Do good and talk about it: Corporate Social Performance and Corporate Social Reporting

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1 Cover Paper

Abstract

This paper introduces the dissertation by Carsten Albers. In the first part it illustrates the understanding of corporate social performance (CSP) and exposit important theories which explain why companies consider stakeholders in their decisions. It will give motivations for disclosing voluntary information in general and especially with regard to CSP, and it will address the standards for disclosure and assurance of such information. The second part will give an overview of the research field of CSP. Finally, it will briefly present the content of and the relationships between the papers included in the dissertation.

1.1 Introduction

There have been many noble and generous deeds in human history. The invention of writing made it possible to deliver such events to posterity. Beside this, writing has also been used for other documentary tasks. The Egyptians recorded their crop yields, the location of stars, and the planning and progress for building pyramids. Later, double entry accounting was invented and writing has been used more and more to support organisational processes, but also to describe special events.

Every company needs to do some kind of writing. This can be for internal purposes to inform managers or other internal stakeholders, or external, to inform shareholders or other external stakeholders such as the government which receives tax payments from the company. Some companies act in a good way and also report these actions. Furthermore, there can be reports about the company by someone else, such as analysts or associations who want to inform their members or the public about the company’s activities. Normally, it is expected that a company reports only to its owners because they financed the company and they made this decision to receive high returns from their investment in relation to the risk they bear.

Doing something good for other stakeholder groups from which the company does not, or at least not directly, benefit could be questionable for some people. For example, investors could think that pollution control expenditures are a “drain on
resources which could have been invested profitably, and do not ‘reward’ the companies for socially responsible behavior” (Mahapatra, 1984: p. 37). This argument is very linear and does take into account cross-links. Low pollution output could decrease the regulations or fees imposed by the government, which in turn saves expenditures in this direction. But also, links are imaginable which are not computable. Most theories stating such relationships are in association with stakeholders and their influence on the company.

Indeed, shareholders are also stakeholders and they suffer and react accordingly by decreasing their investment if they assume that the company acts in an unprofitable way. That is why corporate social performance (CSP, more in section 1.2) should be examined more closely to find aspects which could help the company to be profitable, but also to discover the possible risks of CSP. Different concepts and definitions exist for this construct, and they do not necessarily harmonise in practical and academic discussion.

It is recognisable that some companies not only act in the way preferred by many stakeholders, but also report what they do. In most cases this reporting is voluntary and not regulated by law. This reporting costs extra resources and as with other social actions, does not provide any direct improvement in profits. That is why the motives of such reporting are an interesting research question. Additionally, it could be of interest how credible this kind of disclosure is. As mentioned, in most cases it is voluntary and it is conceivable that companies mainly report in their own favour and leave out unfavourable aspects, or they could even disclose false data.

To evaluate and report a company’s CSP, different frameworks exist. In financial accounting, the IFRS or US-GAAP standards are the basis for assessing important parts of the corporate financial performance (CFP) of companies, and so too do these standards and guidelines help to assess the CSP. But this latter should be done differently than in financial statements, because many aspects of CSP are non-monetary (or at least it is very difficult to determine their value).

To better understand such company behaviour, the research field belonging to CSP should be categorised. This can be done with the help of literature reviews of this research stream, but also with the voluntary financial disclosure literature. This should lead to the origins of CSP and its practical implementation in companies. It is also the basis for the identification of aspects which are of great interest for researchers or where other knowledge gaps should be filled in the future.

The contribution of this paper is to introduce these important themes to give a basis and understanding of CSP research, especially the reporting of a company’s social behaviour. This paper is structured as follows. First, a short introduction with regard to CSP is given and different theories are introduced that not only focus on financial performance as the main interest for shareholders, but also on
social and environmental issues. Next are delineated different information sources for the reporting of companies in general. Additionally, it is argued why companies report on CSP topics, followed by an introduction to the standards and guidelines which should assist companies in assessing their CSP. Afterwards, an overview of CSP research is given. Then, the three papers of this dissertation are delineated which belong to this research stream and it is stated where they contribute to the literature. Finally, a conclusion is drawn and possible further research is suggested.

1.2 Corporate social performance

The article of Wood (1991b) is, with Jones (1995) and Mitchell et al. (1997), one of the most cited articles in corporate social performance research (De Bakker et al., 2005: p. 303). Wood (1991b: p. 692) states that theoretical development of the CSP definition has not significantly moved beyond this by Wartick and Cochran (1985). They define that the “CSP model reflects an underlying interaction among the principles of social responsibility, the process of social responsiveness, and the policies development to address social issues” (Wartick and Cochran, 1985: p. 758).

This definition is improved by Wood (1991b: p. 693) who defines CSP as “a business organization’s configuration of principles of social responsibility, processes of social responsiveness, and policies, programs, and observable outcomes as they relate to the firm’s societal relationships”. Hence, the constructs corporate social responsibility and corporate social responsiveness can be seen as a part of or as something standing in close connection to corporate social performance.

There also exist definitions of constructs related to CSP which have not emerged from the research literature. E.g., a definition given in the so-called Brundtland report (Brundtland Report, 1987) or a definition from the European Commission (European Commission, 2001). The Brundtland report is named after the Norwegian prime minister Gro Harlem Brundtland who was chair of the United Nations World Commission on Environment and Development in the 1980s. The commission drew up the concept of sustainable development because they wanted to consider the destruction of the earth and its resources. The work of this commission built a foundation for Agenda 21 (Agenda 21, 1992), a plan of action for saving and protecting the environment, which was adopted by more than 178 governments at the United Nations Conference on Environment and Development in Rio de Janerio 1992. This agenda was also reaffirmed at the World Summit on Sustainable Development in Johannesburg 2002. In the Brundtland report it is defined that sustainable development should “ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Report, 1987: p. 24).
In European Commission (2001: p. 9) it is stated that corporate social responsibility is “a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis”. This paper was published in 2001 and its intention is to deliver a basis for debating this theme on a European and international level. This should help to achieve the goal of the European Union “to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion” (European Commission, 2001: p. 4).

These definitions are very broad and it always depends on circumstances whether a certain action is seen as social or sustainable. Taking the definition from the Brundtland report, it can be said that our generation is the next generation from the viewpoint of our parents and grandparents. They probably met their needs and we probably meet our needs, too. It should rather be asked to what extent all generations met and will meet their needs. Also the definition of Wood (1991b) leaves room for interpretation, but this is not necessarily an issue because social demands may change and so the social responsibility, processes, and actions of companies should too. Further issues can arise because of the diversity of stakeholders. Some actions which are seen as responsible by one stakeholder group can actually be seen as irresponsible by another (Jones and Goldberg, 1982: p. 604).

1.3 Stakeholder centred theories

In the financial accounting literature, the focus is often on the wealth of shareholders who invest money in the company in the hope of making a profit from this investment. They are the source of equity and their money is at higher risk than capital given by banks and other sources of debt. They expect at least as much profit as they would get from other investments with similar risk. Hence, companies try to attract investors by increasing the shareholder value. To do so, companies also have to satisfy the needs of stakeholders they do business with or which are otherwise important for the company. For example, a company that pays wages at a level which is too low to give the employees an adequate living or makes them sick because they cannot afford good food will suffer from unmotivated or ill employees. In a similar vein, companies should respect their customers. If a company does not respect the wishes of its customers it is difficult to sell its products, which generate the profits and therefore are the basis for its shareholder value.

Out of these thoughts some questions arise. Are all individuals and institutions stakeholders which have to be satisfied? And if not, how can a company make a distinction between stakeholders which add value for shareholders and those which
do not? In addition, it can be asked why companies engage in activities such as charitable donations which apparently do not have a direct and positive influence on the return for shareholders. To assess these questions, Clarkson (1995: p. 100) proposes that researchers distinguish between the management of (primary) stakeholder issues and social issues. He also advises conducting analyses at the appropriate level which can be institutional, organisational, or individual. Often used theories which consider stakeholders out of the society are legitimacy theory, institutional theory, resource dependence theory, and stakeholder theory (Chen and Roberts, 2010: p. 651). These theories are compatible up to a certain level and they should be chosen based upon the focus of the study where they are to be used.

1.3.1 Legitimacy theory

To understand legitimacy theory it is helpful to understand the term “social contract”. It is expressed by Shocker and Sethi (1973: p. 97) who point out that a company has to distribute some of its benefits to the groups from which it derives its power and to foster society in general. Only when it fulfils this contract and demonstrates with such actions that it is useful for society will it be accepted by society. In turn, the company gets legitimacy to work and is seen as relevant for society, which is the basis for its operations.

If a company misses fulfilling the expectations of society, it should undertake corrective steps to save its legitimacy (Deegan, 2000: p. 105). This is somewhat different from legal contracts, where the part who does not discharge their obligation satisfactorily gets penalised immediately. A social contract is not written formally by someone, it arises from societal expectations. Hence, it is possible to fulfil it when the actions from the company are acceptable as a whole.

Because it is not a fixed contract, the possibility exists that the relevant societal expectations may change over time Brown and Deegan (1998: p. 22). Media attention to special issues often influence the public salience of these themes (Ader, 1995: p. 309). This means that managers have some indication what the current social expectations could be. E.g., there was a great media coverage of Union Carbide, Exxon Valdez, Moura Mine, and the Iron Baron incidents, and companies tried to preserve their legitimacy by positively influencing society with respect to these incidents (Deegan, 2000: p. 126).

Lindblom (1994), as cited by Tilling and Tilt (2010: p. 61), states four strategies for companies to defend their legitimacy: change itself, change the public, manipulation, and misrepresentation. By changing itself, the company changes its activities and adapts to the expectations of the society. By changing the public, the company tries to change the expectations of society in a desired direction without chang-
ing its own behaviour. By manipulating society, the attention from current issues should be decreased by highlighting other more positive actions such as charitable donations the company has given recently. Misrepresentation means an incorrect representation of the company’s activities. This would be done with the risk of being uncovered and suffering even more damage to its legitimacy.

1.3.2 Institutional theory

The development of institutional theory provides different definitions and arguments (Scott, 1987: p. 509). However, it explains the establishment of institutional norms to which the company has to answer in a certain way (Kondra and Hinings, 1998: p. 744). These norms arise from pressures by institutional environments which have isomorphic structural effects on companies (Meyer and Rowan, 1977: p. 346). This type of organisational change makes companies with similar environments more equal, which does not necessarily mean more efficient or competitive (DiMaggio and Powell, 1983: p. 147).

To better understand the processes of conformation with the institutional environment, Scott (2008: p. 428) proposes three elements (1) regulative, 2) normative, 3) cultural-cognitive) which should be considered when applying the institutional theory. 1) Regulative elements include rule-setting, monitoring, and sanctioning activities, for instance law-based rules. If the company does not comply with these rules it has to expect fines. 2) Normative elements are similar, but not enforceable through legislation, but they are expected by the institutional environment as well. Examples for these elements are the compliance with certification or accreditation standards. 3) Cultural-cognitive elements are the basis for the other two elements (regulative, normative) and they are generally accepted by the institutional environment. They also can not be enforced by governmental agents. Training programs for employees or charitable contributions can be seen as such cultural-cognitive elements. Hence, these elements have different motives, but they all aim to sustain a stable relationship with the environment (Scott, 2008: p. 429).

For companies there exist different possible ways of responding to institutional environmental pressures. Oliver (1991: p. 152) provides five different strategies to respond to institutional processes: acquiescence, avoidance, compromise, defiance, manipulation. Acquiescence is the most passive form of response and can harmonise with the concept of mimetic isomorphism which is stressed by many researchers considering institutional theory. The other forms of response are more active. Whereas with the strategy of avoidance the company tries to circumvent, with compromise or defiance it debates or ignores the problems arising from the environment. With the most active strategy, manipulation, the company changes or counteracts the
institutional pressure in its favour.

1.3.3 Resource dependence theory

The book *The External Control of Organizations: A Resource Dependence Perspective* by Pfeffer and Salancik (1978) was very influential in establishing the resource dependence theory (Hillman, 2009: p. 1404). This theory describes companies as being exposed not only to internal but also to external contingencies. They arise because companies depend on the resources of its environment which are necessary for the company to exist. External factors are able to control these resources to a certain degree which can influence the behaviour of a company and build external dependence. To increase their own power, companies try to minimise their own dependence or increase the dependence of others on themselves (Ulrich and Barney, 1984: p. 472). In doing so, resource dependence theory proposes theoretically and empirically that companies concentrate more on resources which are critical for their long term survival (Jawahar and Melaughlin, 2001: p. 402).

A good portion of the work by Pfeffer and Salancik (1978) concentrates on how a company can manage dependence on its environment. Companies can adapt to their environment or try to avoid its influence on them. They also can alter organisational interdependences by engaging in mergers and acquisitions or organisational growth. Another way is negotiating the environment by influencing the composition of the board of directors or building joint ventures or other strategic alliances. There also exists the possibility of influencing political decisions or regulations to create an environment that is more favourable for the company. Furthermore, the success of a company also depends on its executives, which is why it is critical to choose the right people to manage the organisation in its specific context.

1.3.4 Stakeholder theory

The book *Strategic Management: A Stakeholder Approach* by Freeman (1984) is often seen as the starting point of the stakeholder theory (Laplume, 2008: p. 1157). He defines stakeholders as “a group or individual who can affect or are affected by the achievement of the organisation’s objectives” (Freeman, 1984: p. 46). He also states that “you must deal with those groups that can affect you, while to be responsive (and effective in the long run) you must deal with those groups that you can affect” (Freeman, 1984: p. 47). These definitions are very broad and can be interpreted in many directions. Perhaps this has caused the popularity of this theory and its use for many different research questions. Laplume (2008) give a very good overview of the development of this theory, definitions used, and its use as a basis for empirical work.
Nevertheless, there are some researchers who view this theory with some scepticism. Jensen (2002: p. 243) compares stakeholder theory with “the widespread failure of centrally planned socialist and communist economies” and states that with stakeholder theory, special interests get too much power. Sundaram and Inkpen (2004: p. 359) argue that shareholder value should be the preferred goal of a company. Freeman et al. (2004: p. 366) address these arguments and point out that shareholders already are stakeholders and increasing their wealth does not constrict the stakeholder theory. They discuss that managing other stakeholders than shareholders does not necessarily decrease shareholder value and that there already exist product tests with customers, alliances with other companies, and an increase in supply-chain management with suppliers, all of which are stakeholders. In a complex world, it is not necessarily more difficult to manage different stakeholders than to follow only the one goal of shareholder value maximisation which is the only requirement for the wealth and survival of companies.

For managing stakeholders, companies can use a large set of strategies (Laplume, 2008: p. 1165). Freeman (1984) has two chapters in his book that deal with the four strategies: exploiting, defending, swinging, or reinforcing. Huse and Eide (1996: p. 227) present three stakeholder management techniques which are labelled movement, multitatum, and manipulation. Rowley (1997: p. 901) discusses strategies depending for different network configurations depending on the density of the stakeholder network and the centrality of the focal organisation. Jawahar and McLaughlin (2001: p. 405) show possible strategies for companies in different stages of their life cycle. These strategies depend on how important particular stakeholders are for organisational needs in these life cycle stages.

1.3.5 Application of theories

In their article Chen and Roberts (2010) discuss how the presented theories have similar objectives, lines of arguments, and applying them should be based on the focus of the particular study (Chen and Roberts, 2010: p. 662). They propose using legitimacy theory if social expectations exist but the audience of corporate actions or disclosure are not explicitly known or named. Institutional theory should be applied when analysing companies having similar institutional structures in comparison to other companies which have also implemented the analysed processes, programs, or actions. Resource dependence theory is applicable when analysing interactions between the company and other organisations who both have or strive for power over important resources the company needs to operate and survive. Stakeholder theory can be used in studies which examine the active management of stakeholders or stakeholder groups.
In addition, one theory, such as the stakeholder theory, can be used in different ways: narrative, descriptive/empirical, or instrumental, all of which have different application presumptions and outcomes (Donaldson and Preston, 1995: p. 71). The identification of important stakeholders is also difficult and none of these theories provide a consistent way to include them in research (Mitchell et al., 1997: p. 854). However, the theories presented overlap in scope, and in the proposed strategies for companies, and usually more than one theory can be applied for a specific research question.

1.4 Information sources

There are different information sources that provide data about the activities of companies. These information sources can be provided by internal or external parties. Normally, the information sources have different target audiences with differing informational needs for which they are prepared for. Only one broad, but not very detailed information source for several stakeholders, which even could have differing interests (Sturdivant, 1979: p. 58) could probably increase those problems and can cause a misallocation of resources, because of insufficient information.

For corporate financial disclosure Healy and Palepu (2001: p. 407) point out that an information problem for investors before an investment decision and an agency problem (incentive problem) after a positive investment decision for a company exist which influence the content, representation and amount of disclosure. Information asymmetry which is one reason for these problems can be decreased by different information sources. In addition, information asymmetry can affect other stakeholders in a similar manner, because they interact with a company on the basis of their knowledge as well.

1.4.1 Information problem

The information problem especially arises in markets where investors or other stakeholders do not have full information and for example try to judge the quality of possible investments with little available information. Akerlof (1970: p. 489-490) explain the possible loss in market efficiency with the example of the market for uses cars. In this market the seller of a car knows whether his car is good or bad (a so-called “lemon”). The buyer cannot differ between good cars and lemons and thus the market price for cars is an average price which is between the lower price for a lemon and a higher price for a good car. At this price sellers of lemons get more money than a buyer would pay for the car if they knew the real quality. Sellers of good cars instead achieve less money than they would get if a buyer knew the real
quality.

The more lemons are in the market the lower is the average market price. Thus
the seller of a good car should try to escape this information problem. This could
be done with trustworthy additional information which confirms that his car is good
quality car. The same problem can be transferred to others who want to invest
in a company or are in another kind of business relationship with it. With only
little information they do not know how good or bad the company performs and
can only judge about general aspects like the situation in the company’s industry.
Thus, additional information should increase the believe that a company performs
good for good companies and lowers it for bad companies.

1.4.2 Agency problem

If an investor (“principal”) and a manager (“agent”) have the same goals there should
be no issue, because both would choose the same or a similar way of managing a
company. This situation is definitely present when the investor and manager are the
same person. Once the investor hired someone else to manage the company it should
be assumed that the manager also acts in his own interests which can differ from
those of the investor. For instance, in this situation the manager tries to increase
his own annual monetary returns, he wants to delegate more staff than necessary to
increase his power or makes charitable contributions to projects he prefers personally
(Jensen and Meckling, 1976: p. 312). This decreases the possible wealth of the
investor and occurs because of unequal information between the principal and agent,
wrong or no incentives for the agent and is called the agency problem.

To deal with this problem the principal has to bear monitoring costs or incentive
costs which are paid for desired actions of the agent. These also include costs for
additional information the principal is willing to pay because he achieves a benefit
from it which is greater than the costs. If a contract exists which defines clear
instructions the agent has to stick to, additional information acts as an incentive for
the agent to act in the desired way. In this case for the agent the information could
induce high costs of being discovered in comparison to his benefit for not complying
with his part of the contract. Such agency problems can also be attributed to other
relationships such as companies and creditors or companies and its customers.

1.4.3 Types of information sources

To decrease the information asymmetry, several types of disclosure can be used
(Healy and Palepu, 2001: p. 409). Disclosure of information can be mandatory
or voluntary for a company. Mandatory are regulations from the government or
disclosure requirements by stock exchanges. For example, they include well-known
standards such as IFRS or US-GAAP, but also the NYSE rules that companies have to follow if they want to be listed on the New York Stock Exchange.

Voluntary disclosure can be given directly from the company to its stakeholders or through information intermediaries. Directly given information includes information of voluntary reports, websites, conferences, and road shows. One type of voluntary reports are social or sustainability reports which include information about the social performance aspects of companies. Information intermediaries are the financial press, financial analysts, or rating agencies. They get information from the company and pass it on to the shareholders. Usually, they prepare, modify, or add information for improved readability and comprehensibility. In contrast to mandatory reporting which necessarily has to be done, companies consciously choose to disclose voluntary information which differentiates them from non-disclosing companies and sends content-dependent signals to its stakeholders. Hence, voluntary disclosure provides more information than no disclosure, but does not need to be complete, because there are no binding standards for the company. Table 1.1 gives a short overview of these aspects.

Table 1.1: Comparison of mandatory and voluntary disclosure

<table>
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<tr>
<td>- information for stakeholders</td>
<td>- information for stakeholders</td>
</tr>
<tr>
<td>- regulated</td>
<td>- not regulated</td>
</tr>
<tr>
<td>- binding standards</td>
<td>- no binding standards</td>
</tr>
<tr>
<td>- difficult to hide issues</td>
<td>- easy to hide/not report issues</td>
</tr>
<tr>
<td>- mostly stand-alone reports</td>
<td>- different reporting types possible</td>
</tr>
<tr>
<td>- easier to compare</td>
<td>- more difficult to compare</td>
</tr>
<tr>
<td>- disclosure by itself has no signalling function</td>
<td>- disclosure by itself has a signalling function</td>
</tr>
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</table>

When companies issue freely available voluntary information, analysts have lower costs in gathering this information. But this could also decrease the demand for their services, because they do not have the advantage of information which is privately provided to them by company managers which was a unique selling point (Healy and Palepu, 2001: p. 417). Nevertheless, companies which provide more information than their industry peers have a greater analyst following and more accurate forecasts (Lang and Lundholm, 1996: p. 490). Similar to this Francis et al. (1997: p. 390) find a greater analyst following for firms with corporate presentations to analysts.
1.4.4 Credibility of disclosed information

Shareholders and investors react to information published by companies (Kothari, 2001: p. 196). Amir and Lev (1996: p. 28) show that the growth potential or franchise value for cellular companies, which is non-mandatory information, are value-relevant for investors. However, there is also evidence that positive voluntary information from stressed companies is less credible for the market than that of non-stressed companies (Frost, 1997: p. 184). However, also information of non-stressed companies can be of less credibility in several circumstances. Managers could have incentives for maintaining a state of information asymmetry to support their own interests, which may differ from those of the stakeholders. Thus, the information provided by the company can be incomplete or even incorrect. Hence, the market tends not to trust this information without additional assurances.

For mandatory reports, there is often a mandatory assurance process which is not the case for voluntary disclosure. Assurance not only exists for financial statements, but also for expanded reporting of performance, electronic commerce, or sustainability reporting (Knechel et al., 2006: p. 145). Thus, to make voluntary disclosure, e.g., social reports, more useful for the readers, it should be assured by a trustworthy and independent party. Consequently, independent third-parties such as auditors should be able to increase the credibility of social reports (Dunfee, 2003: p. 250).

Credible information can also be provided by information intermediaries, if they are independent from the company they report about. Those intermediaries collect information from several possible sources, not only the company itself. Then they evaluate this information independently and inform their clients, e.g., investors, about the corporate performance. Usually, this is done for financial information by financial analysts and academic research concentrates on earnings forecasts and buy recommendations, which indicates the value relevance of these types of information (Healy and Palepu, 2001: p. 416). Barth and Hutton (2004: p. 91) examine analyst earnings forecast revisions and find that they are positively related to future changes in earnings. This can be seen as an indication that financial analysts improve market efficiency. The accuracy of analyst information seems to be better when the company offers expanded disclosure and when they are examined by specialised analysts (Gilson et al., 2001: p. 565). Consequently, it can be assumed that disclosure by the company, external assurance of corporate information, and information by financial intermediaries, provide value relevant data for shareholders and investors (Healy and Palepu, 2001: p. 418).
1.5 Causes for social reporting

Besides managing the needs of society and engaging in social activities, companies report about those aspects which bind additional resources of the company. This kind of disclosure is called social reporting, but the terms triple bottom line reporting, social and environmental reporting, or sustainability reporting, are also used. Sustainability can be seen as a term embracing social and environmental terms (Adams and Larrinaga-González, 2007: p. 350). Hence, considering political economy theory and two of its variants which are important for this research stream, stakeholder theory and legitimacy theory (Branco and Rodrigues, 2007: p. 79), potential readers of such reports are all the stakeholders. That is why a reporting company has to consider all stakeholders which could affect the company in a significant way, because it can be assumed that most of its owners are mainly interested in the financial performance. But if a company considers all important stakeholders before issuing a social report, it could be that it realises that some information may be disadvantageous for its market value (Cormier and Gordon, 2001: p. 593).

That is why social disclosure cannot be observed in all companies, and also among the reporting companies it is unlikely that all available information is reported. Beyer et al. (2010: p. 300) list six conditions under which companies would disclose all voluntary information they have: “(1) disclosures are costless; (2) investors know that firms have, in fact, private information; (3) all investors interpret the firms’ disclosure in the same way and firms know how investors will interpret that disclosure; (4) managers want to maximise their firms’ share prices; (5) firms can credibly disclose their private information; and (6) firms cannot commit ex-ante to a specific disclosure policy”. If all these conditions hold, there would be no argument for companies to not disclose their information because they should try to minimise information problems. Following this line of argumentation, at least some of these conditions should not be fulfilled because in fact companies do not voluntary publish all their information.

Social reporting can be seen as a further cost factor and thus, the first condition is not a given. However, it is possible that companies disclose more information if it is relatively cheap and the benefit of disclosing this information influences firms’ share prices in a positive way which is supported by condition four. There is also a tendency to less disclosure if proprietary costs are too high which can also be seen as disclosure costs. Clinch and Verrecchia (1997: p. 132) formally show that increased competition between companies results in a decreased probability of voluntary disclosure because companies try to hide valuable information. With respect to the second and fifth condition it can be argued that the probability is very high that investors do not know all about the information the company has and also do not
know if the given information is credible, but indeed these assumptions are hard to prove. That investors interpret all available information in the same way is also very unlikely because they combine it with their own private information which is one of the reasons stock exchanges work. If all information were interpreted in the same way, all investors would act in the same way if they want to maximise their profit. In turn it is impossible for companies to interpret this reaction because they differ. Condition four is, in a social context, not necessarily the only goal, but rather increasing the wealth of more stakeholders and not only shareholders. The argument against the sixth condition comes from the previous arguments and because the disclosure of voluntary information is a discretionary decision, companies cannot be forced to follow a specific strategy even if they promised a specific disclosure policy.

Nevertheless, companies partially disclose voluntary information which should depend on the extent to which these conditions do apply. Thus, it can be assumed that motives for voluntary disclosure exist. However, some state that probably not all companies are clear about their goals due to reporting about their social engagement (Moody-Stuart, 2006: p. 89). If a motive exists, they can either be derived from the capital market literature which also deals with voluntary disclosure, or from stakeholder oriented theories.

Healy and Palepu (2001: p. 420) give an overview of six hypotheses used in the capital market literature to justify voluntary disclosure: “capital market transactions, corporate control contests, stock compensation, litigation, proprietary costs, and management talent signalling”. The first three hypotheses are based on the argument of information asymmetry between company managers and shareholders or between shareholders. Lowering this information asymmetry helps to reduce the external financing costs of a company or to reduce undervaluation of the company either to minimise takeover risk or to have adequate stock compensation. Litigation risk can raise or lower voluntary disclosure depending on its effect, e.g., if the legal system penalises insufficient information there will be more information, if it penalises good forecasts which are false this information will be decreased. Proprietary costs can be seen in a similar way. If it can be expected that voluntary information would give too much information to competitors or regulators it is rather reported in less detail. Management talent could also have an influence on firm value and managers who show through disclosure that they are aware of their environment can be assumed to be talented.

Investors could also have an investment strategy which does not fully depend on financial criteria, for instance, the Domini Social Equity Fund excludes military, tobacco or gambling companies (Dunfee, 2003: p. 248). In such cases investors need additional criteria to evaluate the company. Consequently, voluntary information can be essential for an investment decision. Interestingly, with such a behaviour
they restrict their own choices of possible investments which should lead to less financial profit in comparison to someone who is able to diversify his portfolio with all possible companies.

Other motives behind this reporting behaviour can be derived from several stakeholder centred theories which all state that a company depends on its environment and stakeholders. One motive could be a demand of stakeholder groups which the company tries to satisfy. Deegan (2002: p. 291) states that many companies try to legitimise their actions which can be explained by legitimacy theory. Releasing such information also helps to influence the behaviour of stakeholders in favour of the company so it can expect support for its activities.

Another motive is that the company wants to show its good behaviour so that the audience for this kind of disclosure recognises it. This could help to improve the reputation of the company. Bebbington, Larrinaga and Moneva (2008: p. 340) analysed reputation ranking studies and argue that five main elements are used to evaluate the reputation of a company: financial performance, quality of management, social and environmental responsibility performance, employee quality, and the quality of goods and services provided. At least social and environmental responsibility performance should be likely to be disclosed in social reports which could help to increase the company’s reputation and help to build competitive advantages. For instance, if people want to work for a company they want to know how it treats its employees or if customers want to buy products they perhaps want to know if they produce them with child labour. If they find the information they are seeking and the company acts in an appropriate way with respect to their demands they have a positive attitude towards the company and are more likely to buy from or work for the company.

Hence, the motives and underlying benefits of voluntary disclosure are “more multifarious and complex than sending risk management signals to investors” (Spence, 2007: p. 860). In most cases they can not be assessed that easily, such as by financial values in annual reports. The effects of social actions and their reporting often are indirect, e.g., managers who signal their talents in managing stakeholders through social reports can not calculate how this affects the firm value. Only a functional chain of effects can be hypothetically identified. The situation is similar with the costs of voluntary disclosure. While the costs of preparing the report can be quantified quite well within the company, competitive disadvantages arising by useful private information which is given to competitors can not be calculated.
1.6 Standards and guidelines for social reporting

1.6.1 Reporting standards

There are some ways for companies to signal their participation in social activities. One form is becoming a voluntary participants in the UN Global Compact. This is an initiative which was founded in 2000 and aims to improve the wealth of economies and society with sustainable practices. It has over 8,700 participating companies and other stakeholders from over 130 countries. It has no legal power over its participants and they can leave this initiative whenever they want. Participants in the UN Global Compact are expected to support and communicate its ten principles in the areas of human rights, labour, environment, and anti-corruption:

1. Businesses should support and respect the protection of internationally proclaimed human rights; and

2. make sure that they are not complicit in human rights abuses.

