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Corporate Social Responsibility in the International Insurance Industry

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ABSTRACT
This paper investigates the corporate social responsibility (CSR) of insurance companies. Rating institutions provide costly information about firms' CSR and it is not clear how they arrive at their assessment. We use a transparent framework to assess the CSR of insurance companies. We apply this framework to different types of insurers (financial conglomerates, life insurance companies, mixed insurers, general insurers) for more than 150 institutions from 20 countries. We find significant differences between different types of insurers and between countries. The results also suggest that social and ethical aspects of CSR are better integrated in the business activities of insurers than environmental aspects are. Financial conglomerates perform better than other types of insurers. Copyright © 2011 John Wiley & Sons, Ltd and ERP Environment.

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Introduction

We focus on the connection between insurance firms and corporate social responsibility. Insurance companies act as financial intermediaries in society: they price and value financial assets, they monitor borrowers, they manage financial risks, and they cover for the financial consequences of circumstances and situations that people usually try to avoid (Greenbaum and Thakor, 2007). By performing these functions, insurance companies impact on society (Scott, 2003). They usually require firms and households to adopt specific behaviors to increase the chances that lenders will pay interest and amortizations, and that the policyholders will not run into trouble. This is meant to reduce the risk of moral hazard and adverse selection. There is an overwhelming amount of literature that assesses how financial institutions affect the economy. The main finding is that the financial system appears to play an important and positive role in economic development (see Beck *et al*., 2010; Levine, 2004). As economic development is directly linked to human, social and environmental development, insurance companies are very likely to impact on sustainable development as well. In contrast to most other industries, the impact of financial institutions on development is mostly indirect because they facilitate growth and development of other firms and households (Scholtens, 2006).

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So far, there is no proper framework to assess how we can qualify the efforts of financial institutions in furthering sustainable development. This is mainly because sustainable development is a multidimensional phenomenon and there is no coherent theory that connects financial firms' activities with sustainable development. At the level of the individual firm, sustainable development translates into corporate social responsibility (CSR) (Elkington, 1998). CSR is a notion used to relate a firm's operations to the various dimensions of sustainable development (Waddock and Graves, 1997). With CSR, firms attempt to take account of their employees, customers and other stakeholders (people), natural environment (planet), and future prospects of the firm (profit) (Elkington, 1998; Smith and Lenssen, 2009).

Specialized rating agencies can provide an assessment of a firm's CSR. They usually have a generic approach and it is not clear how they arrive at their CSR assessment because the lack of a proper and solid theoretical framework gives ample leeway to pragmatism, eclecticism and subjectivism when arriving at an assessment (Chatterji *et al*., 2007). In this paper, we use a more transparent framework to assess insurers' social responsibility policies. This framework results in a comparison of insurers' CSR policies for different types of insurance firms and for insurers in different countries. As such, we compare the relative performance of insurance companies with respect to their policies regarding CSR.

The key actions of financial intermediaries in financing economic activities are screening and monitoring. By economizing on information costs, financial institutions improve the assessment of investment opportunities, with positive effects on resource allocation. By improving information about enterprises, management and market conditions, the financial institutions may accelerate firm growth as well as economic growth (Beck *et al*., 2010; Greenwood and Jovanovic, 1990; King and Levine, 1993). Intermediaries that specialize in ownership and fund management can influence the future directions of the firm through various channels: voting on crucial issues, such as business strategies, mergers, etc.; engaging in dialogue with top management; (co)filing shareowner resolutions; and investing in or divesting from the company. In this respect, the notion of socially responsible investment (SRI) has emerged. SRI is meant to reflect the fact that investors in some way or another account for the non-financial (especially environmental, ethical and social) aspects of production (Scholtens, 2006; Johnsen, 2003).[1] Bauer *et al*. (2005) and Galema *et al*. (2008) find that there is no significant difference in the returns of socially responsible funds and those of conventional funds. Financial risk of SRI is also of the same order of magnitude as that of conventional investments.

