

*Thomas Kilian & Nadine Hennigs\**

## **Communicating Environmental and Ethical Performance: A Longitudinal Analysis of Annual Reports from 1998–2009**

### **Abstract**

Along with the publics' increased demand for businesses to operate responsibly, more and more companies proactively publish their CSR-related principles and activities. A growing body of research is dedicated to the analysis of patterns in self-reported CSR performances; these studies use annual reports as a proxy for the social or environmental activities of the companies. Integrating qualitative and quantitative approaches, the aims of this paper are twofold: First, on the basis of content analysis, we examine categories of CSR-related communication that are in a second step used in a longitudinal perspective spanning twelve years, to compare how CSR motives and activities have changed over time.

### **1. Introduction**

Over the last decades, corporate social responsibility (CSR) has received a large amount of attention in managerial research and practice. In the context of ecological and social challenges, such as global warming, child labour, the world financial crisis, or the Deepwater Horizon oil spill, the impact that companies have on the environment and on society is becoming increasingly apparent. Along with this, empirical results indicate that consumers are influenced by CSR initiatives of businesses if they are aware of them (e.g., Pomeroy/Dolnicar 2007; Vlachos et al. 2009). As a response to the growing awareness of and concern about social and environmental issues, more and more companies are proactively publishing their CSR-related principles and activities. As one of the most important sources of information on corporate activities, corporate annual reports include corporations' self-reported CSR performances and provide a means of determining the quality of the corporations' commitment to CSR (Macleod 2001). A growing body of research is dedicated to the analysis of patterns in or motivations for companies' voluntary social or environmental disclosures (Brammer/Pavelin 2008); these studies use annual reports as a proxy for the social or environmental activities of the companies (Milne/Adler 1999). Past research analysing annual reports or CSR reports in various national contexts (e.g., Abbott/Monsen 1979; Gray et al. 1995; Campbell 2004) has relied mainly on simple measures, such as word and page counts of reports (Chen/Bouvain 2009), and has mostly failed to provide a category scheme that goes beyond CSR-related activities. Therefore, in this paper, we seek to overcome some of these deficiencies by using a combination of quantitative and qualitative approaches. Our empirical examination aims at CSR from a company's and not a customer's point of view (e.g., Singh et al. 2008; Vlachos et al. 2009) and encompasses a sample including the annual reports of all German DAX-30 companies from 1998 to 2009. We build upon and extend the insights from Cormier et al. (2005) and Beck et al. (2010), who analysed annual reports with reference to environmental disclosure by German companies. In our study, we focus not only on corporate environmental disclosures but also on corporate social disclosures published in the companies' annual reports. Our research aims are twofold. First, on the basis of content analysis, we examine categories of CSR-related communication. Second, we then use

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\* *Thomas Kilian*  
*Institute for Management*  
*University of Koblenz-Landau*  
*Universitätsstrasse 1*  
*56070 Koblenz*  
*Germany*  
*kilian@uni-koblenz.de*

\* *Nadine Hennigs*  
*Institute for Marketing and Management*  
*Leibniz University Hannover*  
*Königsworther Platz 1*  
*30167 Hannover*  
*Germany*  
*nadine.hennigs@m2.uni-hannover.de*

these categories in a longitudinal perspective spanning twelve years to compare how motives to pursue CSR and CSR-related activities have changed over time.

## **2. Theoretical background**

### **2.1. The importance of CSR reporting**

To promote an international framework for corporate social responsibility in managerial practice, the European Commission (2001: 6) describes CSR as “*a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis*”.

From a managerial point of view, Carroll (1979) describes the social responsibility of companies as a pyramid with four main layers: a) economic responsibility and the management of the core business to provide jobs, produce products and services, and operate profitably; b) legal responsibilities, as goods and services have to comply to different judicial regulations; c) ethical responsibilities, which are based on the prevailing values and standards of a society; and d) philanthropic responsibility in the form of voluntary actions of the company desired by society. To be considered socially responsible and accepted by stakeholders, all of the layers of responsibility within the pyramid are of importance, and “*CSR should be framed in such a way that entire business responsibilities are embraced*” (Carroll 1991: 4).