3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;

4. the elimination of all forms of forced and compulsory labour;

5. the effective abolition of child labour; and

6. the elimination of discrimination in respect of employment and occupation.

7. Businesses should support a precautionary approach to environmental challenges;

8. undertake initiatives to promote greater environmental responsibility; and

9. encourage the development and diffusion of environmentally friendly technologies.

10. Businesses should work against corruption in all its forms, including extortion and bribery.

These principles are also incorporated in the standards of the Global Reporting Initiative (GRI) and AccountAbility, and they came into force for social and environmental reporting in 1997 and 1995, respectively. These organisations developed standards for companies to cope with their responsibilities, activities, and sustainable development, in social and environmental areas. The AA1000 AccountAbility Principles Standard (AA1000APS, 2008), by AccountAbility, help to identify, prioritise, and respond to sustainable challenges. The sustainability framework by
GRI, which includes sustainability reporting guidelines (GRI, 2006), can be flexibly adapted to assess and report the sustainability of a company. The GRI guidelines are the most often applied reporting standards for social and environmental aspects (Ballou et al., 2006: p. 66). Further standards, but rather for managing and monitoring social and environmental aspects, are ISO 14001 and Social Accountability 8000.

1.6.2 Assurance standards

The assurance of social information is an integral part of the preparation of social reports, and thus it is also voluntary and not every company facilitates the assurance of its social report. There exist two well-known assurance standards, the ISAE 3000 (ISAE 3000, 2003) and the AA1000AS (AA1000AS, 2008), especially for making social reports more credible, by independent external assurance. The ISAE 3000 was released by the International Auditing and Assurance Standards Board (IAASB) in 2003. The IAASB is a board of the International Federation of Accountants (IFAC) which also issued the International Standards on Auditing (IAS) for professional financial accountants. The first edition of AA1000AS was released by AccountAbility in 2003 and a revision of it was released in 2008, which is also compatible with the ISAE 3000.

These standards support auditors in assessing various aspects of social reports. In particular, they give recommendations for planning the assurance process so it can be carried out efficiently. This includes defining the level of assurance, the identification of assurance engagement risks, and needed competences. With such competence, the assurer should be able to judge the appropriateness and evaluate the correctness of the measures used for the subject matter. The risk of false judgements or evaluations should be minimised by using quality control procedures. With this knowledge, the assurer should document the assurance process and come to a conclusion which points out the credibility of the social report, reasons for inappropriate aspects, and limitations of the assurance statement.

1.7 Overview of corporate social performance research

To get an overview of a research area, one possible approach is to read literature reviews. That is why this section is a short literature review about the literature reviews of CSP research. Therefore, only those studies are taken into account whose purpose is to carry out a literature review. Thus, studies including a literature review as part of their introduction or motivation are not considered. This review is
in chronological order and presents in short the underlying purpose of the particular review as well as its findings.

Arlow and Cannon (1982) review seven studies examining the relationship between social responsiveness and economic performance. The studies are divided into those with positive and negative or neutral relationships. They found ambiguous evidence for this relationship and concluded that in the short run there is neither a positive nor a negative relationship. However, it is stated that companies see socially responsible actions as important and in the long run there may be a positive relationship.

Wood and Jones (1995) review studies researching empirical CSP studies. They structured their review into studies with respect to community or charity, employees, social justice (or in particular equal employment opportunity), customer or consumer, natural environment, corporate reputation, information disclosure, responsiveness, governance, manager values, and legal or regulatory behaviour. The intention of their study is to show that many of the variables used in these studies do not reflect what they ought to measure. Consequently, they comment on many studies and their limitations which often are based on inappropriate measures for the relevant stakeholders constructs. They also find that the relationship between social performance and financial performance is ambiguous, but that results are more consistent for market-based measures.

Frooman (1997) performs a meta-analysis for 27 event studies which observe the influence of socially irresponsible or illegal behaviour on shareholder wealth. This is a negative formulation of the question if socially responsible and lawful behaviour influences shareholder wealth. The event studies concentrate on events which reveal a negative behaviour of companies such as violations of laws or governmental standards, product recalls, tax evasion, frauds, pollution of the environment, and so on. The meta-analysis comes to the conclusion that irresponsible or illegal behaviour significantly decreases shareholder wealth. Therefore, it can be said that responsible behaviour serves shareholder wealth.

Mathews (1997) reviews 25 years of social and environmental accounting research from 1971 to 1995. Not only empirical studies but also normative statements, philosophical discussion, the non-accounting literature, teaching programmes, text books, regulatory frameworks, and other reviews are included in this review. The review is divided into three periods: 1971–1980, 1981–1990, and 1991–1995. In the first period, some models or normative statements due to social accounting are developed, but empirical studies are scarce and most are only descriptive. In the second period, more empirical studies which are less descriptive are produced and a wide debate about social and environmental disclosure can be identified. The third period is characterised by an overweight of studies with environmental compared to those with social themes. A lack of normative and philosophical work is identified, but
this area becomes more popular in educational programmes.

Roman et al. (1999) review 51 articles that are extracted from a table in a study by Griffin and Mahon (1997) and four new articles, and assess their validity and contemporary relevance. Therefore, they removed five articles from the sample due to missing or invalid measures for CSP or CFP, but it is also noted that some of these studies are written to find other relationships. They also excluded four studies from their sample because of significant research deficiencies and existing improved research with the same data in their sample. The findings indicate that there may be a positive link between CSP and CFP, but they suggest further research with more valid measures and appropriate methods.

Margolis and Walsh (2003) review 30 years of research examining relationship between CSP and CFP. They found 127 studies from 1972 to 2002. In 109 of these studies CSP is the independent variable and in 22 studies, the dependent variable, meaning that four studies examine both directions. They find that the majority of these studies find a positive relationship between CSP and CFP. However, they argue that there are causes for concern about their reliability and validity, omitted variables, mediating or moderating variables, sample issues, and a causal theory.

A meta-analysis by Orlitzky et al. (2003) includes 52 studies from the US researching the relationship between CSP and CFP. For the purpose of the meta-analysis, only studies which reported the effect size and had clear results are included. Overall they find a positive relationship between CSP and CFP in different industries and contexts. It is stated that a broad construct such as CSP should be measured in a variety of ways, which is already the case. This also influences the results, for instance social responsibility has a higher impact on financial performance than environmental responsibility, reputation based CSP measures have a greater influence on CFP, and CSP has higher correlations with accounting-based than with market-based measures.

Allouche and Laroche (2005) examine the relationship between CSP and CFP with a meta-analysis. The analysis is based on 82 studies coming from the US, the UK, and Canada. The sample does not include event studies or studies with confounding variables or methodological problems. They conclude that CSP has a positive influence on CFP, but the extent of this influence depends on the CSP measures. CSP reputation indices have a strong impact on CFP, whereas social disclosure seems to have a weak influence on CFP.

A bibliometric analysis which covers the period from 1969–2002 is done by De Bakker et al. (2005) to evaluate research and theory development on corporate social responsibility and social performance. They constructed three datasets with literature about corporate social responsibility with 505 articles, CSP with 155 articles, and a combined dataset with 549 articles, because CSP articles are also included to a large
extent in the corporate social responsibility dataset. They state that this research field is developing, but also established, because key papers are often cited in high ranked journals. An increase in theoretical papers in the examined datasets can also be noticed.

A study by Parker (2005) concentrates on the research field of social and environmental accounting. He identifies 247 articles published in six journals from 1988 (or the first volume of the journal in question) to 2003. Of these papers, 66% concentrated on environmental issues, 25% on social issues, and 9% on both. Hence, areas such as employee health and safety, community relations, minority employment, or ethical investment should be considered more often in order to carry out a better balanced research in social and environmental accounting.

Wu (2006) conducts a meta-analysis with 121 empirical studies. In these studies the relationship between CSP, CFP and firm size is analysed. The results find a positive relationship between CSP and CFP. The strongest correlations can be seen with CSP as a reputation measure. The relationship is also stronger if CFP is not a market-based measure. Contrary to many other studies, it is also stated that there is no significant relationship between firm size and CFP or between firm size and CSP.

A literature review by Beurden and Gössling (2008) examines the relationship between CSP and CFP in 34 newer studies since 1990. Of these studies, 68% find a significant positive, 26% no significant, and 6% a negative relationship. They find that reputation rankings are most often used to measure CSP, followed by social actions such as corporate philanthropy, and, least of all, social disclosure about social concern. They state that there is an inconsistency in the measurement of CSP and CFP. Variables found in more than one study that could influence the relationship between CSP and CFP are size, industry, R&D, and risk.

Pelizza (2009) reviews 159 studies researching the relationship between CSP and CFP from 1972 to 2008. In particular, he examines the measures used for CFP, but also finds that 39 different CSP measures are used in the studies. Overall, the relationship between CSP and CFP is seen as positive, but in Africa it could be neutral or negative. 36 different CFP measures are used in the reviewed studies. One measure group includes mediating metrics such as firm consumption, which could influence the measures in the intermediate and end-state outcome metrics. Examples for intermediate outcome metrics are energy expenses or cash flow, and for end-state outcome metrics, share prices or returns to assets. 91% of the studies use end-state metrics for measuring CFP, but market-based measures are used most often. It is concluded that a closer evaluation of CSP, especially from a stakeholder point of view, is necessary. In addition, common measures for CSP or CFP could produce a common base of knowledge for researchers and managers who want, finally,
to know how to act in a specific situation with regard to social activities.

With these reviews of the CSP literature, it can be concluded that this research area is very active. Overall, there seems to be a positive relationship between CSP and CFP, but on a very broad basis. CSP should be researched in more detail and for a better comparison, the results of the studies should be compared with more similar CSP and CFP measures. This could help to find more specific linkages between the two broad constructs of CSP and CFP. In addition, not only environmental measures, reputation ratings, or accounting based measures should be examined, but also measures which could be more directly influenced by social activities.

1.8 Included papers

The conceptual development of the three papers included in this dissertation, the data collection and data analysis as well as the interpretation of the results and the written formulation of the papers, is based on the individual work of Carsten Albers, the author of this cumulative dissertation.

The first paper (Escaping the fog: How to define Corporate Social Performance) is currently in the review process at the journal Business & Society. I am grateful for the support of Prof. Dr. Thomas W. Günther in providing feedback on the concept as well as on the formulation. An early version of this paper was presented at the 5th Workshop on Visualising, Measuring and Managing Intangibles and Intellectual Capital in 2009. I also gratefully acknowledge valuable feedback from Marc Orlitzky on this paper.

The second paper (Disclose or not disclose: Determinants of social reporting) is published in a refined version including the valuable feedback given by Prof. Dr. Thomas W. Günther in Journal of Management Control, formerly Zeitschrift für Planung (Albers and Günther, 2010). However, the paper included in this dissertation comes without this feedback.

The third paper (Sunny with cloudy intervals: The influence of social reporting on firm value) has not been submitted to a journal yet, but it was presented at two conferences which delivered some feedback which helped to improve this paper. It was presented at the EAA Annual Congress 2011 in Rome in 2011 and at the 73rd Wissenschaftliche Jahrestagung des Verbandes der Hochschullehrer für Betriebswirtschaft e.V. in Kaiserslautern in 2011. Under the supervision of Carsten Albers the idea and concept of the third paper was tested empirically in a diploma thesis by Harald Altmann with a reduced sample. I am also grateful for the support of Prof. Dr. Thomas W. Günther in providing feedback on the concept as well as on the formulation.

Figure 1.1 gives an overview of the three papers included in the dissertation.
The first paper examines different definitions of the construct CSP and develops a proposal for researchers to understand this term better and to find appropriate measures for it. The second and the third paper analyse corporate reporting about corporate social performance (corporate social reporting). With regard to the proposed assessment of CSP in the first paper, they deal with social responsiveness, in particular the answer of a company to stakeholder demands in the form of social reports. These reports can also contain and report about other aspects such as corporate social responsibilities or other social actions, but the actual content of these reports is not examined in the papers. In particular, the second paper examines determinants of corporate social reporting while the third paper shows the influence of social reporting on CFP.

1.8.1 Paper 1: Escaping the fog: How to define Corporate Social Performance

As seen in Section 1.7, there are often concerns about the validity of the CSP measures used. A prerequisite for construct validity which empirically tests whether a measure measures what a defined construct specifies is the validity of the subjective consistence of measurement and construct. To provide this prerequisite this article examines face validity of the measures of CSP with the CSP definitions in papers researching the relationship between CSP and CFP. It also gives a proposal to achieve a more common understanding and delineation of CSP.

To find used CSP definitions and measures empirical studies researching the link between corporate social performance and corporate financial performance are used. This relationship is taken, because it is the most researched relationship in this research field. It is also useful to isolate the definitions and measures of CSP. Thus their differences can be associated with the construct CSP without the probability
of a distortive relationship of CSP to different constructs.

Definitions and measures of CSP used in these articles are identified in a focused literature review of 114 articles between 1970 and 2009. Showing these definitions a plausible explanation for the interchangeable use of CSP, corporate social responsibility, and corporate social responsiveness can be given as the two latter constructs often are defined as constituents of CSP.

A subsequent step compares these definitions with their associated measures to assess their face validity. It is shown that few definitions and measures are not face valid. However, those which are face valid are not necessarily better. There exist two shortcomings with CSP definitions. First, a lot of papers do not define CSP constructs clearly. Second, very different measures could be used for some definitions because the CSP construct is defined very broadly. These shortcomings can hinder progress in CSP research, because they may be the source of confusion about actual relationships between particular CSP constructs and CFP constructs.

That is why a proposal for assessing CSP as well as corporate social responsibility and corporate social responsiveness is given in this paper. The suggested model is derived from the definitions found in the analysed papers. This model also incorporates two other terms often used in connection with CSP: corporate social responsibility and corporate social responsiveness. Stakeholders are basis of this model because they specify the social responsibilities for companies. The companies in turn have to answer to them which can be described with the term social responsiveness. Finally, the fit between these two constructs can be seen as the social performance. This model may aid in categorising research and identifying more precise aspects of CSP and their interactions in future research.

1.8.2 Paper 2: Disclose or not disclose: Determinants of social reporting

This paper examines determinants of disclosing a social report or not. As such, reports prepared with the help of the guidelines developed by the Global Reporting Initiative (GRI) are used in this paper. There are only few papers analysing this relationship, but there are also papers concentrating on specific voluntary information which has not to be a separate report. Building on those both streams of literature, possible determinants of disclosing a social report are identified and examined.

This question is important because it delivers arguments for several debates. For instance, it contributes to debates where people ask to change voluntary social disclosure to a mandatory one. In addition, the knowledge about the determinants of voluntary social disclosure can help stakeholders to better judge companies on the basis of their reporting behaviour.
The sample consists of STOXX Europe 600 firms. Thus, it is possible to analyse country specific effects based on a broad sample of companies. These are often missing variables in prior literature. But also other important constructs which should have an influence on the disclosure of a social report such as size or media coverage are included in the analysis. This study also adds sustainability performance for the disclosure of GRI reports as an additional possible determinant which has not been used in prior studies researching this relationship.

The analysis reveals that size, media, country specific factors, industry, and sustainability performance have a significant influence on whether firms disclose social reports or not. The results indicate that mandatory regulation of social reports is not that necessary, because it can be assumed that companies are more likely to report in countries where laws do protect stakeholders, such as investors, to a lesser extent. Thus, a kind of self-regulation due to the necessity of voluntary reporting can be seen. It can also be stated that companies which perform well with regard to sustainable aspects are more likely to disclose social reports. As has been stated in previous literature risk, capital structure and financial performance seem to have a negligible influence on this kind of voluntary reporting. Consequently, while this study confirms some previous findings, it also rejects or undermines certain others.

1.8.3 Paper 3: Sunny with cloudy intervals: The influence of social reporting on firm value

In this paper the impact of social reporting on firm value is examined. Companies provide more information than they are required by law. Social reports are such a kind of voluntary information and the rationale behind its disclosure is expected to be of financial nature. Thus, social reporting is hypothesised to have a positive impact on the firm value.

It is argued that reducing possible information asymmetries between companies and stakeholders should increase the value of the company. Other reasons for the increase of firm value are given through arguments provided by stakeholder centred theories. Further, it is expected that more information as well as an assurance of voluntary disclosed reports should also increase the firm value.

The sample which is used in this study consists of the Dow Jones STOXX 600 firms from 2008 to 2010 and GRI reports are taken as social reports. All companies in this index are located in Europe which has gone a long way in the history of social reporting. Both the companies disclosing such reports as well as the stakeholders reading these reports should be familiar with this kind of reporting, at least more than on other continents. Thus, the market should reveal a firm value which includes such disclosure in an appropriate manner.
The results show that the fact of disclosing a GRI report increases the firm value. More information in general also increases the firm value, but there is a probability that an optimum of information exists which is less than the maximum possible information required by the GRI guidelines. However, external assurance seems to have no influence on the firm value. Only for companies with relatively little disclosed information can it be advantageous to let the GRI assure their reports.

In conclusion, the first paper in the dissertation provides a basis for analysing CSP in its details and to allocate particular research to a well-defined terminology which shows its direction. The second and third paper are about voluntary disclosure of social information which is an action of the company. This can be seen as social responsiveness because it is assumed that companies try to satisfy a demand from their stakeholders. Both papers are good starting points for analysing CSP in more detail using the contents of GRI reports. This content can be defined with the proposed CSP model of the first paper.

1.9 Conclusion and further research

CSP is a broad construct including many different aspects. It not only includes different facets such as the environment and social and economic aspects, but these aspects can be examined from different perspectives. It is important to know why companies act in a social or ethical way. This may be caused by the stakeholders of the company who have other demands besides increasing shareholder value. But it is also interesting to know if companies really respond to these demands or if they undertake social actions which are broadly accepted and are not for their stakeholders in particular.

Research indicates that acting in a social manner may increase financial performance, but do companies know what they have to do and to what extent? Is it better to act for the broad social community or to respond only to special stakeholders of the company? If the latter is the case, should a company only respond to primary or also to secondary stakeholders? Next, the question arises about too much social engagement, which means whether there is an optimum of social actions. For instance, McWilliams and Siegel (2001) present a supply and demand model for corporate social responsibility. When taking this into account, positive influences such as higher reputation or more support from stakeholders have to be compared with the higher costs of social actions or of disclosing private information about the company which could used against it.

Similar questions arise for social disclosure. Without communicating good behaviour, it could be that stakeholders would not notice it. This could mean that positive effects do not occur, but also negative effects from disclosing private infor-
mation do not lead to competitive disadvantages. To answer this there could also be a maximum or minimum of social disclosure which should be applied regarding the company’s goals. The same counts for the type of information and the format in which it is presented or how it is made credible to its audience.

Further research should concentrate on the many facets of CSP and categorize them as precisely as possible. Researching studies using reputation rankings should point out that this is the company’s picture from the view of those who rank the company. Studies examining charitable donations should classify these studies as social responsiveness. This research should also be done with various methods to show where differences in particular areas come from, the variables used, the circumstances such as time, country, industry, or the method used. For instance, Schuler and Cording (2006) proposes a behavioural model which should help to understand the impact of social performance on consumers attitude towards a company. Changes in societal expectations or those of stakeholders should also be incorporated into CSP research because they should be the basis of social behaviour which means that the relationship between society and companies changes with them (Warren, 1999: p. 215).
2 Escaping the fog: How to define Corporate Social Performance

Abstract

This article examines the use of definitions and measures of corporate social performance (CSP) in prior empirical studies researching the link between CSP and corporate financial performance and gives a proposal to achieve a more common understanding and better delineation of CSP. Definitions of CSP used in these articles are identified in a focused literature review of 114 articles between 1970 and 2009. A subsequent step compares these definitions with their associated measures to assess their face validity. Two major findings are derived from this analysis. Firstly, more than 60% of the studies do not have a definition for their research construct. Thus, it is not clear what is actually researched and the construct has to be surmised by looking at the measures used. Secondly, 30% of the construct definitions are not face valid with respect to their measures. These results can hinder progress in CSP research, because they can be the source of confusion about actual relationships. To foster further research, in this article we suggest a model for assessing CSP more precisely, which is derived from the definitions found. This model may aid in categorising research and identifying more precise aspects of CSP and their interactions in future research.

2.1 Introduction

There are a plethora of papers researching the relationship between social performance (CSP) and financial performance (CFP). The first paper investigating this relationship was published in 1972 by Moskowitz (1972). There is an ongoing stream of literature examining this relationship which in itself indicates its relevance, but also suggests to some extent its inability to explain certain aspects of the relationship satisfactorily. Empirical studies show conflicting results - with positive, neutral or negative relationships (Ruf et al., 2001: p. 144). This paper does not examine
such an underlying relationship between CSP and CFP, but rather concentrates on the measurement of the CSP construct. It analyses how CSP is defined and whether the measures are appropriate in respect to these definitions. This should help to build an understanding of the variety of measures used in this research field and shows that many papers evidence difficulties in giving an explicit definition of their constructs. Therefore, the definitions found are analysed, and on this basis a proposal for the definition and measurement of CSP is proposed, in order to offer a basis for assessing CSP in a more structured way in future research.

This paper offers an overview of articles researching the relationship between CSP and CFP. This is the basis for this paper which hones in on particular points which may be the source of differing results in CSP research. First, one contribution of the paper is in showing commonly used definitions for CSP and giving a plausible explanation for their interchangeability with social responsibility and social responsiveness. We suggest that these two constructs are mostly treated as being constituents of CSP. It can also be seen that many studies do not even specify a definition for CSP.

The CFP construct is not part of this paper and it is only mentioned because many papers research its particular relationship with CSP. Thus, CFP only serves as a constant construct in the relationship examined - which makes it easier to attribute different definitions and measures of CSP to the CFP part. By including other relationships, e.g. CSP with reputation, it is more likely that CSP could be defined or measured in other ways, in order to fit the research question. In fact, this should not affect the chosen CSP construct but, as discussed above, it is one possible factor which should be kept in mind, especially in cases where different theories and relationships with regard to CSP exist. Different measures of CFP, "market-based (investor returns), accounting-based (accounting returns), and perceptual (survey)" (Orlitzky et al., 2003: p. 407), may also influence the CSP definition and measurement. However, CFP measures are more closely related, as they all describe the financial success of a company. Hence, by focussing on a CSP-CFP relationship differences in CSP constructs and measures should basically arise from the author’s decision and not from the diversity of underlying relationships.

Second, another contribution of this study is the examination of the face validity of constructs used in studies researching CSP. This is important because a study only delivers comparable results when the researched construct is defined properly. If a construct is measured with inappropriate measures it may still lead to useful results, but these results belong to other constructs and this could be a source of confusion for other researchers and does not foster valuable progress in this research area. With another focus, for instance, Chatterji et al. (2009) also investigate how well a particular rating (KLD) represents the actual environmental performance of
companies; alternatively Boyd et al. (2005) conclude that only a "few articles discuss reliability and validity issues" (Boyd et al., 2005: p. 239) in strategic management research. The findings are an interesting possible source for further research which will yield a better understanding of the operationalization of the CSP construct.

We find that studies including a definition often have face valid measures. However, we also find that some studies do not have face valid measures and many studies do not specify a definition of CSP. Furthermore, Pelzoa (2009: p. 1521) reviewed CSP literature and found 39 different operationalizations of CSP. If the same definition of CSP was used for all measures it is doubtful that all measures are face valid. Thus, for every study researching CSP, an appropriate definition is needed to interpret the results in an appropriate manner.

Third, a further contribution of this study is in extracting the meaning of the three constructs corporate responsibility, corporate social responsiveness and corporate social performance from the definitions used. With this as a basis, this paper also contributes to further research and gives a framework for assessing CSP in a structured and reproducible way, as the absence of such a model is one of the major issues in this research field (Clarkson, 1995: p. 92). Wood (2010: p. 76) also asks for research on the different parts of CSP including "principles, processes and outcomes of business behaviour that are particularly relevant for stakeholders and society". To achieve this, it is necessary to define the CSP construct as precisely as possible. Within this model the constructs are defined as mutually exclusive which yields easier decision as to what the research object is. In this model, the definitions have a certain degree of malleability to include changing social values, but are as precise as possible. This also justifies the examination of "stakeholders" under the topic of CSP, which has often been researched only on an organizational level, impeding research progress in this field (Orlitzky et al., 2011: p. 7).

The paper argues for the use of this model to define constructs in further research more precisely. A similar approach is taken by Halme and Laurila (2009: p. 329) who define three types of socially responsible actions. This should help to do more finely-honed analyses with different types of social responsible actions (Halme and Laurila, 2009: p. 336). This is also the aim of the model presented in this paper, but applied to the concept of CSP and its relations to the constructs corporate social responsibility and corporate social responsiveness. This model can be used as a foundation for researchers to categorize their and other research. This categorization could also prove valuable for meta studies which yield different results with respect to the relationship of CSP and CFP over all studies, because these can now be redone using this categorization.

This paper is structured as follows; a literature search is carried out to find empirical studies examining the CSP-CFP relationship; then the method for finding
definitions of CSP is explained and major definitions out of these studies are presented; subsequently, the fit between the definition and measures used (face validity) is analysed; and finally, a model or process for completing structured research stemming from CSP and related constructs is given with respect to its definition.

2.2 Background

2.2.1 Reasons for ambiguous study results

Figure 2.1 outlines possibilities for different results in empirical studies researching the relationship of CSP and CFP. These points arise from an inversion of common knowledge for good research practices as well as from the limitation sections in articles which examine the relationship between CSP and CFP. Possible reasons for different results are the non-existence of a relationship, inadequate theories, applicability of methodologies, different constructs or invalid or unreliable measured constructs. The possibility that no relationship between CSP and CFP exists can be disregarded at least for the existing literature with its used definitions and measurements, because recent meta-analyses by Orlitzky et al. (2003), Allouche and Laroche (2005) and Wu (2006) indicate a positive relationship for the measures used in CSP- CFP studies. Therefore, it can be assumed that studies investigating an association between CSP and CFP are examining a tangible link between the two. Nevertheless, there is probably more than one fundamental basis for a relationship between CSP and CFP. This is context-dependant, and also dependant on the actual issues that influence this relationship (Lankoski, 2009: p. 207). E.g., defining CSP as the amount of greenhouse gases strikes one as being inappropriate when the company employs child labour, but has nearly no emission of greenhouse gases. Halme and Laurila (2009: p. 325) recommend an examination of the special relationships using structured research to find more specific context factors. Also De Bakker et al. (2005: p. 310) suggest a more in-depth analyses of concepts such as corporate social responsibility and corporate social performance.

Other possible sources for "contradictory results stem from conceptual, operationalization, and methodological differences in the definitions of social and financial performance" (Griffin and Mahon, 1997: p. 7). It may be the case that a relationship exists, but an inadequate theory is employed to identify this relationship. Garriga and Melé (2004: p. 51) present a selection of theories predicting a relationship between social and financial performance without establishing clear and contradictory interdependencies. These different theories can only be researched by testing them empirically and if there are results which are not in line with the theory then the theory is inadequate in explaining the data. However, this does not mean
that all parts of the theory are incorrect. An example of examining different theories is Preston and O’Bannon (1997) who research six possible relationships between CSP and CFP. They state a causal effect of CSP on CFP or the other way round or an mutual interaction between the two - where each interaction can be positive or negative. They explain these different possible interactions using the stakeholder theory, the trade-off hypothesis, the slack resources theory, the managerial opportunism hypothesis, and synergies between these theories. Similarly, Berman et al. (1999) test two different stakeholder management models. In one model, stakeholder relationships are directly managed and thus affect financial performance directly. In the other model stakeholder relationship management is intrinsic and influences firm strategy which in turn influences financial performance.

Moreover, it is possible that there are omitted variables such as R&D and advertising intensity which have an influence on CFP and which would change these results as shown by McWilliams and Siegel (2000: p. 604). Other important variables influencing CFP shown by Capon et al. (1990: p. 1148) are industry concentration, firm growth rate, market share, firm size, and capital investment intensity. If these omitted variables are not taken into account, the relationship can only be associated with the researched variables, which can overstate or understate their influence.

Different results can also be produced by inadequate methods. McWilliams and Siegel (1997) for instance, examined the applicability of event studies. They criticized the assumptions made by event studies, e.g. efficient markets, unanticipated events, which are a necessity in isolating the effect of an event, and the absence of confounding events during the event window. The research design - which includes sample size, outliers, length of the event window, and explanation of abnormal returns - also influences the results of event studies. They replicated an event study and showed that the results "depend critically on the length of the window and
whether researchers have isolated the events of interest, i.e., controlled for con-
foundling effects" (McWilliams and Siegel, 1997: p. 106). Other examples of the
questionable application of methods are surveys which include inconsistencies be-
tween different raters and content analyses which can lead to a bias due to the
type of the document analysed and the omission or inclusion of particular content

However, when a method is appropriate for a particular research question and
conducted in an appropriate way then different methods should be allowable and
they should produce similar results. The same argument counts for different con-
structs. This is why an attempt to assess validity may be done using a multitrait-
multimethod matrix which should include "at least two traits, each measured by at
least two methods" (Campbell and Fiske, 1959: p. 104).

Even if constructs are the same and adequate theory of the relationship between
CSP and CFP is applied, a study may lead to divergence in the results due to mea-
surement errors or an inappropriate operationalization of constructs used. Schmidt
and Hunter (1999: p. 183-184) state that "measures of constructs - whether physi-
cal or social sciences - contain measurement error. There is no such thing as error-
less measurement. As a result, all observed relations are relations between specific
measures, not relations between constructs, and are therefore biased estimates of
relations between constructs".

For the question of inappropriate measures of constructs, many measures of CSP
are one-dimensional which hinders examination of particular social aspects and
which does not represent an appropriate operationalization of the complexity of
the CSP construct (Waddock and Graves, 1997: p. 305). As such, it could also be
the case that measures are used which do not coincide or are not congruent with
the definitions of the constructs they should represent. There is no one measure to
evaluate a the comprehensive conceptual construct CSP (Simpson and Kohers, 2002:
p. 100). This is why Griffin and Mahon (1997: p. 10) suggest the use of multiple
measures to assess CSP. Whether or not the construct and its operationalization
match is described by the concept of validity. There is also some confusion about
the definition of CSP as it is often used interchangeably with constructs such as cor-
porate social responsibility, corporate social responsiveness or corporate citizenship
(Galbreath, 2010: p. 512).

