of information in investment decisions. The closest real life example of such misuse of the GRI framework was seen in Finland when the mining company Talvivaara Plc. was responsible for an environmental catastrophe in northern Finland and the company has since been charged with environmental endangerment in 2013. Talvivaara Plc. initiated its first GRI report only one year earlier in 2012.



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## APPENDICES

Appendix 1. Sample companies, industries and GRI publication year.

All 117 Nasdaq OMX Helsinki Stock Exchange sample companies, their respective industries and division to GRI and non-GRI companies along with the first release year of the GRI report.

Company name	Sector	GRI	Year
Afarak Group	Mining	No	
Affecto	Information technology	No	
Ahlstrom	Forestry	Yes	2003
Aktia 'A'	Finance	Yes	2012
Alandsbanken 'A'	Finance	No	
Aldata Solutions	Information technology	No	
Alma Media	Media	Yes	2010
American Sports	Travel and Leisure	No	
Apetit	Food and retail	No	
Aspo Group	Electronic and Electrical Equipment	No	
Aspocomp Group	Electronic and Electrical Equipment	No	
Atria 'A'	Food and retail	Yes	2012
Basware	Information technology	No	
Biohit 'B'	Healthcare	No	
Biotie Therapies	Healthcare	No	
Capman 'B'	Finance	No	
Cargotec 'B'	Industrial	Yes	2012
Cencorp	Electronic and Electrical Equipment	No	
Citycon	Real Estate	Yes	2010
Componenta	Industrial	Yes	2008
Comptel	Information technology	No	
Cramo	Support Services	No	
Digia	Information technology	No	
Dovre Group	Support Services	No	
Efore	Electronic and Electrical Equipment	No	
Elecster 'A'	Industrial	No	
Elektrobit	Information technology	No	
Elisa	Information technology	Yes	2012
Equity	Finance	No	
Equity Corporation	Finance	No	
Etteplan	Support Services	No	
Evia	Media	No	
Exel Composites	Industrial	No	
Finnair	Travel and Leisure	Yes	2009
Finnlines	Industrial	No	
Fiskars 'A'	Food and retail	No	
Fortum	Electrical	Yes	2006
F-Secure	Information technology	No	
Glaston	Construction	No	

Hkscan 'A'	Food and retail	No	
Honkarakenne 'B'	Construction	No	
Huhtamaki	Industrial	No	
Ilkka Yhtymä	Media	No	
Incap	Electronic and Electrical Equipment	No	
Innofactor	Information technology	No	
Ixonos	Information technology	No	
Kemira	Industrial	Yes	2011
Keskisuomalainen	Media	No	
Kesko 'B'	Food and retail	Yes	2001
Kesla 'A'	Industrial	No	
Kone 'B'	Industrial	Yes	2008
Konecranes	Industrial	Yes	2009
Lassila and Tikanoja	Support Services	Yes	2012
Lemminkäinen	Construction	Yes	2012
Marimekko	Food and retail	Yes	2012
Martela 'A'	Food and retail	Yes	2011
Metsä Board 'B'	Forestry	Yes	2007
Metso	Industrial	Yes	2005
Neo Industrial 'B'	Electronic and Electrical Equipment	No	
Neste Oil	Industrial	Yes	2010
Nokia	Information technology	Yes	2001
Nokian Renkaat	Industrial	Yes	2014
Nurminen Logistics	Industrial	No	
Okmetic	Information technology	No	
Olvi 'A'	Food and retail	No	
Oral Hammaslaakarit	Healthcare	No	
Oriola-KD 'B'	Healthcare	No	
Orion 'B'	Healthcare	Yes	2010
Outokumpu 'A'	Industrial	Yes	2008
Outotec	Industrial	Yes	2011
Panostaja	Finance	No	
Perlos	Electronic and Electrical Equipment	No	
PKC Group	Electronic and Electrical Equipment	No	
Pohjois-Karjalan Kirjapaino	Media	No	
Ponsse	Industrial	No	
Poyry	Support Services	No	
QPR Software	Information technology	No	
Raisio	Food and retail	Yes	2008
Ramirent	Industrial	Yes	2013
Rapala VMC	Travel and Leisure	No	
Rautaruukki 'K'	Industrial	Yes	2004
Raute 'A'	Industrial	No	
Revenio Group	Healthcare	No	
Rocla	Industrial	No	
Saga Furs	Food and retail	Yes	2012
Sampo 'A'	Finance	No	



Sanoma	Media	No	
Sentera	Information technology	No	
Sievi Capital	Finance	No	
Solteq	Information technology	No	
Soprano	Information technology	No	
Sponda	Real Estate	Yes	2012
SRV Yhtiot	Construction	No	
SSH Communications	Information technology	No	
Stockmann 'B'	Food and retail	Yes	2010
Stonesoft	Information technology	No	
Stora Enso 'R'	Forestry	Yes	2003
Suominen	Industrial	No	
Takoma	Support Services	No	
Talentum	Media	No	
Talvivaara	Mining	Yes	2012
Technopolis	Real Estate	Yes	2012
Tecnotree	Information technology	No	
Tekla	Information technology	No	
Teleste	Information technology	No	
Tieto OYJ	Information technology	Yes	2011
Trainers House	Information technology	No	
Tulikivi 'A'	Construction	No	
Turvatiimi	Support Services	No	
UPM-Kymmene	Forestry	Yes	2003
Uponor	Construction	No	
Vacon	Electronic and Electrical Equipment	Yes	2012
Vaisala 'A'	Electronic and Electrical Equipment	Yes	2009
Wartsila	Industrial	Yes	2001
Viking Line	Travel and Leisure	No	
Wulff-Group	Support Services	No	
YIT	Construction	Yes	2013