Although shares and shareholder rights are an important instrument to impact on the direction of the firm, they are not the only means. Private capital, bank credit and insurance are also important financial instruments if it comes to providing external finance to the firm. But these types of financing are much more opaque than financing via public markets for stocks or bonds (Boot and Thakor, 1997). Nevertheless, their impact can be at least of equivalent importance (Beck *et al*., 2010). Financial institutions usually regard qualitative attributes of the firm and the entrepreneurs as proxies for the viability of the project and the firm (Greenbaum and Thakor, 2007; Matthews, 2002). They also select firms and projects based on their performance with respect to such non-financial characteristics. The financial intermediary not only provides finance, but is also involved in project design and implementation (Haupt and Henrich, 2004; Jappelli and Pagano, 2002). Furthermore, finance and insurance opens the potential to direct economic activities in a way that takes account of social, ethical and environmental issues (Scholtens, 2006).

A general and natural weakness of insurance companies when it comes to impacting on sustainable development is that their activities are of an indirect, intermediate character. By providing insurance, the insurance company contributes to the realization of all kinds of activities and projects. However, in the end, the entrepreneur is accountable for the success or failure of the project. By taking account of social, ethical and environmental conditions in the provisioning of insurance as well as with their investments, the insurance companies come up with additional challenges regarding the ways in which the entrepreneur realizes and manages the business (Scott, 2003).

[1] In the special issue (Cerin and Scholtens, 2011), several papers relate responsible investment to different agents. For example, Manescu (2011) investigates the role of financial markets, Chegut *et al*. (2011) investigate how academics study SRI in connection with financial market performance, Hedesström *et al*. (2011) analyze how information specialists arrive at information about responsible conduct and policies of firms, and Jansson and Biel (2011) look into motives of private and institutional investors to engage with SRI.

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We want to find out how CSR connects with the international insurance industry. To this end, we use a straightforward framework to assess insurers' CSR. Then, we investigate the performance of 153 insurers from different countries on the basis of this framework. We find that there are substantial differences between individual insurers, types of insurers, and insurers from different countries and regions.

The structure of this paper is as follows. First, we discuss the data and methods used in the analysis. Then, we report the results and produce an assessment of performance for the four different types of insurers (financial conglomerates, life insurance companies, mixed insurance companies and general insurance companies). We also discuss performance at the regional and the national levels. Last, we associate the insurers' performance on CSR with firm size and try to find out whether well-rated insurers are likely to be included in sustainability indices.

Data and Methodology

In this section we discuss the data and methodology. We start with the selection of the insurance companies. Then, we introduce and discuss the criteria to assess an insurer's CSR.

We selected insurance companies for our sample on the basis of whether they provide financial statements or an annual report on their website in English. As a result, we included insurance companies of different size in our sample. Four different indicators of company size were used, namely total assets, number of employees, net premiums collected and shareholders' equity. We investigated four different types of insurance firms: financial conglomerates, life insurance companies, general insurance companies and mixed insurance companies. Conglomerates are large financial companies that operate in different financial sectors (banking, insurance, etc.), and usually across borders. A conglomerate has at least 10% income from banking operations and at least 10% from insurance activities.[2] Life insurance companies predominantly offer life insurance products. General insurance companies predominantly offer products for non-life insurance (health and casualty insurance products). Mixed insurance companies offer both life and non-life products. For a regional analysis, we focus on insurance companies in Europe, North America and Japan. An overview of the number and type of insurance companies and their regional distribution is given in Appendix 1.

We investigated 23 different indicators to assess the CSR of insurance firms. We investigated whether a particular insurance company did or did not perform regarding the indicators. More specifically, the insurer received a score of 1 if the policy was present and 0 otherwise. We standardized all scores to allow for a comparison of firm performance between regions, countries and insurer type. For example, if five firms from Denmark were included in the analysis, and if one of them published a CSR report, then the performance of the Danish insurers was rated as 20%. We used the 23 different CSR indicators to assess the performance of the 153 insurers. The 23 indicators were divided into four categories: (1) CSR reporting, behavioral codes, and environmental care systems; (2) environmental responsibility in practice; (3) social-economical activities; and (4) governance codes. This design is based on a framework developed by Scholtens (2009), who investigated CSR with internationally operating banks. A similar approach was developed by Gjølberg (2009) but she assesses CSR at the country level.

