Chapter 2 International Corporate Sustainability Barometer: Purpose and Approach

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Abstract In a first step, this chapter provides a brief review of the existing literature on the international state of the art of sustainability management. The review reveals that while a large body of studies already exists, most publications deal with single nations or bilateral comparisons. Among the truly international studies, a lack of comparative quantitative inquiries on a country-specific level is identified.

In a second step, the edited volume's methodological approach to address this research gap is outlined. Unlike prior studies on sustainability management, the ICSB builds on a comprehensive survey among sustainability managers in large companies and is not restricted to single aspects of sustainability management. This chapter describes the process of data collection and provides the reader with the most important information on the resulting sample which includes 468 companies of 11 economically developed countries from 4 distinct world regions.

2.1 Current State of Research: Identifying the Research Gap

The growing importance of sustainability issues for society, politics and business (see Chap. 1) not only motivates companies to establish sustainability management practices, but it has also led to an increasing number of academic publications on sustainability management. The German 'Corporate Sustainability Barometer' (Schaltegger et al. 2010) conducted a literature review and identified a growing number of sustainability management articles in sustainability-related journals as well as in conventional management journals. Sustainability management has become an integral part of mainstream business studies.

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Numerous studies have been conducted since the late 1990s to describe the status quo of sustainability management and corporate social responsibility (CSR) practices. National analyses exist for most European countries (e.g. Harkai and Pataki 2001; Pacheco and Wehrmeyer 2001; Wagner and Schaltegger 2002; Bertelsmann Foundation 2005; Antal and Sobczak 2007; Delbard 2008; Schaltegger et al. 2010) as well as for numerous countries in North and Latin America (e.g. Cecil 2008; United Nations 2012) and in the Asia-Pacific region (e.g. Frost et al. 2005) to name just a small selection of studies on the countries involved in the International Corporate Sustainability Barometer (see also Schaltegger et al. 2013). Besides country-specific studies, empirical research has been primarily concentrated on bilateral comparisons (James et al. 1997; Bansal and Roth 2000; Wehrmeyer et al. 2002). However, these studies frequently concentrate on single aspects of sustainability management such as sustainability reporting (Frost et al. 2005; Cecil 2008) or corporate environmental strategies (Wehrmeyer et al. 2002).

An important step towards multi-country comparative analysis in the field of sustainability management was the European Business Environmental Barometer (EBEB). This quantitative survey conducted in 11 European countries in 1997/98 covered a wide range of environmental management topics. It resulted in various publications (e.g. Baumast 2000; Baumast and Dyllick 2001; Kestemont and Ytterhus 2001) on national differences in management practices as well as on the role of contextual factors such as national market forces, legislation or culture. However, the results date back to the late 1990s and do not cover any non-European countries. The EBEB's focus on environmental issues furthermore means that it does not deal with a number of central aspects of sustainability management, such as balancing and simultaneously managing social, environmental and financial aspects.

Until today, there is a lack of truly international academic studies on sustainability management. Most publications concentrate on a relatively small number of countries and on specific aspects (such as the application of ISO 14001 as an environmental management standard) related to sustainability management (e.g. Wehrmeyer et al. 2002; Burritt et al. 2003), use secondary data, or they collect comparatively general qualitative, primarily practitioner-oriented data. These studies do not allow then for comprehensive in-depth quantitative comparisons. For instance, although the journal articles by Neumayer and Perkins (2004) as well as Delmas and Montiel (2008) analyse companies in more than 100 different countries, their analyses are limited to the diffusion of voluntary management standards. Delmas and Montiel (2008) restrict their sample to companies in the chemical industry. Similarly, although Forbes and McIntosh (2011) use existing indicators to compare CSR practices in 16 countries, their analysis focuses on the Asia-Pacific region, excluding companies from other economically advanced regions.

One of the first international studies of corporate sustainability management practices was documented in the UN Global Compact Annual Review of 2007 (UN Global Compact 2007). In 2010, the UN Global Compact, together with the consulting firm Accenture, extended its study and surveyed 766 CEOs (Lacy et al. 2010).

However, with their focus on CEOs both studies primarily survey managerial attitudes and expectations towards sustainability rather than depicting the current practice of corporate sustainability management. Furthermore, the study almost exclusively collects qualitative information and does not aim at nation-specific comparisons of implementation activities. Instead it gives a practitioner-oriented overview of attitudes towards sustainability and adds some comparisons on a continent-specific level.

Similarly, the annual reports published by the MIT Sloan Management Review and the consulting firm The Boston Consulting Group (BCG) provide very valuable insights by surveying more than 1,500 corporate leaders from all over the world in their annual surveys (Berns et al. 2009; Haanaes et al. 2011, 2012; Kiron et al. 2013). Again, due to the focus on the perceptions of corporate leaders the emphasis is more on attitudes than on measures actually taken, and the questionnaire concentrates on qualitative information. As in the study by Accenture and UN Global compact (Lacy et al. 2010), the results are not displayed on a country-specific basis, but instead global trends are identified and global regions are compared.

Other publications such as the UN Global Compact International Yearbooks (e.g. UN Global Compact 2012) illustrate the practice of sustainability management in selected companies all over the world. However, these publications tend to focus on promoting best practice examples rather than on identifying and analysing the actual status quo of corporate sustainability practice. Idowu and Leal Filho (2009), taking a different approach, aim at systematically documenting the current state of CSR in 19 countries from Europe, East Asia, Middle East/Africa and the Americas. However, these findings are not based on primary survey data but provide what are often conceptual summaries of the national CSR frameworks drawing on anecdotal examples from single companies. Due to the focus on CSR instead of sustainability management, the authors largely neglect the application of a broad range of sustainability management tools and how sustainability can be integrated into the company's core economic activities.

