



Hochschule für
Wirtschaft und Recht Berlin
Berlin School of Economics and Law

IMB Institute of Management Berlin

A KPI based study on the scope and quality of sustainability reporting by the DAX30 companies

Authors: Joris Greiwe ■ Avo Schönbohm

Working Papers No. 64

11/2011

Editors:

Gert Bruche ■ Christoph Dörrenbächer ■ Friedrich Nagel ■ Sven Ripsas

RESEARCH NOTE

**A KPI based study on the scope and quality of sustainability
reporting by the DAX30 companies**

**Joris Greiwe
Avo Schönbohm**

Paper No. 64, Date: 11/2011

Working Papers of the
Institute of Management Berlin at the
Berlin School of Economics and Law (HWR Berlin)
Badensche Str. 50-51, D-10825 Berlin

Editors:
Gert Bruche
Christoph Dörrenbächer
Friedrich Nagel
Sven Ripsas

ISSN 1869-8115

- All rights reserved -

Biographic note:

Since October 2010, **Joris Greiwe** is studying the master program "Accounting & Controlling" at the Berlin School of Economics and Law. He made his Bachelor of Science in General Management with focus in International Accounting & Controlling and Industrial Management at the Private University of Applied Science Göttingen. Mr. Greiwe works as an intern and student consultant for international companies, consulting and audit companies during his studies. Since 2010, he is working as a student research assistant for Prof. Dr. Schönbohm with focus on Performance Management und Sustainability Accounting.

Email: jorisgreiwe@hotmail.com

Prof. Dr. **Avo Schönbohm** is Business Administration Professor with focus on Management Accounting at the Berlin School of Economics and Law. Before joining the University in 2010, he had worked for several years in various assignments in the industry. His latest responsibility was Vice President Strategic Planning at Voith Paper GmbH & Co. KG. He studied Business Administration at the University of Mannheim and the ESSEC Business School and earned his PhD while working as an Assistant Professor at the Technical University Kaiserslautern.

Email: avo.schoenbohm@hwr-berlin.de

Joris Greiwe studiert seit Oktober 2010 im Masterstudiengang „Accounting & Controlling“ an der Hochschule für Wirtschaft und Recht Berlin. Seinen Bachelor absolvierte er in General Management mit den Schwerpunkten International Accounting & Controlling sowie Industrielles Management an der Privaten Fachhochschule Göttingen. Während seines Studiums arbeitete er als Praktikant und studentischer Berater für international operierende Konzerne, Unternehmensberatungen und Wirtschaftsprüfungsgesellschaften. Seit 2010 arbeitet er bei Prof. Dr. Schönbohm als studentische Hilfskraft mit Schwerpunkten in den Bereichen Performance Management und Nachhaltigkeitsberichterstattung.

Prof. Dr. **Avo Schönbohm** ist seit 2010 Professor für Allgemeine Betriebswirtschaftslehre und Controlling an der Hochschule für Wirtschaft und Recht Berlin. Er hat mehrere Stationen in der Industrie absolviert. In seiner letzten Position verantwortete er die Strategische Planung der Voith Paper GmbH & Co. KG. Er studierte Betriebswirtschaftslehre an der Universität Mannheim und der ESSEC Business School. Seine Promotion absolvierte er an der Technischen Universität Kaiserslautern, wo er auch als wissenschaftlicher Mitarbeiter am Lehrstuhl für Rechnungswesen und Controlling (Prof. Dr. Volker Lingnau) tätig war.

Abstract:

This paper analyses the scope and the quality of the sustainability reporting of the DAX30 companies with the help of comparable Key Performance Indicators (KPIs) and a presentation of the general characteristics of the published reports with focus on the topics sustainability and sustainable actions.

Whereas other recent studies have concentrated on more general information like the number of published reports, their frequency as well as the number of external audited reports, a research gap exists in the identification of the priorities and weighting of the sustainability perspectives within the communication to the companies' stakeholders.

The empirical analysis suggests that the DAX30 companies recognize the increasing importance of sustainability in their communication with the stakeholders. Differences were found in the reporting of the companies' sustainable actions. Possible reasons for this could be the different importance attached to the topic within the companies and their surroundings, their business activities, the required information by their different stakeholders but also the degree of performance of sustainability.

Zusammenfassung:

Die vorliegende Arbeit analysiert den Umfang und die Qualität der Nachhaltigkeitsberichterstattung der DAX30-Unternehmen mit Hilfe von definierten Key Performance Indicators (KPI) und stellt die allgemeinen Merkmale der veröffentlichten Berichte mit Fokus auf das Thema Nachhaltigkeit und nachhaltiges Handeln dar.

Während sich andere Studien auf allgemeine Informationen wie die Anzahl der veröffentlichten Berichte, deren Veröffentlichungsfrequenz und die Anzahl der externen geprüften Berichte konzentrieren, wurde eine Lücke in der Identifizierung der Prioritäten und der Gewichtung der Nachhaltigkeitsperspektiven identifiziert und mit dieser Studie geschlossen.

Die Ergebnisse der empirischen Analyse verdeutlichen, dass die DAX30-Unternehmen die zunehmende Bedeutung von Nachhaltigkeitsaspekten und deren Kommunikation mit den unterschiedlichen Interessensgruppen erkannt haben. Bei der Berichterstattung über das nachhaltige Handeln wurden erheblich Unterschiede identifiziert. Als Gründe hierfür können die unterschiedliche Bedeutung des Themas im Unternehmen und in ihrer Umgebung, die Geschäftstätigkeit, die Differenz der geforderten Informationen durch die unterschiedlichen Interessensgruppen als auch die erbrachte Leistung im Bereich Nachhaltigkeit des Unternehmens herangezogen werden.

Table of contents

List of tables	5
List of figures	5
List of abbreviations	5
1. DAX30 Sustainability under Review.....	6
2. Theoretical foundations of sustainability reporting	6
2.1 The concept of sustainability	6
2.2 Global Reporting and Stakeholder Approach.....	7
3. Empirical analysis on the scope and quality of the sustainability reporting.....	9
3.1 Analyzed entities and reporting dimensions	9
3.2 General characteristics of the sustainability reports	10
3.3 Analyzed KPIs	10
3.4 Testing hypotheses with the empirical analysis	12
4. Results and discussion of the empirical analysis	13
4.1 General results	13
4.2 Profile of the sustainability reports	16
4.3 Hypotheses.....	18
5. Conclusions.....	20
List of references	21
List of reports.....	21
Appendix	24
Working Papers des Institute of Management Berlin an der Hochschule für Wirtschaft und Recht Berlin.....	30

List of tables

Table 1: Sectors in the DAX30	9
Table 2: Report profile of the Adidas AG.....	18

List of figures

Figure 1: Standard Disclosure.....	8
Figure 2: Reporting Parameters of the DAX30 companies	13
Figure 3: Usage of GRI-guidelines and external auditor of the DAX30 companies	14
Figure 4: Communication form of the DAX30 companies	14
Figure 5: Length of the reports of the DAX30 companies	15
Figure 6: Text ratios of the sections of the reports of the DAX30 companies	15
Figure 7: Selected category ratios of the aspects of the reports of the DAX30 companies	16
Figure 8: Correlation between GRI Application Level, text ratios and reported KPI's	19

List of abbreviations

DAX	German Stock Index (Deutscher Aktienindex)
EBIT	Earnings before Interest and Taxes
GRI	Global Reporting Initiatives
IASB	International Accounting Standards Board
IFRS	International Financial Reporting Standards
KPI	Key Performance Indicator
MDAX	Mid-Cap-DAX
TecDAX	Technology DAX

1. DAX30 Sustainability under Review

This paper analyses the scope and the quality of the sustainability reporting of the DAX30 companies with the help of comparable Key Performance Indicators (KPI) and a presentation of the general characteristics of the published reports with focus on the topic sustainability and sustainable actions. The analysis covers the latest published sustainability report of the respective company until March 2011. The base for this analysis is the Global Reporting Initiatives (GRI) framework guidelines which are considered as standard for ecological, economic and social reporting (Crone & Hoch 2002: 47). Whereas other recent studies have concentrated on more general information like the number of published reports, their frequency as well as the number of external audited reports (e.g. KPMG AG WPG 2009, PricewaterhouseCoopers AG WPG 2010), a research gap exists in the identification of the priorities and weighting of the sustainability perspectives within the communication to the companies' stakeholders.

The rest of the paper is organized as follows. Chapter 2 introduces the GRI guidelines. Since they have been a substantial part of the following empirical analysis, the GRI-guidelines are described in greater detail with regard to the components defined in their Standard Disclosure. Chapter 3 discusses the chosen objects of the analysis and the methodology. This includes the definition of the analyzed actors and objects as well as the definition of the information which was collected during the empirical analysis. Therefore, the used KPIs and the hypotheses, assuming a connection between the more quantitative analysis to a more qualitative one, are also described. In the subsequent chapter 4, the results of the empirical analysis of the sustainability reports of the DAX30 companies are presented. Only a selection of the complete results is displayed. The selected results are subdivided into the presentation and explanation of the general findings, an exemplary profile of a sustainability report and the verification of hypotheses. A reflection of the results and further research perspectives conclude the paper.