Table 1 is an overview of the 23 indicators used. It also gives the five sustainability indices that were used to find out how our assessment of the insurance industry relates to that of the rating agencies that use more opaque methodologies to arrive at an assessment about a firm's CSR. The latter is at the basis of the decision of whether to include a particular company in a sustainability index. Table 1 gives the indicator, the way in which it was measured and the data source. The CSR reports of the conglomerates and insurance companies were used most to arrive at information. When such a report was unavailable, the environmental or social report was used. The annual report was used if none of the above-mentioned reports was available. We always used the most recent version of the reports. Furthermore, we searched for CSR information on the firms' websites. We assumed that a company did not follow a behavioral code nor has an environmental management system if this was not stated in their report or on their webpage, etc. As such, we were completely reliant on self-reporting. This has as a drawback the fact that institutions may be overly optimistic about their performance. However, as we only check whether they

[2] http://ec.europa.eu/internal_market/financial-conglomerates/docs/20060424_conglomerates_bycountry_en.pdf

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No.	Indicator	Measure / dimension	Source
	Reporting, codes and systems		
1	Sustainability reporting	Year of first published report	Company website
2	ICC Business Charter	Adoption of guidelines (yes/no)	Website and sustainability reports
3	UNEP FI	Adoption of guidelines (yes/no)	www.unepfi.org, and www.unpri.org
4	Equator Principles	Adoption of guidelines (yes/no)	www.equator-principles.com
5	Global compact	Adoption of guidelines (yes/no)	www.unglobalcompact.org
6	Who cares wins	Participation in publication (yes/no)	Who cares wins statement, www.unglobalcompact.org
7	ISO 14001	Certification by ISO 14001	Website and sustainability reports
8	EMAS	Certification by EMAS standard	Website and sustainability reports
	Environmental responsibility in practice		
9	Environmental policy	Policy designed by insurer (yes/no)	Website and sustainability reports
10	Supply chain management	Policy designed by insurer (yes/no)	Website and sustainability reports
11	Transparency performance	Quantitative/qualitative	Website and sustainability reports
12	Transparency goals	Quantitative/qualitative	Website and sustainability reports
13	Environmental risk analysis	Usage of risk analysis (yes/no)	Website and sustainability reports
14	Sector exclusion	Usage of sector exclusion (yes/no)	Website and sustainability reports
15	World Bank guidelines	Adoption of guidelines (yes/no)	Website and sustainability reports
16	OECD guidelines	Adoption of guidelines (yes/no)	Website and sustainability reports
17	Sustainable financial products	Supply of these products (yes/no)	Website and sustainability reports
	Social-economic activities		
18	Community involvement	Involvement in foundation or voluntary work (yes/no)	Website and sustainability reports
19	Sponsoring	Sponsoring activities (yes/no)	Website and sustainability reports
20	Education and training	Availability of education and training facilities (yes/no)	Website and sustainability reports
21	Equal career opportunities	Presence of equal opportunities (yes/no)	Website and sustainability reports
	Corporate governance		
22	Company ethics	Code of Conduct, Code of Ethics (yes/no)	Website and sustainability reports
23	Compliance	Compliance with a Code (yes/no)	Website and sustainability reports
	Indices		
24	Dow Jones Sustainability group	Inclusion in DJSGI	DJSI World Constituent Data
25	FTSE4Good	Inclusion in FTSE4Good (yes/no)	FTSE4Good Global Index Constituent Data
26	Ethibel ESI Excellence Europe	Inclusion of European insurers in Ethibel (yes/no)	Ethibel constituent Data
27	Domini Social Index DSI	Inclusion of North-American insurers in DSI (yes/no)	DSI constituent Data
28	Carbon Climate Index	Inclusion in the Carbon Climate Index (yes/no)	Climate Leadership Index CLI

Table 1. Sustainability criteria

cover a particular item and not their actual performance, self-reporting seems justified as a means to arrive at information.