Along with the publics’ increased demand for businesses to operate responsibly, stakeholders want to be informed about what their company does correctly and what it does incorrectly (Pomeroy/Dolnicar 2009). According to legitimacy theory, firms act legitimately if they comply with the values of the society in which they are embedded; if they do not comply, their legitimacy is removed by society (Schocker/Sethi 1974; Dowling/Pfeffer 1975). To remain legitimate, companies communicate topics that concern society, such as activities in CSR. However, beyond legitimisation, CSR reporting is believed to promote companies’ reputation and foster competitive advantages (Kuruppu/Milne 2010). Studies have shown that CSR has an overall positive influence on a firm’s financial performance (Orlitzky et al. 2003), can build brand equity (Hoeffler/Keller 2002) and can foster competitive advantages (Porter/Kramer 2002), customer loyalty and other positive post-purchase outcomes (Bhattacharya/Sen 2003). Therefore, the rationale for the positive effects of CSR is straightforward: customers are more likely to be positively attracted to products or services provided by a firm that is acting socially responsible, investors are more likely to buy their stocks, and, among other factors, potential employees are more likely to apply for jobs. However, communicating CSR initiatives may be problematic (Pomeroy/Dolnicar 2007), as consumers tend to be sceptical of companies that advertise their ‘good deeds’ (Pomeroy/Dolnicar 2007; Drumwright 1994). Therefore, a main challenge of stakeholders’ acceptance of CSR reporting is that CSR messages are proven by corresponding corporate activities.

## **3. Conceptual framework**

For the purposes of this paper, following a comprehensive understanding of CSR as a strategic management approach, we conceptualise CSR as illustrated in *Figure 1*. This framework represents our definition of CSR from a company’s point of view, encompassing CSR-related motives and activities and its effects on outcomes such as the company’s financial performance and corporate reputation, which is moderated by firm characteristics and situational conditions. The elements of this framework can be described as follows:

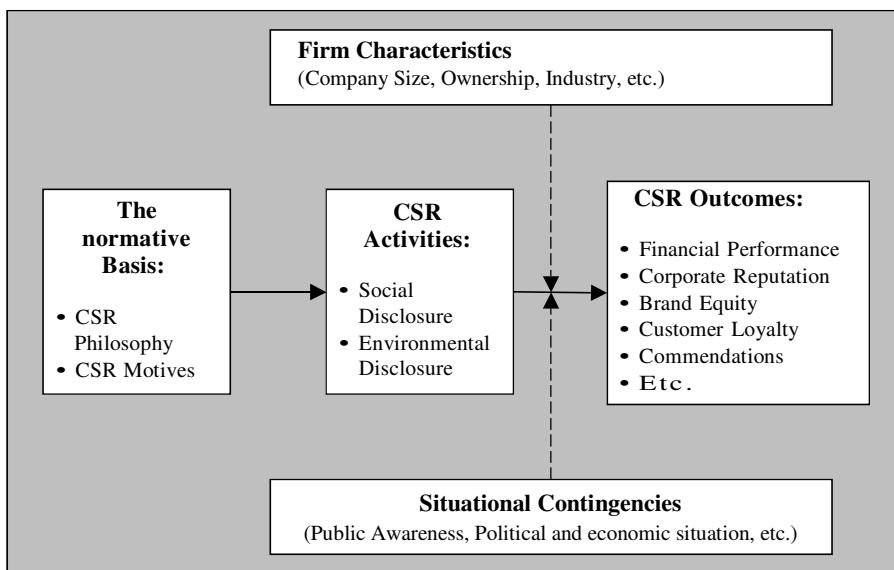


Figure 1. The Conceptual Model

### 3.1. The normative basis: CSR-related philosophy and motives

A normative environment that encourages socially responsible behaviour will affect corporate responses by pressuring them into engaging in and reporting on their CSR activities (Chen/Bouvain, 2009). If companies act on the basis of the principle of 'doing good', this behaviour will be spread in the organisation and thus provide a basis for CSR practices among both managers and employees (Jones 1995). Therefore, CSR should be defined within the normative framework of underlying corporate philosophical principles and related motives.

In accordance with Carroll (1979), researchers conceptualise the concept of CSR and components of a CSR-related philosophy along economical, legal and philanthropic dimensions (e.g., Gupta/Pirsch 2008; Jamali/Mirshak 2007); some authors specify the ethical dimension using terms like 'social', 'stakeholder' or 'ecological' (e.g., Ibrahim et al. 2003; Amaeshi et al. 2006). Based on CSR-motives (e.g., Siegel/Vitaliano 2007; Lougee/Wallace 2008; Idowu/Papasolomou 2007; Anselmsson/Johansson 2007) as the reasons why companies engage in CSR-related activities, five motives have been identified: economical, moral, social, ecological, and legal motives. For the purposes of our study, we follow Maignan/Ralston (2002), who distinguish between three main motives for CSR: 1) value-driven motives, where CSR is understood as a part of corporate culture or as the expression of the company's values; 2) stakeholder-driven motives, where CSR is viewed as a reaction to the pressure and control of one or more stakeholder groups; 3) performance-driven motives, where CSR is part of the company's economical mission and a means of increasing the financial performance and competitive position.

### 3.2. CSR-related activities: social and environmental disclosure in annual reports

As shown in Table 1, a wide field in accounting research is dedicated to the analysis of annual reports with reference to social or environmental disclosure. In general, these studies distinguish between different categories of social or environmental disclosure, such as environmental, employee and ethical disclosures (Adams et al. 1998), deal with equal opportunity, personnel, community involvement and products (Abbott/Monsen 1979), or the commitment to investors, employees, community, customers, environment and communication (Calabres/Lancioni 2008).