2. Theoretical foundations of sustainability reporting

2.1 The concept of sustainability

The three dimensions economic, environment and social performance are the most recognizable elements of the theoretical sustainability discourse. The aim of this analysis is the development of a category list which can be used for the analysis of all kinds of reports with a focus on sustainability. To standardize the sustainability reporting which among other things should ensure the comparability, an international and independent organization, the GRI, was founded in 1997. The GRI has developed universally applicable guidelines for all forms of organizations.

The GRI defined – comparable to the IASB for the financial reporting – internationally applicable and accepted guidelines. However, there is currently no legal obligation to publish sustainability reports. According to the GRI, sustainability reports should be in accordance with the International Financial

Reporting Standards (IFRS) in the way of their comparability, reliability, accuracy, timeliness and clarity. Furthermore, the GRI defines the sustainability not as a substitution to IFRS reports but as a necessary complement (Lackmann 2010: 43).

GRI's vision is articulated as follows:

"[...] Disclosure on economic, environmental and social performance should become as commonplace and comparable as financial reporting, and as important to organizational success." (GRI 2009:4)

In comparison with the financial reporting, a sustainability report should inform about the performance of the company and provide information in a broader context. In addition, the macro-economic and the social impact of the business activities should be taken into consideration (Ernstberger/Haller 2006: 2518). According to the GRI, a sustainability report should measure and publish the performance in an economic, ecological and social perspective (GRI 2011: 5). For a published report and the provided information various application levels are possible. Following a benchmark of comparable companies as well as an internal assessment of the sustainability performance, e.g. with respect to legal issues, standards, conduct, performance standards, and voluntary initiatives are some of the possibilities. Therefore, the company can internally analyze whether it meets its own requirements in terms of sustainability. Furthermore, a structural comparison of the performance of the companies over time or a benchmark with other companies is feasible (GRI 2011: 3).

2.2 Global Reporting and Stakeholder Approach

Integral part of the sustainability reporting is the ongoing dialogue between the company and its stakeholders. This open dialogue, which is called 'multi-stakeholder engagement process', is a core element of the approach of the GRI and can be seen as the basis of their success. Overall, the GRI describes a long-term, international process to develop its guidelines including the interests of various stakeholder groups. These groups include representatives of business, investors, employers and employee representatives, the society, accounting institutions, science and other areas (GRI 2011: 3).

To analyze the current sustainability reporting, it is necessary to describe the components of the framework. Since the GRI-guidelines are divided into two parts, the description of the GRI-guidelines follows this structure. In this connection, the second part has a higher impact on this research paper.

Part 1 - Defining Report Content, Quality and Boundary

In the first part of the guidelines, the general principles related to the classification of the content of a report as well as its quality control are defined. Furthermore, instructions for reporting boundaries are given (GRI 2011).

Part 2 - Standard Disclosures

While the first part of the reporting principles defines the boundaries, the second part includes the Standard Disclosures of a sustainability report. These are the essential elements in form of minimum requirements that should be contained within any kind of a sustainability report. The GRI defines three

categories of Standard Disclosures. These are the strategy and profile of the company, the management approach and the economical, ecological and social performance indicators (GRI 2011: 40).

The performance indicators are split into several aspects. These are specific data related to an indicator category (e.g. the energy consumption as an aspect of the environmental performance indicators). The defined performance indicators disclose either a qualitative or a quantitative dimension about the activities of the company and their impact on the company's stakeholders. For each aspect in the sustainability report, the Management Approach as well as the associated performance indicators should be integrated. In accordance with the GRI, all of the Standard Disclosures are considered material and relevant for any business (GRI 2011: 39).

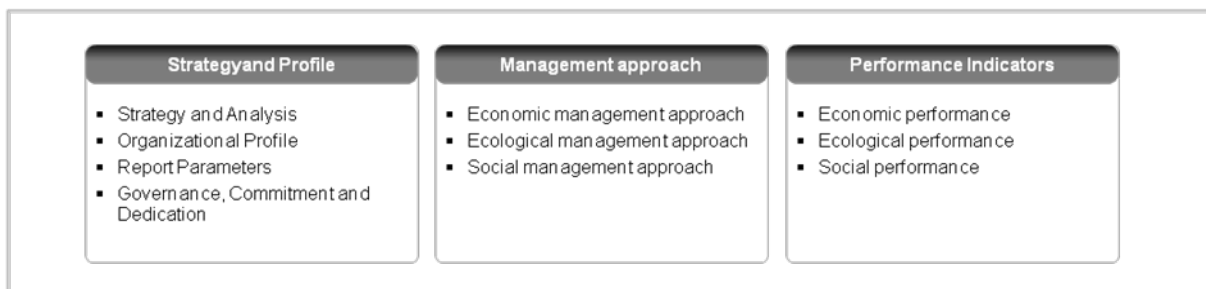


Figure 1: Standard Disclosure

The first category includes Standard Disclosures for the strategy and profile. This area is subdivided into details for Strategy and Analysis, Organizational Profile, Report Parameters and Governance, Commitment and Dedication of the company. This information should help to understand the company's performance in a larger context (GRI 2011: 19).

The report on the Management Approach is defined in the second category of the Standard Disclosure. These are information about the company's approach related to specific topics. It should be evident on which sustainability approach the company's performance is based (GRI 2011: 19).

All performance indicators, which are reported as a Standard Disclosure, are part of the third category. These indicators are primarily giving information about the economic, ecological and social performance of the company (GRI 2011: 19).

According to the GRI-guidelines, the performance indicators are separated into the categories of economic, ecological and social issues. This division is also recommended for the sustainability reporting. Each of these performance indicator categories contains information about the management approach and a catalog with the core indicators as well as additional indicators (GRI 2011: 24).

3. Empirical analysis on the scope and quality of the sustainability reporting

3.1 Analyzed entities and reporting dimensions

Additionally to the development of an appropriate methodology to analyze the scope and quality of the sustainability reporting, the selection of relevant entities and also the related reporting dimensions are important. For an analysis of the economic system there are several approaches. On the one hand, the reports of industrial associations could be analyzed. Even if this could provide a first overview of the relevant industrial sectors, the analysis is directly addressed to individual companies because this approach facilitates quantitative and qualitative findings.

For this empirical analysis, the companies listed on the DAX30 are analyzed with regard to sustainability reporting. They are the largest and most influential actors in the German economy. Furthermore, 87% of these companies either provide a sustainability report or a similar report. To structure further analysis and to identify sector-specific trends, the DAX30 companies are classified by the authors into nine different sectors according to their business activity. This classification is shown in Table 1.

Automotive sector	Energy sector	Industrial sector	Retail sector	
BMW	E.ON	Heidelbergcement	Beiersdorf	
Daimler	RWE	K+S	Adidas	
Deutsche Lufthansa	Financial sector	Siemens	Henkel	
Volkswagen	Allianz	ThyssenKrupp	Metro	
MAN	Commerzbank	Medical sector	Services sector	
<th>Chemical sector</th> <td>Deutsche Bank</td> <td>Fresenius Medical Care</td> <td>Deutsche Post</td>	Chemical sector	Deutsche Bank	Fresenius Medical Care	Deutsche Post
BASF	Deutsche Börse	Fresenius	Deutsche Telekom	
Bayer	Münchener	Merck KGAA	Technology sector	
Linde	Rückversicherungs- Gesellschaft		Infineon Technologies	
			SAP	

Table 1: Sectors in the DAX30

This research paper aims to identify the explicitly communicated dimensions of sustainability by the DAX30 companies as well as the neglected factors. Therefore, the choice of reporting dimensions and factors has a high importance. Loew et al. (2005) have already accomplished an analysis of the quality of the sustainability reporting of German companies. They distinguish five types of reports (Loew et al. 76):

- Sustainability report
- Corporate responsibility report
- Report with focus on social aspects
- Environment report with focus on sustainability
- Environment report

These reports express the positioning of the company in relation to their sustainable actions and should be regarded as separate information documents. Particularly with regard to the reporting forms, there are significant differences between the companies, mainly because sustainability reporting is still voluntary. Despite the fact that a uniform standard does not exist, many companies already follow the GRI guidelines (GRI 2011).

3.2 General characteristics of the sustainability reports

In addition to the KPI-based analysis of the different entities, general characteristics of these reports are identified. In order to improve the assessment of the results, the administrative effort and the communication channels of the sustainability-related business issues are contemplated. The below stated general characteristics of the reports were measured as part of our empirical analysis:

- Type of the report
- Reporting year
- Reporting frequency
- Availability of an interactive sustainability report
- Existence of a direct link with a focus on sustainability on the group's website
- Length of the report (words/pages)
- Usage of GRI-guidelines
- Usage of an external auditor

3.3 Analyzed KPIs

Following the analysis of the scope and quality of the sustainability reports used KPI's are described and their usefulness is elucidated.