The first of our four categories concerned reporting, codes and systems. By a CSR report, adoption of behavioral codes, or implementation of environmental care systems, a company signals that it is committed to CSR and is willing to take social, ethical and environmental issues into account. Stakeholders are not solely interested in the financial performance of companies, they are also interested in activities related to environment, ethics and society. CSR reports are a way in which companies can communicate to their stakeholders how they are engaged in socially

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responsible activities. By having environmental statements and behavioral codes, a company signals that it wants to integrate CSR into its business. There are several codes and statements: The International Chamber of Commerce (ICC) set up the Business Charter for Sustainable Development in response to the World Commission on Environment and Development report. This Charter sets out 16 principles for environmental management, and covers, among others, health, safety and product stewardship. Furthermore, we check whether an insurance firm adheres to the United Nations Environment Program statement by Financial Institutions (UNEP FI) on Environment and Sustainable Development. Conglomerates and insurance companies which sign this statement signal that they want to achieve sustainable development. Another indicator is whether the insurance company has underwritten the Equator Principles. These principles are a financial industry benchmark for determining, assessing and managing social and environmental risk in project finance in developing countries. Companies that adopt these principles have to ensure that the projects they finance are developed in a manner that is socially responsible and reflects sound environmental management practices. Furthermore, we include the Global Compact of the UN and the related *Who Cares Wins* statement. Global Compact is an international program that joins companies, UN agencies, labor and civil society to support universal environmental and social principles. Global Compact contains 10 principles regarding human rights, labor issues, the environment and anti-corruption. *Who Cares Wins* is a report in which financial institutions explain that social, environmental and governance practices are crucial to well-functioning financial markets. An environmental management system can be part of the existing management system and focuses on the control and improvement of environmental performances. With an environmental management system, the focus is on the position of the environment within the business conduct. Two issues are of importance. First is the compliance with legislation and rules and the control of environmental risks. Second is the environmental performance. Insurers may seek certification of their environmental management system through ISO 14001 and/or through the EMAS standard.

The second category of indicators relates to environmental responsibility in practice. Information about environmental performance and goals is usually included in the CSR reports. Insurance companies can use supply chain management to examine the CSR performance of their suppliers. Transparency of environmental performances and goals indicates to what extent insurance companies are active in environmental responsibility. Environmental responsibility is also expressed by the environmental risk analysis of insurance companies, sector exclusions, and whether they follow certain guidelines. Insurers develop an environmental policy when they want their business activities to be environmentally responsible. Such a policy reflects how these companies try to reduce their impact on the environment, and how they manage environmental risk. Insurance companies may use supply chain management as a guideline for their relations with suppliers. Companies that use responsible supply chain management expect that their suppliers have similar practices regarding CSR as they themselves might have. Some insurance companies exclude suppliers if those suppliers do not act in line with their environmental and/or social practices. As insurers realize that they have a social responsibility and that they can help to achieve a more sustainable situation, they usually also become more transparent. A company can be transparent in two ways, namely in a quantitative or a qualitative manner. The first implies that, for example, reductions or goals are stated in numbers or percentages, whereas with the latter only a general statement is provided. We incorporate both in the analysis. Insurance companies who perform environmental risk analysis examine the CSR of the companies in which they insure and invest. Furthermore, insurance companies can create awareness of the environmental impact of companies in other industries and may convince them to change their policy in a more sustainable direction. When insurance companies are involved in projects in developing countries they can use the guidelines set by the World Bank or Organization of Environmental Co-operation and Development (OECD) to examine and analyze companies. Furthermore, insurance companies can offer insurance products with a specific CSR component. An example is life insurance products of which the premiums are only invested in socially responsible investment funds or car insurance where repairs are made with certified used parts.

The third category of indicators relates to social-economic activities. Community involvement signals that the company is involved in and wants to stimulate the (local) community. Several insurance companies have created a foundation that decides what projects are funded and what donations are made. These foundations can be oriented towards the local community or more globally. Volunteering also reflects community involvement. For example, employees can be involved in teaching, care or building activities for the local community. Different forms of sponsoring exist, for example sponsoring of sport-related activities, art, music, environmental projects or

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health-related projects. This type of sponsoring shows that a company is engaged with its community. Furthermore, regarding 'internal' social responsibility, we investigate how insurance companies perform with respect to their employees. In this respect, we focus on two aspects of the working conditions, namely education and training and equal career opportunities.

The fourth category of indicators relates to governance. As to corporate governance codes, we review the way the insurance companies conduct relations between the supervisory board, managing board and shareholders. The indicators included in this category measure to what extent companies want to create long-term sustainable value for their stakeholders. Company ethics can be written in the company's Code of Conduct or Code of Ethics, and they specify how a company resolves ethical issues. A company which has a Code of Conduct agrees to several aspects of socially responsible business activities. In every country, different corporate governance codes exists. For example, in the USA the Sarbanes–Oxley Act was created in response to several major corporate and accounting scandals. The European Commission states that every member state has to draft a code, and companies have to comply or to explain why they do not comply. In Japan, the Japan Corporate Governance Forum issued corporate governance principles. Provisions in the codes relate to compliance with and enforcement of the code, the management and supervisory board, financial reporting and shareholders.