2.2.2 Validity

Agle and Kelley (2001: p. 280) provide a matrix which will help to assess the re-
liability and validity of CSP measures. They list different kinds of validity (face,
content, convergent, discriminant, criterion, construct) with respect to the stake-

32
holders of a company, and they regard three dimensions of CSP on the basis of the definition by Wood (1991b).

Figure 2.2: Validity framework

The necessity for a pre-stage of construct validity can be explained with Figure 2.2 (Libby et al., 2002: p. 795). X and Y are concepts which are represented by variables such as X' and Y'. These concepts can be represented by variables with the help of an auxiliary theory which states a connection between the concept and the variable (Costner, 1969: p. 246). Construct validity is given when the variables change in the same way as the theory between X and Y suggests. One possibility to test this relationship is to look at the relationship between different variables such as X1' and X2' with the knowledge that one of these variables is known as construct valid. However, before testing construct validity in an empirical way it should be shown non-empirically that the content of the construct is adequately represented by the variable (Edwards, 2003: p. 330).

To our best knowledge there is only one article which practically examines the construct validity of CSP data. Sharfman (1996) analyses data provided by Kinder, Lydenberg and Domini (KLD) and tests its construct validity with other measures, e.g. Fortune data. Information about these two data sets can be found in section 2.5.1. He argues that "the fact that the KLD principles are well known and respected in the social investment field does give the ratings 'face' validity" (Sharfman, 1996: p. 289). Further he argues that "Fortune data are not truly representative of CSP but rather simply the image that a particular firm has in the business community" (Sharfman, 1996: p. 290). With this in mind, he tries to discover the construct validity of KLD data with a measure which does not truly measure CSP but the image of a company which is rather a measure related to reputation. Nevertheless, this is a legitimate procedure because he stated that Fortune data has been used to measure CSP and KLD data has face validity with CSP. However, he delivers no evidence in
the form of a discussion or citation for this proposition. A measure must be at least face valid to be included in the process of construct validation (Turner, 1979: p. 86). Sharfman (1996) examines KLD data by adding all categories to a single unweighted score. He also uses weighted scores with all categories and without the categories nuclear power, military contracting and South African involvement. Fortune data is examined with an overall score and the "Responsibility to the Community and the Environment" score. Furthermore, he uses data from "social choice" mutual funds to identify firms that are in several of these funds. Such a firm is "a better than average firm in terms of CSP" (Sharfman, 1996: p. 291).

Sharfman (1996: p. 289) refers to Schwab (1980) on analysing validity and for assessing construct validity he uses a method which is known as criterion validation. Schwab defines construct validity "as representing the correspondence between a construct (conceptual definition of a variable) and the operational procedure to measure or manipulate that construct" (Schwab, 1980: p. 5). This is why the construct which is the conceptual definition of a variable should be the starting point in evaluating construct validity. Hence, there should always be a definition of this construct. Not until this is given a decision can be made as to whether construct validity exists. When the operational variables are correlated the constructs are not essentially correlated if the conceptual definition of variable does not harmonize with its operational variable. Unfortunately Sharfman (1996) only compared the correlation between KLD data with the Fortune corporate reputation survey which are operational variables without mentioning the required definition of the underlying construct. Perhaps this is the cause for his use of different possible variations of KLD and Fortune scores to examine CSP.

Sharfman (1996: p. 293) states that validity is not binary but rather continuous and his results show in different tests that there is a substantial but not overwhelming correlation. Thus, he can confirm his research question - "do KLD ratings correlate sufficiently with other measures of corporate social performance" (Sharfman, 1996: p. 293) within the limitations of his underlying assumptions. As stated above, these limitations are a definition missing from CSP (which should be the basis for an assessment of validity) and measures which are accepted as CSP measures. This does not mean that the work of Sharfman (1996) is invalidate as it is correct under the given assumptions. Furthermore, he is one of the few authors who address the validity issue. Other researchers even think that a good correlation between Fortune data and KLD data may be a result of the relatively untested KLD Index which may be incorrect or rather should represent the reputation of a company (Griffin and Mahon, 1997: p. 26).

For face validity we analyse whether the operational variables match with the construct definitions. Already sixty years ago there have existed some discrepancies
in the understanding of "face validity" (Mosier, 1947). In our study face validity is examined by analysing the measures and judging if the measure encompasses what is intended to be measured, but without a quantification of the judgement as to what content validity research does (Kerlinger and Lee, 2000: p. 668). It can be said that "face validity is one limited aspect of content validity, concerning an inspection of the final product to make sure that nothing went wrong in transforming plans into a completed instrument" (Nunnally and Bernstein, 1994: p. 110). Sometimes the difference between content validity and face validity is explainable by stating that content validity is something done by experts and face validity by test users (Groth-Marnat, 2009: p. 16). It could also be the case that a measure does not appear to measure the construct, but nevertheless has a very high correlation with the construct (Nunnally and Bernstein, 1994: p. 110). This may be desirable if potential test users should not know what is measured and it shows that face validity is only one step in assessing validity and further steps are needed to judge the overall validity of measures. Hence, content coverage is important and desirable, but that alone does not assure validity (Messick, 1975: p. 1276).

To examine face validity in CSP research, clear definitions of constructs and their operationalizations are needed. The constructs are available through the definitions found in the 40 identified studies which include a definition (see section 2.4) and the measures are presented in the next section. Subsequently, face validity is investigated by comparing the definition and operationalization of constructs.

2.3 Literature search

The search strategy used is similar to Orlitzky et al. (2003: p. 411) and Allouche and Laroche (2005: p. 21). It was conducted via EBSCO in the Business Source Complete, EconLit and PsycINFO databases. We searched for empirical papers examining the relationship between CSP and CFP between 1970 and 2009. Title, abstract and keywords of the papers were searched for "(social performance) and (effectiveness or performance or profitability or success)". Citations from previous literature reviews or meta-analyses were also scanned for relevant articles. Papers identified which review CSP come from Arlow and Cannon (1982), Aupperle et al. (1985), Ullmann (1985), Wood and Jones (1995), Pava and Krausz (1996), Frooman (1997), Griffin and Mahon (1997) and their reclassified results by Roman et al. (1999), Gerde and Wokutch (1998), Margolis and Walsh (2003), Orlitzky et al. (2003), Allouche and Laroche (2005), De Bakker et al. (2006), Wu (2006), and Beurden and Gössling (2008).

173 studies were found which present empirical data relating to a CSP-CFP relationship or similar topics, but only 114 of them research corporate social perfor-
formance, corporate social responsibility, corporate social responsiveness or socially responsible investing. Studies examining corporate social responsibility and corporate social responsiveness are also taken into account because as stated previously these definitions are sometimes used interchangeably with CSP. This is assumed to be the case because they were found with a search strategy that used search strings for CSP. Socially responsible investment is considered because it looks at face value to have similarities to corporate social responsibility. Many studies do not even explicitly name a construct. Excluded papers focus on constructs like environmental and pollution performance, living-asset stewardship, reputation, charitable contributions, ethics, or perceptions of firm quality. These constructs are not examined in this paper because they are not directly related to CSP. Most of these come from the above literature reviews which do not necessarily only focus on CSP.

2.4 Definitions

The 114 studies were reviewed for definitions of CSP. In addition, the operational variables of the studies which should measure CSP were also recorded for the assessment of face validity.

A definition is identified if it fits at least one of the following conditions:

- words like "define", "definition" or similar are used
- definitions by other authors are mentioned and one is selected
- parts of definitions by other authors which are not contradictory are used which can be seen as a new definition (does not count as self-defined)
- the construct is described in words which are distinct to the study, and represent a new definition (self-defined)

If only a literature review or state of the art is given this is not counted as a definition.

Table 2.1: Definitions of constructs in studies researching the CSP-CFP relationship

<table>
<thead>
<tr>
<th>no definition</th>
<th>27</th>
<th>35</th>
<th>2</th>
<th>6</th>
<th>70</th>
</tr>
</thead>
<tbody>
<tr>
<td>with definition</td>
<td>22</td>
<td>17</td>
<td>1</td>
<td>4</td>
<td>44</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>49</td>
<td>52</td>
<td>3</td>
<td>10</td>
<td>114</td>
</tr>
</tbody>
</table>

Table 2.1 shows that only 44 papers (38.6%) have a clear definition of the researched CSP construct. For further analysis, only definitions which refer to CSP,
corporate social responsibility or corporate social responsiveness are considered - this being the case for 40 studies.1 CSP and corporate social responsibility are the most frequently researched constructs in the analysed studies, whereas CSP is defined slightly more often. The construct corporate social responsiveness was found 3 times and is defined once. Hence, only 40 out of 104 studies can be analysed with regard to face validity. If a reader of studies with no clear definition is unable to define constructs used by himself or can not surmise with the help of the variables used what the analysed relationship is, then these studies will be of little help for him.

Table 2.2: Number and source of used definitions

<table>
<thead>
<tr>
<th>definition by</th>
<th>Corporate Social Performance</th>
<th>Corporate Social Responsibility</th>
<th>Corporate Social Responsiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carroll (1979,1991,2000)</td>
<td>6</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Sethi (1979)</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ullmann (1985)</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wartick/Cochran (1985)</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wood (1991a,b)</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Swanson (1995,1999)</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>McWilliams/Siegel (2001)</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Waddock (2004)</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Heal (2005)</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Siegel/Vitaliano (2007)</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Self-defined</td>
<td>7</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>27</strong></td>
<td><strong>20</strong></td>
<td><strong>1</strong></td>
</tr>
</tbody>
</table>

Analysing the sources of the construct definitions Table 2.2 shows those definitions which have been used and how often. There are more definitions used than there are studies which use a definition because some studies use more than one definition or part of a definition. One study which researches social responsibility uses its own definition and so there are no definitions by other authors used for this construct. Most often definitions by Carroll (1979), Wartick and Cochran (1985) and Wood (1991b) are used. If there is more than one definition to define a construct, these definitions are counted for each author. This is why the definitions add up to more than the analysed 40 studies. From Table 2.2 it can be seen that there is a relatively large range of definitions which could lead to some confusion in research, especially if the definition is not taken into consideration when interpreting and adapting the methods and results of these studies.

In the following paragraphs the definitions of all authors included in Table 2.2 are presented as a time-line.

1Four studies with definition researching social responsible investing (SRI) are not considered in further examination. These studies measure SRI necessarily in accordance with the definitions because the measures are funds or stocks built upon the definitions. They use particular inclusion or exclusion criteria to define a fund or stock as social responsible or not. Funds that include companies in the tobacco or gambling industry for instance are mostly regarded as not being socially responsible by definition.
The first definition is from Carroll. He has developed a model of CSP which integrates three aspects: social responsibility, social issues and social responsiveness (Carroll, 1979: p. 503). The aspect of social responsibility includes four components: economic responsibilities, legal responsibilities, ethical responsibilities and discretionary responsibilities. Economic responsibility means that a firm has a responsibility to produce goods and services which are required by the society. Legal responsibility describes a situation wherein a firm has to act in a system with given laws and rules and it is expected that the firm adheres to these regulations. Ethical responsibility covers activities which do not count as legal responsibilities but are expected by society. Discretionary responsibilities are voluntary activities not having explicit expectations by society members, e.g. philanthropic contributions or training for the long-term unemployed (Carroll, 1979: p. 500).

The social issues aspect looks at the topical area of social responsibility. These can change over time and are not specific for all firms but differ depending on industry. Some example topics are product safety, occupational safety and health, as well as employment discrimination. The social responsiveness aspect describes the type and degree of reaction to social responsibility and social issues. It can be shown as a continuum from doing nothing to doing as much as possible (Carroll, 1979: p. 501).

Carroll wrote two other articles which have been cited in the papers analysed. In Carroll (1991) he takes his four chosen aspects and joins them to stakeholder groups because he sees "a natural fit between the idea of corporate social responsibility and an organization’s stakeholders" (Carroll, 1991: p. 43). In another article Carroll (2000: p. 473) notes that at least four to five stakeholder groups should be examined in many areas of responsibility - not only economic, legal, environmental or philanthropic aspects in order to account for CSP.

The article by Sethi (1979) does not describe CSP directly, but corporate behaviour which consists of three dimensions: social obligation, social responsibility and social responsiveness. Social obligations are prescriptive and are market forces or legal constraints which can be related to a company. Social responsibility on the other hand, is prescriptive and it translates to societal expectations which are not (yet) codified law. Social responsiveness is preventive and consists of actions responding to social changes in society, eventually induced by the firm before they are subject to social norms or legal requirements (Sethi, 1979: pp. 65-66).

Ullmann (1985) reviewed the relationship between social disclosure, social performance and economic performance by investigating different studies with this topic. In his paper a definition of social performance which "refers to the extent to which an organization meets the needs, expectations, and demands of certain external constituencies beyond those directly linked to the company’s products/markets" (Ullmann, 1985: p. 543) is given.
Another model is presented by Wartick and Cochran (1985) who traced the evolution of the CSP model which concludes with an exposition of a CSP model that extends the definition offered by Carroll (1979). It has three dimensions: namely social responsibility, social responsiveness and social issues management. Each dimension has its own direction and orientation. The social responsibility has a philosophical orientation and describes the principle social obligations of a firm at an economic, legal, ethical or discretionary level. The corporate social responsiveness has an institutional orientation and concentrates on the process of obtaining social responsibility. The firm could react in four ways: being reactive, defensive, accommodative or proactive. The social issues management dimension has an organizational orientation and delineates the policies to operationalize the social responsiveness. Under the social issues management dimension, the three steps of issues identification, issues analysis and response development should be done (Wartick and Cochran, 1985: p. 767).

Wood (1991a,b) also developed a model for CSP after examining the evolution of the CSP literature and integrates different approaches into one model. Based on the definition by Wartick and Cochran (1985) she defines CSP as "a business organization’s configuration of principles of social responsibility, processes of social responsiveness, and policies, programs, and observable outcomes as they relate to the firm’s societal relationships" (Wood, 1991b: p. 693). She identifies three principles of corporate social responsibility, three processes of corporate social responsiveness and three outcomes of corporate behaviour.

The institutional principle of social responsibility is legitimacy, the organizational principle is public responsibility and the individual principle is managerial discretion. Legitimacy means that business has obligations on an institutional level as required by the society. Public responsibility is on an organizational level and can differ from company to company. This principle implies that an organization has to react to social problems which are caused by the organization or which affect it. Managerial discretion describes individual boundaries in which a decision maker can act and also includes personal responsibilities such as those of a moral nature.

The processes involved in corporate social responsiveness are environmental assessment, stakeholder management and issues management - and these are theoretically and pragmatically intertwined. They are responses to the corporate social responsibility with which an organization is obliged to act. Environmental assessment is the response to the contextual framework in which an organization works. Stakeholder management refers to the different actors who are in interaction with a company. Issues management describes the detection and satiation of interests which the society has in relation to the firm.

The outcomes of corporate behaviour are the results of actions from social re-
responses. They can take the form of social impacts, social programs or social policies. Social outcomes are the only actual observable part of the CSP model. Social impacts are results of the process of responding to social responsibilities which are directly noticeable by society. In the corresponding process programs and policies can also be developed to achieve social impacts. Through these social programs and policies social responsibility and its outcomes can be managed and institutionalized in a company.

On the basis of Wood's (Wood, 1991b) CSP model, Swanson (1995) designed a reoriented model. She sees the necessity to widen corporate social responsibility principles because, in her view, Wood had assumed that they have a negative impact on the economic performance of a company. Swanson organizes her model into four broad research topics: corporate social responsibility macro-principles, corporate social responsibility micro-principles, corporate culture, and social impacts. These research areas interact with each other in a direct or indirect way.

Corporate social responsibility macro-principles occur on an institutional or organizational level. Based on these principles, companies have responsibilities to economize, act in an ecological way and provide positive and negative duties to society. Micro-principles of corporate social responsibility relate to executives who should economize, ecologize and also provide positive and negative duties.

Corporate culture includes a corporate social responsiveness component which addresses the topics of economizing, ecologizing, power seeking and refers to interactions of companies with their environment (Swanson, 1999: p. 508). Corporate social responsiveness can be influenced by managerial and employee decision making as well as social programs and policies implemented by executives to encounter corporate social responsibility. She defines social impacts as real increases or decreases of economizing, ecologizing or power seeking (Swanson, 1995: pp. 56-60).

Corporate social responsibility is also defined by McWilliams and Siegel (2001). They build a supply and demand model for corporate social responsibility which they see as "actions that appear to further some social good, beyond the interests of the firm and that which is required by law" (McWilliams and Siegel, 2001: p. 117). This means that a firm has to voluntarily act in a good way even if the company achieves no profit from this before it can be called social responsibility. Similarly, Siegel and Vitaliano (2007: p. 774) state that "corporate social responsibility occurs when firms engage in activity that appears to advance a social agenda beyond that which is required by law". This can be assigned to the viewpoint that "actions which reduce the extent of externalized costs or avoid distributional conflicts" (Heal, 2005: p. 393) are part of social responsibility as the company does not necessarily have to bear these costs, but can do so voluntarily.

The history and field of corporate citizenship is illustrated by Waddock (2004).
In her article she also gives definitions of corporate responsibility and corporate social performance (Waddock, 2004: p. 10). From her view corporate citizenship and corporate social responsibility are used interchangeably. Corporate citizenship is a subset of corporate responsibility and deals with voluntary relationships with societal and community stakeholders. It is the responsibility to these stakeholders which is manifested in the company’s strategy and operating practices. Corporate social performance is interpreted in a similar way as that put forward by Wood (1991b) and Swanson (1995) as a framework where principles of corporate social responsibility at different levels, processes of corporate social responsiveness and outcomes of these processes can be assessed by integrating them to a single model.

To sum up, Table 2.3 shows that CSP is defined separately only by Ullmann (1985: p. 543), but more often it is a framework including at least corporate social responsibility and corporate social responsiveness and sometimes social issues or outcomes. Corporate social responsibility in turn is also defined separately or as a part of CSP.

Table 2.3: Corporate social performance as framework or not

<table>
<thead>
<tr>
<th>Framework</th>
<th>Corporate Social Responsibility</th>
<th>Corporate Social Responsiveness</th>
<th>Social Issues</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carroll (1979)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Sethi (1979)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Ullmann (1985)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wartick/Cochran (1985)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Wood (1991)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Swanson (1995)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Waddock (2004)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

Table 2.4 shows which components are included in the corporate social responsibility definition. Consequently, half of the authors of the definitions connect this term with a reduction of externalities. The remainder states that corporate social responsibility is voluntary and not codified by law, but is expected by society. However, it is also regarded as compliance with legal or economic obligations.

Corporate social responsiveness is always part of a CSP framework in the analysed definitions. Table 2.5 shows three of the parts which are mentioned in literature. Whereas in some definitions corporate social responsibility already includes an action component most definitions connect actions with corporate social responsiveness. Furthermore it is described as the degree of reaction to the company’s social responsibility or internal structures which help the company to react to social changes in order to comply with their social responsibilities.

Social issues management is mentioned by Carroll (1979), Wartick and Cochran
2 Escaping the fog: How to define Corporate Social Performance

Table 2.4: Definitions of corporate social responsibility

<table>
<thead>
<tr>
<th>Obligations to society</th>
<th>Expectation by society</th>
<th>Not expected by society, but good for society</th>
<th>Reduce externalizations</th>
<th>Not codified by law, voluntary</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carroll (1979)</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Sethi (1979)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Wartick/Cochran (1985)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Wood (1991a,b)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Swanson (1995)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>McWilliams/Siegel (2001)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Waddock (2004)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Heun (2005)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Siegel/Vitaliano (2007)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

Table 2.5: Definitions of corporate social responsiveness

<table>
<thead>
<tr>
<th>Kind and degree of reaction on social responsibility and social issues (doing nothing to proactive)</th>
<th>Action counterpart to social responsibility</th>
<th>Internal structures to anticipate social changes, eliminate side effects of corporate actions prior to them</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carroll (1979)</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Sethi (1979)</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Wartick/Cochran (1985)</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Wood (1991a,b)</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Swanson (1995)</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Waddock (2004)</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

(1985), Wood (1991b), Swanson (1995) and includes policies and processes intended to detect and respond to societal interests. As such, issues management can help to identify social responsibilities and respond to them in an appropriate way. Outcomes are the results of such responses. Outcomes are mentioned by Wood (1991b), Swanson (1995) and Waddock (2004) as a part of CSP.

CSP is not defined in entirely different ways, rather some definitions include components which other definitions do not. The concept of CSP as a framework also explains the fact that social responsibility and social responsiveness as components of this framework are sometimes used interchangeably with CSP. For this reason, there is diversity at the first level of components included in CSP definitions. These components, especially social responsibility and responsiveness in turn are defined slightly differently on a second level. This can lead to some difficulties in comparison and interpretation of the results of studies using different definitions. In the next step the definitions used in the found papers are tested as to whether or not they can be the basis for choosing appropriate measures for CSP or if they are merely written in paper without an explicit connection being made.

42
2.5 Face validity

2.5.1 Measures of CSP

Table 2.6 presents sources used for data that measures CSP. Some articles use data from more than one source. Most data is derived from questionnaires, where the items differ and often have no common basis. Other measures are extracted from annual or sustainability reports which include data showing social aspects of companies. Another source are social funds or stocks which are identified by defining including or excluding criteria for socially acceptable firms. A minority of the data is taken from the Toxic Release Inventory (TRI) of the U.S. Environmental Protection Agency - a database which details toxic chemical releases and waste management activities of companies - and the Council on Economic Priorities (CEP) which disseminates information on the social policies of companies. Other sources such as a list of the top 100 defence contracting organizations or data from an Office of Water Services are also used. There are two measures which are presented in this section in more detail as they are very often used in different studies: ratings from KLD and Fortune reputation surveys (also known as World’s most admired company survey).

<table>
<thead>
<tr>
<th>Source of measure of CSP</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>questionnaire</td>
<td>9</td>
</tr>
<tr>
<td>KLD</td>
<td>7</td>
</tr>
<tr>
<td>annual report</td>
<td>6</td>
</tr>
<tr>
<td>social funds or stocks</td>
<td>6</td>
</tr>
<tr>
<td>Fortune reputation survey</td>
<td>4</td>
</tr>
<tr>
<td>CEP</td>
<td>2</td>
</tr>
<tr>
<td>sustainability report</td>
<td>1</td>
</tr>
<tr>
<td>TRI</td>
<td>1</td>
</tr>
<tr>
<td>other</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44</strong></td>
</tr>
</tbody>
</table>

The financial service company KLD (in the meantime acquired by Morgan Stanley Capital International Inc., MSCI) provided data through a proprietary process in which data is collected from the company, research partners, media, public documents, governmental, and non-governmental organizations. Companies are rated on social, environmental, and governance criteria and on controversial business involvement criteria. The latter labels a company as per se one which is "bad" because it is engaged with - abortion, adult entertainment, alcohol, contraceptives, firearms, gambling, the military, nuclear power, or tobacco. The social, environmental and governance criteria are divided into "strengths" and "concerns". Themes for the environmental criteria are climate change, products and services, operations and management and other strengths and concerns. The social criteria include strength and concerns for community, diversity, employee relations, human rights and prod-
ucts. Governance criteria are rated on reporting, structure and other strengths and concerns.

KLD ratings are based on qualitative judgements and there is no explanation as to why these criteria and not others are chosen for the rating (Wood and Jones, 1995: p. 239). Another critical point is that KLD uses a proprietary assessment process so that the results are not reproducible with publicly available sources (Scholtens, 2007: p. 1097). Entine (2003: p. 355) also states that the fact that there are no good alternatives to the KLD data, but that does not make this data more credible for using it to measure CSP.

The fortune ranking comes from the Fortune magazine which identifies the most admired companies each year. Until 2008 the Fortune 1000 (largest U.S. companies by revenue) and the top foreign companies operating in the U.S. were chosen. Since 2009 non-U.S. companies in Fortune's Global 500 database with high revenues are also included. The ranking is based on a survey of executives, directors, and analysts. They rate other companies in their own industry on nine criteria: financial soundness, global competitiveness, innovation, long-term investment, people management, product/services quality, management quality, social responsibility, and use of corporate assets. These criteria have changed slightly over time, but only in terms of the number or names of the criteria, e.g. there were only eight criteria, and criteria in previous years were labelled such as employee talent, ability to attract and retain talented people, and responsibility to the community and environment.

Bearing in mind that the ranking is based only on one figure per criterion it is more akin to a reputation measure than a measure for CSP (Wartick, 1988: p. 17). The likely knowledgability of the raters does not change this fact. Furthermore, non-U.S. firms are included in 2009 for the first time. Another critical point is the pre-selection process where only companies with a nominal high revenue are chosen. In any case, this financial halo effect can be removed in research (Brown and Perry, 1994, 1995), however it excludes smaller companies with smaller total revenues, which nevertheless can have a superior revenue per capita. In addition, each respondent to the survey has its own conditions for rating other companies with regard to the given criteria. Nevertheless, this is an issue in every survey and can only be solved by subdividing an item into sub-items.

As Fortune data measures reputation rather than CSP it is not an appropriate measure for CSP. Furthermore, it does not involve distinguished stakeholders groups in the rating process. Its reliability is also questionable (Wartick, 2002: p. 383). Although KLD data is based on qualitative judgement the rating process includes more objective data and is comparable, but with the rating process being hidden from the user. There is a need for other means which measure CSP in a more appropriate and reproducible way. However, the development of such measures
could prove difficult when one considers the popularity of Fortune and KLD data (Neville et al., 2005; p. 1194).

2.5.2 Face validity of CSP measures

The face validity of CSP measures is examined by comparing the definition of a CSP construct and the CSP measures used in all studies on the CSP-CFP relationship with CSP definitions. The process of examining face validity is based upon two judgements per construct-variable pair. The first step is to investigate the often defined multidimensionality or aspects that should be included with respect to the definition. Subsequently, whether or not the measures really measure what is stated in the definition of the construct is analysed. Table 2.7 shows which of the 40 studies with an existing definition have appropriate measures. Altogether there are 28 studies (70 %) which cover the definitions with respect to face validity. 12 studies (30 %) are not appropriate for measuring what should be measured. The following are some examples of measures which do not match with the definitions given in the studies. The judgement of face validity is binary and is judged as "yes" if a measure is appropriate with regard to the definition.

Table 2.7: Appropriateness of measures in CSP-CFP studies (in alphabetical order)

<table>
<thead>
<tr>
<th>Article</th>
<th>Definition by</th>
<th>Source of CSP measure</th>
<th>Appropriate measure</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbott and Mason (1970)</td>
<td>self-defined</td>
<td>annual report</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Bell (1995)</td>
<td>Carroll (1979,1991,2000)</td>
<td>Ernst and Ernst social disclosure survey (Ernst and Ernst 1973); survey conducted by Business and Society review, ranking firms' social performance (<em>industry rates itself</em>, 1972)</td>
<td>no</td>
<td>more a reputation survey</td>
</tr>
<tr>
<td>Bennis and Karpik (1989)</td>
<td>Carroll (1979,1991,2000)</td>
<td>list of the top 100 defense contracting organizations, in terms of contract dollars awarded</td>
<td>no</td>
<td>only measured if a company is an initiative signer or not</td>
</tr>
<tr>
<td>Berenson et al. (2006)</td>
<td>self-defined</td>
<td>Ethical Investment Research Service (EIRIS)</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Boddewyn and Shelly (1970)</td>
<td>self-defined</td>
<td>questionnaire, annual reports, pamphlets, speeches, articles by the companies, personal letters describing social action efforts</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Article</td>
<td>Definition by</td>
<td>Source of CSP measure</td>
<td>Appropriate measure</td>
<td>Cause</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---------------</td>
<td>------------------------</td>
<td>---------------------</td>
<td>-----------------------------------------------------------</td>
</tr>
<tr>
<td>Graves and Waddock (1999)</td>
<td>self-defined</td>
<td>KLD</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Graves and Waddock (2000)</td>
<td>self-defined</td>
<td>KLD</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Hamilton et al., (1993)</td>
<td>self-defined</td>
<td>equity mutual funds</td>
<td>yes</td>
<td>only social responsible mutual funds</td>
</tr>
<tr>
<td>Hill et al., (2007)</td>
<td>self-defined</td>
<td>list of socially</td>
<td>no</td>
<td>only social responsible mutual funds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>responsible mutual</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>funds (SRMF) and WWW</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>searches, information</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>by Blauk et al, 2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hillman and Keim (2001)</td>
<td>Carroll</td>
<td>KLD</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Warrick/Gochan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1985) Wood</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LDShagri and Gant (1989)</td>
<td>self-defined</td>
<td>Arthur D. Little, Inc.,</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>the Cambridge,</td>
<td></td>
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<td></td>
<td></td>
<td>Massachusetts consulting</td>
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<td></td>
<td></td>
<td>firm, monitors</td>
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<td></td>
<td></td>
<td>compliance with the</td>
<td></td>
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<td></td>
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<td>principles. [The Wall</td>
<td></td>
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<td></td>
<td></td>
<td>Street Journal,</td>
<td></td>
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<td></td>
<td></td>
<td>Wednesday, Dec. 10,</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>1986, p. 371]</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Priorities (CEP),</td>
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<td></td>
<td></td>
<td>COMPUSTAT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luo and Blast</td>
<td>self-defined</td>
<td>Fortune</td>
<td>no</td>
<td>overall regulation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mahoney and Roberts (2007)</td>
<td>Carroll</td>
<td>Canadian Social</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Investment Database</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>(CSID) by Michael</td>
<td></td>
<td></td>
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<td></td>
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<td>Justel</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>Research Association</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>(MJRA) similar to KLD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mahoney et al., (2008)</td>
<td>Carroll</td>
<td>KLD</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Mille and Gardner (1984)</td>
<td>self-defined</td>
<td>annual reports</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Monae et al., (2007)</td>
<td>Wood</td>
<td>Sustainability Reports</td>
<td>no</td>
<td>only quantity of information, no measure of principles</td>
</tr>
<tr>
<td></td>
<td>(190 la, la)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Siegel</td>
<td>Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ogden and Watson (1999)</td>
<td>self-defined</td>
<td></td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Perrini and Minnella (2008)</td>
<td>self-defined</td>
<td>Integrated annual</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>reports, interviews</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with all frontline</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>managers, the owner,</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>the chairman, the</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>investments manager,</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>field observations,</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>corporate histories and</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>other archival material</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roberts (1992)</td>
<td>self-defined</td>
<td>Council on Economic</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Priorities (CEP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scholz (2007)</td>
<td>self-defined</td>
<td>annual reports</td>
<td>no</td>
<td>internalization of non-market costs not regarded in study</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seifert et al., (2003)</td>
<td>Carroll</td>
<td>Foundation Center in</td>
<td>no</td>
<td>only cash donations (philanthropy)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Washington, D.C.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simons (1994)</td>
<td>Wood</td>
<td>Fortune</td>
<td>no</td>
<td>only reputation</td>
</tr>
<tr>
<td>Simpson and Riches (2002)</td>
<td>Carroll</td>
<td>Community Reinvestment Act of 1977- regulatory authorities are</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>required to examine</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>banks to develop a</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>rating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spicer (1978)</td>
<td>self-defined</td>
<td>review of Standard and</td>
<td>no</td>
<td>no racial and sexual discrimination or consumer policies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poor survey, Council</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>on Economic Priorities</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>(CEP)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 2.7: Appropriateness of measures in CSP-CFP studies (in alphabetical order)**
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<table>
<thead>
<tr>
<th>Article</th>
<th>Definition by</th>
<th>Source of CSP measure</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Starwick and Starwick (2008b)</td>
<td>Wood (190 la, 3b)</td>
<td>Fortune</td>
<td>only reputation</td>
<td></td>
</tr>
<tr>
<td>Starwick and Ginter (1977)</td>
<td>self-defined</td>
<td>Evaluation by Milton Moskovitz Student survey (Management Attitude factors), Top Management survey</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Sorensen and Tribo (2008)</td>
<td>Worklock (2004)</td>
<td>Sustainable Investment Research International Company, an international network of social research organizations that scrutinize firms with respect to their practices toward employees, communities, suppliers, customers, the environment, and shareholders. These data include and expand upon those of Kinder, Lydenberg, Domini and Company (KLD)</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Turban and Greening (1997)</td>
<td>self-defined</td>
<td>KLD</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Van der Laan et al. (2008)</td>
<td>Wood (190 la, 3b)</td>
<td>KLD</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Worklock and Graves (1997)</td>
<td>self-defined</td>
<td>KLD</td>
<td>yes</td>
<td></td>
</tr>
</tbody>
</table>

The study by Boyle et al. (1997) measures corporate social responsibility with a dummy variable which shows whether a company is a signer of a defence contracting initiative or not. However, corporate social responsibility was defined in the study as the expectations of society which are above codified law. Signing an initiative is more an action than a responsibility and it is not clear if this is an expectation of the society. As such, this step is more like a response if it is something demanded by society, but even then there could be variant demands which are not measured here. Another study by Spicer (1978) only measures pollution, but also defines racial and sexual discrimination and consumer policies as part of CSP.