Text ratio

A coding catalogue with regard to the Standard Disclosure developed by the GRI was created. This coding catalog refers to the statements of the reporting companies to the sustainability-related strategy and profile of the company – classified in Strategy and Analysis, Organizational Profile, Report Parameters and Governance, Commitments and Engagement – as well as statements regarding the management approach and performance of the three dimensions economic, environment and social (Appendix 1). The detailed description of the various categories and its subcategories facilitates the assignment of text sections or passages to the particular subcategories and followed overarching categories. If further explanation of the performance indicators provided an additional information surplus, they would also be encoded and assigned to the appropriate category. Components of the reports which could not be clearly coded but have a clear reference to one or more categories of the coding catalog were fully assigned to the most fitting category. In case of no direct references to the GRI-guidelines or sustainability, the corresponding text section was not coded. This procedure had

been chosen because in some places, there are statements which give the appearance that text has been created to just more or less fill the space. The aim of the analysis method is to track how much of the text of a document refers to the theoretically derived categories with regard to sustainability. The counting and coding of words for each category is the most common and reliable procedure for a quantitative content analysis.

The text ratio sets the number of words that are used within a document for a category or a section in relation to the number of words of the entire document. For a better illustration the number is multiplied by 100 to express the ratio as a percentage. This ratio can be calculated by Equation 1:

Equation 1:
$$Textratio = \frac{\sum_{i=1}^k n_{dci}}{n_d}$$

- with: $c =$ Index for the codes
 $d =$ Index for the coded document
 $i =$ Index for all codes
 $k =$ Number of coded passages
 $n_d =$ Number of words in document d
 $n_{dci} =$ Number of words which belongs to code c in document d and passage i

With this ratio, it can be determined to what extent a text as a whole deals with sustainable development and the categories. Also the frequencies of sections within a document can be compared.

Category ratio

If we assume that a different text length is used for the description of each category and that it varies on the analyzed reports, additional information will be wasted if just the text ratio is used. To enable a more accurate analysis, a second KPI is introduced. If the ratio of the different categories in the various documents is more interesting and comparability between the actors is ensured, the category ratio will be more informative than the text ratio. The problem is caused by the fact that different documents can report on sustainable development to a different extent.

To counter this problem and to compare the ratios of the categories across different documents a second KPI – the category ratio – was developed. The calculation is similar to the text ratio. The number of words in a category is divided by the sum of all words counted for all codes in a document and not by all words of the document (see Equation 2).

Equation 2:
$$Categoryratio = \frac{\sum_{i=1}^k n_{dci}}{\sum_{c=1}^m \sum_{i=1}^k n_{dci}}$$

- whit: $c =$ Index for the codes
 $d =$ Index for the coded document
 $i =$ Index for all codes
 $k =$ Number of coded passages
 $m =$ Number of all codes
 $n_{dci} =$ Number of words which belongs to code c in document d and passage i

Within the category ratio, the sum of all values for a category of a document is always 100 percent while the text ratio has no fixed value. Therefore, the category ratio is expedient for a further analysis of the frequency of the occurrence of the categories of sustainable development.

Sustainability performance indicators

All performance indicators have been developed by the GRI and the process involved many different kinds of stakeholders. The performance indicators are generally applicable and it is assumed that they are essential for most organizations. An organization should then report on all of these indicators. The performance indicators are divided into the categories economic, environmental and social issues. The social indicators are subdivided into Working Practices, Human Rights, Society and Product Responsibility. Each category contains a set of appropriate core performance and additional indicators (Appendix 1). The presence of these performance indicators and any additional information on these has been part of the empirical analysis of the sustainability reports of the DAX30 companies.

GRI Application Level

To specify that a report is based on the GRI-guidelines, the report authors should designate the level on which they applied the GRI Reporting Framework. To derive an appropriate relation of the qualitative and quantitative application level the recording of this indicator was part of the empirical analysis. To meet the requirements of the different reports, an indicator system is applied defining the three levels A, B and C. The criteria for these levels reflect up to which extent the GRI Reporting Framework was applied. A further upward graduation at each level is displayed by an additional "+" (A+, B+, C+). This implies that the information in the report was audited by an external auditor.

The classification was introduced for the purpose of a qualitative analysis of the different reports. The report author himself explains to which extent his report meets the criteria of the GRI Reporting Framework. In addition to this self-assessment, reporting organizations can opt for one of the following options:

- Examination of the self-assessment by an external third party
- Examination of the self-assessment by the GRI

3.4 Testing hypotheses with the empirical analysis

One aim of our analysis is a data-driven construction of profiles of the importance of communicated sustainable development of the surveyed companies. In addition to this, the below listed hypotheses will be validated. The verification or non-verification also serves the validation of the survey instrument and will imply whether there is a correlation between the quality and the scope of the sustainability reports.

- *Hypothesis 1: Correlation between the reporting quality (GRI Application Level) and the length of the sustainability reports.*
- *Hypothesis 2: Correlation between the reporting quality (GRI Application Level), the text ratios, the categories and the number of reported KPIs.*

4. Results and discussion of the empirical analysis

4.1 General results

In the following, the results of the empirical analysis of the reports with focus on the topic of sustainability are discussed. To not overburden the reader with details, further information on the results and the collected data are given in the appendix. The perceived importance of the issue of sustainability and sustainable development as well as the communication of the approaches and results is in accordance with the number of companies that publish a report focusing on sustainability. Namely, 26 out of 30 DAX-listed companies are publishing such a report. It is noticeable that two of the four companies which do not publish such a report are from the healthcare sector (Fresenius Medical Care AG&CO KGAA and Fresenius SE&CO KGAA) and the technology sector (Infineon Technologies AG and SAP AG). The SAP AG is publishing the information concerning sustainability in an interactive form on their homepage, but not in form of a sustainability report. Especially surprising might be that the healthcare sector performs poorly, given the sensitive nature and high public awareness of its business activities.

With regard to the form of the report, there is a rather clear picture. Only one out of (K+S AG) the 26 companies is publishing information on sustainability not as a sustainability report (16 companies) or corporate social responsibility report (9 companies). But it is worth noting here that – as opposed to the trend in other sectors – 60% of companies in the financial sector are publishing their information as a corporate social responsibility report. Most of the companies in the DAX30 publish their report with a focus on sustainability every year. Five companies publish their reports every two years and only one company (ThyssenKrupp AG) communicates their sustainable actions every three years (see Figure 2). This result is an indicator for the increased importance of the issue of sustainability and formalized communication.

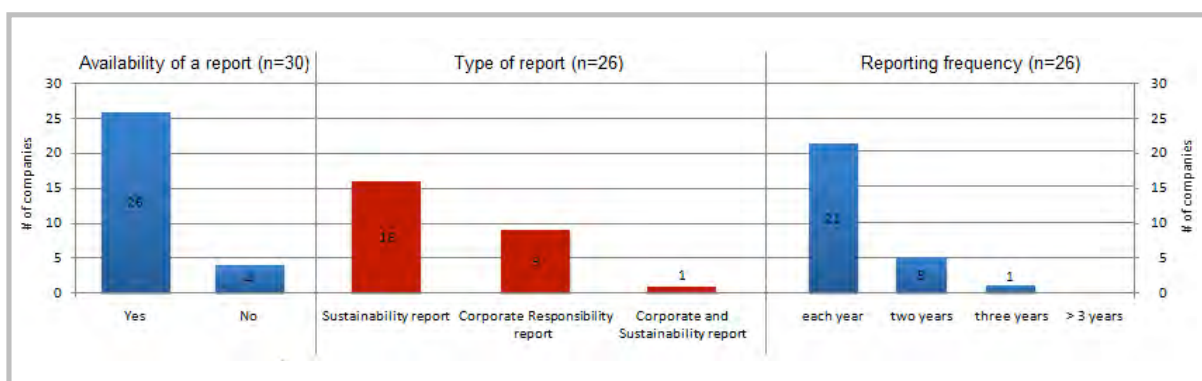


Figure 2: Reporting Parameters of the DAX30 companies

As mentioned in chapter 2.1, the GRI-guidelines for sustainability reporting are internationally the most popular and most widely used standards. This is confirmed by the fact that 24 companies (including SAP AG) base their reporting on these guidelines. Although an external audit is not required for a Germany-based company, 38.5% of the investigated reports were reviewed and audited by an external auditor (see Figure 3). This result indicates that the companies are orientating themselves towards the standards and communicate their credibility in the field of sustainability.