We use the inclusion in sustainability indices (#24 to #28 in Table 1) as a control device in our analysis. Inclusion in these indices is only possible if a company complies with certain standards and requirements as specified by the CSR rating agency (Ziegler and Schröder, 2009). The five sustainability indices which will be used as a control device are the following, Dow Jones Sustainability Group Index, FSTE4Good, Ethibel ESI Excellence Europe, Domini Social Index, and Carbon Climate Index.

We calculated Spearman rank correlations between the indicators (results are not reported here for brevity sake but are available upon request). We find that the CSR performance between the reports category and the environmental responsibility in practice category have the highest correlation (0.87). The correlation between the reports category and the social category is also substantial (0.73). Correlation between environmental responsibility in practice and the social category is large, namely 0.77. The governance category has the lowest correlation with the other categories, however this correlation is also significant (0.55 with reports, 0.56 with responsibility in practice, and 0.54 with social). Overall, we conclude that the correlation among the CSR indicators is substantial. However, it is also far from perfect. Therefore, we feel it is important to report on the different indicators and categories instead of combining the 23 indicators into one single score.

Results

In this section, we present and discuss the results of the analysis of the CSR performance of the insurance companies. We start with the analysis at the regional level. Then, we assess the performance of insurers at the country level. Third is an investigation of the performance of the four different types of insurers. In addition, we test whether there is a relationship between company size and CSR performance. Finally, a comparison is made between CSR performance and inclusion in the sustainability indices.

Regional Analysis

We distinguish between Europe, North America and Japan. Table 2 gives the 23 indicators and shows the number of firms and the percentage of firms in that region that score positive on the particular indicator. We discuss the results per category of indicators.

As to CSR reporting, behavioral codes and environmental care systems, approximately half of all insurance companies publish a CSR report. In general, Europe and Japan perform similarly and the North American insurers lag in all respects. About one-third of the insurance companies follows the UNEP FI code and have an ISO 14001 certification. Approximately 70% of the Japanese and European insurance companies publish a CSR report or have a separate section on CSR in their annual report. In North America only 20% of the insurance companies publish a report; compared with Japan and Europe this number is low. It appears that insurers sign up more to

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No.	indicator	Europe		North America		Japan		Total	
		n	%	*n*	%	*n*	%	*n*	%
	Reporting, codes and systems								
1	Sustainability reporting	58	67%	10	20%	10	71%	78	51%
2	ICC Business Charter	9	10%	2	4%	1	7%	12	8%
3	UNEP FI	33	38%	6	12%	6	43%	45	30%
4	Equator Principles	14	16%	4	8%	2	14%	20	13%
5	Global compact	27	31%	0	0%	6	43%	33	22%
6	Who cares wins	8	9%	0	0%	0	0%	8	5%
7	ISO 14001	28	32%	1	2%	8	57%	37	24%
8	EMAS	9	10%	0	0%	0	0%	9	6%
			27%		6%		29%		20%
	Environmental responsibility in practice								
9	Environmental policy	52	60%	8	16%	8	57%	68	45%
10	Supply chain management	29	33%	3	6%	0	0%	32	21%
11	Transparency environmental performance	51	59%	7	14%	9	64%	67	44%
12	Transparency environmental goals	51	59%	7	14%	9	64%	67	44%
13	Environmental risk analysis	31	36%	3	6%	4	29%	38	25%
14	Sector exclusion	8	9%	2	4%	0	0%	10	7%
15	World Bank guidelines	16	18%	4	8%	3	21%	23	15%
16	OECD guidelines	7	8%	0	0%	0	0%	7	5%
17	Sustainable financial products	33	38%	5	10%	5	36%	43	28%
			49%		13%		47%		37%
	Social-economical activities								
18	Community involvement	67	77%	30	59%	14	100%	111	73%
19	Sponsoring	67	77%	31	61%	13	93%	111	73%
20	Education/training	62	71%	11	22%	5	36%	78	51%
21	Equal career opportunities	53	61%	20	39%	5	36%	78	51%
			69%		49%		48%		62%
	Corporate governance								
22	Company ethics	54	62%	25	49%	6	43%	85	56%
23	Compliance	68	78%	16	31%	3	21%	87	57%
			70%		40%		32%		57%

Table 2. Performance of the insurance companies on the sustainability criteria on a regional level (performance is given in percentages and the number of companies that satisfy a criterion)

the UNEP FI and Global Compact than to other principles. Only European companies participate in the *Who Cares Wins* project and have an EMAS certification.