Seifert et al. (2003) use cash donations as a proxy for philanthropy. They intend to measure corporate social responsibility, which comes from the definition used from economic, legal, ethical and discretionary responsibilities. Again, cash donations are more a response than a responsibility and they only fall into the area of ethical or discretionary responsibilities, while the definition also demands economic and legal responsibilities. Brammer and Millington (2008: p. 1326) define CSP as a "multidimensional construct that encompasses a large and varied range of corporate behaviour in relation to its resources, processes, and outputs". However, in their study they only use the one-dimensional measure of average charitable donations. Although these donations may be made in different areas, they are not differentiated in the article. Furthermore, there is no relationship with this behaviour and its resources, processes or outputs.

Measures of a company's reputation very often do not match with the given definitions. Consequently, not all of the measures coming out of the Fortune survey are inappropriate in measuring CSP, as argued above. For example, Brown and
Perry (1995) take the definition of Wood (1991b: p. 693), but then try to measure it only with the Fortune’s criterion "responsibility to the community and environment" which is merely a measure of reputation for this criterion. Additionally, social responses, policies, and programs or outcomes as stated in the definition are not operationalized. One definition which sees corporate social responsibility as "a company’s activities and status related to its perceived societal or stakeholder obligations" (Luo and Bhattacharya, 2006: p. 2) could perhaps be measured with the help of the Fortune survey, but only if reputation is interpreted as satisfaction with the companies actions in respect to the stakeholders obligations. However, this is indicated as not being face valid because there is no assessment of the firm’s activities and it is not clear if the Fortune survey represents the satisfaction of stakeholder obligations for the particular companies.

28 out of 40 (70%) constructs have appropriate measures with respect to face validity. As such, they theoretically measure what is intended. Nevertheless, it should not be forgotten that only 40 out of 110 studies (36.4%) have a more or less clear definition of the underlying CSP construct. Combining both, 28 studies out of 110 (25.5%) studies have definitions for CSP constructs and measures that reflect these definitions appropriate.

Table 2.8: Rating of examined journals

<table>
<thead>
<tr>
<th>Journal quality</th>
<th>ABS2009-Rating</th>
<th>definition</th>
<th>face validity</th>
<th>Percentage for existing definitions</th>
<th>Percentage for face validity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>no</td>
<td>yes</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>10</td>
<td>20.00%</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
<td>1</td>
<td>3</td>
<td>15</td>
<td>26.67%</td>
</tr>
<tr>
<td>3</td>
<td>15</td>
<td>3</td>
<td>11</td>
<td>26</td>
<td>47.22%</td>
</tr>
<tr>
<td>4</td>
<td>11</td>
<td>1</td>
<td>5</td>
<td>17</td>
<td>35.29%</td>
</tr>
<tr>
<td>no rating</td>
<td>11</td>
<td>1</td>
<td>5</td>
<td>17</td>
<td>35.29%</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>12</td>
<td>28</td>
<td>104</td>
<td></td>
</tr>
</tbody>
</table>

It might be argue that the quality of a journal will dictate whether a definition is required in passing the review process. In Table 2.8 the analysed studies are subdivided into studies which have a definition and those which do not. The rating comes from the Association of Business School (ABS) and classifies journals into four categories. This is an assessment by leading UK researchers, including a citation impact factor and an evaluation of quality standards, track records, contents and processes of each journal included. Journals with a quality rating of four publish the most original and best executed papers whereas a quality rating of one indicates a modest journal with research of a recognized standard. The table shows that in journals with a relative high rating of three only every second article (47%) has a definition of the construct used and in journals with a rating of one or two only every
fourth or fifth article has one. Surprisingly journals with a rating of four seem to have a somewhat lower rate than journals with a rating of three. It should be stated that the rating of journals is not equal over time and differs between the rating institutions. However, this table shows that adequate definitions and face validity of CSP measures are more usual in the higher ranked journals, whereas the number in journals which were not in the rating is also comparatively high. With respect to adequate definitions and face valid measures this also does not hinder low-prestige journals from publishing good articles (Starbuck, 2005: p. 196). These conclusions are robust with regard to other ratings listed in Harzing (2011).

2.6 Proposal for assessing CSP in future research

Based on the above analysis of definitions and face validity of CSP the following conclusions for improving future research can be derived. Face validity could be achieved in two ways. First, by precisely and strictly defining a construct as done by Abbott and Monsen (1979). They write about social responsibility and define their research construct as social activities. In examining social activities in the areas "environment", "equal opportunity", "personnel", "community involvement", and "products", all of which are found in annual reports, the measures match with their construct. Second, some constructs are defined broadly, but too vaguely which makes them easier to be complied with. For example, Brammer et al. (2006) define CSP merely as a multi-dimensional construct and measure more than one dimension (employment, environment and community) which makes it face valid per definition. However, a definition which only demands a multi-dimensional measure without a further specification with regard to the content of these CSP dimensions is not sufficiently defined.

This is why a comprehensive measure of CSP with respect to the stakeholders should be developed and in cases where this is not achieved it should not be called CSP (Carroll, 2000: p. 474). Nevertheless, such a multi-dimensional measure can not be a universal measure for all situations, because this oversimplifies a complex construct which is in fact situation-dependent (Griffin, 2000: p. 483). Hence, the CSP definition should to some extent be flexible and should allow for adaptation to particular circumstances. E.g., as for some companies customers are the most important stakeholders and for others employees the companies social performance should depend more on the stakeholder group with the most important issues.

Different viewpoints could potentially negatively influence the progress of a research field and the "way in which relevant variables should be measured and modelled" (Pfeffer, 1993: p. 616) is one of these and "decades of research would almost certainly have yielded more understanding of it if CSP researchers had a greater
tendency to use similar definitions and operationalizations" (Hull and Rothenberg, 2008: p. 781). Third, common measures are needed in this field of research to improve progress. Beurden and Gößling (2008) classify CSP into three categories, but they only look at the CSP measures and not at definitions which should be a part of the underlying theory. They also argue that there is "no standard definition of CSP that is properly measurable" (Beurden and Gößling, 2008: p. 421). An integrative approach developed from existing definitions which offers a starting point for potential harmonisation is shown in Figure 2.3.

Figure 2.3: Model for assessing a CSP definition

![Model for assessing a CSP definition](image)

This model is not a new definition of corporate social responsibility, corporate social responsiveness or CSP, but does show existing ideas arranged into an understandable framework and attempts to arrange diverse definitions in a mutually exclusive way. This should help empirical researchers to at least achieve face validity. It shows that there are four steps in assessing CSP which have to be done in a certain order. In a first step, the stakeholders have to be identified and as a second step the responsibilities to them must be pinpointed. In the third step, social responses by the firm can be examined. If these three steps are executed the CSP can be analysed in the fourth step. These four steps are described in more detail below, but they have to made in this sequence as they build upon each other. A similar model just for a socially responsible management control system is described by Durden (2008: p. 687). This model is similar to the first three steps, but more detailed in regard to the process of finding the right actions with regard to the company’s responsibilities. However, step four is missing.

The starting point in assessing CSP are the firm’s stakeholders which have different concerns - for instance, the environment, human resources or product safety. These issues can be understood as the corporate social responsibility if the word "social" is interpreted as "stakeholders". In this way, "the stakeholder nomenclature
puts 'names and faces' on the societal members who are most urgent to business, and to whom it must be responsive" (Carroll, 1991: p. 43). Clarkson (1995: p. 104) also stated that the "organizational level is identified as that of the corporation and its stakeholder groups, the level appropriate for analysis and evaluation of CSP". However, he argued that the institutional level, i.e. the interests of society as an entity, is appropriate for analysing corporate social responsibility and corporate social responsiveness, because these both arise from societal issues on the whole. In the model presented in this paper society is defined as equal to stakeholders and thus can also be analysed on an organisational level.

Our model does not itemize CSP over the Triple P bottom line concept with profit (economic aspect), people (social aspect) and planet (environmental aspect), but refers foremost to the stakeholder’s interests, which could feasibly be included as a second step as including the three Triple P aspects (Fauzi and Rahman, 2008: p. 132). Stakeholders are important because they may influence a company’s performance in an implicit or explicit way (Atkinson et al., 1997: p. 27). It can be assumed that stakeholders influence the performance in a positive way if their stakes are well satisfied. Hence, a satisfied stakeholder or more commonly good social performance should lead to good financial performance. This is why many scholars believe that stakeholder theory should be the basis for exploring the field of CSP (Neville et al., 2005: p. 1186).

Stakeholder theory has been used in very different ways with many different methodologies and so these yield many differing and often poorly interpreted results, while having well-defined stakeholders for the CSP-CFP interaction can be more easily interpreted (Donaldson and Preston, 1995: p. 70). It also allows a systematic consideration of specific aspects such as the time or industry in which the stakeholders or firms are situated (Jamali and Mirshak, 2007: p. 247).

Stakeholders have their stakes in companies and construct responsibilities for companies and thus they define company norms (Wood and Jones, 1995: p. 231). If the stakeholders did not exist, then a company would have no responsibilities to them. Taking specific stakeholders as the basis for justifying corporate social responsibilities could even prevent the "everybody thinks so" argument used by many researchers to justify their use of general, unspecified ranking data (Wood and Jones, 1995: p. 238). Certainly, there were instances in which not "everybody thought so", but still other illegitimate arguments were put forward. An example is the financial attributes of the Fortune rating correlating closely with the financial performance of a company, which is seen as evidence for the validity of the other attributes of the Fortune rating (McGuire et al., 1988: p. 860). Because of the inclusion of stakeholders in the process of finding appropriate measures it can be argued that the stakeholder definition and measurement is at least face valid. Subtle distinctions
between stakeholder groups can be made when particular stakeholders are defined rather than only focusing on two groups of primary and secondary stakeholders (Van der Laan et al., 2008: p. 300).

The response of a company to its social responsibilities can be interpreted as its corporate social responsiveness. This can be in the form of a confrontation or collaboration - for example the implementation of an entrenchment strategy against powerful stakeholders (Surroca and Tríbo, 2008: p. 752). If the responses meet the responsibilities to the stakeholders then the stakeholders have more trust in the company and are more satisfied with it (Pivato et al., 2008: p. 3). The responses to stakeholder issues allow an examination of different types of social actions by companies, as there is not merely one type of social responsibility. Examining the most important issues could also be another step (Halme and Laurila, 2009: p. 336). One possibility in assessing social actions with KLD data is shown in a study by Mattingly and Berman (2006: p. 39) where they identify social actions labelled as positive or negative.

Van der Laan et al. (2008: p. 300) have similar considerations when defining corporate social responsiveness. While corporate social responsibility "refers to the business principles that guide managerial decision making", it is mentioned above that social responsibility comes from stakeholder's issues and thus should considered of managers. Corporate social responsiveness is seen as "the processes through which corporations respond, or not do so, to social demands" (Van der Laan et al., 2008: p. 300) which is also in line with the given explanation, as the social responses and actions in these processes are included in this view.

Corporate social performance has been described as a concept consisting of three categories: the extent of social disclosure, corporate actions and corporate reputation ratings (Beurden and Gössling, 2008: p. 411). However, these are measures rather than concepts and overlap with the area of corporate social responsiveness. A more adequate definition describes CSP as "a business organization's configuration of principles of social responsibility, processes of social responsiveness, and policies, programs, and observable outcomes as they relate to the firm's societal relationships" (Wood, 1991b: p. 693). This configuration can be seen as a process of matching the above components in order to make the concept of corporate social "performance" more concrete. In this way CSP is defined in the presented model. If the responses do not match with the responsibilities of a company it can not be said that the company has a high corporate social performance.

In regards to the definitions of CSP in the papers analysed measures derived from the Fortune survey cannot be regarded as appropriate measures. Nevertheless, these studies could be useful if there was a CSP definition in the particular studies which acknowledges the correspondence of corporate social responsibility and corporate
social responsiveness as corporate social performance. However, to do so, social responsibility and social responsiveness have to be analysed, as they are the basis in judging the correspondence. A potential proxy to measure this correspondence could be the company’s reputation in the analysed areas. This should not however be the only measure as the reputation depends on many more aspects such as advertising or publicity.

Taking stakeholders and their issues as a starting point also helps to prevent a stakeholder mismatch where stakeholders are associated with inappropriate measures (Wood and Jones, 1995: p. 258). E.g. if sponsoring of children events or campaigns against alcohol are seen as measures of a company’s social responsiveness, but the company’s stakeholders are not interested in such events, these measures are inappropriate measures for social responsiveness. Hence, without a stakeholder there can be no social responsibility and without a social responsibility there can be no social responsiveness. Without social responsibility or social responsiveness, no fit between social responsibility and social responsiveness can exist and no corporate social performance can be measured.

Furthermore, important stakeholders and their issues can differ depending on the industry of a company and this must be assessed (Neville et al., 2005: p. 1194). One possible way to identify important stakeholders is sorting them with respect to the three attributes of power, legitimacy and urgency (Mitchell et al., 1997: p. 872). However, even in applying this concept, different industries, company sizes, countries or different time periods could influence the results (Herremans et al., 1993: p. 599). For example stakeholders could have different issues meaning the companies would have different responsibilities at different points in time (Beurden and Gössling, 2008: p. 419). This is why such aspects should be clearly stated in an empirical study. This would also aid in the investigation of the context under which CSP influences CFP (Beurden and Gössling, 2008: p. 420).

With such a precise definition of CSP it is possible to find links between the appropriateness of social responsiveness (actions by the company) with regarding to social responsibilities. If CSP is high it means that a company acts in a strategic way as it considers its stakeholders who may have the capacity to enhance the firm’s profits. Nevertheless, there is a need for measures in regards to these examined responsibilities, and the responses and the degree of stakeholder satisfaction due to them (Husted and De Jesus Salazar, 2006: p. 88). For example, Barnett (2007) develops the construct of stakeholder influence capacity which could help to identify companies with low or high stakeholder influence. This in turn influences their ability to recognise social responsibility and thus their responses to them.

In investigating these constructs it should be taken into consideration that there could be a trade-off between different stakeholders all of which are important for the
company (Mahon, 2002: p. 437). One example is consumers wishing for powerful and fast cars which entail increased emissions compared to less powerful cars, while environmental activists wish for cars with less emissions.

Hence, another proposal would be to specify the construct as detailed as possible in already published studies, but with the support of stakeholder orientation. Thus, only the stakeholders, their issues and the actions/outcomes of social responses - rather than the measures should be changed in these studies. This could help in specifying the construct as mutually exclusively even if one stakeholder belongs to different stakeholder groups as it refers to stakeholder specific interests. For example, if an employee is also a customer of a company, he may want to have an ergonomic workplace, and also products which are safe to use. Therefore, a table with rows as stakeholders and columns named corporate social responsibilities, corporate social responsiveness and corporate social performance would aid in recording the important aspects of a study. In this table the responsibilities towards stakeholders and the responses of the firm could be compared to get an idea of the social performance of companies. Further meta-analyses to try to implement this procedure for existing papers are a possibility.

2.7 Summary

This paper provides a comprehensive list of 114 studies evaluating the relationship between CSP and CFP between 1970 - 2009. Inspired by the diverse results, definitions and measures in these papers, definitions of CSP and related constructs are analysed in a focused literature review. The measures are assessed for face validity with regard to their constructs. Additionally, overlaps between these definitions are presented, and it can be concluded that corporate responsibility and corporate responsiveness are mostly constituents of the concept of CSP. From these definitions a proposal for assessing CSP in further research is given towards a more consistent understanding of this construct.

A first contribution is establishing the fact that more than 60% of the papers do not have a definition for their CSP constructs. For the remaining papers the construct definitions were compared with their measures and it was analysed if they correspond. The purpose of this paper is not to criticise the papers analysed, but to show an important point researchers should look at in the future. A second contribution is a listing of definitions used for CSP and a breakdown of their parts.

A third contribution is showing that in some papers the defined construct does not match its measures. At least these papers include a definition and so it is clear what these studies intend to elaborate. However, a well-defined construct is the basis for validity. For this reason future papers should concretely define social performance,
social responsibility or social responsiveness and the measures which convey this
definition in an appropriate way.

A fourth contribution is, clarifying some potentially misleading issues in the un-
derstanding and use of definitions and appropriate measures for CSP-CFP studies. Thus, a proposal for a model which aids in distinguishing corporate social re-
sponsibility, corporate social responsiveness and corporate social performance is
given. This model should aid in further research by capturing the measures with respect to
their dimensions and stakeholders. Even if one can not find all relevant measures for
an all-inclusive CSP construct, a differentiated analysis could be done for different
stakeholders such as the often-seen additional consideration of environmental issues.
The model presented claims that definitions should be mutually exclusive and can
be used to assign measures in existing articles to certain constructs. As such, these
studies can be made face valid ex post by modifying the underlying definition of the
construct measured.

This proposal also contributes towards a clear distinction between corporate so-
cial responsibility, corporate social responsiveness and corporate social performance
and their relationships and aids in the examination of particular aspects of these
constructs. For example, three types (philanthropy, integration, innovation) of cor-
porate actions as used by Halme and Laurila (2009) (which belong to the corporate
social responsiveness in the presented model) can be plausibly analysed. This in
turn could be the basis for another study looking at the difference between acting
in a philanthropic versus an innovative way.

The model opens other more specific research questions for further research. Tak-
ing the example of different corporate social responses, there could be a weaker
influence of philanthropy actions on CFP than the influence of integrated or innova-
tive social actions. The latter two refer to the actual business of the company and
can thus improve energy efficiency or attract new well educated employees as side
effects of good environmental behaviour or improving employee health. This could
also lead to competitive advantages which help to increase the profitability of the
firm.

Beside the differentiation within individual constructs the relations between the
three constructs presented should also be researched. What are the responsibilities
of a company from the point of view of society? Does the company have the same
view of these responsibilities? Does it respond to these responsibilities or does it
only invest in actions which are widely desired socially, but not from this company
in particular? Does the company respond to all responsibilities or only to a few
of them and if so, which of them and why? Do these actions change the reality
of stakeholders as desired or are they merely a kind of marketing strategy without
actual effects? With research of this kind, some topics can be further investigated
with the potential for more insights. For example, is it profitable for a company to concentrate and react to all varieties of responsibility or only to particular, important ones and if so, which ones are important?
3 Disclose or not disclose:
Determinants of social reporting

Abstract

Building on prior literature, determinants of disclosing a social report are examined. As such, reports prepared with the help of the guidelines produced by the Global Reporting Initiative (GRI) are used in this paper. The sample consists of STOXX Europe 600, meaning it is possible to analyse country specific effects on a broad sample base of companies. An analysis reveals that size, media, country specific factors, industry, and sustainability performance have a significant influence on whether firms disclose social reports or not. As has been stated in previous literature risk, capital structure and financial performance seem to have a negligible influence on this kind of voluntary reporting. Consequently, while this study confirms some previous findings, it also rejects or undermines certain others and adds sustainability performance for the disclosure of GRI reports as an additional possible determinant. These results posit that companies disclose due to a feeling of responsibility or of complying with the expectations of stakeholders and shareholders for information rather than as a means to achieving the goal of reductions in capital costs.

3.1 Introduction

Determinants of voluntary reports are not clear yet. There are two reasons for this situation. First, most papers concentrate on the qualitative or quantitative aspects of the reported information itself. Only a small sample of papers, such as Baginski et al. (2002) and Brammer and Pavelin (2006) present research on whether a firm voluntary discloses or not. This paper, however, adds additional insights into this particular topic in examining the circumstances under which a firm releases a report based on GRI Guidelines. Second, several possible determinants, e.g. the legal system or the media visibility of a company are not included in most studies
examining voluntary disclosure, whereas in this respect the current study considers constructs of previous studies.

Social reporting is not a new phenomenon by any means. Nearly 40 years ago a paper by Bowman and Haire (1975: p. 49) had already identified headings such as Corporate Responsibility, Social Actions, Social Commitment, Corporate Citizenship and Beyond the Profit Motive in annual reports. Awareness of such topics was already evident as demonstrated by books such as "Social Responsibilities of the Businessman" by Bowen (1953) - now nearly 60 years old. Therefore, social issues have been a priority for many companies for more than half a century, even when there was no need to report on social aspects if the company did not want to. Companies report information on either a mandatory or voluntary basis. Mandatory reporting is represented by financial reports and other regulatory filings. Voluntary reporting includes management forecasts, press releases, internet sites, and different kinds of corporate reports (Healy and Palepu, 2001: p. 406). Such disclosure can be found in mandatory reports (e.g. annual reports with additional voluntary information) or in extra voluntary reports which also include social reports. Social reports contain information about a firm’s social performance (Jackson and Bundgard, 2002: p. 253). Synonymous with such reports are terms used both in academic and industrial contexts such as corporate citizenship reporting, sustainability reporting, or social and environmental reporting.

For social reports, different activities and social responsibilities of companies, belonging to areas such as human rights, consumers, employees, society or the environment are often disclosed. Those headings can be further subdivided - for instance, interests of employees, diversity management, safety of workplaces or educational opportunities. As a general rule, non-monetary facts disclosed in social reports are, at first glance, of less interest to shareholders who are more likely to take an interest in mandatory annual reports. Hence, it seems that all other topics which can be voluntarily reported in extra reports are of negligible interest to shareholders.

Nevertheless, social reporting, having become increasingly popular since the 1970s, experienced a temporary decline in the 1990s (Marx, 1992: p. 39). Since then, social reporting has again increased and today approximately 80% of the Global Fortune 250 companies provide a social report (KPMG, 2008: p. 16). On the other hand, 20% of companies belonging to the Global Fortune 250 - that is the largest companies in terms of sales - do not disclose a social report. One question which has been of consistent interest over years of evolution in social reporting is finding its determinants (Gray et al., 2001: p. 328). One motivation for such research is that it would be interesting for a reader of a social report, whether it is published because the company is performing rather good or bad in the field voluntary reported. Another point is that for international investors it could also be
of interest which reporting behaviour they can expect from a company. With this knowledge it should be easier to judge about the content of such reports.

Hackston and Milne (1996: p. 78) state that companies disclose social information without having an evident theoretical framework which explains the benefits and costs of social reporting. Craighead and Hartwick (1998: p. 257) argue that only the belief of managers that voluntary reporting equates with competitive advantages is a determinant in the preparation of social reports. As such, it can not be argued that companies disclose voluntary reports because they know that it leads to direct financial benefits. However, this assumption is nonetheless an expectation and no proven fact.

Actually, some of the reported activities of firms have a direct negative impact on the financial performance of a firm. A popular field of research in this direction is engaged in finding determinants of - and relationships with - charitable donations. For instance, one argument in favour of a company donating to local schools is ensuring a well educated workforce in the future (Peloza, 2006: p. 52). This could be a viable argument in small cities, and where a company is justified in assuming that those children may well work for them in the future. It is also argued that companies with higher profiles make charitable contributions because they are expected to do so and wish to avoid a reputation loss or wish to build a favourable reputation if they donate despite no informal obligation (Seifert et al., 2003: p. 196). The latter type of contribution may be motivated by perceived advantages to the company or to a manager who finds such actions personally gratifying or who contributes to a school his children attend. These examples show that there may be several possible reasons for making donations and reporting about it. The fact that there are different reasons also holds true for other social activities and their inclusion in voluntary reports. Thus, theories based on agency theory, transaction costs theory or political theory exist to explain possible determinants for social reporting from different perspectives.

Corporate social reporting as a separate report is relatively new, emerging only in the last 15 years (Bebbington, Larrinaga-González and Moneva-Abadía, 2008: p. 371). Separate reports are of a higher qualitative level in comparison to voluntary disclosure in annual reports because they dedicate specific and comprehensive attention to several topics. This also raises the costs of disclosing voluntary information in terms of searching, preparing and presenting the information. As such, this information is not a mere side note in reports for purposes such as investor relationship.

Europe, especially France, Germany, UK and Denmark has been at the vanguard of social accounting and thus Bebbington et al. (2000: p. 3) say that the stakeholder dialogue, and thus community reporting, is at a high level today. This means that
European companies are ripe for analysis, as social reporting is not totally new to them and it can be assumed that firms are not disclosing because it is a passing trend. This does not mean that firms in Europe are able to quantify costs and benefits of their social reporting, but there are at least implicit configurations with a historical precedent and which have evolved over time, and which determine the decision to disclose social reports.

Corporate social reporting is under-explored in respect of the reasons such reports are produced - and by whom they are produced (Bebbington, Larrinaga-González and Moneva-Abadía, 2008: p. 371). In addition, it is important to further consider the link between social performance and social reporting and to know in which social, political and economic context voluntary disclosure is made (Adams, 2008: p. 367).

There are some contributions to an enrichment of the topic of determinants of social reporting. Papers which examine determinants of voluntary disclosure are considered in order to deliver an overview of this research area. Furthermore, determinants of social reporting are analysed, while including both the well-known factors and an additional measure of social responsiveness. As such, the analysis of determinants is broad and extensive in this paper. In particular, the examination of different country-specific details and the measurement of social responsiveness are, to the best knowledge of the author, a new contribution to this research area.

The remainder of this paper is organised as follows. First, a short literature review of this research stream is given and important aspects which should be included in the analysis are identified. Then, theories explaining social reporting are introduced - to show that determinants of voluntary reports can be viewed from different perspectives. Subsequently, a research model which builds on well-established constructs and one added construct is introduced so as to identify determinants of social reporting. Finally, the results of this analysis are presented and interpreted.

3.2 Literature Review

Some recent studies already examine determinants of voluntary disclosure. The studies can be classified in two groups. The first group of studies examines the quality or quantity of disclosure such as (Roberts (1992), Gray et al. (1995), Hackston and Milne (1996), Francis et al. (2005) and Boesso and Kumar (2007), Ho and Taylor (2007) and Webb et al. (2008)). Others like Baginski et al. (2002) and Brammer and Pavelin (2006) examine determinants of the act of disclosure or non-disclosure of voluntary information. The current study belongs to the second category, but the other studies have similar underlying theories and thus determinants can also be derived from them. At the end of this section a table is presented containing the determinants of voluntary disclosure examined in the reviewed studies. The
following literature review in chronological order serves as the starting point of the current study.

Roberts (1992) identifies determinants of corporate social responsibility disclosure. His sample consists of 130 major companies from America. He used a measure of the Council on Economic Priorities to classify poor, good and excellent reports. Based on stakeholder theory he has chosen measures for stakeholder power and strategic positions towards social demands. He finds that these aspects have significant influence on the quality of social disclosures.

A somewhat different approach was chosen by Gray et al. (1995). They analyse companies in the UK over a time period of 13 years from 1979-1991. With this data they are able to link historical events with the amount of voluntarily reported information. In this way they demonstrate a change in voluntary reporting over time, dependant on the political, social and environmental situation of firms. In their conclusion out of these results they highlight the possible coexistence of legitimacy and stakeholder theory. They also conclude that such interpretations are to some extent speculative and that further research in this direction should be done (Gray et al., 1995: p. 67). The same data is used in a study by Gray et al. (2001) which comes to the conclusion that voluntary disclosure is related to size, profit and industry. They note that further research should specify industry in different ways and that other influencing factors should be used in order to better explain the variability of disclosure (Gray et al., 2001).