<b>Author/s (year): research focus</b>	<b>Categories of Social or Environmental Disclosure</b>
Ernst and Ernst (1978)	<ul style="list-style-type: none"> <li>- Theme (environment, energy, products/consumers, community, employee/human resources, fair business practices, general/other)</li> <li>- Evidence (monetary quantification, non-monetary quantification, both monetary and non-monetary quantification, declaration)</li> </ul>
Abbott/Monsen (1979): Social and Environmental Disclosure	<ul style="list-style-type: none"> <li>- Environment</li> <li>- Equal opportunity</li> <li>- Personnel</li> <li>- Community involvement</li> <li>- Products</li> <li>- Other</li> </ul>
Gray et al. (1995): Social and Environmental Disclosure	<ul style="list-style-type: none"> <li>- Mandatory disclosure (e.g., employment of disabled)</li> <li>- Voluntary disclosure</li> <li>- Human resource disclosure</li> <li>- Environmental disclosure</li> <li>- Community disclosure</li> </ul>
Hackston/Milne (1996): Social and Environmental Disclosure	<ul style="list-style-type: none"> <li>- Physical environment</li> <li>- Energy</li> <li>- Human resources</li> <li>- Products</li> <li>- Community involvement</li> </ul>
Adams et al. (1998)	<ul style="list-style-type: none"> <li>- Environmental issues</li> <li>- Employee issues</li> <li>- Ethical issues</li> </ul>
Patten (2002): Environmental Disclosure	<ul style="list-style-type: none"> <li>- Environmental regulations</li> <li>- Firm's processes, facilities, or product innovations relative to the reduction of environmental degradation.</li> <li>- Company's concern for the environment</li> <li>- Company's environmental compliance status</li> <li>- Capital expenditures for pollution control or abatement</li> <li>- Projected future capital expenditures for pollution control or abatement</li> <li>- Operating costs for pollution control or abatement</li> <li>- Costs for pollution control or abatement</li> </ul>
Campbell (2004): Environmental Disclosure	<ul style="list-style-type: none"> <li>- Company's attitude</li> <li>- Environmental impact</li> <li>- Emissions</li> <li>- Pollution</li> <li>- Cleaning up (after pollution)</li> <li>- Re-landscaping</li> <li>- Energy efficiency</li> </ul>
van der Laan Smith et al. (2005): Social disclosure	<ul style="list-style-type: none"> <li>- Human resources</li> <li>- Community involvement</li> <li>- Consumer relations</li> <li>- Product safety</li> <li>- Environmental practices</li> <li>- Stockholder rights</li> </ul>
Freedman/Patten (2004); Cho/Patten (2007): Environmental Disclosure	<p><i>Non-Monetary disclosures</i></p> <ul style="list-style-type: none"> <li>- Company's environmental policy or concern for the environment</li> <li>- Company's pollution control facilities or processes</li> <li>- Specific (non-hazardous waste-related) environmental regulations or requirements</li> <li>- Company's being in compliance with environmental regulations.</li> </ul> <p><i>Monetary disclosures</i></p> <ul style="list-style-type: none"> <li>- Current or past years' capital expenditures for pollution control or abatement</li> <li>- Projected future capital expenditures for pollution control or abatement</li> <li>- Current or past years' operating costs for pollution control or abatement</li> <li>- Projected future operating costs for pollution control or abatement</li> </ul>
Comier et al. (2005); Aerts et al. (2008):	<ul style="list-style-type: none"> <li>- Environmental expenditures and risks</li> <li>- Laws and regulations</li> <li>- Pollution abatement</li> </ul>

Environmental Disclosure	<ul style="list-style-type: none"> <li>- Sustainable development</li> <li>- Land remediation and contamination</li> <li>- Environmental management.</li> </ul>
van Staden/Hooks (2007): Environmental Disclosure	<ul style="list-style-type: none"> <li>- Entity (Corporate profile and governance)</li> <li>- Management policy and systems</li> <li>- Environmental impacts</li> <li>- Stakeholders</li> <li>- Financial impacts</li> <li>- General</li> </ul>
Brammer and Pavelin (2008): Environmental Disclosure	<ul style="list-style-type: none"> <li>- Environmental policy</li> <li>- Environmental initiatives</li> <li>- Environmental improvements</li> <li>- Environmental targets</li> <li>- Environmental audit or assessment.</li> </ul>
Calabrese and Lancioni (2008)	<ul style="list-style-type: none"> <li>- Top management commitment to:</li> <li>- Investors</li> <li>- Employees</li> <li>- Society</li> <li>- Customers</li> <li>- Environment</li> <li>- Communication</li> </ul>
Beck et al. (2010): Environmental Disclosure	<ul style="list-style-type: none"> <li>- General Environmental related</li> <li>- Responsibility for the implementation</li> <li>- Pollution related</li> <li>- Related to sustainability</li> <li>- Environmental liabilities</li> <li>- Environment-related activities</li> <li>- Business related risks</li> <li>- Pressure groups</li> <li>- Separate environmental report</li> <li>- Energy related</li> <li>- Information retrieval processes to obtain feedback from stakeholders</li> <li>- Others</li> </ul>