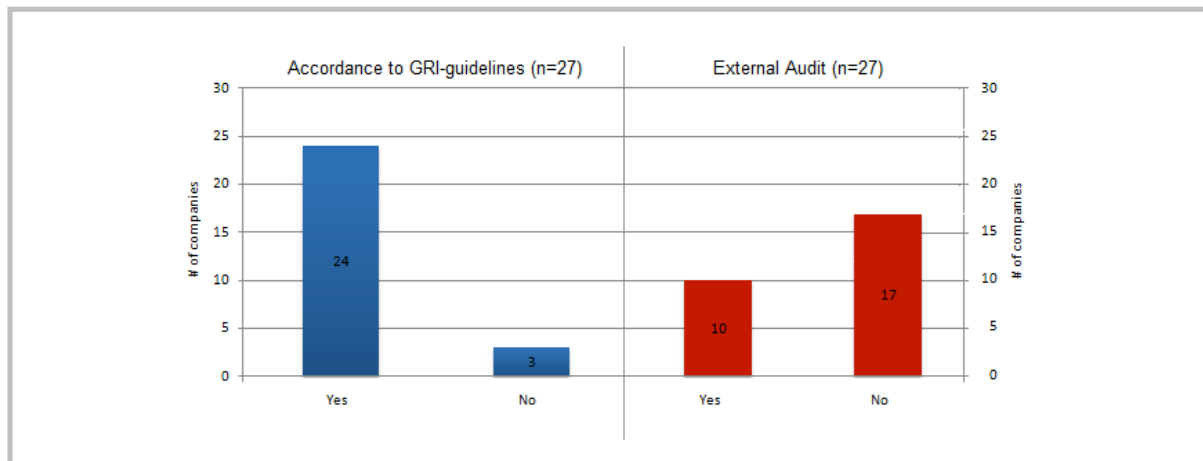


Figure 3: Usage of GRI-guidelines and external auditor of the DAX30 companies

The communication of the sustainable actions of the investigated DAX30 companies and their obvious significance show a mixed picture. All of the 26 companies which publish a report and the SAP AG provide stakeholders with the opportunity to inform themselves in an interactive form about the performance in the field of sustainability. In addition to the sustainability reports, the interactive report gives supplementary information (e.g. notes). Due to the increasing importance of the subject, it would be expected that many companies provide their stakeholders with a direct link with the focus on sustainability on the group's website. However, only 19 of the 30 companies actually provide this link (see Figure 4). Notable is that all companies in the financial sector do not have a direct link.

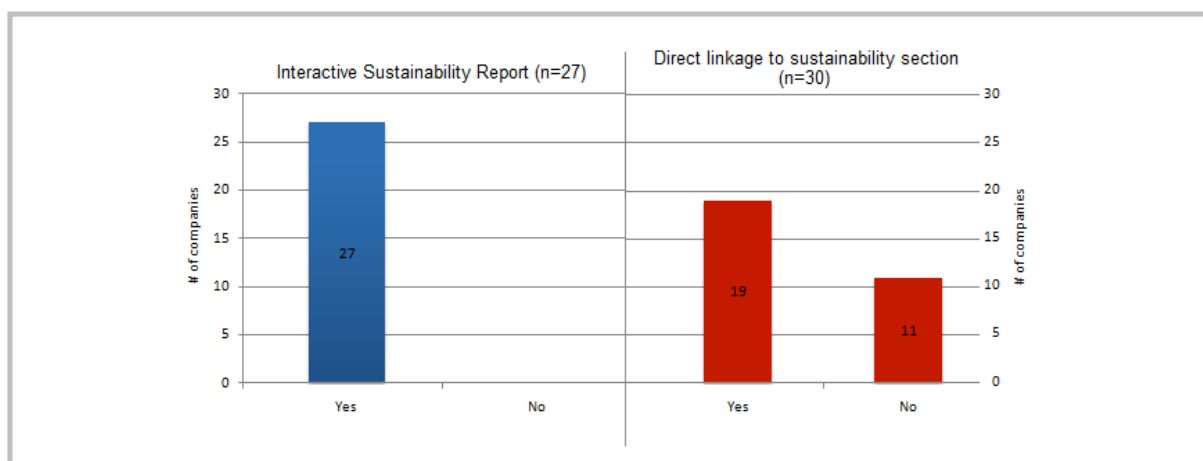


Figure 4: Communication form of the DAX30 companies

The average length of the published reports with focus on the topic of sustainability is 46,886 words on 108 pages. The most significant differences were in the chemical sector and the medical sector. Within the chemical sector, the average length of the text of the reports is 61,727 words (14,841 more than the DAX30 average). The deviation can mainly be explained by the extensive reporting of the BASF SE (118,223 words on 232 pages). Thus, the sustainability report of BASF SE was the longest of all investigated reports. The medical sector, which is represented only by Merck KGAA, was reporting on average the least for all sectors (30,245 words on 76 pages) (see Figure 5). However, if the companies are considered individually, the shortest report was published by Linde AG (also chemical

sector). The sustainability report of Linde AG includes only 5,096 words on 16 pages and therefore 113,127 words less than report of BASF AG. The consideration of all 26 published reports shows that despite the increased importance there is a significant difference between the value and the effort required for sustainability reporting among the individual companies and sectors.

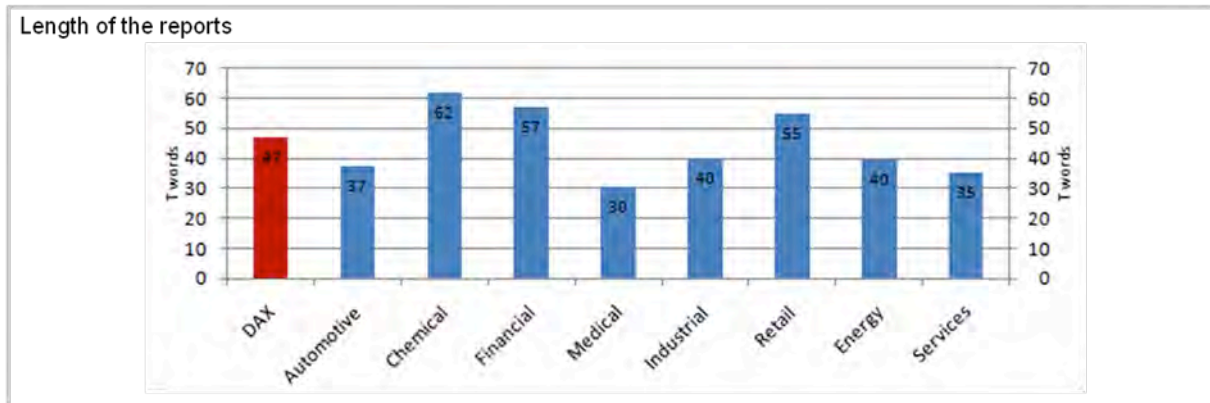


Figure 5: Length of the reports of the DAX30 companies

When comparing the sectors it is pointed out that the focus is on the explanation of the management approaches and the illustration of the performance in the categories economic, environment and social issues. On average, each sector is publishing more information and explanatory statements on such matters compared to the statements on the Strategy and Profile of the company. A counter-image to the sectors and the DAX30 as a whole is given when looking at the individual companies. For instance, the MAN SE (automotive sector) reports 82.7% of their information related to its sustainability-related strategy and profiles and only 10.9% related to its performance and the management approach (see Figure 6).

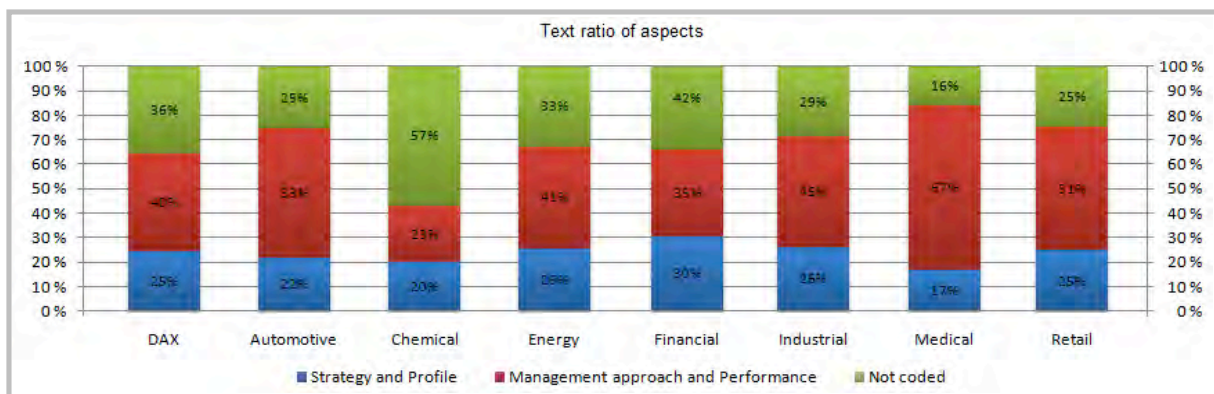


Figure 6: Text ratios of the sections of the reports of the DAX30 companies

In Figure 7 the category ratios of selected sectors in the sections Profile and Strategy (Strategy and Analysis, Organizational Profile, Report Parameters and Governance, Commitments and Engagement) and Management Approach and Performance (Economic, Environment and Social) are presented. The weighting of the individual categories has revealed significant differences, which are basically due to the different business focuses of the companies and the information needs of their involved stakeholders.

Companies in the chemical sector are publishing information about Strategy and Analysis with a ratio of 60.9% (14% more than the DAX30 average). This could be taken as an indicator that the chemical industry has put strategic focus on sustainability. Accordingly, a large part of the Strategy and Profile section is covered by explanatory notes to this area.

A similar picture is evident when considering the category ratios in the section Management Approach and Performance. For example, the financial sector, in contrast to other industries and the DAX30 as a whole, is reporting predominantly about their economic value philosophy and their economic performance because of their business activities. Here, the category ratio of 37.3% in the financial sector is compared to DAX30 average of 5.1%. However, the companies in the energy sector report above-average level (16.5% more than the DAX30 average) on their environmental management approach and performance. The reason for this is the required information led by their stakeholders such as communities.