Hackston and Milne (1996) analyse 47 of the largest companies listed on the New Zealand Stock Exchange. They enumerate mentions of social topics found in annual reports and speculate on determinants of voluntary disclosure. They run a replication study of several studies and compare their results with those studies - mainly regarding US and UK companies. From that they conclude that companies in New Zealand do less voluntary reporting than companies in the US and UK. Furthermore, the size and industry concerned has a significant influence on voluntary disclosure, such that industry appears to moderate the size effect. This means that larger companies in high-profile industries which have increased visibility, risks and competition disclose more social and environmental information.

The effect of the legal environment on voluntary disclosure is analysed by Baginski et al. (2002). Their sample consists of firms in Canada and the US which are very similar. The main difference between these two countries is the legal environment and so they use the location of the companies as a proxy for this. The findings indicate that less litigious countries such as Canada provide more voluntary information and have longer time horizons than the US. Because the examined voluntary disclosure consists of management’s earnings forecasts, they also can differentiate between good and bad news as it relates to increases or decreases in earnings. They find that
US companies disclose more voluntary information when bad news manifests itself, whereas Canadian firms issue more information when good news becomes apparent.

In a study by Francis et al. (2005) manufacturing companies in 34 different countries outside the USA are examined with respect to their disclosure incentives. They find that companies in industries which depend more on external financing are more likely to disclose higher levels of voluntary information. These results are "irrespective of a country's legal or financial system that might limit the effectiveness of such disclosures" (Francis et al., 2005: p. 1159).

Determinants for environmental reports are examined by Brammer and Pavelin (2006). Their data sample consists of 447 companies in the UK. They argue that environmental reporting is negatively associated with environmental performance, because poor performing companies try to justify their actions and save their reputation via reporting. For this purpose they use fines imposed by law courts owing to environmental damage as a proxy for bad actions. The findings show that there is no significant relationship between environmental performance and the disclosing of an environmental report. This could be caused by a limitation of their study as they call for further research to use an improved measure of environmental performance. For instance, a measure other than a one-dimensional one such as fines - one which includes more aspects of environmental performance - could be used.

In an article by Quick and Knocinski (2006) the quality of information in reports prepared with help of the GRI guidelines is investigated. They analyse their completeness and comprehension with a scoring model. The sample consists of the 110 companies from the German stock index HDAX. The content of the researched reports covers the years from 2000 to 2003. It is shown that only a small amount of the possible content is covered by such reports and the reporting quality is low in their sample. To show what factors influence the reporting quality they do further analyses and conclude that a positive relationship between financial performance and the quality of social reports exists.

Boesso and Kumar (2007) examine voluntary disclosures of companies in Italy and the US. The sample consists of 36 companies from each country. Their study is completed using a content analysis. They build their analysis on the stakeholder theory and included a variety of different perspectives - namely, investors, employees, suppliers, society and environment, internal processes, and innovation and learning. They use key performance indicators related to these stakeholder groups in order to construct an index which measures the quality of the reports in terms of the quantity and nature of information. With their analysis they show that stakeholder orientation, relevance of intangibles, and market complexity affect the level and quality of voluntary disclosure.

Ho and Taylor (2007) calculate an index in a similar manner by counting disclosure
items for economic, social and environmental categories of voluntary disclosure. The sample consists of the largest 50 firms which are located in the USA and Japan. By choosing these countries they cover the largest worldwide economies, but it is also possible to investigate country-specific aspects which come from different cultures, regulatory systems or other institutional factors (Ho and Taylor, 2007: p. 144). Their findings indicate that companies disclose more voluntary information if they are large, in the manufacturing industry, and with lower profitability or liquidity.

A study by Webb et al. (2008) examines the influence of globalization on the disclosure of voluntary information. Their sample consists of 643 non-US firms from 30 countries in the year 2003. They use a voluntary disclosure index which is based on Francis et al. (2008). In addition, they argue that other studies only considered the legal environment or globalization, but not both at the same time. Using different measures for multinationality (e.g. ratios for foreign sales or foreign subsidiaries) they provide this missing link by including both aspects and find that there is a significant interaction between legal environment and globalization. In this way they deduce that no direct link between legal environment and voluntary disclosure exists, but that globalization affects voluntary disclosure more in countries with a weaker legal infrastructure. Hence, this effect depends on the home-country of a company.

The quality and determinants of voluntary reported environmental information is examined by Jahnke et al. (2009). For this purpose they examine annual reports of 80 companies from Germany included in either the DAX or MDAX, the two major stock indices in Germany. They show that companies operating in industries which are sensitive to environmental factors rather report about their environmental performance than other branches like banks or insurance services.

Jonas and Jones III (2010) find that the literature states two main causes for publishing social reports: avoiding political costs and satisfying stakeholders to create value. They examine lobbying expenditures and litigation propensity as political cost factors. These constructs are incorporated in the industry classification within other studies. Their sample consists of Fortune 500 companies from 2006 which also were in this index from 2001 to 2008. The results show that lobbying expenditures and litigation propensity are inversely related to publishing a social report.

To facilitate easier comparison, Table 3.1 includes generic terms for the variables used in these studies. Some variables differ slightly between the studies and are also used to measure different constructs. For example, a good portion of literature examining determinants of voluntary disclosure has found country-specific and industry-specific influencing factors. These can be ascribed to institutional factors such as the legal system, media exposure or industry.

Determinants researched in the presented previous studies and not used in the
Table 3.1: Possible determinants of voluntary disclosure

<table>
<thead>
<tr>
<th>Study by</th>
<th>Analysed determinants of voluntary disclosure</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roberts (1992)</td>
<td>age, industry, financial performance, risk, size, stakeholder power, strategic posture</td>
<td>USA</td>
</tr>
<tr>
<td>Gray et al. (1995),</td>
<td>financial performance, industry, size, time</td>
<td>UK</td>
</tr>
<tr>
<td>Gray et al. (2001)</td>
<td>financial performance, industry, size</td>
<td>New Zealand</td>
</tr>
<tr>
<td>Hackston and Milne (1996)</td>
<td>country, industry, media exposure, size</td>
<td>Canada, USA</td>
</tr>
<tr>
<td>Baginski et al. (2002)</td>
<td>capital structure, country, size, time</td>
<td>34 countries</td>
</tr>
<tr>
<td>Francis et al. (2005)</td>
<td>capital structure, environmental performance (measured with environmental fines), financial performance,</td>
<td>outside USA</td>
</tr>
<tr>
<td>Brammer and Pavlin (2006)</td>
<td>media exposure, ownership structure, size</td>
<td>UK</td>
</tr>
<tr>
<td>Quick and Knocinski (2006)</td>
<td>financial performance, size</td>
<td>Germany</td>
</tr>
<tr>
<td>Ho and Taylor (2007)</td>
<td>capital structure, country, financial performance, industry, size</td>
<td>USA, Japan</td>
</tr>
<tr>
<td>Boesso and Kumar (2007)</td>
<td>governance structure, industry, intangibles (market to book value), risk, size, stakeholder orientation</td>
<td>Italy, USA</td>
</tr>
<tr>
<td>Webb et al. (2008)</td>
<td>analyst following, capital intensity, capital structure, country, financial performance, globalization,</td>
<td>30 countries</td>
</tr>
<tr>
<td></td>
<td>information quality, size</td>
<td>outside USA</td>
</tr>
<tr>
<td>Jaluke et al. (2009)</td>
<td>financial performance, industry, ownership structure, size</td>
<td>Germany</td>
</tr>
<tr>
<td>Jonas and Jones III (2010)</td>
<td>financial performance, industry, R&amp;D intensity, size</td>
<td>USA</td>
</tr>
</tbody>
</table>

current study are either not applicable or are captured by other variables. The age of the company is not available for many firms. Information quality should not be a determinant of voluntary disclosure because it is a factor only after a report has been released and this paper first examines whether or not a firm issues a GRI report. Time effects cannot be considered in this study which focuses on the analysis of a single year. Other variables - such as stakeholder power, strategic posture, ownership structure, intangibles governance structure, stakeholder orientation, analyst following and capital intensity - can either assumed to have been included in the industry, country or size variables of this study, or are only used in one reviewed study for a particular purpose which is not relevant or applicable the current study. Globalization, as examined by Webb et al. (2008) is not included in this study because it cannot be sufficiently explained using the underlying theories with regard to the actual aspect of reporting. However, multinationality is included as one possible proxy for globalization a robustness check in section 3.5.3.
3.3 Theoretical Framework

Firm performance is the main information disclosed in social reports. However, it does not necessarily exist in the form of financial performance, but rather social and environmental performance. The concentration on the latter performance aspects should provide acceptance within several stakeholders and thus ensure long-term survival of the company by means of publicity and enhanced reputation.

Because of the variety of stakeholders and different possible performance aspects, studies researching influencing factors of voluntary disclosure apply different theories. At first glance management is mainly accountable towards shareholders and debtholders and so some theories try to explain a relationship between voluntary disclosure and financial performance (Cormier et al., 2005: p. 4). These theories explain either a direct or indirect influence of a company’s financial performance and are mainly applicable for shareholders. Theories which keep their focus on a direct influence are derived from agency or transactions cost theory and deal with monitoring costs and transaction costs. It can thus be argued that reduced information asymmetry due to increased disclosure reduces the cost of capital for companies (Leuz and Verrecchia, 2000: p. 91).

An indirect influence on financial performance is explained by political theories which are broader than the direct theories because they usually consider more than two or three interacting groups. Thus, these theories are stakeholder based. Stakeholder and legitimacy theory are the theories used most often in this research field and are sometimes seen as competing. However, Gray et al. (1995: p. 53) argue that both theories discuss stakeholders - and the necessity for a company to take them into account - but from slightly different point of views. In both theories, stakeholder theory and legitimacy theory, the relationship to economic aspects is not directly via the stock market, but indirectly, via stakeholders. As such, not only the shareholders and debtholders, but all stakeholders are groups in these theories which have an influence on the company. Hence, stakeholder and legitimacy theory can also explain an effect of voluntary disclosure on stakeholders which is important for the financial performance of the company.

The theories can be divided in information asymmetry based theories which concentrate more on shareholders and stakeholder oriented theories. Stakeholders are groups which affect or are affected by the company. This includes shareholders who are also a stakeholder group. Shareholder theories show how shareholders act and that they want high returns from their investments. In contrast, stakeholder theories can explain how and which groups the company has to satisfy in order to achieve high profits. Consequently, stakeholder concepts are only an alternative view to the exclusive goal of profit maximization (Preston and Sapienza, 1990: p. 366). The
theories mentioned are delineated in Figure 3.1 and are now specified in more detail. The effects of reducing information asymmetry and giving proprietary information are first discussed - followed by an attempt to explain influencing of stakeholders besides shareholders and debtholders and the reasoning behind it.

Figure 3.1: Underlying theories

Empirical results suggest that a decrease of information asymmetry lowers capital costs for a firm, as more information implicates less unknown risks or less transaction costs in the acquisition of information. These are seen as primary drivers for those costs (Botosan, 2006: p. 33). Hence, one motive in reporting voluntary information can be seen as an attempt to lower information asymmetry between the company and investors. This could especially be the case if investors have noticed bad trends effecting the company, who in turn will wish to give a more detailed account of the situation in question (Lang and Lundholm, 2000: p. 630). Such an influenced view has the potential to reduce the severity in a possible decline of stock prices. In extreme situations, where disclosing voluntary information costs nothing, its absence would lead groups with vested interests to think the worst even if the reality is actually favourable. In this scenario there would be no reason to not disclose this information (Verrecchia, 1990: p. 246).

In addition, the information to be provided by the company does not need to be collected individually by every investor, making such information collection more efficient (Diamond, 1985: p. 1071). Hence, given that voluntary disclosure is capable of lowering search costs for the reported information it also promotes a culture of
equality between investors. Managers try to mitigate any undervaluation of the company by investors through the voluntary disclosure (Healy et al., 1999: p. 497). In case where the investors have no access to information because it is proprietary then it not only lowers search costs, but also provides additional information. Such information, for instance a firm’s energy consumption, could also be of value for some investors. If an investor compares two similar companies where one uses significantly more energy and the investor thus expects an increase of energy prices this would be an additional argument to invest in the low energy consuming company. Again, it can be argued that companies not disclosing this information may not be high energy consumers. If this information can easily be collected and disseminated then it should. The same holds for informal standards which are not required by law, but are introduced as requirements for special awards for instance (Gibbins et al., 1990: p. 131). Again, the relative levels of compliance or non-compliance with these requirements should be reported.

The value relevance of non-financial information is shown by, for example, Hughes II (2000: p. 225). The study comes to the conclusion that the share price of firms in the electric utility industry is lower when they have high amounts of pollution because investors anticipate future environmental liabilities. This proprietary information could also be used by third parties, e.g. politicians to make companies liable for their actions which can lead to extra costs (Li et al., 1997: p. 459). Furthermore, competitors may receive important strategic information which comprises the disclosing firm (Darrough and Stoughton, 1990: p. 219). Firms should as such be conscious of the particular information they disclose. This is not an argument against preparing a social report, but rather against disclosing all information without some exercising of discretion.

By disclosing proprietary information a company can also enhance its reputation as a credible discloser among its stakeholders (Cornier and Magnan, 2003: p. 47). Additionally, this information can mitigate negative reactions towards disclosed content before it is published by newspapers in a light which is unflattering to the company (Skinner, 1994: p. 58). For example a company which has used child labour is perhaps better off if it voluntarily issues reports about child labour and its actions to reduce it rather than not reporting it and facing a story in the press which exposes the fact of its having used child labour.

The view of legitimacy theory is that organisations have no inherent right to resources or to exist (Deegan, 2002: p. 292). They must respect certain boundaries and not only law - as the term legitimacy might indicate. Legitimacy in this sense means that companies use their power as expected by society (Warren, 1999: p. 215). In reality companies are entities that operate not only in a society, but are obliged to respect other interests, too. If they do not, they will be regulated and
enjoy less freedom. Thus, they try to operate within societally-agreed boundaries and norms which may also change over time (Guthrie et al., 2004: p. 284).

The reciprocal dependency between a company and society is called a social contract. A description of this situation is given by Shocker and Sethi (1973: p. 97):

Any social institution - and business is no exception - operates in a society via a social contract, expressed or implied, whereby its survival and growth are based on:

1. the delivery of some socially desirable ends to society in general, and

2. the distribution of economic, social, or political benefits to groups from which it derives its power.

In a dynamic society, neither the sources of institutional power nor the needs for its services are permanent. Therefore, an institution must constantly meet the twin tests of legitimacy and relevance by demonstrating that society requires its services and that the groups benefiting from its rewards have society’s approval.

It could be that society revokes the social contract with a company so it cannot operate any more (Deegan, 2002: p. 293). This does not mean that the opinion of the society can not be indirectly negotiated (Woodward et al., 2001: p. 357). Such a negotiation with public opinion can be achieved, for example, with the help of social reporting, produced with the objective of extending, maintaining or defending the legitimacy of an organization (Ashforth and Gibbs, 1990: p. 182). By this means - through social reports - a company can present its actions with respect to societal expectations in a positive light and thus minimise potential conflicts (Patten, 1992: p. 472).

Donaldson and Preston (1995: pp. 70-71) argue that stakeholder theory can be divided into three types - descriptive, instrumental and normative. It is descriptive when the actual nature or state of a company and its stakeholders is analysed. Instrumental stakeholder theory tries to explain relationships between stakeholders and the company. In a normative way this theory provides moral or ethical guidelines for actions by firms. In the current paper, stakeholder theory is used in an instrumental way. However, it is necessary to include the context of the company, e.g. country, which is more descriptive. Stakeholder theory tries to integrate economic and social aspects into one framework and it should be kept in mind that each depends on the other (Harrison and Freeman, 1999: p. 483). For this reason, stakeholders should be taken into consideration when they have an impact on the company. There are different possible ways to determine an impact. E.g. Mitchell
et al. (1997: p. 872) point to a significant impact if stakeholders have power, urgency or legitimacy. In satisfying the demands of stakeholders with control over critical resources of the company firm performance will also be enhanced - or at least will not decrease - whereas stakeholders having only a minor influence tend to be ignored (Ullmann, 1985: p. 552).

Stakeholder theory explains firms performance from a sustainable viewpoint including not only shareholders, but all stakeholders. As such, when preparing a sustainability report and defining its content, stakeholders and their issues should be the starting point (GRI, 2006: p. 7). Sustainability is desirable for all stakeholders, because shareholders support sustained revenues, and for other stakeholders it means for example safe workplaces or healthy products (Funk, 2003: p. 66). These dimensions of sustainability are related to each other because sustained revenues are only possible by concentrating on other stakeholders, that is, by satisfying customer needs or reducing pollution as prescribed by governments who may impose fees on polluters (Hart and Milstein, 2003: p. 57). Concentrating on such sustainable actions becomes more and more important because corporate impacts and reactions of stakeholders to such impacts are becoming more significant (McLaren, 2004: p. 199). Furthermore, disclosing relevant voluntary information showing factors related to companies’ stakeholders is an indicator for investors that a company is aware of the risks and opportunities related to these factors and includes them in the decision-making process (López et al., 2007: p. 290).

An attribution of effects to one presented theory is very difficult, because social reports always contain voluntary information. This information could be provided by a company in order to lower information asymmetry, but also to influence its stakeholders which appreciate actions of a company more with the information provided in a social report. It can only be speculated which relationship dominates by interpreting a possible country or industry-effect (Cormier et al., 2005: p. 8). Further, it can be supposed that companies are aware of different effects of voluntary reporting, so that more than one theory is applicable. The same is valid for shareholders, who anticipate further effects because they may speculate on how other stakeholders such as consumers react to voluntary disclosure.

3.4 Research Design

Because of the comprehensive nature of some constructs and overlapping theories, it is not possible to assign non-ambiguously a certain construct to a particular theory. Hence, a variable may explain different facts and an overview of the variables used is given, along with a short description of what they are proxies for.
3.4.1 Dependent Variable

For the analysis reports prepared with the guidelines of the Global Reporting Initiative are taken into account. They are the leading reporting guidelines based on the Triple Bottom Line (Waddock, 2004: p. 33). They incorporate the three topics profit, people and planet which are evaluated in the three categories economic, social and environment. The reporting in these categories is compatible with ISO14000 and World Business Council for Sustainable Development (Reynolds and Yuthas, 2008: p. 53). Companies can declare one of three application levels, whereas the higher levels include additional data regarding the three categories (GRI, 2006: p. 5).

The dependent variable GRI is a binary variable which equals 1 if a GRI report exists and 0 if not (Jonas and Jones III, 2010: p. 14). This may appear simplistic, however it avoids problems which can arise if voluntary disclosure is measured in other ways. Often, the quantity is also measured by pages, words or sentences about voluntary information (Hackston and Milne, 1996: p. 84). This is not useful for comparisons with respect to different formatting styles, page sizes and other possible ways to present visual information. Perhaps all important information is presented in tables which may be easier to find and read than text sections, but this would be a quantity of zero if sentences were counted. Furthermore, reporting is concerned with content, and a company which reports in one sentence, that it has no child labour, reports enough, if compared to a company which reports in 10 sentences about child labour in its manufactures in the third world. Thus, a thorough analysis should always keep the context in mind - which can be both labour intensive and time consuming. In pursuing this direction the point of view switches from a quantitative approach to a qualitative one. However, this paper attempts to identify determinants for the decision to issue GRI reports and not for their quality.

The aspect what and how much is reported is the decision of the company and is expected to be in accordance with its main goal which in turn can be assumed as a good financial performance. This is another cause why the existence of a report and not its coverage measured for instance as application level is taken as the dependent variable. Nevertheless, this decision is somewhat subjective, but it seems plausible that the barrier to prepare an extra report is higher than increasing the application level and thus the circumstances for social reporting should be assessed easier in the suggested way.

A decision on the existence of an extra report was made because nearly every annual report contains some type of voluntary disclosure. However, if a company decides to spend extra money in preparing an additional report, it can be assumed
that the firm considers it as very important to inform stakeholders about its actions
(Clarke and Gibson-Sweet, 1999: p. 10). Moreover, annual reports are historically
developed to inform shareholders who are only one out of many stakeholder groups
and mostly interested in financial performance. Thus, an extra report shows that a
company cares also about other stakeholders who may be more interested in social
and environmental performance instead of financial performance.

3.4.2 Independent Variables

Following stakeholder theory, one argument in favour of companies publishing a
sustainability report could be that they have a very high sustainability performance
and want to show this to their stakeholders. It is assumed that the sustainability
performance is based on actions and processes of the company which can also be
called social responsiveness. Social responsiveness is examined because it seems
intuitive with regard to the theories presented in this paper that companies with
high profiles and performance report about their good actions.

There are many different possible ways to measure sustainability depending on
its definition. Rennings et al. (2003: p. 38) use data from the Swiss bank Sarasin &
Cie on environmental and social aspects of 300 European companies. Environmental
data is drawn from a product life-cycle approach over the value chain and social data
is derived from a stakeholder approach which includes clients, competitors, employ-
ees, investors, public and suppliers. A measure used more often is the inclusion of a
company in the FTSE4Good index, which is based on research of the Ethical Invest-
ment Research Service (EIRIS). Companies in industries such as tobacco production
or nuclear power supply are excluded from this index. Furthermore, companies are
rated on different criteria such as environmental influence or human rights. Studies
which use this Index as a proxy for sustainability are Walmsley and Bond (2003),
Collison et al. (2008) and Collison et al. (2009).

Another index is the Dow Jones Sustainability Index which is used in many stud-
ies, e.g. Lo and Sheu (2007), López et al. (2007), Lee and Faff (2009) and Lee et al.
(2009). This index is considered as being "advantageous because it incorporates a
best-in-class methodology to recognize the leading CSP firms from each industry
sector" (Artiach et al., 2010: p. 34). This also means that no companies are ex-
cluded because per se they belong to a certain industry - they are all rated equally
using the same criteria.

Dow Jones STOXX Sustainability Index (DJSI STOXX) consists of the best com-
panies in terms of sustainability from the Dow Jones STOXX 600. The creation of
this index is delivered by Sustainable Asset Management (SAM) Research and starts
with an assessment of publicly available information which are mostly different types
of reports, documents requested from companies, as well as questionnaires for CEOs and heads of investor relations. These questionnaires are verified by cross-checking answers with submitted documents, media and stakeholder reports by the company. This process is also internally and externally monitored and assured by an independent third party. Companies are rated on different criteria which are either general for all industries or industry-specific. The three main dimensions (economic, environment and social) include weighted criteria which in turn are composed of sub-criteria. Once a company is selected for the DJSI STOXX it is continuously monitored on its sustainable performance, which can lead to an exclusion from the index if a company has issues such as unfair competition or ecological disasters. Whether a company is in the DJSI STOXX or not is shown with the dummy variable \textit{DJSI}. This variable can also be seen as an indicator for social responsiveness which incorporates environmental aspects in decision making and stakeholder management (Waddock, 2004: p. 10). It is expected that companies which are in the DJSI are more likely to disclose a GRI report to their stakeholders.

Capital structure indicates the influence of creditors, an important stakeholder group (Roberts, 1992: p. 602). Companies with low leverage experience less pressure from debtholders. Creditors have two incentives towards knowing more about the companies activities than they can get from annual reports. Firstly, they decrease the effect of information asymmetry and thus the risk of a loss of credit becomes more easily assessable and the cost of debt capital should decrease. Secondly, they may also have more interests than merely the payback of credit. For example creditors may only offer credit to firms which do not pollute and destroy the environment in an excessive manner. In this way, a positive relation with disclosing a social report can be expected. The capital structure \textit{LEV} is measured as total debt divided by total equity.

High levels of risk are expected to come from high uncertainty about a company's future performance which causes increased volatility of stock prices (Boesso and Kumar, 2007: p. 277). Companies can try to give voluntary information which is able to decrease the volatility coming from unknown risks from the company itself. If risk reduction is possible, investors expect a lower risk premium and so companies are able to decrease their cost of capital (Healy and Palepu, 2001: p. 421). It is expected that companies with high capital costs are more likely trying to decrease their capital costs with voluntary reporting than those with low risk profiles. The systematic risk is defined as \textit{BETA}.

Financial performance can influence voluntary disclosure, as it is easier for financially healthy organisations to meet their obligations to stakeholders (Brammer and Pavelin, 2006: p. 1174). It can also be argued that very profitable companies have managers who understand the means of managing the interests of their stakeholders.
(Bowman and Haire, 1976: p. 11). This leads to the assumption that these companies are also more likely to disclose voluntarily. Furthermore, profitable companies have a stronger position than their competitors and so there may be less fear of disclosing relevant information. For the financial performance the return on assets ROA.

Large companies are presumed to be more visible and thus are more likely to disclose voluntary information (Patten, 2002: p. 765). It can also be assumed that they have more stakeholders who demand social reports and thus the political pressure for voluntary disclosure is higher (Watts and Zimmerman, 1978: p. 118). Furthermore, large companies should be involved in more activities, raising the possibility that they are involved in actions which they have to legitimate for. Another explanation is that shareholders of large firms have a higher degree of information asymmetry because large companies are more often engaged in different countries or have a wide spectrum of activities. In this case only investors with good information channels are able to access this extra information. Consequently, additional information is required to lower proprietary costs and to offer equal access to investors to analyse the company. Size is measured with the variable SIZE as the logarithm of total assets.

Media visibility can also be an important factor contributing to voluntary disclosure (Brown and Deegan, 1998: p. 30). If a company often appears in the media it is automatically in the consciousness of more stakeholders. Thus, if they are guilty of some wrongdoing, it can seem to be much worse than the reality when they receive more public attention than other non-prominent firms would get in these scenarios. As a result, companies with high media visibility should prefer to disclose social reports than those with low media visibility. Similar to SIZE media visibility MEDIA is measured as the logarithm of the number of results in a Google news search containing the name of a firm.

Bushman et al. (2004: p. 210) list some studies that analyse the influence of a firm’s country on financial reporting. It can be expected that social reporting also depends on the country because every country has its specific legal environment. Baginski et al. (2002: p. 29) state for instance that countries where managers do not have to fear litigation if they disclose inaccurate information are more likely to disclose voluntary information. Furthermore, the rights of investors differ between countries and it has been shown that countries with legal rules based on common law protect investors more than code law countries (La Porta et al., 1998: p. 1151). With this in mind, it can be assumed that firms in countries with a weaker legal infrastructure provide more voluntary information as they wish to build trust and reputation among investors (Webb et al., 2008: p. 242). This trust should help to reduce the cost of capital (Durnev and Kim, 2005: p. 1467). Nevertheless, there are
also differences between code law and common law countries with regard to other legal requirements (Jaggi and Pek Yee, 2000: p. 500).

This is the reason why three ways to differentiate countries are introduced. First, countries are divided into code law and common law countries. For this purpose a classification by La Porta et al. (1998: pp. 1118-1119) is used. They point out that code law is the oldest legal tradition and its rules are coded very comprehensively and are generally formulated. In contrast, common law is based on the law of England which has specific cases as its foundation. If a company is in a common law country the dummy variable \( LS\_EN \) is set to 1.

Two other country-specific criteria - securities laws and ownership concentration - are taken from Bushman and Piotroski (2006: pp. 145-146). Securities laws are another possible way to assess the legal system. These laws are a contracting framework for security markets and specify mandatory disclosure, or liabilities for incorrect information (La Porta et al., 2006: p. 2). Following Bushman and Piotroski (2006: pp. 145-146), for countries with high securities laws the dummy variable \( SEC\_LAW \) is set to 1. Ownership concentration, meaning that only a few shareholders in a country own large stocks of companies, is argued as being a substitute for legal protection (La Porta et al., 1998: p. 1145). As such, a high concentration of stock ownership offers the possibility to influence companies in a direction similar to securities laws. Although additional information can be claimed easier by the concentrated shareholder power of few influential owners it is voluntary. Hence, it is expected that companies in countries with high ownership concentration are more likely to disclose a social report. Following Bushman and Piotroski (2006: pp. 145-146), the dummy variable \( OWN\_CONC \) is 1 for countries with high ownership concentration and 0 for countries with low ownership concentration.

When considering industry as a control variable, it is, for example, possible to separate companies which are highly regulated from less regulated industries and industries with a different stakeholder structure. This also implies different information needs with respect to information asymmetry. Another aspect is that firms in some industries have to legitimize themselves more than others because they receive more attention, e.g. due to disputable fields of action. For instance, industries with high environmental visibility have to respond to regulations or societal pressure (Bowen, 2000: p. 94). The industry classification is taken from the Dow Jones STOXX 600. \( INDUSTRY \) represents a dummy variable for each industry.

### 3.4.3 Empirical Model

The impact of the possible determinants introduced on GRI disclosure is examined using the following model.
\[ GRI = \beta_0 + \beta_1 DJSI + \beta_2 LEV + \beta_3 BETA + \beta_4 ROA + \beta_5 SIZE \\
+ \beta_6 MEDIA + \beta_7 LS\_EN + \beta_8 SEC\_LAW + \beta_9 OWN\_CONC \quad (3.1) \\
+ \beta_{10} INDUSTRY + \epsilon \]

where

\begin{align*}
GRI &= \text{dummy variable for disclosing a GRI report} \\
DJSI &= \text{dummy variable for inclusion in DJSI} \\
LEV &= \text{total debt divided by total equity} \\
BETA &= \text{beta, Worldscope data item WC09802} \\
ROA &= \text{return on assets, Worldscope data item WC08326} \\
SIZE &= \text{logarithm of total assets} \\
MEDIA &= \text{logarithm of results in Google news search} \\
LS\_EN &= \text{country dummy variable for legal system} \\
SEC\_LAW &= \text{country dummy variable for security laws} \\
OWN\_CONC &= \text{country dummy variable for ownership concentration} \\
INDUSTRY &= \text{industry dummy variables} \\
\end{align*}

Because the dependent variable \( GRI \) is a dummy variable a logistic regression model is done with a maximum likelihood estimation.