Table 1. Social or Environmental Disclosure in Annual Reports

Approaches using a questionnaire-based methodology to conceptualise CSR differentiate between CSR activities related to a) social and non-social stakeholders, employees, customers, and the government (Turker 2009), b) the workforce, customers, stakeholders, the environment and charity (Pedersen 2009), c) environmental management, employment, supply chain management, the local community, controlling and reporting, and community volunteering (Perrini et al. 2007), or d) employment, the environment, the supply chain, the local community and volunteering, and engagement/human resource management (Russo/Tencati 2009). In sum, the cited studies from accounting research that analyse social or environmental disclosure in annual reports fail to provide a meaningful conceptualisation or profound category scheme (e.g., Abbott/Monsen 1979; Adams et al. 1998; Campbell 2004; Deegan/Gordon 1996; Gray et al. 1995; Ingram/Frazier 1980). Because research has so far been mainly based on content analyses that only count statements of disclosure, there is still a lack of research that attempts to relate the identified codes to the strategic embeddedness of CSR activities referring to motives for disclosure or the CSR-related philosophy.

### 3.3. CSR-related outcomes and moderating effects

A number of studies have analysed CSR activities, corporate environmental and/or social disclosures and have related them to different measures such as financial and environmental performance, stock returns, analysts' forecast accuracy, the effects on potential employees, and a firm's reputation (Aerts et al. 2008; Brammer/Pavelin 2008; Deegan/Gordon 1996; Gray et

al. 1996; Campbell 2004; Hasseldine et al. 2005; Hope/Pope 2003; Kuruppu/Milne 2010; Balsam et al. 2002; Lee/Hutchinson 2005; Patten 2002; van der Laan Smith et al. 2005). Another performance measure that was found in the reports are commendations, i.e. awards and the inclusion of company stocks in CSR-related stock indices. The impact of social and environmental disclosure on different performance measures was found to be moderated by variables such as characteristics of the companies (e.g., the company's size, its stakeholder or shareholder orientation, environmental sensitivity, the company's ownership structure, its proximity to customers or industry specifics) as well as situational contingencies (e.g., public awareness of CSR, political and economic environment) (Aerts et al. 2008; Brammer/Pavelin 2008; Deegan/Gordon 1996; Gray et al. 1996; Campbell 2004; Hasseldine, et al. 2005; Hope/Pope 2003; Kuruppu/Milne 2010; Balsam et al. 2002; Lee/Hutchinson 2005; Patten 2002; van der Laan Smith et al. 2005).

#### **4. Methodology**

Understood as information about “*organization-society interactions relating to the natural environment, employees, communities and customers*“ (Gray et al. 1995: 48), CSR reporting in corporate annual reports forms the basis of our study. Annual reports are considered the most important, highly credible source of information on corporate activities and performance in different fields, are sent to all shareholders and are widely recognised, for instance, by financial analysts (Adams et al. 1998; Neu et al. 1998). CSR reporting in annual reports is not practised systematically or in a standardised way by companies and remains voluntary and unaudited (Cormier et al. 2005; Beck et al. 2010). However, it can be expected that environmental and social reporting will be regulated in the mid or long term (e.g., Lee/Hutchinson 2005). Cormier et al. (2005) have noted that German firms' environmental concerns are higher than those in other large European countries; therefore, the German context seems appropriate for the purposes of our study. We analysed annual reports of the DAX-30 (German Stock Index) companies listed on the Frankfurt Stock Exchange. The DAX-30 is the leading stock index in Germany and comprises the 30 largest companies in terms of turnover. The composition of the DAX-30 has not been stable since its introduction in 1988; we thus concentrated on reports from companies represented in the index for most of the time from 1998 to 2009. Even though DAX companies are not representative of the overall German economy, they are leaders of their sectors and influence the whole economy as role models. The companies integrated in our analysis are listed in *Table 2*.