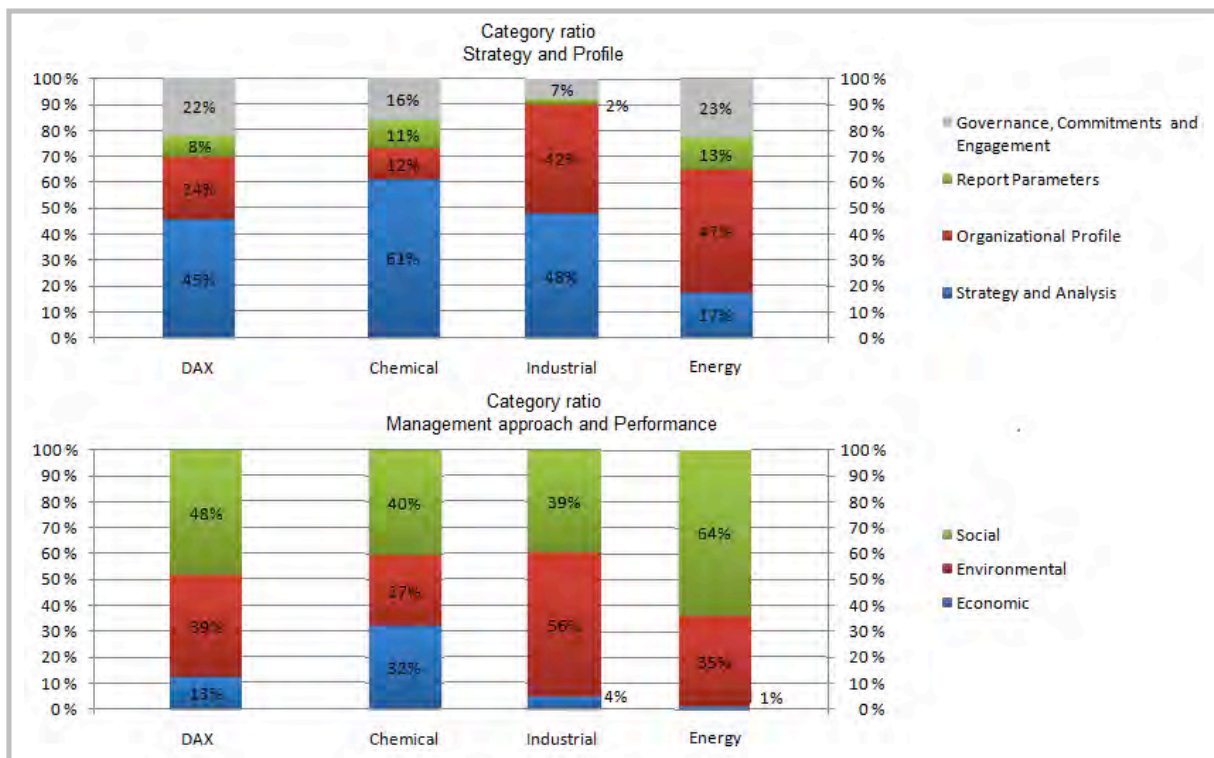


Figure 7: Selected category ratios of the aspects of the reports of the DAX30 companies

4.2 Profile of the sustainability reports

In this chapter, an extract of a prepared profile of the sustainability report by Adidas AG (see Table 2) is demonstrated and explained. A detailed presentation of this profile and of the rest of the DAX30 companies is also provided (Appendix 2.1). To give additional information, the profiles of the individual sectors and the DAX30 as a whole are represented (Appendix 2.2).

First of all the header of each profile presents general information about the reporting company or companies. The header is subdivided into the company's name, the sector and the economic KPI Earnings before Interest and Taxes (EBIT). The classification into sectors provides the possibility for a more detailed analysis in order to identify sector-specific trends. The absolute EBIT and the deviation to the prior year offer the reader a more effective valuation of the represented company and its development.

Following the header, the report information is shown. This involves the type of the report, the reporting year and the reporting frequency as well as the availability of an interactive sustainability section and the existence of a direct link with a focus on sustainability on the group's website. Additional information concerning the length of the report (words and pages) as an absolute measure and in comparison to the average of all reporting DAX30 companies is conveyed. Furthermore, the usage of the GRI-guidelines, the GRI Application Level and the information whether the company had an external audit for its report are stated.

The next part deals with the developed coding catalog. In accordance to this catalog and the method presented in section 3.4, the results are displayed as an absolute number (words) and as percentage (text ratio and category ratio). To enable a better assessment of the results, the differences are compared to the average of the DAX30 (e.g. if the company stated 10% more words within one category in the document than the DAX30 on average, the text deviation ratio would then be 10%).

The last section aims to clarify the quality of the performance reporting by the company. Here is depicted the absolute incidence of the performance indicators, the deviation from the arithmetic average of the DAX30 and the deviation to the proposed GRI Performance Indicators.

General information										
Company		Adidas AG								
Sector		Retail								
EBIT		Reporting year			Deviation to prior year					
		894 Mio. €			75.9%					
Report information										
Type of report		Corporate responsibility report								
Reporting year		2010								
Reporting frequency		Each year								
Interactive sustainability report		Yes								
Direct link with a focus on sustainability		Yes								
Length of the report		Words			Deviation to DAX30 (Words)					
		41161			-13017					
		Pages			Deviation to DAX30 (Pages)					
		104			-4					
Usage of GRI-guidelines		Yes								
GRI index		B								
External audit		Yes								
Coding catalog										
Code	Section	Category	Coded words	Text ratio	Dev. to DAX30	Cat. Ratio	Dev. to DAX30	Source		
Adidas 2011										
Strategy and Profile			10917	26.5%	0.9%	35.0%	-3.3%	-		
SP1	Strategy and Analysis		780	1.9%	-9.3%	7.1%	-38.3%	p.4-5		
...		
Management approach and Performance			20303	49.3%	9.7%	65.0%	3.3%	-		
MAP1	Economic		329	0.8%	-4.2%	1.6%	-11%	p.80		
...		
Performance Indicators										
GRI-Code	Category	Aspects				# of KPI's	Dev. to DAX30	Dev. <10%; >10%	Dev. to GRI	
Economic						7	0.7		2	
EC1-EC4			Economic Performance			4	0.6		0	
...	
Environment						18	1.5		12	
EN1-EN2			Materials			2	0.4		0	
...	
Social						26	3.9	*	17	
LA1-LA3; LA15			Employment			2	-0.3		2	
...	
Total						51	6.2		31	

Table 2: Report profile of the Adidas AG

4.3 Hypotheses

To establish a connection from the more quantitative results presented and discussed in chapter 4.1 and 4.2 and qualitative aspects, the following hypotheses are tested. As a qualitative characteristic the GRI application levels described in section 3.4 are used. Since only 19 out of 26 of the investigated companies give a statement on their GRI application level, the sample is n=19. 9 out of these 19 companies stated that their GRI application level is A 9 stated that their GRI application level is B and one company has the GRI application level C.

Hypothesis 1: Correlation between the reporting quality (GRI Application Level) and the length of the sustainability reports.

With emphasis on this hypothesis the evaluation of the results demonstrates a clear picture. Companies with GRI application level report in average 60,647 words on 132 pages on their sustainability activities. These are 20,425 words and 41 pages more than the range of companies with the Application Level B (40,222 words on 91 pages). Companies reporting under GRI Application Level C, publish 21,276 words on 50 pages.

In summary it can be noted that there is a correlation between the quality and scope of the reports. Of course the length of reports is not necessarily an indicator of a high quality report. Nevertheless, it can be regarded as a first indication pointing to a high quality report.

Hypothesis 2: Correlation between the reporting quality (GRI Application Level), the text ratios the categories and the number of reported KPIs.

In addition to the correlation between the quality and the scope of the sustainability reports, there is also a correlation between the quality and the used KPIs with respect to economic, environment and social issues. With 25 socially-related KPIs companies with GRI application level A report more frequently on their performance in this matter (GRI Application Level B: 23; GRI Application Level C: 19). A similar pattern was detected in the field of environment. Here, 19 reported KPIs of companies with GRI Application Level A are compared with 16 KPIs of companies with B and 12 KPIs C of companies with C. Within the economic KPIs, no significant correlation between quality and used KPIs has been detected.

Particularly with regard to the hypothesis the text ratios of the categories gave a less clear picture. Thus, all reports contain almost equal proportions in terms of the company's Management Approach and Performance in the economic, environmental and social field. Only the text ratio of the section Strategy and Profile differs significantly. But because the companies which are applying to GRI application level C are just represented by Deutsche Börse AG, no clear statement is possible.