### 3.4.4 Data Sources and Sample

Firms of the STOXX Europe 600 are analysed. The sample has the advantage of covering European countries which have diverse legal systems. Data was obtained for the year 2008 excepting the dependent variable \( GRI \) which describes a published report in 2009. The information of whether a company has a GRI report was collected from data published by GRI and for missing data points collected from CorporateRegister.com. DJSI STOXX was used to examine whether a company was sustainable and additional information delivered with the STOXX Europe 600 includes the particular industry. Google news searches were conducted - with the number of search results being taken as a proxy for media exposure between January 01, 2008 and December 31, 2008. Country-specific data comes from previous papers as described in the variables section. For the two companies situated in Luxembourg data for \( SEC\_LAW \) and \( OWN\_CONC \) is not available and thus they are not included in the regression. \( BETA \) and \( ROA \) come directly from Worldscope database of Thomson Reuters Datastream and the remaining variables \( LEV \) and \( SIZE \) were calculated with data from Thomson Reuters Datastream.
3.5 Results

3.5.1 Descriptive Statistics

Table 3.2 shows from which country the companies used in the sample originate. Almost one third (181) of all analysed firms belong to the two existing common law countries. 309 companies are from countries with high securities laws and 173 from countries with high ownership concentration.

Table 3.2: Countries of sample companies

<table>
<thead>
<tr>
<th>Country</th>
<th>Companies</th>
<th>in %</th>
<th>GRI reports</th>
<th>in % per country</th>
<th>Common law</th>
<th>Securities laws</th>
<th>Ownership concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>172</td>
<td>28.7%</td>
<td>43</td>
<td>25.0%</td>
<td>yes</td>
<td>high</td>
<td>low</td>
</tr>
<tr>
<td>France</td>
<td>52</td>
<td>13.7%</td>
<td>26</td>
<td>31.7%</td>
<td>no</td>
<td>high</td>
<td>low</td>
</tr>
<tr>
<td>Germany</td>
<td>57</td>
<td>9.5%</td>
<td>27</td>
<td>47.4%</td>
<td>no</td>
<td>low</td>
<td>high</td>
</tr>
<tr>
<td>Switzerland</td>
<td>46</td>
<td>7.7%</td>
<td>14</td>
<td>30.4%</td>
<td>no</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>Sweden</td>
<td>36</td>
<td>6.0%</td>
<td>15</td>
<td>41.7%</td>
<td>no</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>Italy</td>
<td>34</td>
<td>5.7%</td>
<td>17</td>
<td>50.0%</td>
<td>no</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>Spain</td>
<td>32</td>
<td>5.3%</td>
<td>25</td>
<td>78.1%</td>
<td>no</td>
<td>low</td>
<td>high</td>
</tr>
<tr>
<td>Netherlands</td>
<td>28</td>
<td>4.7%</td>
<td>18</td>
<td>64.3%</td>
<td>no</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>Finland</td>
<td>20</td>
<td>3.3%</td>
<td>10</td>
<td>50.0%</td>
<td>no</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>Belgium</td>
<td>17</td>
<td>2.8%</td>
<td>5</td>
<td>29.4%</td>
<td>no</td>
<td>low</td>
<td>high</td>
</tr>
<tr>
<td>Denmark</td>
<td>17</td>
<td>2.8%</td>
<td>5</td>
<td>29.4%</td>
<td>no</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>Norway</td>
<td>15</td>
<td>2.5%</td>
<td>6</td>
<td>40.0%</td>
<td>no</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>Austria</td>
<td>12</td>
<td>2.0%</td>
<td>4</td>
<td>33.3%</td>
<td>no</td>
<td>low</td>
<td>high</td>
</tr>
<tr>
<td>Greece</td>
<td>11</td>
<td>1.8%</td>
<td>6</td>
<td>54.3%</td>
<td>no</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>Portugal</td>
<td>10</td>
<td>1.7%</td>
<td>7</td>
<td>70.0%</td>
<td>no</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>Ireland</td>
<td>9</td>
<td>1.5%</td>
<td>2</td>
<td>22.2%</td>
<td>yes</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>2</td>
<td>0.3%</td>
<td>1</td>
<td>50.0%</td>
<td>no</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Total | 600 | 100.0% | 231 | 38.5% | 181 | 309 | 173 |

Note: N/A - not available

231 companies prepare a GRI report which equates 38.5%. KPMG (2008: p. 35), who analyse the 100 largest companies in 22 countries and the Global Fortune 250 come to 69% respectively 77% GRI reporting companies for the years 2007 and 2008. For the Fortune Global 250, Kolk (2008: p. 5) identified 64% of companies as having produced reports on sustainability in 2004. However, these are not only reports produced in respect of the GRI guidelines. As a result the proportion of reporting companies may seem to be relatively low in this study, but this is also due to the inclusion of smaller companies often ignored by other studies. The three countries with the highest portion of reporting companies are Spain, Portugal and the Netherlands. The countries with the lowest portion of reporting are Ireland, United Kingdom, Belgium and Denmark.

Table 3.3 lists the industries in which the companies operate. Nearly one quarter of the companies belong to the financial sector. They are closely followed by the industrials industry which is represented by 19.8% of the companies. The lowest portion in this sample is represented by Telecommunication with 3.3% and Technologies with 4.0%.
Table 3.3: Industries of sample companies

<table>
<thead>
<tr>
<th>Industry</th>
<th>Companies</th>
<th>in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financials</td>
<td>143</td>
<td>23.8%</td>
</tr>
<tr>
<td>Industrials</td>
<td>119</td>
<td>19.8%</td>
</tr>
<tr>
<td>Consumer Services</td>
<td>72</td>
<td>12.0%</td>
</tr>
<tr>
<td>Consumer Goods</td>
<td>67</td>
<td>11.2%</td>
</tr>
<tr>
<td>Basic Materials</td>
<td>49</td>
<td>8.2%</td>
</tr>
<tr>
<td>Oil &amp; Gas</td>
<td>39</td>
<td>6.5%</td>
</tr>
<tr>
<td>Health Care</td>
<td>36</td>
<td>6.0%</td>
</tr>
<tr>
<td>Utilities</td>
<td>31</td>
<td>5.2%</td>
</tr>
<tr>
<td>Technology</td>
<td>24</td>
<td>4.0%</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>20</td>
<td>3.3%</td>
</tr>
<tr>
<td>Total</td>
<td>600</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 3.4: Descriptive statistics and correlation coefficients

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Correlation Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDIA</td>
<td>7.75</td>
<td>1.91</td>
<td>2.40</td>
<td>12.94</td>
<td>MEDIA 1</td>
</tr>
<tr>
<td>SIZE</td>
<td>6.97</td>
<td>0.77</td>
<td>5.39</td>
<td>9.39</td>
<td>.419*** SIZE 1</td>
</tr>
<tr>
<td>BETA</td>
<td>1.04</td>
<td>0.38</td>
<td>-0.55</td>
<td>3.33</td>
<td>.114*** BETA 1</td>
</tr>
<tr>
<td>ROA</td>
<td>6.10</td>
<td>9.24</td>
<td>-225.89</td>
<td>57.81</td>
<td>-.062 - .307*** ROA 1</td>
</tr>
<tr>
<td>LEV</td>
<td>1.55</td>
<td>10.72</td>
<td>-225.83</td>
<td>90.74</td>
<td>-.059 .210*** -.046 -.073* LEV 1</td>
</tr>
</tbody>
</table>

Significance levels: ***p < 0.01, **p < 0.05, *p < 0.10
Note: The operationalization of the variables can be found in Section 3.4.3.

Table 3.4 shows descriptive statistics for the non dummy variables. One important fact is that there are some companies with a negative leverage which means that they have a negative equity. The large standard deviation of MEDIA, ROA and LEV are caused by some very high or low variables in the dataset. This dataset is examined more closely and seems to be correct, showing no error values. However, the negative leverage and possible outliers are considered in a robustness check. The correlation matrix indicates that some independent variables especially SIZE and MEDIA are correlated with the other variables, but the coefficients are relatively low (all below 0.5) and indicate no multi-collinearity issue.

3.5.2 Regression results

Table 3.5 provides the results for the logistic regression. Using logistic regression there is no measure which corresponds to adjusted $R^2$ in linear regression. However, some examples of Pseudo $R^2$ exist, but there is no natural interpretation for their values and maximum likelihood estimators are not designed to maximize $R^2$ as classical regression models do (Greene, 2003: pp. 683-686). Nevertheless, using a $\chi^2$-Test the overall fit of the model can be tested. With a $\chi^2$ of 225 ($d.f. = 569$)
it can be said that the model fits significantly \( p < 0.01 \) better than a model with just an intercept (null model).

12 companies are not considered in the regression due to missing data points and the variable for the telecommunication industry was omitted from the regression as it is the industry with the fewest firms and it is explained perfectly by the other industries. For industries, it is demonstrated that only finance industry \( (p < 0.01) \) and, with lower significance consumer services \( (p < 0.05) \) and industrials \( (p < 0.10) \) make less voluntary disclosure than the other industries. This result is consistent with those for the financial industry taken from Brummer and Pavelin (2006: p. 1182). Nevertheless, their study is about voluntary environmental disclosure and not voluntary social disclosure and they had a somewhat different classification of industries, excluding that for the financial industry.

| Predicted | Estimate |Std. Error | z value | \( \text{Pr}(>|z|) | \\
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>-10.87***</td>
<td>1.56</td>
<td>-6.97</td>
<td>0.00</td>
</tr>
<tr>
<td>DJSI</td>
<td>( \beta_1 &gt; 0 )</td>
<td>1.44***</td>
<td>0.26</td>
<td>5.65</td>
</tr>
<tr>
<td>LEV</td>
<td>( \beta_2 &gt; 0 )</td>
<td>-0.02*</td>
<td>0.01</td>
<td>-1.91</td>
</tr>
<tr>
<td>BETA</td>
<td>( \beta_3 &gt; 0 )</td>
<td>-0.07</td>
<td>0.21</td>
<td>-0.34</td>
</tr>
<tr>
<td>ROA</td>
<td>( \beta_4 &gt; 0 )</td>
<td>0.03**</td>
<td>0.02</td>
<td>1.96</td>
</tr>
<tr>
<td>SIZE</td>
<td>( \beta_5 &gt; 0 )</td>
<td>1.53***</td>
<td>0.22</td>
<td>6.83</td>
</tr>
<tr>
<td>MEDIA</td>
<td>( \beta_6 &gt; 0 )</td>
<td>0.04</td>
<td>0.07</td>
<td>0.62</td>
</tr>
<tr>
<td>LS_EN</td>
<td>( \beta_7 &lt; 0 )</td>
<td>-0.45</td>
<td>0.32</td>
<td>-1.41</td>
</tr>
<tr>
<td>SEC_LAW</td>
<td>( \beta_8 &lt; 0 )</td>
<td>-0.39</td>
<td>0.25</td>
<td>-1.54</td>
</tr>
<tr>
<td>OWN_CONC</td>
<td>( \beta_9 &gt; 0 )</td>
<td>0.59**</td>
<td>0.25</td>
<td>2.33</td>
</tr>
<tr>
<td>Oil &amp; Gas</td>
<td>?</td>
<td>-0.19457</td>
<td>0.09</td>
<td>-0.28</td>
</tr>
<tr>
<td>Basic Materials</td>
<td>?</td>
<td>0.44364</td>
<td>0.67</td>
<td>0.66</td>
</tr>
<tr>
<td>Industrials</td>
<td>?</td>
<td>-1.03*</td>
<td>0.61</td>
<td>-1.68</td>
</tr>
<tr>
<td>Consumer Goods</td>
<td>?</td>
<td>-0.65642</td>
<td>0.64</td>
<td>-1.03</td>
</tr>
<tr>
<td>Health Care</td>
<td>?</td>
<td>-1.10</td>
<td>0.71</td>
<td>-1.56</td>
</tr>
<tr>
<td>Consumer Services</td>
<td>?</td>
<td>-1.38***</td>
<td>0.65</td>
<td>-2.13</td>
</tr>
<tr>
<td>Utilities</td>
<td>?</td>
<td>-0.47</td>
<td>0.71</td>
<td>-0.65</td>
</tr>
<tr>
<td>Financials</td>
<td>?</td>
<td>-2.38***</td>
<td>0.64</td>
<td>-3.71</td>
</tr>
<tr>
<td>Technology</td>
<td>?</td>
<td>-0.39</td>
<td>0.78</td>
<td>-0.50</td>
</tr>
</tbody>
</table>

\( n = 588 \)

Significance levels: *** 0.01 ** 0.05 * 0.10
Null deviance: 784.33 on 587 degrees of freedom
Residual deviance: 559.33 on 569 degrees of freedom
\( \chi^2 = 225 \) with \( p < 0.01 \)

Note: The operationalisation of the variables can be found in Section 3.4.3.

\( \text{DJSI} \) is a determinant of GRI reporting with a strong positive significant influence \( (p < 0.01) \). Consequently, the prediction that companies with positive social actions wish to show these to their stakeholders holds true. Vice versa, it may not to be a mistaken assumption should stakeholders conclude that companies which do not report on social aspects do so because they are worse than others.
The sign of the capital structure $LEV$ indicates a significant negative influence ($p < 0.10$) on $GRI$. This relationship differs from the predicted positive relationship. Thus, this result does not harmonise with the underlying theories. For instance, stakeholder theory, and creditors are a stakeholder group, predicts that the company tries to satisfy and inform their stakeholders. There are two possible reasons for this result. First, the company reports to their creditors in a private and not a public way, so creditors do not need extra voluntary information. Second, the results are not robust and vary with different construct variables which is tested in section 3.5.3. The latter case seems to be more likely, so that the significant result could be stochastic.

$BETA$ has no significant influence. It may be that risk is already incorporated in the industry variables as they could have differing levels of risk. But also dropping the industry variables from the regression does not change the significance of $BETA$. It can be assumed that no additional risk effects outside of the industry effects can be held responsible for the significance of the industry results.

Financial performance has a positive significant influence ($p < 0.05$) on the preparation of a GRI report. This contrasts with Brammer and Pavelin (2006: p. 1182) where financial performance has no significant influence on environmental reporting. However, the negative effect ($p < 0.10$) of capital structure would confirm their results.

Company size has a significant positive influence ($p < 0.01$) on GRI reporting. This is an expected effect, because large companies are assumed to have more powerful stakeholders and so there is more pressure to report what they do in addition to the content of their financial reports. Furthermore, this helps to lower information asymmetry between shareholders who are supposed to be different in large companies.

At first glance similar to Brammer and Pavelin (2006: p. 1183) media visibility seems not to be a significant determinant, although $MEDIA$ is significant positively correlated with $SIZE$. It shows that the result does not hold if $SIZE$ is dropped from the regression which means that the $SIZE$ overrides $MEDIA$. In this case, as predicted, $MEDIA$ has a significant positive impact ($p < 0.01$) on $GRI$.

With respect to country-specific effects it can be shown that the legal system ($LS\_EN$) has no influence on GRI reporting. The same is true for high or low securities laws ($SEC\_LAW$). This presupposes the condition that ownership concentration is included in the model. Countries with high ownership concentration have a significant positive ($p < 0.05$) influence on GRI reporting. It can be the case that the effect of $OWN\_CONC$ is so strong that it overrides other country effects. In addition, common law countries have a significant negative effect ($p < 0.05$) when $OWN\_CONC$ is dropped and if $LS\_EN$ is also dropped, high securities laws have
a significant negative effect \((p < 0.01)\). This can be explained by the fact that these two aspects may be imposed by the state in question, such that these laws likely are of high quality and the stakeholder can thus rely more on these than on any supplementary social reports produced by the company.

3.5.3 Robustness checks

In order to test the robustness of the results construct validity is tested using different variables for some of the determinants. In addition, regarding company size the variables net sales and market capitalization were also tested. For financial performance Return on Assets was substituted by Total Investment Return (Worldscope data item WC08801) and Earnings per Share (Worldscope data item WC05201) as given by Thomson Reuters Datastream. Both are stock market return figures for a return per share. Finally, multinationality has been incorporated in the regression - calculated as foreign assets divided by total assets.

With the given variation in these variables, the reported results are shown to be quite robust. The health care industry sometimes gets a significant negative association with reporting. The presence of common law has a significant negative influence if size is measured with net sales or market capitalization. Two variables which are less robust are capital structure and financial performance. Capital structure becomes insignificant if market capitalization is used as a proxy for company size. In addition, financial performance remains questionable, as it becomes insignificant upon a variation on size and along with other financial performance variables. The inclusion of multinationality has no significant influence on the results.

Robustness has also been tested by deleting data points with a negative leverage \(LEV\). A negative leverage implies that a company should no longer be in the market because it is in an excessive state of debt. Excluding the seven companies with excessive debt leaves a sample of 581 companies. The results are considered robust apart from \(LEV\) itself which becomes insignificant.

Robustness was also tested by dropping the highest and lowest 1\%, the outliers of the dataset. Using this test, the branch industrials and leverage became insignificant. For industry consumer services and \(ROA\), the significance level declined \((p < 0.10)\). Without these outliers Akaike’s information criterion declined from the 597.33 of the original model to a figure of 537.89, meaning that the model without outliers better explains the reporting behaviour. Thus, from these robustness checks, conducted in conjunction with the original analysis, it can be assumed that sustainability performance, financial performance, industry, size and country - with respect to ownership concentration and legal system - may have a significant impact: whether a GRI report is disclosed or not.
3.6 Conclusion

This paper analyses determinants of voluntary disclosure using the example of GRI reporting. Knowing determinants for voluntary disclosure can help in different ways. Firstly, standard setters for voluntary disclosure frameworks such as GRI can create these standards either in order to help companies reporting voluntarily or to stimulate non-reporting companies to do so more efficiently. Secondly, it gives rise to a discussion on whether social reporting should become mandatory - that companies which are less likely to report voluntarily should perhaps be compelled to do so, as they are likely to be worse off with respect to sustainability performance if they do not. Thirdly, stakeholders of companies such as shareholders or customers can evaluate companies better when they know what factors stand behind a certain reporting behaviour. For instance, the demonstrated high positive correlation between good social responsiveness and voluntary reporting may render companies not reporting more likely to be met with suspicion.

The topic is assessed by looking for determinants used in previous studies regarding voluntary reporting. An analysis as to why companies prepare social reports in accordance with GRI guidelines is conducted. These guidelines are a well-accepted quasi-standard for social or sustainability reports which are disclosed voluntarily. Variables for constructs such as media exposure, sustainability performance, industry, size, capital structure, risk, financial performance, and country are used. Apart from the sustainability measure, these variables are derived from constructs in other studies examining determinants of voluntary disclosure. Sustainability or social responsiveness can be regarded as a determinant because it is plausible that companies with positive social activities would wish to show what they have done. The sample of this study are companies of the STOXX Europe 600 index.

The analysis is conducted using a logistic regression model. Evidence is achieved that good sustainability has a positive significant influence on reporting behaviour meaning that companies would rather report positive actions than negative ones. Another influencing factor is the size of a company as well as its media visibility, whereas the effect of size is more influencing the company to publish a report. Industry and country are also significant. The country in which a company is based has a mainly positive impact on reporting when there is a high ownership concentration in a country. Capital structure also seems to have no influence and thus it can be assumed that social reports are not intentionally prepared in order to satisfy the requirements of debtholders.

This analysis reveals that good sustainability behaviour by a company is a determinant in preparing sustainability reports. With respect to the point that the measure for sustainability performance is also a measure for social responsiveness, it
indicates good stakeholder management policy. Indeed, social reporting can either
be an inherent part of stakeholder management or alternatively companies may want
to report their social actions to increase their good reputation among stakeholders.

For further research the following points are recommended. One major limitation
of this study is that it is based on a single year, which could be extended in further
studies. A multiple year sample also includes more companies not reporting on a
yearly basis or changing their reporting behaviour. This also allows to analyse if
the stated causal relationship is given in cases where variables only change slightly
over time. Another limitation is that only European companies and GRI reports as
an important example of social reports are included in this study. Furthermore, it
is not clear yet if the social actions of companies harmonize with the expectations
of stakeholders. It is a possible that companies only disclose what they believe
stakeholders want to hear, without actually doing what would genuinely benefit the
stakeholders. The identification of specific actions by companies could help to answer
this question. With regard to the results of this analysis, it could also be interesting
for standard setters to consider how less sustainable firms could be motivated to
report on their social activities. Moreover, the results of this study could be revised
for different years, with additional determinants or other classifications of industries
or countries. For example, the Dow Jones Sustainability Index is only one of those
measures. To get a better understanding of which social activities are determinants
of conducting voluntary disclosure, this index can be broken down into more specific
parts. Other proxies of social actions could also be identified and used to verify the
results of this study.
4 Sunny with cloudy intervals:
The influence of social reporting on firm value

Abstract

In this study the impact of social reporting on firm value is examined. Social reporting is hypothesised to have a positive impact on the firm value. It is argued that the more content is reported, the higher this impact should be. An externally assured report also should increase the firm value because it makes the report more credible. The sample which is used in this study consists of the Dow Jones STOXX 600 firms from 2008 to 2010 and GRI reports are taken as social reports. The hypotheses are tested with regression analyses and measures which indicate the quantity of information given and external assurance for the reports. The results support the hypothesis that publishing a GRI report has a positive influence on firm value. Including more information is better in general, but the results indicate that there could be a point of too much information. However, external assurance seems to have no influence on firm value.

4.1 Motivation

Companies provide a lot of mandatory disclosure by law, especially annual reports, which are relatively expensive because there is the need for special knowledge as well as high costs for data gathering in creating such reports. Nevertheless, in addition, many companies disclose voluntary information. If there is a rational cause for this behaviour, the benefit of disclosing voluntary information should be at least equal to the costs because companies should create profit for their owners (Verrecchia, 2001: p. 171).

Sustainability or social topics which are also voluntary information can be structured through the Triple P Bottom Line with profit, planet, and people as the basis.
These are the main topics in sustainability reporting, which is also called triple bottom line reporting (Gray, 2006: p. 73). In this article, social report is used as a synonym for sustainability reports or triple bottom line reporting.

There is a plethora of literature analysing the relationship between corporate social performance (CSP) and corporate financial performance (CFP), as recent literature reviews and meta-analyses show, e.g. by Orlitzky et al. (2003), Wu (2006), Beurden and Gössling (2008), Pelzoa (2009), and Vishwanathan (2010). But little research has been done on the influence of separate voluntary reports such as social reports on corporate financial performance. Furthermore, results from corporate social performance research can not be transferred flawlessly to the topic of social reporting, because social performance and social disclosure are not necessarily correlated (Ullmann, 1985: p. 543). In addition, Glac (2009: p. 52) asks for further research on the availability of information and its influence on investor behaviour.

This paper contributes to the literature by analysing the influence of social reports on corporate financial performance. The first contribution is to answer the question of whether GRI reports are able to increase the companies’ firm value. This helps companies to identify the importance of social reports and if they should produce them. This also shows whether information in such reports can be of value for stakeholders of the company. A positive influence of GRI reports on firm value has been shown by Schadewitz and Niskala (2010) who analysed all listed Finnish firms from 2002 to 2005. However, the present paper analyses another period from 2008 to 2010 and enlarges the sample to firms from all European countries. A second contribution is to evaluate how the quantity of information in social reports influences firm value. This gives some evidence as to whether it is only important to disclose a social report or also to report in a comprehensive manner. In addition, Kolk and Perego (2010: p. 195) ask for research on how the assurance of social reports is related to financial decisions. Thus, as a third contribution, this study examines whether an audit is an influencing factor on financial performance. Assurance can be seen as an action to increase the reliability of the information. Hence, it either indicates how reliable the information of the social reports is or how reliable the assurance is. To the best knowledge of the author, the impact of the assurance of social reports on firm value has not been explored empirically so far.

In a meta-analysis, Orlitzky et al. (2003: p. 420) find that only eight studies averaging null findings would be needed to bring the average sample size mean for effect sizes down to 0.05 for studies using disclosure measures for CSP and market-based measures for CFP. Hence, this study also contributes to the literature of voluntary disclosure in the area of corporate social performance to gain more reliable results in further meta-analyses.

To answer the research questions, regression analyses are executed to analyse
the relationship between social reporting and firm value. The sample consists of
the companies of the Dow Jones STOXX 600, which includes firms from European
countries. Hence, a wide field of industries and countries which are not located in
the US is examined. The analysed period is the three years from 2008 to 2010.
The findings show that social reports in general have an impact on firm value. This
influence depends on the constellation of information quantity and assurance. Social
reports with much information should not be assured by third parties to increase
the firm value. However, GRI reports which have less information should be assured
by the Global Reporting Initiative to increase the firm value. In all cases, assurance
by other third parties is inferior in the examined time frame.

In the next section, some background knowledge in the field of voluntary social
disclosure is exposited. Hypotheses are developed out of the existing theories and
results from other studies. Afterwards, the sample and data which are the basis for
the examination of whether social reports contribute to firm value are presented.
This examination is made stepwise with the report itself, the quantity of given
information in the report, and its kind of assurance. The paper concludes with a
summary and suggestions for further research.

4.2 Background & Theory

4.2.1 Social Reporting

Measuring and reporting the social performance of a company is not a new de-
velopment and Carroll and Beiler (1975: p. 596) identified early landmarks for this
evolution. They found that the identification of social performance has existed at
least since 1940, when Kreps (1940) developed an external evaluation of com-
panies. The first known suggestion for an internal evaluation was presented by Bowen
(1953). The interest in social reports grew rapidly till the early 1970s and disap-
peared by the early 1990s when approximately 90% of the largest companies did not
compile a social report (Marx, 1992: p. 39). Nowadays, this number has increased
again as the report from KPMG (2008) indicates: 79% of the Global Fortune 250
compile a social report. This is perhaps based on the fact that we live in a time when
stakeholders can get a lot of detailed information about companies. This indirectly
forces companies to provide this information with a justification for their actions,
especially for information which otherwise could be biased and hence negatively
interpreted (Hess, 2001: p. 312).

Some organizations have developed standards to assist reporters and readers to
disclose or evaluate non-monetary or voluntary aspects in social reports. Some
examples of such initiatives are the Global Reporting Initiative (GRI), Account-
Ability (AA), SustainAbility (SA), UN Global Compact, CSR Europe, Social Investment Research Analyst Network (SIRAN), Public Environmental Reporting Initiative (PERI), Global Environmental Management Initiative (GEMI), United Nations Environment Programme (UNEP), and the World Industry Council for the Environment (WICE). Examples for standards for sustainability reporting are the GRI Guidelines and AA1000S, indices for sustainable firms are the DJSI and FTSE4GOOD, and norms for sustainable behaviour are the UN Global Compact, OECD Guidelines, SA 8000, ISO 9000, and ISO 14001 (Ferrini, 2005: p. 614). Without applying a standard, there could be a huge information asymmetry between managers and stakeholders of a company, because some information would not be published. If the information still was published, then the content and outline of the information would have no specification and could freely be chosen, which would impede its assessment.

KPMG (2008) analyses the state of social reporting of over 2,200 companies in 22 countries, including the Global Fortune 250 and the 100 largest companies by revenue in these 22 countries. They remark that the social reports they include in their analysis can differ in terminology such as sustainability, corporate social responsibility, corporate citizenship, and others. Since the last survey in 2005, the percentage of reporting companies among the Fortune 250 increased dramatically from 52% to 79% in 2008. A survey of these companies identified five main drivers for reporting: ethical considerations, economic considerations, reputation or brand, innovation/learning, and employee motivation. 77% of the reporting companies follow the GRI Guidelines to create their reports. A third-party commentary was given in 56% of the Fortune 250 reports and inclusion of formal assurance statements increased from 2005 to 2008 from 30% to 40%. The three main drivers for this assurance are improving the quality of the reported information, reinforcing its credibility to stakeholders, and improving the reporting process. The two most used assurance standards are International Standards for Assurance (ISAE) 3000 and AA1000AS by AccountAbility.

Kolk (2008) analyses trends of social reporting in a similar way by using the Fortune Global 250. The reporting of sustainability increased from 35% in 1998 and 45% in 2001 to 64% in 2004 (Kolk, 2008: p. 5). Of these reports, almost one third were externally assured, but usually no reason for this assurance was given. Reasons for external audits are increasing the credibility of the report and ensuring the quality of the internal processes (Kolk, 2008: p. 10).
4.2.2 Hypotheses Development

“Separate reports on aspects of social performance represent a significant investment in time and money. Thus, it seems reasonable to hypothesise that these will only be produced by those companies which consider it very important to inform stakeholders about their performance” (Clarke and Gibson-Sweet, 1999: p. 10). Boessio and Kumar (2007: p. 290) also figured out that there is more than one explanation for disclosing voluntary reports. These reasons are mainly based on the expected outcomes of the social reports, such as increased competitive advantages, reputation, legitimacy, decreased capital costs, or lower risk expectations. Thus, voluntary disclosure can be driven by the information needs of investors beyond financial information, by stakeholder engagement, and by the management of intangible resources which could result in crucial competitive advantages.

However, Orlitzky and Whelan (2007: p. 313) also mention costs beside benefits for the reporting organization and for its stakeholders. On the firm side, legitimacy for its actions and competitive advantages by signalling its strengths can be achieved. Social reporting can lower transaction costs which arise for monitoring, collecting, and preparing the necessary information for some stakeholders, but it can also cause an information overload. In addition, this information can also be used against the company’s interest by competitors or other stakeholders. Nevertheless, providing investors more information may decrease their risk and the company can present itself in a good manner to avoid further regulatory restrictions. Thus, whether it tries to reduce the information asymmetry or not depends on the company’s decision, which is likely based on a cost-benefit analysis (Cormier and Magnan, 1999: p. 432).

Before discussing stakeholders and their influence on firm value in general, the ratio for disclosing social reports for investors which is an important stakeholder group and also has a large influence on firm value is discussed briefly. Normally, investors are not part of the company they invest in. Hence, they judge companies on the basis of the information about financial and non-financial aspects which they can gather from their external view. Because most companies are obliged to disclose an annual report which includes basically financial information of the last fiscal year, investors are informed about economic related events in the last reporting period. Nevertheless, there could be important information arising in the same time-period with no immediate effect on financial statements, but with a financial effect in the future. Mostly, managers know these events and could report additional information in the annual report or through an additional social report. This should lower the information asymmetry between managers and shareholders and thus the cost of capital which comes from a lower premium risk (Easley et al., 2002: p. 2219). Furthermore, there can be an agency problem due to differing interests between
the principal and the agent, which means that investors have to trust managers which in turn could have differing interests (Jensen and Meckling, 1976: p. 308). If managers not only report about financial, but also about social facts, they are more transparent and it is less likely that they would act against the interests of the investors. Those problems are two main arguments for voluntary disclosure in capital markets (Healy and Palepu, 2001: p. 407).