Company	Sector	Years
Adidas AG	Sporting Goods	1998-2009
Allianz SE	Insurance	1998-2009
BASF SE	Chemical	1998-2009
Bayer AG	Chemical and Pharmaceutical	1998-2009
BMW AG	Automotive	1998-2009
Commerzbank AG	Banking	1998-2009
Continental AG	Automotive Supplier	1998-2009
Daimler AG	Automotive	1998-2009
Deutsche Bank AG	Banking	1998-2009
Deutsche Boerse AG	Financial Services	1999-2009
Deutsche Lufthansa AG	Aviation	1998-2009
Deutsche Post AG	Logistics	1998-2009
Deutsche Postbank AG	Banking	1998-2009
Deutsche Telekom	Telecommunication	1998-2009
E.ON AG	Energy	2000-2009
Fresenius Medical Care AG & Co. KGaA	Medical Engineering	1998-2009
Henkel KGaA	Consumer Goods	1998-2009
Hypo Real	Financial Services	2003-2009
Infineon Technologies AG	Semiconductor	2000-2009
Linde AG	Gas and Engineering	1998-2009
MAN AG St	Automotive Manufacturer	1998-2009
Merck KGaA	Chemical and Pharmaceutical	1998-2009
METRO AG St	Commerce	1998-2009
Muenchner Rueck AG	Insurance	1998-2009
RWE AG	Energy	1998-2009
SAP AG	Software	1998-2009
Siemens AG	Electronics, Automotive Supply, Power Plants and Medical Engineering	1998-2009
ThyssenKrupp AG	Steel and Armaments	1999-2009
TUI AG	Tourism	1998-2009
Volkswagen AG	Automotive	1998-2009

Table 2. Companies and Annual Reports included in the Study

## 5. Data analysis and key findings

To achieve our research goals, this study uses a mixed qualitative-quantitative approach (Srnka and Koeszegi 2007). On the basis of annual reports from German DAX-30 companies from 1998 to 2009, we conducted a content analysis to quantify the constructs as presented in *Figure 1*. In the second step, we analysed the data from a longitudinal perspective spanning twelve years, to present how codings have changed over time.

### 5.1. Step 1: Content analysis using MAXQDA

To identify recurring themes in the reports, we used content analysis – a common scientific research method in various disciplines such as psychology, sociology, and politics (e.g., Kasarjian 1977; Krippendorff 2003). All reports were transferred to Rich Text Format, which is

required by MAXQDA, the analysis program we employed. The coding was done manually, where the defined coding unit was a phrase or a clause. To capture all relevant meanings, in accordance to Beck et al. (2010), we found early on in the coding process that more than one code was found in one sentence and that one code could be spread over several sentences. During the coding process, we adopted a mixed deductive-inductive process, as suggested by Srnka and Koeszegi (2007). Starting with categories, that is, common patterns and themes identified in the literature (philosophy, motives and activities related to CSR), we performed a pretest with 30 randomly chosen annual reports. The initial coding phase had two rounds conducted by two authors, both of whom were experienced in content analysis. To ensure accurate coding, several decision rules were formulated (see *Table 4*). Finally, both authors agreed on a coding scheme, as shown in *Table 3*, based on categories that are mutually exclusive and reliable.

Main Category	First Subcategory	Coding Example
Stated Philosophy towards CSR	Environmental Responsibility (223 codings)	"Ecological considerations largely determine the corporate activity of the corporations' enterprises." (TUI 2001)
	Social Responsibility (185 codings)	"The company sees itself as a part of society and as a 'Good Corporate Citizen', feels obliged to act responsible." (Bayer 2009)
CSR Motives	Performance-Driven (94 codings)	"Our key objective is profitable growth." (Allianz 2000) "For us, entrepreneurial success and social responsibility belong together." (Daimler 2004)
	Stakeholder-Driven (110 codings)	"The MAN group is committed to the stakeholder concept – besides the shareholders' interests, the interests of our customers, employees, suppliers, creditors and all other stakeholders are adequately taken into consideration." (MAN 2005)
	Value-Driven (100 codings)	"... is based upon the principle of sustainability and, especially in light of the difficult times our company faces, adheres to it. We consider sustainable action holistically. This includes economical standards as well as cultural, social and naturally ecological aspects." (Münchener Rück 2002)
CSR-related Internal Activities	Organisational Activities (701 codings)	"Our Sustainability Council directs the global activities in cooperation with the operative divisions, the regional and national companies as well as the central functions." (Henkel 2006) "... worldwide legal compliances, which oblige everyone to adhere to the laws and regulations." (Bayer 2000)
	Products and Production (902 codings)	"For newly developed products and procedures, we make sure from the very beginning that as little energy as possible is used and that the natural resources are preserved." (ThyssenKrupp 2001) "We create products that are safe to produce, use, recycle and dispose of." (BASF 2000)
	Activities in Human Resource Management (275 codings)	"Hence, we encourage a culture in which everyone can contribute to the success (...) regardless of nationality, culture, religion, age, sex or skin color." (Infineon 2006) "In 2002, Infineon has, as an incentive for its employees, launched the ESH-Award." (Infineon 2002)
CSR-related Activities towards Suppliers	Guidelines (95 codings)	"The BMW Group demands compliance with social and ecological standards of its suppliers too." (BMW 2006)
	Others (27 codings)	"...in 2002, the Volkswagen Group Award was awarded to selected suppliers for the first time. With this award, Volkswagen honored the best suppliers in the categories business performance, quality, environmental protection, logistics and development." (VW 2002)
CSR-related Activities towards Society	CSR-related Reports (193 codings)	"In 2006, for the first time, DaimlerChrysler published an integrated sustainability report under the title »360 GRAD«." (Daimler 2007)
	Neighborhood Projects (43 codings)	"With our neighborly help – Good Neighbors, Good Citizen – the DaimlerChrysler Fund and our employees contribute to the stability of the community since 1953." (Daimler 2007)
Corporate Donations, Sponsoring and Charitables (in sum: 768 codings)	Education and Research (TUI 2005)	"The focus of the commitment is on supporting disadvantaged children and teenagers." (TUI 2005)
	Sports and Culture	"Support programs for future conductors, dramatic advisors and directors from the music theater, support of 15 yearly scholarship holders..." (Deutsche Bank 2001)
	Social Issues	"...the foundation is committed to help people in risk situations and to improve their life situation..." (Münchener Rück 2007)
	Environmental Issues	"Besides large projects, the Allianz environmental foundation also supports smaller projects." (Allianz 1998)
CSR-related Cooperations	With other Companies (106 codings)	"Together with eight further companies, BASF is founding a knowledge factory. Its two main areas are education and the support of business start-ups." (BASF 2005)
	With Non-Profit Organisations (391 codings)	"As an active member of the UNEP (United Nations Environment Programme), the World Business Council for Sustainable Development and other important associations, we take up new insights in the area of sustainable development and integrate them into our own sustainability concept." (Deutsche Bank 2001)
Comments	CSR-related Awards (165 codings)	"In June 2002, ThyssenKrupp received the Federation of German Industry Award for the Environment in the category environmentally-friendly technologies." (ThyssenKrupp 2002)
	CSR-related Indices (243 codings)	"E.ON will be included in the most important index for sustainable companies, the Dow Jones Sustainability Index (DJSI) and as a result will be even more attractive for investors who emphasize social responsibility." (Eon 2007)