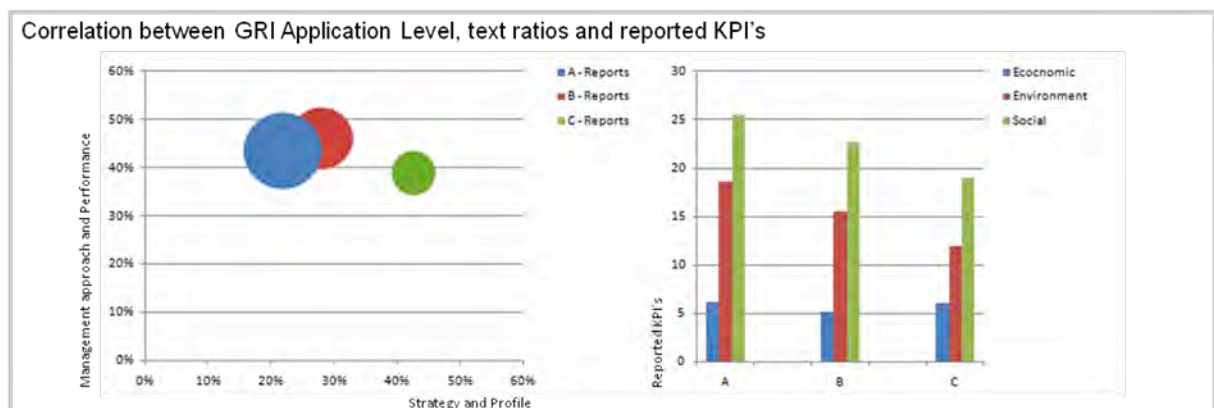


Figure 8: Correlation between GRI Application Level, text ratios and reported KPI's

5. Conclusions

The empirical analysis suggests that DAX30 companies have recognized the increasing importance of sustainability reporting in their communication with stakeholders. Differences were found in the reporting of the company's sustainable actions. Possible reasons for this could be the different importance attached to the topic within the companies and their surroundings, their business activities, the required information by their different stakeholders but also the degree of performance of sustainability. The identified intersections of the importance of sustainable development for various systems are of quantitative nature. If necessary, they must be examined in substance in each individual case to provide a more qualitative and validated result.

Our analysis provides results for a systematic study of the different priorities and the communication requirements. The data which were collected during the empirical analysis facilitate a basis for further research. Through the verification of the hypotheses the collected data can furthermore be used for qualitative analysis of the content of the sustainability reports.

An analysis of Lackmann (2010) pointed out that there is a correlation between the size of a company and its behavior with respect to sustainability reporting. Because of that an extension of this analysis also to smaller businesses (e.g. MDAX, TecDAX, SMEs) or other non-economic organizations (e.g. NGOs or political parties) is proposed.

It should be noted that this work does not consider the companies' judgment and performance on their sustainable actions. Possible cross-impact of the categories on business performance indicators were beyond the scope of this study. Nevertheless, it is assumed that the most important actions are correctly reflected in these reports. On the one hand, the companies themselves have an interest improving their image through achieving sustainable development. In addition to the recommended expansion of this analysis, there is the need of further research approaches. This concerns the analysis of the internal acceptance and the application of the sustainability approach within the operational business as well as the identification of the influence of different stakeholders on the company's sustainability reporting.

Besides the analysis of the business structure, the sustainability-related expenses and the administrative efforts, an empirical investigation of the operational management levels' attitude would provide valuable information. This is especially of interest when the object of investigation is expanded into organizations of different sizes and strategic directions.

Through a classification and prioritization of the stakeholders of each company, the data in this analysis could further be used for an analysis of the influence of the stakeholders on the company's sustainability reporting. This would lead to conclusions about internal or external influences including the drivers on sustainability reporting.

List of references

- Bortz, J./Döring, N. (2002): Forschungsmethoden und Evaluation für Sozialwissenschaftler, Springer, Heidelberg.
- Crone, H. C./Hoch, M. (2002): Nachhaltigkeit und Nachhaltigkeitsberichterstattung, Aktuelle juristische Praxis, vol. 11, pp. 40-52.
- Ernstberger, J./Haller, A. (2006): Global Reporting Initiative - Internationale Leitlinien zur Erstellung von Nachhaltigkeitsberichten, Betriebs-Berater, vol.61/46, pp. 2516-2524.
- Global Reporting Initiatives (GRI) (2011): Sustainability Reporting Guidelines, viewed April 62011, <http://www.globalreporting.org/NR/rdonlyres/660631D6-2A39-4850-9C04-57436E4768BD/0/G31GuidelinesinclTechnicalProtocolFinal.pdf>
- Global Reporting Initiatives (GRI) (2009): Year in Review, viewed April 62011, http://www.globalreporting.org/NR/rdonlyres/E8B6ED9E-1A29-4154-A6DA-F14E6F71A2C9/3830/GRI_Year_In_Review_241209.pdf
- KPMG AG WPG (2009): Handbuch zur Nachhaltigkeitsberichterstattung 2008/09, Deutschlands 100 umsatzstärksten Unternehmen im internationalen Vergleich, Germany.
- Lackmann, J.(2010): Die Auswirkungen der Nachhaltigkeitsberichterstattung auf den Kapitmarkt – Eine empirische Analyse, Gabler, Wiesbaden.
- Loew, T./Ankele, K./Braun, S./Clausen, J. (2004): Bedeutung der CSR-Diskussion für Nachhaltigkeit und die Anforderungen an Unternehmen, future e.V. - Umweltinitiative von Unternehme(r)n und Institut für ökologische Wirtschaftsforschung (IÖW), Münster/Berlin.
- PricewaterhouseCoopers AG WPG (2010): Corporate Sustainability Barometer, Wie nachhaltig agieren Unternehmen in Deutschland?, Hechingen, Germany.

List of reports

- Adidas (2011): Sustainability Report 2010 – In the real world performance counts, viewed April 62011, http://www.adidas-group.com/en/SER2010/_assets/downloads/adidasSR2010_full.pdf
- Allianz (2010): Allianz Sustainable Development Report 2010, viewed April 62011, https://www.allianz.com/static-resources/de/verantwortung/media/documents/v_1297077248000/allianz_nhk_bericht_2009-10.pdf
- BASF (2011): BASF Report 2010 – Economic, environmental and social performance, viewed April 62011, http://www.basf.com/group/corporate/en/function/conversions:/publish/content/about-basf/facts-reports/reports/2010/BASF_Report_2010.pdf
- Bayer (2010): Sustainable Development Report 2009, viewed April 62011, <http://www.sustainability2009.bayer.com/en/Sustainable-Development-Report-2009.pdf>
- Beiersdorf (2010): Beiersdorf Sustainability Report, viewed April 62011, <http://www.sustainability.beiersdorf.com/Our-Way/About-this-Report/Download-Center.aspx?l=2>
- BMW (2009): Sustainable Value Report 2008, viewed April 62011, http://www.bmwgroup.com/e/0_0_www_bmwgroup_com/verantwortung/publikationen/sustainable_value_report_2008/_pdf/SVR_2008_engl_Gesamtversion.pdf

- Commerzbank (2009): Corporate Responsibility Report 2009, viewed April 62011,
https://www.commerzbank.com/media/konzern/engagement/CR_Bericht_2009_EN.pdf
- Daimler (2010): 360 Facts on Sustainability 2010, viewed April 62011,
http://www.daimler.com/Projects/c2c/channel/documents/1827874_Daimler_Sustainability_Report_2010_360Grad_en.pdf
- Deutsche Bank (2010): Corporate Social Responsibility Report 2009 – More than money, viewed April 62011, http://www.db.com/csr/en/docs/CSR_GB_Gesamt_Doppelseiten.pdf
- Deutsche Börse (2010): Living Dialogue – Corporate Responsibility 2009, viewed April 62011,
Deutsche Börse (2010): Living Dialogue – Corporate Responsibility 2009
- Deutsche Post 2009, Sustainability Report 2009 – Changing ways, viewed April 62011, http://www.dp-dhl.com/content/dam/mlm.nf/dpwnew/sustainability/infothek/entire_dp_csr09.pdf
- Deutsche Telekom (2010): The 2010 Corporate Responsibility Report. We take responsibility., viewed April 62011, http://www.download-telekom.de/dt/StaticPage/87/05/88/dtag_cr_report_2010.pdf_870588.pdf
- E.ON 2010, E.ON CR Report (2009): viewed April 62011, http://www.download-telekom.de/dt/StaticPage/87/05/88/dtag_cr_report_2010.pdf_870588.pdf
- Heidelbergcement (2009): Sustainability Report 2009 – Foundations, viewed April 62011,
http://www.heidelbergcement.com/NR/rdonlyres/21CFC7D0-FE8A-4EBC-A184-7B12569B7498/0/SustainabilityReport_HC_2009en.pdf
- Henkel (2011): Sustainability Report 2010 – Excellence is our Passion, viewed April 62011,
http://www.henkel.com/com/content_data/208531_SR2010.pdf
- K+S (2011): Corporate/Sustainability Report 2010 – Sustainable Growth, viewed April 62011,
<http://www.k-plus-s.com/en/pdf/2010/ub2010.pdf>
- Linde (2010): Corporate Responsibility 2010. At a Glance., viewed April 62011,
[cr_report_2010_en.linde.com/linde/dms/pdf/en/CR2010_at_a_glance.pdf](http://www.linde.com/linde/dms/pdf/en/CR2010_at_a_glance.pdf)
- Lufthansa (2010): Balance – Company / Social responsibility / Environment / Corporate citizenship, viewed April 62011, <http://verantwortung.lufthansa.com/fileadmin/downloads/en/LH-sustainability-report-2010.pdf>
- MAN (2010): Our Responsibility – MAN's CR Strategy, viewed April 62011, http://www.man.eu/MAN-Downloadgalleries/All/CR/2010/MAN_CR_Strategie_2010_e.pdf
- Merck (2009): Responsibility – Corporate Responsibility Report 2009, viewed April 62011,
http://www.merck.de/company.merck.de/en/images/Merck_CR_Report_2009_EN_tcm82_42348.pdf
- Metro (2010): Focus! We take action – Sustainability Report 2009, viewed April 62011,
http://www.metrogroup.pl/internet/site/sustainability2009/get/documents/metrogroup_international/Reports/sustainability2009/publications/SR2009-en.pdf
- Münchener Rückversicherungsgesellschaft (2010): Corporate Responsibility, viewed April 62011,
http://www.munichre.com/app_pages/corporate-responsibility/@res/pdf/downloads/corporate_responsibility_report_2009_2010_en.pdf
- RWE (2010): Our Responsibility. Report 2009 – Make good things happen for society, viewed April 62011, <http://www.rwe.com/web/cms/mediablob/en/413442/data/10122/2/rwe/rwe-group/blob.pdf>