This brief review of the literature reveals that while a large body of studies already exists, most publications deal with single nations or bilateral comparisons. Among the truly international studies, there is a lack of in-depth academic investigations on a comparative but country-specific basis. Most attempts focus on qualitative information, draw global trends and are primarily oriented to practitioners.

More academically-oriented, quantitative publications usually focus on single aspects of sustainability management. In most analyses, the perceptions and attitudes of CEOs and corporate leaders are surveyed. However, sustainability managers or other operational middle managers explicitly authorised to deal with sustainability may be better able to provide a valid insight not only into attitudes but also into the details of actual sustainability management practices.

This review shows that a research gap exists for a large-scale, comparative international study on sustainability management which surveys and compares corporate practices between different countries. This research gap is addressed by the International Corporate Sustainability Barometer (ICSB).

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2.2 Methodology: Addressing the Research Gap

In contrast to the international studies described above, the ICSB collected data on a country-specific basis. To be able to examine the effects of different contextual factors (e.g. markets, legislation and culture) the 'most-different system design' has been adopted from political sciences (Anckar 2008). Companies from a number of economically developed countries differing in culture, economic size, market structures and traditions were investigated with regard to their sustainability management practices within a single survey:

- For continental Europe, French and German companies were examined, to
 provide an insight into large Western European economies, whereas Belgian and
 Swiss companies represent the group of smaller European economies. Central
 Europe is captured by Hungary and for Southern Europe Spain was examined.
- The United Kingdom was surveyed as a traditionally strongly free-market oriented economy. Likewise, the USA, the largest North American economy and another free-market oriented economy strongly influenced by Anglo-Saxon culture, was also included in the analysis.
- Within the Asia-Pacific region, Japan and the Republic of Korea were surveyed, representing the largest capitalistic industrial economies in East Asia. Last but not least, Australia was included in the survey, as an Asia-Pacific economy distinct from the Asian countries.

This international project was coordinated by the Centre for Sustainability Management (CSM) at Leuphana University Lüneburg, Germany. In each country, a national academic institution organised the country-specific surveys (see Table 2.1).

Unlike other empirical sustainability management studies, the questionnaire used for the ICSB was not restricted to a single aspect of sustainability management or a single environmental or social topic. It aimed at covering a broad range of corporate sustainability issues, with a special focus on a company's *intention* to pursue sustainability management, the *integration* of sustainability into its business activities and its actual *implementation*. In contrast to more practitioner-oriented, qualitative studies, this research instrument was largely based on quantitative questions. These served to describe and analyse quantitative differences for the surveyed aspects instead of comparing percentages of dichotomous answers.

The questionnaire was developed by the CSM and made use of the experience of prior surveys conducted by the CSM on sustainability management in Germany in 2002, 2006 and 2010. Where necessary, the national academic institutions translated the questionnaire into the country's main language. Back translations were organised to ensure that in each country the same questions were asked in exactly the same manner. This procedure served to enable multi-country comparisons. Before the survey started, extensive pre-testing was conducted to validate the questionnaire. To reduce the effort for participating companies, an online-questionnaire was used. All national surveys were carried out between February and August 2012.

Table 2.1 Participating research institutions, responses and response rates in the surveyed countries

Country	Institution	Responses (quantity/ response rate [%])
Australia	University of South Australia; Centre of Accounting,	48/26.2
Belgium	Governance and Sustainability University of Liege; HEC Management School	22/15.9
France	University Paris Descartes; Département Gestion des Entreprises et des Administrations	20/21.5
Germany	Leuphana University Lüneburg; Centre for Sustainability Management (CSM)	152/39.7
Hungary	Corvinus University of Budapest; Department of Environmental Economics and Technology	28/32.9
Japan	Kobe University; Graduate School of Business Administration	48/16.0
Korea	Inha University; Sustainability Management Research Institute	32/15.5
Spain	University of Zaragoza; Faculty of Economics and Business Administration	23/26.1
	University of Basque Country; Faculty of Economics and Business Studies	
Switzerland	University of Applied Sciences and Arts Northwestern Switzerland; School of Business; Institute of Management	25/12.2
United Kingdom	Nottingham University Business School; International Centre for Corporate Social Responsibility	36/16.4
USA	Rochester Institute of Technology; Department of Civil Engineering Technology, Environmental Management and Safety	34/19.4
Overall	management and Salety	468/22.5

Before the surveys were conducted, in each country lists of the largest companies from all industries were compiled. In most countries, existing databases (e.g. Fortune 500, Welt Online, BelFirst) were used to identify the largest companies by revenue. To avoid double-counting of responses, subsidiaries which do not manage their sustainability management independently were excluded from the lists. Similarly, all companies which ex post turned out not to fit the sample were excluded from the analysis to ensure that the companies from all countries in the study fulfil the same criteria. The most frequent reason to exclude a company from the database was if it reported annual revenue below €50 million for the prior financial year, which classified it as a small or medium-sized company according to the EU definition (European Commission 2005). Other companies were excluded ex post if their sustainability management activities were run by a parent company.

In total, 2,076 questionnaires were sent out in the 11 participating countries. Altogether, the international surveys yielded 468 valid responses (response rate of 22.5 %). The ICSB data thus meets the requirements Bartlett et al. (2001) set

up for performing statistical analysis using quantitative survey data. Additionally, the response rate is within the standard deviation range Baruch and Holtom (2008) identified as appropriate for survey-based scientific articles on organisations published in refereed academic journals. The country-specific differences in the response rate can be explained by different cultures and attitudes towards surveys (see also O'Neill et al. 1995; de Heer 1999).

For the data analysis, IBM SPSS 20 was used, which allows building and comparing subsamples for each national dataset. The main characteristics of the resulting international sample are displayed in the following chapter.

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