Table 3. Coding Scheme



• All statements must be specifically stated; they cannot be implied.
• If any sentence has more than one possible classification, more than one code is to be allocated.
• Statements relating to the quality of goods or services are not coded unless they contain a direct relation to social or environmental improvements.
• Statements relating to HRM practice, such as further training and education corporate pension plans, appraisal interviews and so on that is not CSR-related, are not to be coded.
• No activities that are based on legal requirements, such as the prevention of accidents or health prevention, are to be coded.
• Activities that are best attributed as graduate recruiting or campus marketing are not to be coded.
• Activities that are pure R & D with no relation to CSR are not to be coded.
• Codes assigned to the category Sports focus only on amateur sports and not on professional sponsorship

Table 4. Decision rules for Coding

Based on the rule that a theme which is more frequently mentioned in the reports is weighted more highly, all of the codes were summed up. Therefore, it is assumed that the significance of a disclosure can be meaningfully represented by its quantity. Consequently, the relative weight and importance of different categories identified by the content analysis was evaluated by the frequency of codes in all annual reports (e.g., Campbell et al. 2006). Some researchers have weighted their codes (e.g., Beck et al. 2010); however, when dealing with longitudinal data, Campbell et al. (2006) found frequency to be the most powerful measure. In our study, some codes initially assigned seemed to capture not only CSR-related topics but also those that appeared to be mostly economically motivated, such as college marketing. As a consequence, only when the text was considered to contain a substantial CSR-related motivation beyond an economical one was it included (see *Table 4*). The first two categories of the overall coding scheme and code frequencies for all annual reports from 1998 to 2009 are presented in *Table 3*. In total, eight main categories were identified:

(1) Stated **CSR-related philosophy**, including statements that depict the philosophy towards CSR or “*the range of business responsibilities*” (Carroll, 1991: 40) and refer to codes for *a) economic* and *b) judicial responsibility* as prerequisites for the existence of the company and *c) ethical responsibility*, which addresses social and environmental values and norms of the society that the company is embedded in. For our analysis, we drew on the ethical responsibility and coded only statements that comprise a commitment to social or environmental responsibility.

(2) **CSR-related motives** addressing the reasons why companies engage in CSR with three subcategories: *a) performance-driven motives*, which are mainly economically oriented and based on profitability, *b) stakeholder-driven motives*, which acknowledge the importance of stakeholders for the company, and *c) value-driven motives*, which refer to the ethical responsibilities of the business.

(3) **CSR-related internal activities** including *a) organisational activities* (i.e., CSR-related positions, codices, and certified management systems), *b) activities in production* (i.e., efficient production processes and environmentally friendly or ethical products), and *c) activities in human resource management* (i.e., CSR-related training, education, and volunteering programs, diversity management, employee suggestion systems).