Siemens (2010): Sustainability Report 2009 – Siemens – Fulfilling our responsibility, viewed April 6 2011, http://www.siemens.com/sustainability/report/09/pool/pdf/siemens_sr_2009.pdf

ThyssenKrupp (2009): Sustainability Report 2009 – Doing the right thing. Right?, viewed April 6 2011, http://www.thyssenkrupp-technologies.com/documents/Publicationen/TK_Magazine/sustainability_rreport_steel_doing_the_right_thing.pdf

VW (2010): Driving ideas. Sustainability Report 2009/2010, viewed April 6 2011, http://www.volkswagenag.com/vwag/vwcorp/info_center/en/publications/2009/09/sustainability_report0.-bin.acq/qual-BinaryStorageItem.Single.File/VW_Sustainability_Report_2009.pdf

Appendix

Coding catalog

The used coding catalog was created in accordance to the GRI-guidelines (GRI 2011).

Code	Section	Category	
	Strategy and Profile		
SP1		Strategy and Analysis	
SP2		Organizational Profile	
SP3		Report Parameters	
SP4		Governance, Commitments and Engagement	
	Management Approach and Performance		
MAP1		Economic	
MAP2		Environmental	
MAP3		Social	
Key Performance Indicator			
	Economic		
EC1-EC4		Economic Performance	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.
			Financial implications and other risks and opportunities for the organization's activities due to climate change.
			Financial implications and other risks and opportunities for the organization's activities due to climate change.
			Significant financial assistance received from government.
EC5-EC7		Market Presence	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.
			Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.
			Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.
EC8-EC9		Indirect Economic Impacts	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.
			Understanding and describing significant indirect economic impacts, including the

			extent of impacts.
	Environment		
EN1-EN2		Materials	Materials used by weight or volume.
			Percentage of materials used that are recycled input materials.
EN3-EN7		Energy	Direct energy consumption by primary energy source.
			Indirect energy consumption by primary source.
			Energy saved due to conservation and efficiency improvements.
			Initiatives to provide energy-efficient or renewable energy-based products and services, and reductions in energy requirements as a result of these initiatives.
			Initiatives to reduce indirect energy consumption and reductions achieved.
EN8-EN10		Water	Total water withdrawal by source.
			Water sources significantly affected by withdrawal of water.
			Percentage and total volume of water recycled and reused.
EN11-EN15		Biodiversity	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.
			Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.
			Habitats protected or restored.
			Strategies, current actions, and future plans for managing impacts on biodiversity.
			Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.
EN16-EN25		Emissions, Effluents and Waste	Total direct and indirect greenhouse gas emissions by weight.
			Other relevant indirect greenhouse gas emissions by weight.
			Initiatives to reduce greenhouse gas emissions and reductions achieved.
			Emissions of ozone-depleting substances by weight.
			NO _x , SO _x , and other significant air emissions by type and weight.

			Total water discharge by quality and destination.
			Total weight of waste by type and disposal method.
			Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.
EN26-EN27		Products and Services	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.
			Percentage of products sold and their packaging materials that are reclaimed by category.
EN28		Compliance	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.
EN29		Transport	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.
EN30		Overall	Total environmental protection expenditures and investments by type.
	Social		
LA1-LA3; LA15		Employment	Total workforce by employment type, employment contract, and region, broken down by gender.
			Total number and rate of new employee hires and employee turnover by age group, gender, and region.
			Benefits provided to full-time employees that are not provided to temporary or parttime employees, by significant locations of operation.
			Return to work and retention rates after parental leave, by gender.
LA4-LA5		Labor/Management Relations	Percentage of employees covered by collective bargaining agreements.
			Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.
LA6-LA9		Occupational Health and Safety	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.

			Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender.
			Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.
			Health and safety topics covered in formal agreements with trade unions. Health and safety topics covered in formal agreements with trade unions.
LA10- LA12		Training and Education	Average hours of training per year per employee, by gender, and by employee category.
			Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.
			Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.
LA13		Diversity and Equal Opportunity	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.
HR1- HR3		Investment and Procurement Practices	Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.
			Percentage of significant suppliers, contractors, and other business partners that have undergone human rights screening, and actions taken.
			Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.
HR4		Non-discrimination	Total number of incidents of discrimination and corrective actions taken.
HR5		Freedom of Association and Collective Bargaining	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights.
HR6		Child Labor	Operations and significant suppliers identified as having significant risk for incidents of child

			labor, and measures taken to contribute to the effective abolition of child labor.
HR7		Forced and Compulsory Labor	Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.
HR8		Security Practices	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.
HR9		Indigenous Rights	Total number of incidents of violations involving rights of indigenous people and actions taken.
SO1; SO9- SO10		Local Communities	Percentage of operations with implemented local community engagement, impact assessments, and development programs.
			Operations with significant potential or actual negative impacts on local communities.
			Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.
SO2- SO4		Corruption	Percentage and total number of business units analyzed for risks related to corruption.
			Percentage of employees trained in organization's anti-corruption policies and procedures.
			Actions taken in response to incidents of corruption.
SO5- SO6		Public Policy	Public policy positions and participation in public policy development and lobbying.
			Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.
SO7		Anti-Competitive Behavior	Total number of legal actions for anticompetitive behavior, anti-trust, and monopoly practices and their outcomes.
SO8		Compliance Core	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations.
PR1- PR2		Customer Health and Safety	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.
			Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services, by type of outcomes.
PR3-		Product and Service	Type of product and service information

PR5		Labeling	required by procedures, and percentage of significant products and services subject to such information requirements.
			Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.
			Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.
PR6-PR7		Marketing Communications	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.
			Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes.
PR8		Customer Privacy	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.
PR9		Compliance	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services

Working Papers des Institute of Management Berlin an der Hochschule für Wirtschaft und Recht Berlin