In addition, investors take non-financial aspects such as ethical, social, or environmental responsibility, increasingly into account, because they want to look at non-financial besides financial performance (Adams, 2004: p. 732). This can be the case because they are socially minded or they think that only companies which meet the relevant stakeholder interests are able to maximise shareholder value in the long run (Ballou et al., 2006: p. 65). To notice such activities, the company’s financial reports are not suitable because they are not laid out or expected to deliver such information. However, social reports include this information and can help to uncover sustainable actions. These reports are possible media for communication with shareholders, which could have an impact on the volatility of share prices (Hockerts and Moir, 2004: p. 86). It has also been shown in an experimental study by Barreda-Tarazona et al. (2011: p. 320) that investors prefer socially responsible companies. However, this does not mean that investors are willing to take lower returns from such companies (Rosen et al., 1991: p. 231).

Some of these aspects have also been shown in empirical research. E.g., Botosan (1997) examines the impact of disclosure level on equity costs. She shows that more voluntary information in annual reports is related with lower equity costs for companies with low analyst following. For firms with high analyst following there is no significant association. Similar results are achieved by Poshakwale and Courtis (2005) who examine the relationship between voluntary disclosure in annual reports and equity costs for the banking sector. They have found a positive relationship for banks in Australia, Europe and North America whereas the influence of voluntary disclosure on equity costs in Europe is higher. In an event study Blacconiere and Patten (1994) figure out a less negative market reaction due to a negative event for companies in the chemical industry which had had more extensive environmental reporting before this event.

Hockerts and Moir (2004) interviewed investor relations staff responsible for communication with investors. They found that “corporate responsibility” and “corporate sustainability” are used interchangeably by the interviewees and include a social, environmental, and an economic dimension (Hockerts and Moir, 2004: p. 89). Most of them say that corporate sustainability can lead to reduced costs, but that it is also useful to get legitimation to operate. Anyway, there is no totally conclusive theoretical or empirical evidence whether or how the relationship between social and
financial aspects unfolds (Kolstad, 2007: p. 143). Otherwise, it can be argued that a company will not have good financial performance when it ignores other stakeholders besides investors (Bird et al., 2007: p. 204), which can be explained with legitimacy and stakeholder theory.

Legitimacy is important, because a company always operates in a dynamic society and to ensure its power it has to satisfy not only its own interests but also to show that the company is needed in the society (Shocker and Sethi, 1973: p. 97). Whether the social report is appropriate to get this legitimation depends on whether the company can justify its own actions conclusively or not (Lerner and Tetlock, 1999: p. 255). Bansal and Clelland (2004) have shown that environmental information which is able to legitimate a company’s actions can lower unsystematic risk on the stock market. The society which is addressed by legitimacy theory can be interpreted as a pool of stakeholders and so there is a connection or overlap with the stakeholder theory (Deegan, 2002: p. 294).

An example for publishing social reports to influence stakeholders is the tobacco industry. While the tobacco industry as well as alcohol, nuclear power, or gambling is excluded from socially responsible funds, tobacco companies such as British American Tobacco (BAT) produce social reports (Yach et al., 2001: p. 6). In their reports they do not expose all possible harmful consequences of smoking, because this would not help them become attractive for stakeholders (Palazzo and Richter, 2005: p. 392). These reports should help to get legitimacy in society so that the company can avoid further regulations or restrictions in respect to distribution or marketing activities, but without using the reporting process to change their business model (Moerman and van der Laan, 2005: p. 375). With this example and keeping in mind that the tobacco industry already has gotten liabilities from different states, it can be said that “today’s social issue is tomorrow’s financial issue” (Williams, 1999: p. 1284) and that is why companies could try to influence social issues in their favour.

Investors are an essential part of stakeholders. Beside employees, NGOs, government and customers, they are also seen as one of the target audiences of such social reports (Spence, 2009: p. 258). Thus, a sole concentration on ethical values does not conform with the stakeholder theory (Balmer et al., 2007: p. 10). In addition, companies can learn to understand stakeholders if they deal with social responsibilities in social reports even if those responsibilities are contradictory (Jones, 1980: p. 65). This learning process also helps companies to improve their actions or at least their social reporting and it shows stakeholders that they are included in the decision processes, which leads to a kind of procedural fairness (Jones and Goldberg, 1982: p. 606).

Other stakeholder groups beside investors could also be interested in social re-
ports. For instance, customers often have a choice of buying similar products from different companies. They look more and more at other aspects such as sustainable products and processes before their buying decision (Fortes, 2002: p. 84). Thus, reporting additional information could not only lower the information asymmetry and influence the decisions of investors, but it could also influence the behaviour of other stakeholders having an impact on the value of the company. For example, Brown and Dacin (1997: p. 80) and Handelman and Arnold (1999: p. 40) show that social responsibility influences the evaluation of companies by consumers. Sen and Bhattacharya (2001: p. 238) come to similar results and in addition they point out that consumers are more sensitive to negative information in evaluating companies.

Walmsley and Bond (2003) investigate the association between environmental reporting and market value, but found no significant relationship. Whether such reports are included in investment decisions depends on the awareness of investors and Walmsley and Bond (2003: p. 178) state that the “establishment of the Global Reporting Initiative has been instrumental in raising awareness”. For companies in the UK, Murray et al. (2006) also found no relationship between environmental and social disclosure and financial market performance. However, because of the rapidly changing environment and circumstances of companies and their stakeholders, it could be the case that social reporting plays or will play a more important role, perhaps also with other or better norms of reporting. Differing results due to social reporting studies can also depend on the conflicting values of stakeholders which can cause contradictory research results (Epstein, 1987: p. 104).

Whichever of the possible underlying arguments or theories holds, it should be useful to disclose social activities by the company to enhance its financial performance (Holzer-Webb et al., 2009: p. 501). Hence, a change in firm value can not directly be associated with concrete value changes such as lower costs of equity or debt capital or higher employee or customer satisfaction. For instance, some companies may increase their firm value merely by lower equity costs and others by higher capital costs, but higher expected sales which more than compensate this effect. Social reports also can lead to less uncertainty for investors which appears in lower risk premiums. These are the basis for discounting the future cash flow of a firm. If the cash flows are discounted with lower discount rates the net present value of a firm is higher. Thus, an increase in firm value can result from reduced information asymmetry, but is also induced by reducing the uncertainties of the other stakeholders (Boessio and Kumar, 2007: p. 270). Hence, it is barely possible to further disaggregate a firm value increasing effect with regard to the underlying variety of possible arguments or theories. So it can be proposed:

**Hypothesis 1** Disclosing a social report is positively related to firm value.
Not only the presence of a social report, but also the quantity of disclosed information can have an influence on the firm value. Reported “good” behaviour potentially affects the financial performance of a company by giving stakeholders information about a company’s social aspects they want to hear (Cetindamar, 2007: p. 164). Thus, the expected effects of social reports can lead to reports which include only or mostly positive information to cast a positive light on the company (Holder-Webb et al., 2009: p. 517). One example is given by Deegan and Rankin (1996: p. 59) who show that companies are very retentive in providing negative environmental information and prosecuted firms provide more positive environmental information than others. Hess and Dunfee (2007: p. 23) say that the costs for disclosing negative social information increase if stakeholders are intolerant to less responsible firms. This also motivates companies to disclose mainly positive information. Furthermore, without significant search costs, stakeholders cannot identify whether information is undisclosed because a lot of information is only available inside the company (Hess and Dunfee, 2007: p. 23).

Companies are also free to report about what they think is able to influence stakeholders in their interest, whereas the information indeed could be true, but not necessarily effective (Laufer, 2003: p. 254). For instance, for voluntary financial disclosure it has been shown that only the adoption announcement of repurchase plans increases the market value of a company even if the plans were not implemented and the rate of adopted but not implemented plans increased at the same time (Zajac and Westphal, 2004: p. 449). This real positive impact on the market value could also be an incentive for companies to report primarily favourable voluntary information.

A survey of 1,037 American households in 1994 shows that before they purchase from a company, 16% observe always or frequent the business practices or ethics and 50% say they try to avoid socially irresponsible companies (Gildea, 1994: p. 21). In an experimental setting Alnicik et al. (2011: p. 241) also show that positive corporate social responsibility information influences consumers, employees and investors to the benefit of the company. Furthermore, Petersen and Vredenburg (2009: p. 13) find that corporate executives as well as institutional investors believe that social actions are positive for the firm value.

With that knowledge it would not be astonishing if social reports are used as advertising instruments by disclosing as much as possible positive social actions of a firm. If every firm acts in this manner it can be assumed that firms reporting more also have more positive information and thus a better performance with respect to these aspects. Thus, companies try to disclose as much as they can to achieve the benefits outlined for hypothesis 1. At the same time companies are cautious to report few or no negative and mostly positive information which should increase
the firm value. Al-Tuwajri et al. (2004) found a significant positive relationship between good environmental performance and good economic performance while environmental performance is also associated with higher environmental disclosure.

Furthermore, with higher levels of reported information, a company has to take a closer look at its stakeholders and has to better know their needs (Reynolds and Yuthas, 2008: p. 58). This is why companies reporting more should benefit more according to stakeholder theory. Shareholders in turn have a more complete and comprehensive view of the company and they can better judge about the company’s performance. Hence, the following hypothesis can be posed:

**Hypothesis 2** Social reports with more information are positively related to firm value.

Besides the quantity of given information, its reliability can also influence firm value. Social reports not only include quantitative measures, but also information which is not measurable and thus not presentable in numbers, but rather in narrative form. The presentation of qualitative information is not that precise and is interpretable to a certain degree. Furthermore, as described above, it could be unfavourable to disclose too much negative information. Hence, it is not to be expected that a company is willing or able to disclose all information in a true and fair view and it even can be the intention of a company to mislead the report reader (Gray, 2001: p. 12). This also means that it is very difficult to verify such information (Ballou et al., 2006: p. 67).

Thus, it can be assumed that a non-audited social report is less reliable than an audited social report. Gray (2001: p. 13) states that an assurance is a waste of money and time if there are no standards and well-trained auditors. But the assurance of social reports has improved over time, and standards such as the International Standard for Assurance Engagements (ISAE3000) and the AA1000AS (2008) from AccountAbility which are based on the principles of inclusivity, materiality, and responsiveness should help to assure the reliability of social reports.

Coram et al. (2009: p. 147) show in an experiment that assurance of voluntary non-financial information influences stock price estimates in a positive way if the information is also positive, but there is no significant influence if the information is negative. They assume that positive information is less reliable and so there is a need for assurance. Thus, assurance should have a positive impact on firm value because it was concluded that companies try to publish mainly positive information. Similar results come from Blackwell et al. (1998: p. 68) who show that interest rates for bank loans are lower when the financial statements given to the bank are voluntarily audited. Furthermore, there is empirical evidence which states that external auditing in general is able to lower agency costs (Carey et al., 2000: p. 49).
This also decreases the risk premium expected by shareholders and thus increases the firm value. To sum up, the following hypothesis can be formulated:

**Hypothesis 3** *External assurance of social reports is positively related with firm value.*

### 4.3 Research Design

#### 4.3.1 Data & Sample

The sample consists of the Dow Jones STOXX 600, which covers 600 companies. The companies are located in 18 European countries including Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom. The companies belong to different industries, which are based on the ICB (industry classification benchmark). The industries are classified into Oil & Gas, Basic Materials, Industrials, Consumer Goods, Health Care, Consumer, Services, Telecommunications, Utilities, Financials, and Technology.

Furthermore, only social reports which are prepared with the help of the GRI Guidelines from the Global Reporting Initiative are considered in the analysis, because these guidelines are very comprehensive and are widely used. Hence, they “are essentially becoming the equivalent of Generally Accepted Accounting Principles for social and environmental reporting” (Hess and Dunfee, 2007: p. 25) and can be seen as a de facto standard in this reporting field (Hess, 2008: p. 474). In 1997 the GRI was created by the Ceres, an NGO which addresses sustainable challenges. It became an independent institution in the form of a foundation in the Netherlands. In 2006 the third and latest version of the GRI Guidelines, called G3, was released.

The reports were searched for on the basis of a list published by the GRI, which includes companies publishing GRI reports and on the website CorporateRegister.com for the companies which are not included in the GRI list. In order to be included in the sample, the reports have to be published in the years 2008 to 2010. All reports are hand-collected, either from the company’s website or from CorporateRegister.com. Application levels as an indicator of the quantity of information and kind of assurance are also hand-collected from these reports. The remaining independent variables are calculated based on data from Thomson Reuters Datastream.
4.3.2 Variable Operationalisation

Dependent variable

Company owners in the sample act on financial markets and hold shares of the analysed companies. Financial markets estimate the value of a company on the basis of the information available. If this information is useful and reliable, they are taking on less risk and so they need only a smaller risk premium because the estimation is more precise. Thus, a company which, besides mandatory financial information, provides also useful information in its voluntary social reports, will achieve a higher value. The best estimator for firm value is the price of the security if the stock market is efficient (Fama, 1970: p. 408). This price is based on expectations about long-term returns. Thus, possible long-term effects which are implied by reported content should be included in this value. This is why, as in Lo and Sheu (2007: p. 351), the market-based measure Tobin’s $q$ is taken as the dependent variable which should be influenced by GRI reporting. The value of a company’s social aspects is not represented by an accounting measure such as return on equity or return on investment because they do not reflect the evaluation of the company owner (Wood and Jones, 1995: p. 258).

Tobin’s $q$ considers the price of securities and is defined as the market value of a company’s financial claims divided by the replacement costs of its assets. Theoretically, the replacement costs can be calculated as in Lindenberg and Ross (1981: p. 13), but practically most of the data is not available or very difficult to get. Similar to Chung and Pruitt (1994: p. 71) in this analysis an approximation of Tobin’s $q$ ($Q$) is used where $Q$ is the sum of a company’s market value of equity ($MVE$), liquidating value of outstanding preferred stocks ($PS$) and all liabilities ($LIA$) divided by the book value of total assets ($TA$). As the liquidating value of outstanding preferred stocks is only available for U.S. companies a proxy for the included European countries, the stated value of preferred stock, is taken. The market value is the firm’s share price multiplied by the number of common shares outstanding and $LIA$ are the total liabilities as book value. Hence, Tobin’s $q$ is calculated as:

$$Q = \frac{MVE + PS + LIA}{TA} \quad (4.1)$$

This market to book ratio provides the advantage that no risk adjustment or normalization is required such as with stock returns or accounting measures (Lang and Stulz, 1994: p. 1249). A $Q$ greater than one indicates that firm value is higher than its current asset value, hence a company creates value. A $Q$ less than one indicates that it is expected that the company is destroying value and it would be better to sell the current assets (Lee and Tompkins, 1999: p. 20).
**Reporting variables**

For testing Hypothesis 1, the dummy variable *GRI* is set equal to one if a firm provides a GRI report. *GRI* only shows whether a company discloses a social report according to GRI or not and it does not indicate a poor or rich amount of information in the report. For testing the other hypotheses, the GRI variable is disaggregated into sub-categories.

The application level of GRI reports is an indicator of the amount of disclosed information. It consists of three levels: A, B, and C. An application level of C requires the company to report at least ten performance indicators and a level of B, 20 performance indicators. The company has to report at least on all core indicators of the GRI guidelines or it has to explain their omission to get an application level of A. Hence, an application level A indicates the most information and C indicates less information, but there are also non-declared reports. For this purpose new dummy variables are introduced for testing Hypothesis 2 which differentiate between application levels and undeclared reports with no application level. A, B, and C are the application levels and *AL UN* is 1 for an undeclared GRI report.

The assurance of a report can be a criterion of the reliability of the information disclosed. Reports can be non-checked, GRI checked, or checked by another third party. If a report is checked, it does not necessarily show how good the report is or whether it meets all the requirements of the GRI guidelines. A report checked by the GRI only ensures that the application level is correctly applied. The scope of a third party assured report regularly can be found in the assurance statement. Thus, for Hypothesis 3, the binary variable *GAS* describes a report checked by GRI, *TAS* describes a third party assured report, and *NAS* is an indicator for a non-checked report.

**Control variables**

The reporting variables stand for the factors of GRI reports that influence the dependent variable, Tobin’s *q*, representing the firm value. To isolate the relationship between social reports and economic performance, other influencing effects have to be eliminated. Thus, as a summary of Morek and Yeung (1991: p. 170), Dowell et al. (2000: p. 1064), Konar and Cohen (2001: p. 285), King and Lenox (2002: p. 291), Luo and Bhattacharya (2006: p. 7), Wahba (2008: p. 92), Walls et al. (2011: p. 86) and Schreck (2011: p. 173), who used Tobin’s *q* as dependent variable, control variables for R&D expenses, return on assets, leverage, risk, multinationality, size, and industry are used.

R&D creates intangible assets which contribute to a company’s market value (Hall et al., 2005: p. 34). McWilliams and Siegel (2000) have shown for an existing
study which has not included R&D intensity that the found positive relationship between corporate social performance and corporate financial performance becomes non-significant by adding R&D intensity. Hull and Rothenberg (2008: p. 786) who examine the relationship between corporate social performance and financial performance also found a significant influence of innovation on financial performance. Additionally, Lev and Sougiannis (1999: p. 441) state in general that a higher firm value is positively associated with R&D capital. Thus, R&D intensity is included as a control variable (RD) which is defined as R&D expenditures divided by total assets (Rao et al., 2004: p. 132).

Return on assets (ROA) is introduced as a control variable since the profitability of a company should also influence firm valuation. It indicates how good management is in utilising the resources of the company efficiently (Lee et al., 2009: p. 33). The capital structure which is represented by the financial leverage or debt level is defined as long-term debt to total assets (LEV) (Waddock and Graves, 1997: p. 309). This describes how much power creditors have and how likely an insolvency of a firm is. E.g., Jensen and Meckling (1976: p. 306) point out that companies with a mixed capital structure act differently than companies with a sole owner. Modigliani and Miller (1963: p. 442) state that a company tries to adjust its capital structure also with the aim of preserving a certain degree of flexibility. The riskiness of a firm can be captured with beta (BETA), which describes the systematic market risk which indicates how much a firm’s stock price depends on general stock market movements (Fombrun and Shanley, 1990: p. 245). Barry and Brown (1985: p. 408) argue that companies with equal risk, but different levels of information, can be valued diversely. BETA considers the risk relatively to the Dow Jones STOXX 600 on a yearly basis.

AlNajjar and Riahi-Belkaoui (1999: p. 35) and Morek and Yeung (1991: p. 167) found a positive relationship between multinationality and the market value. From their results they conclude that multinationality supports the internationalisation theory which means that a higher degree of internationality offers a broader market for a company where it can use its competitive advantages especially its intangible assets (Morek and Yeung, 1991: p. 165). Thus, the variable for multinationality (MN) is defined as foreign assets divided by total assets (Dowell et al., 2000: p. 1064).

Previous studies have shown an influence of firm size on the market value. Some argue that large companies have money for innovation investments while others say that small companies can react quickly to market changes, which is especially important in the technology sector (Connolly and Hirschey, 2005: p. 217). In this study the size variable (SIZE) is defined as the logarithm to base 10 of total assets (Dowell et al., 2000: p. 1064).
Industry is taken into account because the competitive circumstances can vary very strongly between industries. Profit margins, for instance, are mostly lower in trading business than in manufacturing industry. The same applies to other factors, such as the demand for information by stakeholders, which differs between industries and are not represented by the other control variables such as R&D intensity (Waddock and Graves, 1997: p. 306). To capture industry specific effects for each industry, a dummy variable (IND) is introduced. Similarly, the dummy variables YEAR2009 and YEAR2010 help to differentiate between the three years included in the sample, because of changing macroeconomic effects.

4.3.3 Regression Analyses

The basic model tests whether the firm value differs between companies providing a GRI report or not. Hence, the estimation model is:

\[
Q = \beta_0 + \beta_1GRI + \beta_2RD + \beta_3ROA + \beta_4LEV + \beta_5BETA + \beta_6MN + \beta_7SIZE + \sum_{i=1}^{9} \beta_{8i}IND_i + \beta_9YEAR2009 + \beta_{10}YEAR2010
\]

To determine whether the application level which indicates the detail and volume of a report and whether external assurance which indicates reliability of reports have an influence on the firm value, two further models are introduced. Equation (H2) differentiates between the three application levels and undeclared reports. Equation (H3) differentiates between GRI assurance, other third party assurance and no assurance.

\[
Q = \beta_0 + \beta_1A + \beta_2B + \beta_3C + \beta_4AL_UN + \beta_5RD + \beta_6ROA + \beta_7LEV + \beta_8BETA + \beta_9MN + \beta_{10}SIZE + \sum_{i=1}^{9} \beta_{11i}IND_i + \beta_{12}YEAR2009 + \beta_{13}YEAR2010
\]

\[
Q = \beta_0 + \beta_1GAS + \beta_2TAS + \beta_3NAS + \beta_4RD + \beta_5ROA + \beta_6LEV + \beta_7BETA + \beta_8MN + \beta_{9}SIZE + \sum_{i=1}^{9} \beta_{10i}IND_i + \beta_{11}YEAR2009 + \beta_{12}YEAR2010
\]

The analysis is done with an ordinary least squares regression to capture the influ-
ence of social reports on the firm value while considering effects of control variables. The firm value is computed with measures from 31 December of a particular year and the underlying GRI reports are published before this date, hence there is a lag which implies that reporting should affect the firm value. The analysis could also be done with an event study, but this would lead to some event study specific issues such as missing publication dates, the necessity of unanticipated events and the absence of confounding events which are difficult to account for (McWilliams and Siegel, 1997: p. 99).

4.3.4 Descriptive Statistics

Table 4.1 shows that the number of published GRI reports slightly increases over the three years from 213 to 236 reports (36% to 39% of 600 companies). Most of them are application level A or B. There are more undeclared reports than reports with an application level of C. The ratio of reports which have not been checked by third parties or GRI is between 50% and 61% per year. The amount of non-checked reports is higher for reports which have an application level of B or C. The assured reports with an application level of A are more often checked by GRI (35% to 67%) than by third parties (22% to 32%). Furthermore, the number of assured reports increases from 2008 to 2009, but it decreases from 2009 to 2010 and this holds for GRI-checked and for third-party checked reports.

Descriptive statistics for $Q$ and control variables without industry are given in Table 4.2. R&D intensity is very low and its median and mean are nearly zero. There are not many R&D intensive companies included in the sample and companies in Europe which use IFRS standards also have some possibility of not showing all R&D expenses in their annual reports. The sample is also corrected for data points with negative LEV and values with $MN$ above 100 which means that these companies are not included in the analysis. A negative $BETA$ for companies means that the particular company has a risk which is inverse to that of the market, but nevertheless it is possible, hence it is not corrected. Minimum and maximum values in comparison to means and medians show that there are some extreme values within LEV, MN and ROA, which are considered in the robustness test in Section 4.5.
### Table 4.1: GRI reports, application level, assurance

<table>
<thead>
<tr>
<th>Year</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>undeclared</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GRI reports</strong></td>
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<td></td>
</tr>
<tr>
<td>2010</td>
<td>89</td>
<td>74</td>
<td>34</td>
<td>39</td>
<td>236</td>
</tr>
<tr>
<td></td>
<td>37.7%</td>
<td>31.4%</td>
<td>14.4%</td>
<td>16.5%</td>
<td>100.0%</td>
</tr>
<tr>
<td>2009</td>
<td>81</td>
<td>61</td>
<td>32</td>
<td>57</td>
<td>231</td>
</tr>
<tr>
<td></td>
<td>35.1%</td>
<td>26.4%</td>
<td>13.9%</td>
<td>24.7%</td>
<td>100.0%</td>
</tr>
<tr>
<td>2008</td>
<td>60</td>
<td>60</td>
<td>21</td>
<td>72</td>
<td>213</td>
</tr>
<tr>
<td></td>
<td>28.2%</td>
<td>28.2%</td>
<td>9.9%</td>
<td>33.8%</td>
<td>100.0%</td>
</tr>
<tr>
<td><strong>Third party assured</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>22</td>
<td>12</td>
<td>4</td>
<td></td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>24.7%</td>
<td>16.2%</td>
<td>11.8%</td>
<td></td>
<td>16.1%</td>
</tr>
<tr>
<td>2009</td>
<td>26</td>
<td>21</td>
<td>5</td>
<td></td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>32.1%</td>
<td>34.4%</td>
<td>15.6%</td>
<td></td>
<td>22.5%</td>
</tr>
<tr>
<td>2008</td>
<td>13</td>
<td>19</td>
<td>2</td>
<td></td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>21.7%</td>
<td>31.7%</td>
<td>9.5%</td>
<td></td>
<td>16.0%</td>
</tr>
<tr>
<td><strong>GRI checked</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>31</td>
<td>16</td>
<td>7</td>
<td></td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>34.8%</td>
<td>21.6%</td>
<td>20.6%</td>
<td></td>
<td>22.9%</td>
</tr>
<tr>
<td>2009</td>
<td>47</td>
<td>10</td>
<td>6</td>
<td></td>
<td>63</td>
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<tr>
<td></td>
<td>58.0%</td>
<td>16.4%</td>
<td>18.8%</td>
<td></td>
<td>27.3%</td>
</tr>
<tr>
<td>2008</td>
<td>40</td>
<td>8</td>
<td>6</td>
<td></td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>66.7%</td>
<td>13.3%</td>
<td>28.6%</td>
<td></td>
<td>25.4%</td>
</tr>
<tr>
<td><strong>not checked</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>36</td>
<td>46</td>
<td>23</td>
<td>39</td>
<td>144</td>
</tr>
<tr>
<td></td>
<td>40.4%</td>
<td>62.2%</td>
<td>67.6%</td>
<td>100.0%</td>
<td>61.0%</td>
</tr>
<tr>
<td>2009</td>
<td>8</td>
<td>30</td>
<td>21</td>
<td>57</td>
<td>116</td>
</tr>
<tr>
<td></td>
<td>9.9%</td>
<td>49.2%</td>
<td>65.6%</td>
<td>100.0%</td>
<td>50.2%</td>
</tr>
<tr>
<td>2008</td>
<td>7</td>
<td>33</td>
<td>13</td>
<td>72</td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>11.7%</td>
<td>55.0%</td>
<td>61.9%</td>
<td>100.0%</td>
<td>58.7%</td>
</tr>
</tbody>
</table>

### Table 4.2: Descriptive Statistics - Overall

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Q</th>
<th>RD</th>
<th>ROA</th>
<th>LEV</th>
<th>BETA</th>
<th>MN</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min.</td>
<td>2010</td>
<td>0.50</td>
<td>0.00</td>
<td>-74.75</td>
<td>0.01</td>
<td>-0.06</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>2009</td>
<td>0.47</td>
<td>0.00</td>
<td>-52.25</td>
<td>0.00</td>
<td>-0.11</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>0.47</td>
<td>0.00</td>
<td>-55.89</td>
<td>0.02</td>
<td>-0.78</td>
<td>0.00</td>
</tr>
<tr>
<td>Median</td>
<td>2010</td>
<td>1.25</td>
<td>0.00</td>
<td>5.49</td>
<td>1.72</td>
<td>1.04</td>
<td>17.80</td>
</tr>
<tr>
<td></td>
<td>2009</td>
<td>1.24</td>
<td>0.00</td>
<td>3.97</td>
<td>1.87</td>
<td>1.07</td>
<td>15.14</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>1.08</td>
<td>0.00</td>
<td>5.60</td>
<td>2.07</td>
<td>1.10</td>
<td>26.59</td>
</tr>
<tr>
<td>Mean</td>
<td>2010</td>
<td>1.60</td>
<td>0.01</td>
<td>6.79</td>
<td>5.20</td>
<td>1.06</td>
<td>27.26</td>
</tr>
<tr>
<td></td>
<td>2009</td>
<td>1.54</td>
<td>0.01</td>
<td>4.95</td>
<td>5.22</td>
<td>1.14</td>
<td>27.13</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>1.35</td>
<td>0.01</td>
<td>6.13</td>
<td>5.84</td>
<td>1.13</td>
<td>31.04</td>
</tr>
<tr>
<td>Max.</td>
<td>2010</td>
<td>8.17</td>
<td>0.29</td>
<td>46.22</td>
<td>99.83</td>
<td>2.37</td>
<td>100.00</td>
</tr>
<tr>
<td></td>
<td>2009</td>
<td>8.36</td>
<td>0.41</td>
<td>75.00</td>
<td>197.20</td>
<td>4.62</td>
<td>100.00</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>10.84</td>
<td>0.42</td>
<td>57.81</td>
<td>163.79</td>
<td>3.22</td>
<td>100.00</td>
</tr>
<tr>
<td>SD</td>
<td>2010</td>
<td>0.90</td>
<td>0.03</td>
<td>7.98</td>
<td>10.25</td>
<td>0.42</td>
<td>29.75</td>
</tr>
<tr>
<td></td>
<td>2009</td>
<td>0.93</td>
<td>0.03</td>
<td>8.42</td>
<td>11.32</td>
<td>0.65</td>
<td>30.45</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>0.88</td>
<td>0.04</td>
<td>9.23</td>
<td>11.69</td>
<td>0.46</td>
<td>29.93</td>
</tr>
</tbody>
</table>

2010: n = 582, 2009: n = 588, 2008: n = 580

*Note: The operationalisation of the variables can be found in Section 4.3.2.*
4.4 Results

4.4.1 Basic Results

One overall Pearson correlation matrix for all three years is given in Table 4.3, because it is similar to the yearly correlation matrices. Some companies are not considered in further analyses because of the above-mentioned corrections or missing values in the financial data which results in a sample of 580 companies in 2008, 588 companies in 2009, and 582 companies in 2010. The highest absolute value of correlation coefficients between the independent variables is 0.5 for \( \text{LEV} \) and \( \text{SIZE} \) and thus there seems to be no multicollinearity issue. It can be seen that \( \text{RD} \), \( \text{ROA} \), \( \text{LEV} \), \( \text{BETA} \), and \( \text{SIZE} \) are significantly associated \((p < 0.01)\) with the firm value. However, \( \text{GRI} \) and its derived measures present no significant influence. The derived measures are not shown in the correlation tables because the results are very similar to those of \( \text{GRI} \). However, they are significantly correlated with \( \text{GRI} \) because they are sub-samples of it.