(4) **CSR-related activities with regard to suppliers**, referring to *a) CSR-related guidelines* like minimum requirements for environmental and work-related issues that their suppliers have to comply with or *b) other CSR-related activities* to provide a constant and lively exchange of knowledge, such as by joint seminars or workshops.

(5) **CSR-related activities towards society**, such as a) *specific CSR-related reports or websites* and b) *neighbourhood projects* to organise initiatives for community welfare, education and job search, mostly in the region where companies are located.

(6) **Corporate Giving**, encompassing donations to education and research, sports, culture, social and environmental issues. The category consists mostly of activities focusing on disadvantaged teenagers, which are supported by various educational projects, but scholarships were also coded.

(7) **CSR-related Cooperation, Corporate Donations, and Sponsoring** related to both for-profit and non-profit organisations, such as cooperation with supranational organisations like UNICEF or the UNEP (United Nations Environment Program) to comply with certain environmental or social guidelines, or cooperation with universities to develop responsible products or production processes or to support education and research.

(8) **Awards** the company has received for its CSR-activities as well as **CSR-related indices** on which the company is listed (e.g., the Domini 400 Social Index or the Dow Jones Sustainability Index).

Based on this coding scheme, we used the variables of the final categories and subcategories as described above in the longitudinal analysis. Thus, the content analysis contributed to the quantitative analyses, as it translated the raw data into numbers that were then applied to discover changes over time.

## 5.2. Step 2: Longitudinal analysis of CSR-related codings

Only a fraction of past studies are based on longitudinal data, in which annual reports from more than one year are analysed, thus aiming to uncover trends in CSR reporting (Abbott and Mosen 1979; Campbell 2004; Cho/Patten 2007; Deegan/Gordon 1996; Campbell 2004; Campbell et al. 2006; Cormier et al. 2005; Gray et al. 1995).

The comparison of the means of CSR-related motives and philosophies stated in the annual reports from a longitudinal perspective spanning the years 1998 to 2009, revealed the following trends as illustrated in *Figure 2*.

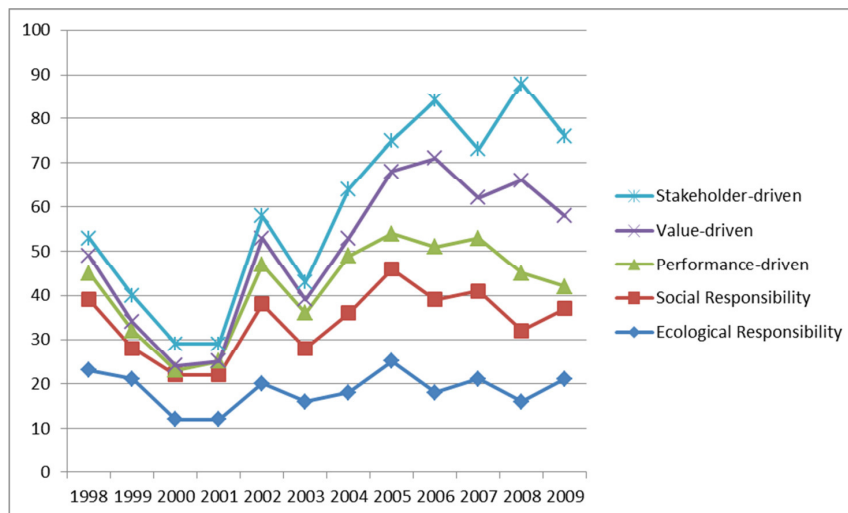


Figure 2. Codes for CSR Philosophy and CSR Motives

The codings for social and environmental CSR-Philosophy remain more or less stable over time, but there is a rise in stated stakeholder and value-driven motives, which can be interpreted. As the latter concentrate more on stakeholder requirements and the ethical responsibilities of companies as compared to performance-driven motives that argue from a pure eco-

conomic base, a shift in philosophy can be detected; at least in stated philosophy. In the year 2000, a drop for both CSR motives and philosophies can be detected, as well as a smaller drop for motives in 2009. The drop in 2000 can be attributed to the economic crisis following the burst of the dot com bubble in March 2000. However, the question, why the drop in 2009 was smaller than in 2000, remains. One could argue that this is a sign of a rising sincerity in CSR reporting in companies, as they do not forget all there social and environmental responsibilities as crisis strikes. Nevertheless, there is a significant drop in reported CSR activities as Figure 3 shows.