- 1 Bruche, Gert/Pfeiffer, Bernd: Herlitz (A) – Vom Großhändler zum PBS-Konzern – Fallstudie, Oktober 1998.
- 2 Löser, Jens: Das globale Geschäftsfeld „Elektrische Haushaltsgroßgeräte“ Ende der 90er Jahre – Fallstudie, Oktober 1998.
- 3 Lehmann, Lutz Lars: Deregulation and Human Resource Management in Britain and Germany – Illustrated with Coca-Cola Bottling Companies in Both Countries, March 1999.
- 4 Bruche, Gert: Herlitz (B) - Strategische Neuorientierung in der Krise - Fallstudie, April 1999.
- 5 Herr, Hansjörg/Tober, Silke: Pathways to Capitalism - Explaining the Difference in the Economic Development of the Visegrad States, the States of the Former Soviet Union and China, October 1999.
- 6 Bruche, Gert: Strategic Thinking and Strategy Analysis in Business - A Survey on the Major Lines of Thought and on the State of the Art, October 1999, 28 pages.
- 7 Sommer, Albrecht: Die internationale Rolle des Euro, Dezember 1999, 31 pages.
- 8 Haller, Sabine: Entwicklung von Dienstleistungen - Service Engineering und Service Design, Januar 2000.
- 9 Stock, Detlev: Eignet sich das Kurs-Gewinn-Verhältnis als Indikator für zukünftige Aktienkursveränderungen?, März 2000.
- 10 Lau, Raymond W.K.: China's Privatization, June 2000.
- 11 Breslin, Shaun: Growth at the Expense of Development? Chinese Trade and Export-Led Growth Reconsidered, July 2000, 30 pages.
- 12 Michel, Andreas Dirk: Market Conditions for Electronic Commerce in the People's Republic of China and Implications for Foreign Investment, July 2000, 39 pages.
- 13 Bruche, Gert: Corporate Strategy, Relatedness and Diversification, September 2000, 34 pages.
- 14 Cao Tingui: The People's Bank of China and its Monetary Policy, October 2001, 21 pages.
- 15 Herr, Hansjörg: Wages, Employment and Prices. An Analysis of the Relationship Between Wage Level, Wage Structure, Minimum Wages and Employment and Prices, June 2002, 60 pages.
- 16 Herr, Hansjörg/Priewe, Jan (eds.): Current Issues of China's Economic Policies and Related International Experiences – The Wuhan Conference 2002 - , February 2003, 180 pages.
- 17 Herr, Hansjörg/Priewe, Jan: The Macroeconomic Framework of Poverty Reduction An Assessment of the IMF/World Bank Strategy, February 2003, 69 pages.
- 18 Wenhao, Li: Currency Competition between EURO and US-Dollar, June 2004, 18 pages.
- 19 Kramarek, Maciej: Spezifische Funktionen des Leasings in der Transformationsperiode, Juni 2004, 32 pages.
- 20 Godefroid, Peter: Analyse von Multimedia-Lern/Lehrumgebungen im Fach Marketing im englischsprachigen Bereich – inhaltlicher Vergleich und Prüfung der Einsatzfähigkeit an deutschen Hochschulen, September 2004, 48 pages.
- 21 Kramarek, Maciej: Die Attraktivität des Leasings am Beispiel polnischer Regelungen der Transformationsperiode, April 2005, 33 pages.
- 22 Pan, Liu/Tao, Xie: The Monetary Policy Transmission in China – „Credit Channel“ and its Limitations.
- 23 Hongjiang, Zhao/Wenxu, Wu/Xuehua, Chen: What Factors Affect Small and Medium-sized Enterprise's Ability to Borrow from Bank: Evidence from Chengdu City, Capital of South-western China's Sichuan Province, May 2005, 23 pages.
- 24 Fritsche, Ulrich: Ergebnisse der ökonomischen Untersuchung zum Forschungsprojekt Wirtschaftspolitische Regime westlicher Industrienationen, March 2006, 210 pages.
- 25 Körner, Marita: Constitutional and Legal Framework of Gender Justice in Germany, November 2006, 14 pages.
- 26 Tomfort, André: The Role of the European Union for the Financial Integration of Eastern Europe, December 2006, 20 pages.
- 27 Gash, Vanessa/Mertens, Antje/Gordo, Laura Romeu: Are Fixed-Term Job Bad for Your Health? A Comparison between Western Germany and Spain, March 2007, 29 pages.
- 28 Kamp, Vanessa/Niemeier, Hans-Martin/Müller, Jürgen: Can we Learn From Benchmarking Studies of Airports and Where do we Want to go From Here? April 2007, 43 pages.
- 29 Brand, Frank: Ökonomische Fragestellungen mit vielen Einflussgrößen als Netzwerke. April 2007, 28 pages.
- 30 Venohr, Bernd/Klaus E. Meyer: The German Miracle Keeps Running: How Germany's Hidden Champions Stay Ahead in the Global Economy. May 2007, 31 pages.
- 31 Tomenendal, Matthias: The Consultant-Client Interface - A Theoretical Introduction to the Hot Spot of Management Consulting. August 2007, 17 pages.
- 32 Zenglein, Max J.: US Wage Determination System. September 2007, 30 pages.
- 33 Figeac, Alexis: Socially Responsible Investment und umweltorientiertes Venture Capital. December 2007, 45 pages.
- 34 Gleißner, Harald A.: Post-Merger Integration in der Logistik - Vom Erfolg und Misserfolg bei der Zusammenführung von Logistikeinheiten in der Praxis. March 2008, 27 pages.
- 35 Bürkner, Fatiah: Effektivitätssteigerung im gemeinnützigen Sektor am Beispiel einer regionalen ‚Allianz für Tanz in Schulen‘. April 2008, 29 pages.
- 36 Körner, Marita: Grenzüberschreitende Arbeitsverhältnisse - Grundlinien des deutschen Internationalen

- Privatrechts für Arbeitsverträge. April 2008, 22 pages.
- 37 Pan, Liu/Junbo, Zhu: The Management of China's Huge Foreign Reserve and its Currency Composition. April 2008, 22 pages.
- 38 Rogall, Holger: Essentiales für eine nachhaltige Energie- und Klimaschutzpolitik. May 2008, 46 pages.
- 39 Maeser, Paul P.: Mikrofinanzierungen - Chancen für die Entwicklungspolitik und Rahmenbedingungen für einen effizienten Einsatz. May 2008, 33 pages.
- 40 Pohland, Sven/Hüther, Frank/Badde, Joachim: Flexibilisierung von Geschäftsprozessen in der Praxis: Case Study „Westfleisch eG - Einführung einer Service-orientierten Architektur (SOA). June 2008, 33 pages.
- 41 Rüggeberg, Harald/Burmeister, Kjell: Innovationsprozesse in kleinen und mittleren Unternehmen. June 2008, 37 pages.
- 42 Domke, Nicole/Stehr, Melanie: Ignorieren oder vorbereiten? Schutz vor Antitrust Verstößen durch Compliance“-Programme. June 2008, 25 pages.
- 43 Ripsas, Sven/Zumholz, Holger/Kolata, Christian: Der Businessplan als Instrument der Gründungsplanung - Möglichkeiten und Grenzen. December 2008, 34 pages.
- 44 Jarosch, Helmut: Optimierung des Zusammenwirkens maschineller und intellektueller Spezialisten. January 2009, 35 pages.
- 45 Kreutzer, Ralf T./Salomon, Stefanie: Internal Branding: Mitarbeiter zu Markenbotschaftern machen – dargestellt am Beispiel von DHL. February 2009, 54 pages.
- 46 Gawron, Thomas: Formen der überörtlichen Kooperation zur Steuerung der Ansiedlung und Erweiterung von großflächigen Einzelhandelsvorhaben. April 2009, 43 pages.
- 47 Schuchert-Güler, Pakize: Aufgaben und Anforderungen im persönlichen Verkauf: Ergebnisse einer Stellenanzeigenanalyse. April 2009, 33 pages.
- 48 Felden, Birgit/Zumholz, Holger: Managementlehre für Familienunternehmen – Bestandsaufnahme der Forschungs- und Lehraktivitäten im deutschsprachigen Raum. July 2009, 23 pages.
- 49 Meyer, Susanne: Online-Auktionen und Verbraucherschutzrecht – ein Rechtsgebiet in Bewegung. Zugleich ein Beitrag zu Voraussetzungen und Rechtsfolgen des Widerrufsrechts bei Internetauktionen. December 2009, 29 pages.
- 50 Kreutzer, Ralf T.: Konzepte und Instrumente des B-to-B-Dialog-Marketings. December 2009, 40 pages.
- 51 Rüggeberg, Harald: Innovationswiderstände bei der Akzeptanz hochgradiger Innovationen aus kleinen und mittleren Unternehmen. December 2009, 31 pages.
- 52 Kreutzer, Ralf T.: Aufbau einer kundenorientierten Unternehmenskultur. December 2009, 59 pages.
- 53 Rogall, Holger/Oebels, Kerstin: Von der Traditionellen zur Nachhaltigen Ökonomie, June 2010, 28 pages.
- 54 Weimann, Andrea: Nutzung von Mitarbeiterpotenzialen durch Arbeitszeitflexibilisierung – Entwicklung eines optimierten Arbeitszeitmodells für eine Abteilung im Einzelhandel, June 2010, 35 pages.
- 55 Bruche, Gert: Tata Motor's Transformational Resource Acquisition Path – A Case Study of Latecomer Catch-up in a Business Group Context, October 2010, 28 pages.
- 56 Frintrop, Philipp/Gruber, Thomas: Working Capital Management in der wertorientierten Unternehmenssteuerung bei Siemens Transformers, November 2010, 35 pages.
- 57 Tolksdorf, Michael: Weltfinanzkrise: Zur Rolle der Banken, Notenbanken und „innovativer Finanzprodukte“, November 2010, 20 pages.
- 58 Kreutzer, Ralf T./Hinz, Jule: Möglichkeiten und Grenzen von Social Media Marketing, December 2010, 44 pages.
- 59 Weyer, Birgit: Perspectives on Optimism within the Context of Project Management: A Call for Multilevel Research, January 2011, 30 pages.
- 60 Bustamante, Silke: Localization vs. Standardization: Global approaches to CSR Management in multinational companies, March 2011, 29 pages.
- 61 Faltin, Günter/Ripsas, Sven: Das Gestalten von Geschäftsmodellen als Kern des Entrepreneurship, April 2010, 22 pages.
- 62 Baumgarth, Carsten/Binckebanck, Lars: CSR-Markenmanagement – Markenmodell und Best-Practice-Fälle am Beispiel der Bau- und Immobilienwirtschaft, September 2011, 46 pages.
- 63 Lemke, Claudia: Entwurf eines Modells zur serviceorientierten Gestaltung von kleinen IT-Organisationen in Forschungseinrichtungen Theoretische Überlegungen und methodische Konzeption als erste Ergebnisse eines Forschungsprojektes an der HWR Berlin, October 2011, 43 pages.

Special Edition:

Ben Hur, Shlomo: A Call to Responsible Leadership. Keynote Speech at the FHW Berlin MBA Graduation Ceremony 2006. November 24th, 2006, Berlin City Hall, April 2007, 13 pages.