Table 4.3: Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>Q</th>
<th>GRI</th>
<th>RD</th>
<th>ROA</th>
<th>LEV</th>
<th>BETA</th>
<th>MN</th>
<th>SIZE</th>
</tr>
</thead>
</table>
| Q     | 1  | 0.03| 1   | -0.03| 1    | 0.53* | 0.37**| 0.5**| 0.22**| 0.29**| 1.00*
| GRI   | -0.03| 1   | 0.23***| -0.03| 1    | -0.16***| 0.06**| -0.12***| -0.17***| 1    |
| RD    | -0.03| 1   | 0.53***| -0.02| 1    | 0.25***| 0.14***| 0.23***| 0.22***| 0.1***| 1    |
| ROA   | -0.02| 1   | 0.37**| 0.04* | 0.05*| -0.06***| 0.1***| 0.22***| -0.02| 1    |      |
| LEV   | -0.12***| 1| 0.25***| 0.14***| 0.23***| 0.22***| 0.29**| 0.5**| 0.22***| -0.02| 1    |
| BETA  | 0.23***| -0.12***| -0.12***| -0.17***| 1| 0.22***| 0.1***| 0.22***| -0.02| 1    |      |
| MN    | 0.04* | 0.05*| -0.06***| 0.1***| 1    | 0.22***| 0.29**| 0.5**| 0.22***| -0.02| 1    |
| SIZE  | 0.37**| 0.5**| 0.22***| -0.02| 1    | 1    |      |      |      |      |      |

\( n = 1750 \), \( *** p < 0.01 \), \( ** p < 0.05 \), \( * p < 0.1 \) (two-sided)

Note: The operationalisation of the variables can be found in Section 4.3.2.

Table 4.4 presents the results of the regression analysis which shows overall influences and significances due to \( \text{GRI} \) and the control variables on the dependent variable \( Q \). The adjusted \( R^2 \) for this model is 0.43 which means that the model explains the dependent variable \( Q \) well at a significant level \((p < .01)\). \( \text{GRI} \), \( \text{ROA} \), \( \text{RD} \) and \( \text{SIZE} \) and the year have the most significant influence \((p < .01)\) on \( Q \). There is also a high significance \((p < .01)\) for \( \text{LEV} \), but its influence on \( Q \) is almost zero. \( \text{BETA} \) also has a quite significant \((p < .05)\) negative impact on \( Q \). Only multinationality and some industry variables have no significant impact on \( Q \). The variance inflation factor is always less than or equal to 2.2, except in the industry variables, where it goes up to 7.24. Often a factor above 10 is considered as an indicator for multicollinearity and thus it seems that in this model multicollinearity is no critical matter. Hence, the significant positive influence of \( \text{GRI} \) on \( Q \) supports
Hypothesis 1. It is also in line with the results of the study by Schadewitz and Niskala (2010: p. 104) who identify a positive relation between GRI reporting and firm value in Finnish firms.

### Table 4.4: Results of Regression Analysis with GRI report

| Coefficients | Estimate | Std. Error | t value | Pr(>|t|) |
|--------------|----------|------------|---------|----------|
| (Intercept)  | 4.07     | 0.23       | 17.46   | 0.00 *** |
| GRI          | 0.24     | 0.04       | 5.89    | 0.00 *** |
| ROA          | 0.05     | 0.00       | 21.93   | 0.00 *** |
| RD           | 2.95     | 0.62       | 4.71    | 0.00 *** |
| LEV          | 0.01     | 0.00       | 5.10    | 0.00 *** |
| BETA         | -0.10    | 0.04       | -2.55   | 0.01 **  |
| MN           | 0.00     | 0.00       | -0.84   | 0.40     |
| SIZE         | -0.43    | 0.03       | -13.24  | 0.00 *** |
| Oil & Gas    | -0.20    | 0.12       | -1.74   | 0.08 *   |
| Basic Materials | -0.12 | 0.11       | -1.10   | 0.27     |
| Industrials  | -0.12    | 0.10       | -1.23   | 0.22     |
| Consumer Goods | -0.06 | 0.11       | -0.54   | 0.59     |
| Health Care  | 0.36     | 0.11       | 3.27    | 0.00 *** |
| Consumer Services | 0.02 | 0.11       | 0.18    | 0.85     |
| Telecommunications | -0.26 | 0.14       | -1.94   | 0.05 *   |
| Utilities    | -0.24    | 0.12       | -1.96   | 0.05 *   |
| Financials   | -0.07    | 0.11       | -0.67   | 0.50     |
| YEAR2009     | 0.26     | 0.04       | 6.18    | 0.00 *** |
| YEAR2010     | 0.24     | 0.04       | 5.65    | 0.00 *** |

Significance: *** $p < .01$, ** $p < .05$, * $p < .10$
Multiple $R$-squared: 0.4404, Adjusted $R$-squared: 0.4345
$F$-statistic: 74.68 on 18 and 1708 DF, $p$-value: $< 2.2e-16$ ***
Highest VIF 7.24

Note: The operationalisation of the variables can be found in Section 4.3.2.

As can be seen in Table 4.5, there is a significant positive influence of $A$ ($p < .01$), $B$ ($p < .01$), $C$ ($p < .10$), and $AL_UN$ ($p < .01$) on $Q$. Table 4.6 shows $p$-values for a Wald test which tests the equality of these coefficients. It can be seen that the coefficient for $B$ (0.40) is significantly higher than the other coefficients. This confirms a positive influence on the firm value if a GRI report contains much information. However, the coefficient for $B$ is higher than for $A$ which means that an application level of $B$ leads to a higher $Q$. Thus, Hypothesis 2 can only be partly supported. There seems to be a point of too much information beyond the application level $B$ where additional costs for more information are higher than additional benefits from this extra information.

For external assurance, the results are presented in Table 4.7. GRI reports in general have a significant positive influence, because all variables GAS, TAS, and NAS have positive coefficients which are all significant (at least with $p < .10$). However, as the Wald test in Table 4.8 shows that the coefficient for TAS (0.13)
Table 4.5: Results of Regression Analysis with application levels as dummy variables

| Coefficients   | Estimate | Std. Error | t value | Pr(>|t|) |
|----------------|----------|------------|---------|----------|
| (Intercept)    | 4.18     | 0.24       | 17.64   | 0.00 *** |
| A              | 0.24     | 0.06       | -4.10   | 0.00 *** |
| B              | 0.40     | 0.06       | 6.68    | 0.00 *** |
| C              | 0.15     | 0.08       | 1.88    | 0.06 *   |
| AL_UN          | 0.20     | 0.06       | 3.15    | 0.00 *** |
| ROA            | 0.05     | 0.00       | 21.86   | 0.00 *** |
| RD             | 2.83     | 0.62       | 4.54    | 0.00 *** |
| LEV            | 0.01     | 0.00       | 5.25    | 0.00 *** |
| BETA           | -0.10    | 0.04       | -2.69   | 0.00 *** |
| MN             | 0.00     | 0.00       | -0.87   | 0.38     |
| SIZE           | -0.45    | 0.03       | -13.40  | 0.00 *** |
| Oil & Gas      | -0.20    | 0.12       | -1.77   | 0.08 *   |
| Basic Materials| -0.12    | 0.11       | -1.14   | 0.26     |
| Industrials    | -0.13    | 0.10       | -1.29   | 0.20     |
| Consumer Goods | -0.07    | 0.11       | -0.66   | 0.51     |
| Health Care    | 0.36     | 0.11       | 3.26    | 0.00 *** |
| Consumer Services | 0.01 | 0.11 | 0.05 | 0.96 |
| Telecommunications | -0.30 | 0.14 | -2.18 | 0.03 ** |
| Utilities      | -0.26    | 0.12       | -2.14   | 0.03 ** |
| Financials     | -0.08    | 0.11       | -0.71   | 0.48     |
| YEAR2009       | 0.26     | 0.04       | 6.17    | 0.00 *** |
| YEAR2010       | 0.24     | 0.04       | 5.70    | 0.00 *** |

Significance: *** p < .01, ** p < .05, * p < .10
Multiple R-squared: 0.4459, Adjusted R-squared: 0.4391
F-statistic: 65.34 on 21 and 1705 DF, p-value: < 2.2e-16 ***
Highest VIF 7.27

Note: The operationalisation of the variables can be found in Section 4.3.2.

Table 4.6: Wald Test for the equality of application level coefficients

<table>
<thead>
<tr>
<th>Estimate</th>
<th>Std. Error</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>AL_UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0.24</td>
<td>0.06</td>
<td>1.00</td>
<td>0.005</td>
<td>0.140</td>
</tr>
<tr>
<td>B</td>
<td>0.40</td>
<td>0.06</td>
<td>1.00</td>
<td>0.000</td>
<td>0.001</td>
</tr>
<tr>
<td>C</td>
<td>0.15</td>
<td>0.08</td>
<td>1.00</td>
<td>0.590</td>
<td></td>
</tr>
<tr>
<td>AL_UN</td>
<td>0.20</td>
<td>0.06</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

p-values for Pr(>|χ²|)

Note: The operationalisation of the variables can be found in Section 4.3.2.

is significantly lower than for NAS (0.33) and GAS (0.25), this means that non-checked or GRI-checked GRI reports have a higher influence on Q. Thus, there is no support for Hypothesis 3, because third party assured reports are not better than non-checked reports for firm value and GRI assured reports are at best equal to non-checked reports.
Table 4.7: Results of Regression Analysis with external assurance as dummy variables

| Coefficients | Estimate | Std. Error | t value | Pr(>|t|) |
|--------------|----------|------------|---------|---------|
| (Intercept)  | -4.17    | 0.23       | 17.79   | 0.00 ***|
| GAS          | 0.25     | 0.06       | 3.99    | 0.00 ***|
| TAS          | 0.13     | 0.07       | 1.89    | 0.06 *  |
| NAS          | 0.33     | 0.05       | 6.70    | 0.00 ***|
| ROA          | 0.05     | 0.00       | 21.82   | 0.00 ***|
| RD           | 2.90     | 0.62       | 4.65    | 0.00 ***|
| LEV          | -0.01    | 0.00       | 5.28    | 0.00 ***|
| BETA         | -0.10    | 0.04       | -2.59   | 0.00 ***|
| MN           | 0.00     | 0.00       | -0.93   | 0.35    |
| SIZE         | -0.45    | 0.03       | -13.61  | 0.00 ***|
| Oil & Gas    | -0.20    | 0.12       | -1.72   | 0.09 *  |
| Basic Materials | -0.13    | 0.11       | -1.19   | 0.24    |
| Industrials  | -0.12    | 0.10       | -1.19   | 0.23    |
| Consumer Goods | -0.07    | 0.11       | -0.66   | 0.51    |
| Health Care  | 0.36     | 0.11       | 3.28    | 0.00 ***|
| Consumer Services | 0.02   | 0.11       | 0.15    | 0.88    |
| Telecommunications | -0.25  | 0.14       | -1.84   | 0.07 *  |
| Utilities    | -0.25    | 0.12       | -2.03   | 0.04 ** |
| Financials   | -0.07    | 0.11       | -0.61   | 0.54    |
| YEAR2009     | 0.26     | 0.04       | 6.28    | 0.00 ***|
| YEAR2010     | 0.25     | 0.04       | 5.83    | 0.00 ***|

Significance: *** p < .01, ** p < .05, * p < .10
Multiple R-squared: 0.4451, Adjusted R-squared: 0.4386
F-statistic: 68.42 on 20 and 1706 DF, p-value: < 2.2e-16 ***
Highest VIF 7.27

Note: The operationalisation of the variables can be found in Section 4.3.2.

Table 4.8: Wald Test for the equality of assurance coefficients

<table>
<thead>
<tr>
<th>Estimate</th>
<th>Std. Error</th>
<th>GAS</th>
<th>TAS</th>
<th>NAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAS</td>
<td>0.25</td>
<td>0.06</td>
<td>1.000</td>
<td>0.051</td>
</tr>
<tr>
<td>TAS</td>
<td>0.13</td>
<td>0.07</td>
<td>1.000</td>
<td>0.003</td>
</tr>
<tr>
<td>NAS</td>
<td>0.33</td>
<td>0.05</td>
<td>1.000</td>
<td></td>
</tr>
</tbody>
</table>

p-values for Pr(>\(\chi^2\))

Note: The operationalisation of the variables can be found in Section 4.3.2.

4.4.2 Additional Analysis

Tables 4.5 and 4.7 show that there is no unidirectional relationship between firm value and application level or assurance. This means a higher application level does not necessarily provide a higher firm value. It also cannot be affirmed that third-party assured reports are seen as better than GRI checked reports or that the latter are seen as better than non-checked reports for the firm value. With this knowledge, there is a possibility that certain combinations of application level and assurance
type have effects differing from the already analysed effects. Therefore, all these variables are combined and included in one regression which can be seen in (4.2).

Equation (4.2) incorporates the application levels and assurance at the same time and thus all possible combinations of them are included. E.g., the variable A_TAS describes a GRI report with an application level of A which is third-party assured. Interaction terms are not introduced because of multicollinearity issues which arise because application levels and assurance of GRI reports are both sub-groups from the sub-sample of companies with GRI reports.

\[
Q = \beta_0 + \beta_1A_{GAS} + \beta_2A_{TAS} + \beta_3A_{NAS} + \beta_4B_{GAS} + \beta_5B_{TAS} + \beta_6B_{NAS} + \beta_7C_{GAS} + \beta_8C_{TAS} + \beta_9C_{NAS} + \beta_{10}AL\_UN + \beta_{11}RD + \beta_{12}ROA + \beta_{13}LEV + \beta_{14}BETA + \beta_{15}MN + \beta_{16}SIZE + \sum_{i=1}^{9} \beta_{17i}IND_i + \beta_{18}YEAR2009 + \beta_{19}YEAR2010
\]

The results of this regression are shown in Table 4.9 and the related p-values for testing the equality of the combined coefficients with the Wald test are presented in Table 4.10.

Now it can be stated that GRI reports with an application level of C only have a significant \((p < .10)\) positive \((0.32)\) impact on \(Q\) if the report is assured by GRI. Third-party assurance or no assurance have no significant impact on \(Q\) with an application level of C. B always has a significant \((p < .05)\) positive influence on \(Q\), but the effect is the highest for non-checked reports, which is also significantly \((p < .01)\) higher than for third-party assured reports. For A there is no significant influence of third-party assured reports. A has a significant \((p < .01)\) positive influence if the report is non-checked with a coefficient of 0.83 which is significantly \((p < .10)\) higher than for a non-checked report with an application level B (0.55). However, a GRI-checked A has a similar coefficient (0.22) as an undeclared report (0.20).

Thus, out of these results it is advisable to assure a report by GRI if it has an application level of C, but it should not be assured or at best GRI-checked if the application level is B. Reports with an application level of A or B should be non-checked, because the coefficient for a non-checked A report (0.83) is significantly \((p < .10)\) higher than for a non-checked B report (0.55). Also an application level B report which is non-checked has a significantly \((p < .01)\) higher influence (0.55) on \(Q\) than an GRI-checked C report (0.32). Given these conditions, reports with a higher application level also have a higher influence on the firm value, which confirms Hypothesis 2.
Table 4.9: Results of Regression Analysis with combined application levels and external assurance as dummy variables

| Coefficients   | Estimate | Std. Error | t value | Pr(>|t|) |
|----------------|----------|------------|---------|----------|
| (Intercept)    | -4.18    | 0.24       | 17.68   | 0.00 *** |
| A\_GAS         | 0.22     | 0.07       | 3.07    | 0.00 *** |
| A\_TAS         | 0.06     | 0.09       | 0.59    | 0.55     |
| A\_NAS         | 0.83     | 0.15       | 5.46    | 0.00 *** |
| B\_GAS         | 0.33     | 0.14       | 2.39    | 0.02 **  |
| B\_TAS         | 0.20     | 0.10       | 2.05    | 0.04 **  |
| B\_NAS         | 0.55     | 0.08       | 6.87    | 0.00 *** |
| C\_GAS         | 0.32     | 0.17       | 1.87    | 0.06 *   |
| C\_TAS         | 0.10     | 0.20       | 0.48    | 0.63     |
| C\_NAS         | 0.11     | 0.10       | 1.06    | 0.29     |
| AL\_UN         | 0.20     | 0.06       | 3.15    | 0.00 *** |
| ROA            | 0.05     | 0.00       | 21.55   | 0.00 *** |
| RD             | 2.69     | 0.62       | -4.33   | 0.00 *** |
| LEV            | 0.01     | 0.00       | 5.33    | 0.00 *** |
| BETA           | -0.10    | 0.04       | -2.61   | 0.00 *** |
| MN             | 0.00     | 0.00       | -1.18   | 0.24     |
| SIZE           | -0.45    | 0.03       | -13.51  | 0.00 *** |
| Oil & Gas      | -0.16    | 0.12       | -1.38   | 0.17     |
| Basic Materials| -0.09    | 0.11       | -0.87   | 0.38     |
| Industrials    | -0.09    | 0.10       | -0.90   | 0.37     |
| Consumer Goods | -0.05    | 0.11       | -0.45   | 0.66     |
| Health Care    | 0.38     | 0.11       | 3.52    | 0.00 *** |
| Consumer Services | 0.02  | 0.11       | 0.21    | 0.83     |
| Telecommunications | -0.24 | 0.14       | -1.80   | 0.07 *   |
| Utilities      | -0.23    | 0.12       | -1.91   | 0.06 *   |
| Financials     | -0.05    | 0.11       | -0.48   | 0.63     |
| YEAR2009       | 0.26     | 0.04       | 6.34    | 0.00 *** |
| YEAR2010       | 0.25     | 0.04       | 5.90    | 0.00 *** |

Significance: *** p < .01, ** p < .05, * p < .10
Multiple R-squared: 0.549, Adjusted R-squared: 0.4462
F-statistic: 52.52 on 27 and 1699 DF, p-value: < 2.2e-16 ***
Highest VIF 7.31

Note: The operationalisation of the variables can be found in Section 4.3.2.

Surprisingly, in most cases external assurance has no significant influence on firm value, which also means no negative influence. Because of less transparency and independence in comparison to financial auditing Ball et al. (2000: p. 18) argue that the reporting company has more control over the auditing process and its findings for voluntary disclosed information. Not before independent auditors can ensure that reports are not only for marketing purposes will an accurate and truthful assessment of the company’s social reports be possible (Hess, 2001: p. 320). Furthermore, O’Dwyer and Owen (2005: p. 224) point out that assurance statements often are not addressed to the company’s stakeholders, but rather to the management of the company. This increases the chance that they could be seen as less reliable for important stakeholders such as shareholders. Hence, the non-existing influence of
4 Sunny with cloudy intervals: The influence of social reporting on firm value

Table 4.10: Wald Test for the equality of combined application level and assurance coefficients

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Std. Error</th>
<th>A_GAS</th>
<th>A_TAS</th>
<th>A_NAS</th>
<th>B_GAS</th>
<th>B_TAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A_GAS</td>
<td>0.22</td>
<td>0.07</td>
<td>1.00</td>
<td>0.022</td>
<td>0.000</td>
<td>0.120</td>
<td>0.760</td>
</tr>
<tr>
<td>A_TAS</td>
<td>0.06</td>
<td>0.09</td>
<td>1.00</td>
<td>0.000</td>
<td>0.003</td>
<td>0.130</td>
<td></td>
</tr>
<tr>
<td>A_NAS</td>
<td>0.83</td>
<td>0.15</td>
<td>1.00</td>
<td>0.000</td>
<td>0.001</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>B_GAS</td>
<td>0.33</td>
<td>0.14</td>
<td>1.00</td>
<td>0.330</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B_TAS</td>
<td>0.20</td>
<td>0.10</td>
<td>1.00</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Std. Error</th>
<th>B_GAS</th>
<th>C_GAS</th>
<th>C_TAS</th>
<th>C_NAS</th>
<th>AL_UN</th>
</tr>
</thead>
<tbody>
<tr>
<td>A_GAS</td>
<td>0.22</td>
<td>0.07</td>
<td>0.000</td>
<td>0.180</td>
<td>0.003</td>
<td>0.110</td>
<td>0.740</td>
</tr>
<tr>
<td>A_TAS</td>
<td>0.06</td>
<td>0.09</td>
<td>0.000</td>
<td>0.005</td>
<td>0.640</td>
<td>0.590</td>
<td>0.130</td>
</tr>
<tr>
<td>A_NAS</td>
<td>0.83</td>
<td>0.15</td>
<td>0.064</td>
<td>0.001</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>B_GAS</td>
<td>0.33</td>
<td>0.14</td>
<td>0.120</td>
<td>0.910</td>
<td>0.095</td>
<td>0.100</td>
<td>0.330</td>
</tr>
<tr>
<td>B_TAS</td>
<td>0.20</td>
<td>0.10</td>
<td>0.000</td>
<td>0.220</td>
<td>0.310</td>
<td>0.340</td>
<td>0.990</td>
</tr>
<tr>
<td>B_NAS</td>
<td>0.55</td>
<td>0.08</td>
<td>1.00</td>
<td>0.004</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>C_GAS</td>
<td>0.32</td>
<td>0.17</td>
<td>1.00</td>
<td>0.200</td>
<td>0.210</td>
<td>0.480</td>
<td></td>
</tr>
<tr>
<td>C_TAS</td>
<td>0.10</td>
<td>0.20</td>
<td>1.00</td>
<td>0.980</td>
<td>0.640</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C_NAS</td>
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<td>0.10</td>
<td>1.00</td>
<td>0.000</td>
<td>0.360</td>
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<td></td>
</tr>
<tr>
<td>AL_UN</td>
<td>0.20</td>
<td>0.06</td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
<td></td>
</tr>
</tbody>
</table>

*p-values for Pr( > χ²)

Note: The operationalisation of the variables can be found in Section 4.3.2.

assurance can be traced back to a lack of existing regulations and standards which stakeholders can really trust.

Furthermore, Jones and Solomon (2010: p. 30) argue that the missing evidence can be explained by the difference in thinking between academics who develop theories due to the general positive effects of assurance, and managers. Perhaps for managers, external assurance produces too few or no positive outputs for the money it costs. So they state that “at the end of the day it is the companies rather than academics that have to pay the price for SERA” (social and environmental report assurance) (Jones and Solomon, 2010: p. 30). Even a check by GRI which charges relatively low fees in comparison to third party auditors, the estimates for their influence on Q are lower (0.22) than those of non-checked reports (0.85) for application level A.

Another reason could be the level of assurance as well as the requirements for passing the assurance process. E.g., the assurance level can be limited if some verification actions are not done by auditors during the assurance process. If the level is low an assured report does not necessarily enhance the reliability of a report, but it increases the costs for its assurance. Further, the requirements for passing the assurance process could be quite low for the examined time span. At this point of time, without good traceability of certain content in social reports, it is possible that stakeholders have no benefits coming out of an external assurance with regard
to the assured content and so it could have no impact on their decisions (Hess, 2008: p. 471). This might change in the future. For instance, since 2011 the GRI has required firms to include a content index template which helps to identify disclosed data. Such an index is also very useful for readers of GRI reports and the assurance of its inclusion and completeness could raise the reliability of GRI reports.

Summing up, support for a positive influence of GRI reports on firm value could be shown. It also can be assumed that under certain conditions, reports with more information have a positive influence on firm value. This does not hold for assurance, neither for third-party nor GRI-checked reports, which seem to have little or no influence on firm value, but also no negative effect. Assurance by GRI is only recommended for companies who disclose with an application level of C.

4.5 Robustness

The robustness tests are done with an analysis which includes all combinations of application level and assurance. Hence, they provide evidence on how robust the results from Table 4.9 are.

In a first robustness test extreme values are considered. Thus, data points under the 1% quantile and above the 99% quantile of LEV, MN and ROA are winsorized because of their differing median and mean values which could be caused by outliers. This leads to changes in these values for 87 companies. Except for one industry variable there are no changes in sign or significance of the coefficients. Also the relations between the reporting variables remain stable which confirms the results from Table 4.9. Additionally, with this correction adjusted $R^2$ increases from 0.45 to 0.50.

Furthermore, a regression with the market-to-book value based on equity is done. With this the results for reports with application levels of B or C and undeclared reports become insignificant. The results that non-checked reports with an application level of A are better do not change. Thus, it can be speculated that equity owners only value excellent GRI reporting companies higher than others. However, it could also be possible that equity owners incorporate the liabilities of a company in their judgement about the importance and value of GRI reports. In this case, the adjusted $R^2$ also decreases from 0.45 to 0.30, which could be because it represents a change in the dependent variable with no adjustments in the control variables which originally were determined for $Q$.

$MN$ is also redefined with foreign sales divided by total sales. In this regression all results remain stable, but the variable $MN$ itself becomes significant ($p < 0.10$) with a very low negative coefficient ($-0.0012$). Adjusted $R^2$ remains 0.45. With employees as size variable, it can be confirmed that non-checked reports reports
with an application level of A or B have a positive influence on firm value which is significantly \((p < .05)\) higher for an application level of A. The highest significant \((p < 0.10)\) influence of GRI assured reports is given for reports with an application level of C, but this coefficient is not significantly lower than for a non-checked B report. Undeclared reports do not have a significant influence on firm value in this case. The significance of the coefficient for \(LEV\) disappears and the significances in the industry variables also vary slightly. Furthermore, the adjusted \(R^2\) decreases from 0.45 to 0.40.

In addition, country specific effects are accounted for. For instance, it could be that countries exist which generally have more third-party assurance of social reports than others (Chen and Bouvain, 2009: p. 308). If companies in these countries on average have significantly different firm values than in other countries, it could influence the results due to assurance. However, the inclusion of country dummy variables does not change the significance or direction of coefficients except for C reports which in this case have no significant influence on firm value even if they are checked by GRI. Three country variables also have a significant coefficient. Adjusted \(R^2\) remains 0.45.

Hence, it can be stated that the results are stable with respect to the fact that non-checked reports with an application level of A are better than assured ones. This drastic reduction of conclusions is only the case if market-to-book ratio is measured on the basis of equity or if employees are taken as an alternative to the size variable. However, the results are very stable if only changes are considered which lead to an adjusted \(R^2\) which equals or exceeds the value of the original regression results (0.45).

### 4.6 Conclusion

This paper argues that social reports which are voluntarily prepared and disclosed by companies have various advantages, but also disadvantages. A social report can lead to more openness and show important stakeholders that a company tries to incorporate their interests. First, it is a possibility for companies to present their good social results which are not included in financial statements. Second, in such reports companies can justify events that are reported in the media and cast a damning light on the company. Third, social reports are the basis for stakeholders to evaluate a company with readily available information. But there also can be disadvantages. For example, if a company reports too much, competitors can use this information for their own interest or against the company. The same is applicable to voluntary information which marks a company as a poor performer, which justifies the assumption that social reports mainly contain positive information.
Both the advantages and disadvantages should motivate companies to primarily report information which casts a positive light on the company. If there are no regulations and standards for external assurance which detect such shortcomings of presenting information, assurance is not very reliable and people can not fully trust it. However, companies seem to have more advantages than disadvantages in disclosing social reports because they do so in a great quantity. In this paper positive signals of social reports are discovered by looking at companies disclosing social reports which are prepared with the help of the popular GRI guidelines. With an analysis of companies in respect to their reporting behaviour this study makes several contributions to this research field.

First, mainly on the basis of legitimacy and stakeholder theory a positive relationship between social reporting and firm value is assumed. This relationship can be shown in the regression analyses. Hence, for reporting companies the benefits of social reports are generally able to outweigh their costs.

Second, it is assumed that firms which report on more indicators provide investors more documented information in comparison to companies with less indicators or no social reports. This lowers the costs for analysing a company and delivers a more comprehensive picture of the company which helps to better predict its future returns. In conjunction with the idea that mostly positive information is reported, companies which report more have more positive actions and outcomes they can report. This satisfies more stakeholders and according to the stakeholder theory this leads to an increase of the firm value. In the current study this hypothesis could be partly confirmed, because the analysis shows that the application level of GRI reports is positively correlated with the firm value if the reports have an application level of A or B and are non-checked or GRI assured with an application level of C.

Third, reports which are externally assured should deliver more trust to their readers, because external validation should minimize conflicts of interest between the preparers and the assurer of the report. This study has shown that today’s assurance has no significant impact on the firm value. This could have two reasons. On the one hand, the indicators do not come from financial data and it could be more difficult to trace them back in order to assure them. So the assurance could be less reliable in itself. On the other hand, there are several standards for auditing social reports, but none of them is mandatory to be applied, so it can be expected that the assurance is less reliable than financial assurance. Fourth, if despite this fact, a company wants to assure a report, it should choose GRI assurance, because those reports increase the firm value more than third-party assured reports.

Further research should be done with the content of the GRI reports themselves. If the relationship between social reports and firm value exists, the impact of the
particular content should be researched in more detail. It would be interesting to
differentiate this content to show which reported actions of firms are able to increase
the firm value and which not. For instance, it can be expected that in the future
better measures can help to detect companies which report positive information
although they perform poorly (Conley and Williams, 2005: p. 15). Finding speci-
cific relationships will enable researchers to contribute to the development of more
specific theories in this research field. Also the firm value could be disaggregated
with a relationship to a more specifically determined content. This would help, for
example, to understand if environmentally active companies decrease their capital
costs because they seem to be future oriented and less risky or rather have lower
expected energy costs.

The application levels lead to another question which is whether companies report
the application level in accordance with the GRI standard. The declaration of the
application level is done by the company itself and especially without assurance it is
possible that companies report higher levels so that they are rated higher in social
performance ratings or are more likely to be included in sustainability funds. This
in turn can be an influencing factor for higher firm values. Similar, a company with
mainly bad social actions could calculatedly report how good its social performance
is. Hence, research on social reporting which also includes the actual actions of
a firm would also be very fruitful. Another research topic would be on assurance
statements, which should be examined with respect to the scope and intensity of
assurance to get an overview about the reliability of external assurance. For instance,
51% of the Global Fortune 250 which have an assurance for their social reports obtain
this assurance on a "limited level" in 2008 (KPMG, 2008: p. 66) which shows that
there is some potential to improve these statements. This research could explain
why currently external assurance mostly has no influence on firm value and if there
is potential for better assurance practices.
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