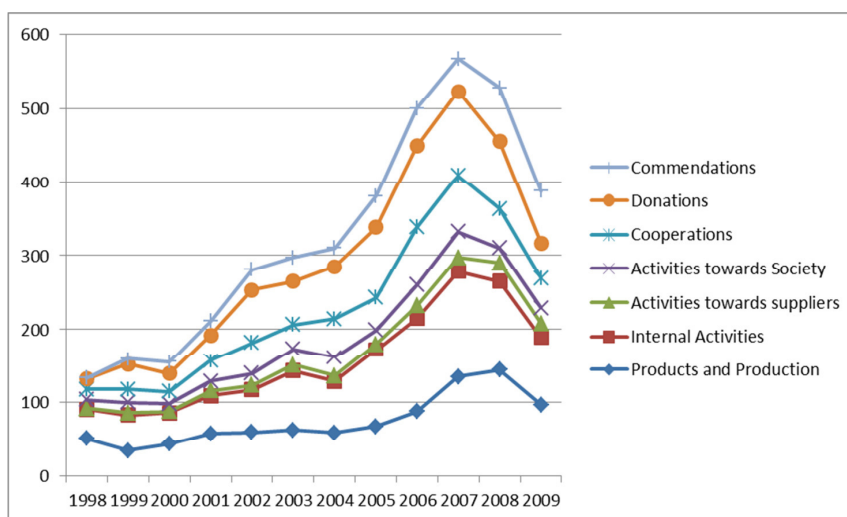


Figure 3. Codes for CSR Activities and Commendations

Overall the codings for CSR-related activities are rising steadily in a similar pattern. However, in 2008 and 2009 all codings are falling. Obviously the reporting of CSR related activities is not so important anymore in times of crisis. Commendations were interpreted as CSR outcomes in our conceptual model (see *Figure 1*). It is interesting that there is a sharp drop in commendations in the years 2008 and 2009, similar to the drop in CSR-related activities. In general, with regard to both CSR-related motives and activities, the longitudinal analysis of trends in CSR reporting reflects the growing importance of CSR in the stakeholder dialogue over time. Starting from 1998, the aggregated number of CSR-related statements in the annual reports has been increasing, with the highest ratings in activities in the context of production, cooperation, the community, and the organisation as the most important aspects. In relation to CSR-related motives, the results show evidence for a paradigm shift over time, from primarily performance-driven motives for engaging in CSR to the increasing significance of stakeholder-driven and value-driven motives. Regarding all aspects in 2008 and 2009, there is a significant drop in the number and extent of CSR-related coding. Along with existing research insights (e.g., Njoroge 2009; Karaibrahimoglu 2010), a financial crisis results in reduced CSR budgets as well as the postponement or cancellation of social and ecological projects. This creates a dilemma, because to cope with the financial and economic downturn, organisations need to focus on meeting society's needs (Wilson 2008).

## 6. Contributions and research implications

The primary goal of this paper was to examine CSR from a company's point of view and to analyse annual reports with reference to corporate environmental and social disclosures. Based on a sample including the annual reports of all German DAX-30 companies from 1998 to 2009, we specifically concentrated on the question of whether CSR statements are mere hypocrisy

or sincere actions that are normatively embedded within the overall CSR mission. Voluntary social and environmental reporting has been subject to criticism from scholars who have found them “often partial, incomplete, and self-serving public relations exercises that seek organizational legitimacy through appearance rather than changed behavior” (Kuruppu/Milne 2010), or, simply put, “greenwashing” (Greer/Bruno 1996). Our results give evidence supporting the idea that, along with the public’s increased demand for businesses to operate responsibly, in contrast to primarily performance-driven motives, there has been a rising significance of stakeholder-driven and value-driven motives as a normative basis for engaging in CSR. This research is based on qualitative data, and it can be argued that content analysis in particular lacks reliability and validity as an interpretative means of analysis. However, as Deegan/Gordon (1996) have pointed out, these difficulties are more significant when a rather small sample of documents is examined. In our study, we have examined a quite large sample and therefore conclude that the overall measurement error is negligible. Furthermore, one of our study’s main aims, extracting a more meaningful CSR-related category scheme from annual reports and depicting longitudinal trends in CSR reporting, does not rely on a precise measurement.

Overall, with a combination of qualitative and quantitative analyses, this paper builds upon and extends past research efforts in the field of CSR and CSR reporting, as it provides deeper insights into qualitative, longitudinal, and quantifiable effects encompassing a rich category scheme that also accounts for the stated CSR-related philosophy and motives to engage in CSR, related to different fields of CSR activities.

Although our results are only initial empirical hints, they should be explored in further research in different ways. Because the national culture of the reporting company is considered a determinant of CSR reporting (e.g., van der Laan Smith et al. 2005; Aerts et al. 2008), a study comparing different countries may lead to interesting results regarding differences and similarities in the definition and communication of CSR. Besides, in our analyses, we did not separate home-market activities from international activities of the companies – given their multinational activities, there might be differences in their CSR commitment in international markets or production sites. In general, the question of how CSR adds value to the actual performance of the company, based on interviews with stakeholder groups or expert judgments on firm philosophy, motives, and activities, possible causal relations between CSR and outcomes such as, for example, corporate reputation, could be examined.

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