Regarding environmental responsibility in practice, about half of the insurance companies has an environmental policy and is transparent about the environmental performance and goals. We find that performance on all other criteria is much lower but, again, European and Japanese insurers perform better than North American ones. Only some European and North American insurance companies exclude sectors and use responsible supply chain management. One-third of the European insurers have responsible supply chain management compared with 6% of the North American and none of the Japanese insurers. Almost 40% of the European and Japanese insurance companies offer sustainable financial products compared with 10% of the North American insurers. The latter are also less transparent about their CSR performance and goals.

The performance of the insurance companies regarding social and economic activities is less diverse between the three regions than in the case of the previous two categories. More than 70% of all insurance companies engage

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in the community and in sponsoring, and more than half of them offer training facilities for their employees and have equal career opportunities. Japanese insurers perform less well on training and equal career opportunities. Compared with the other regions, European insurers appear to be more concerned with working conditions. North American companies are less active in community involvement and sponsoring than firms elsewhere.

The performance of the insurers regarding corporate governance is similar in all three regions: approximately 50% has a Code of Conduct and complies with a Code. European insurance companies perform best. In contrast to the other three categories, it appears that the North American firms perform slightly better than the Japanese ones.

In general, we conclude that European insurers overall perform best on most CSR indicators. Insurance companies from North America perform worst. We find that most firms engage in CSR reporting and have a general environmental policy that is, predominantly, internally oriented. We find that environmental risk analysis, sector exclusion and responsible products are not practiced a lot by the insurance firms. Most insurers are engaged with the community and in sponsoring. Furthermore, most of them take account of ethics and comply with codes of governance.

Country Analysis

Table 3 gives the performance of the insurers with respect to the four main categories of indicators and total CSR performance. The performance per category is the unweighted average of the performances per indicator included in each category. The *p*-values indicate whether the performance is significantly different from average or not. We use a two-sided *t*-test, with a significance level of 5% to determine whether the national performance significantly differs from the average overall performance. This test is valid because all data series are normally distributed according to a Kolmogorov–Smirnov test. The performance of the countries is compared with the unweighted average performance. The performance of firms from Cyprus and Hungary is combined because only one company from Cyprus and one from Hungary is included in our sample.

The average performance with respect to CSR reporting, codes and environmental systems of all 153 insurers is 25%, which is low compared with the performance in the other categories. Insurers from France, Spain and Sweden outperform the others. Insurers from the USA, Denmark and Cyprus/Hungary come last. Their performance in this category is below 10%. The country performance per indicator (not reported here) suggests that in this category only a small number of companies have adopted codes and have an environmental management system. In six countries, all companies publish a CSR report. In five countries one or more insurance companies have an EMAS certification, whereas in six countries none of the insurance companies has an ISO 14001 certification.

The overall score with the environmental responsibility in practice is 35%. The differences between the countries are narrower than in the previous category. Spanish insurers have the highest performance and those from the USA the lowest. We conclude that environmental responsibility in practice is poorly integrated in the insurers' business activities. In four countries, all companies are transparent about their environmental performance and goals; these companies report their waste level, energy usage and CO_2 emissions. On average about one-third of the companies offer sustainable products. The performance on the sector exclusion indicator is poor; in many countries, none of the insurance companies excludes sectors from its operations.

As to social and economic activities (category 3), insurers from France, Ireland and Spain have the maximum score of 100%. Insurers from Denmark, Germany, the Netherlands and the USA perform below average. The total performance of this category is 72%, which suggests that the social aspects of CSR are relatively well integrated into the business activities of insurance companies. The average performance of community involvement and sponsoring indicators is highest (not reported here). Only in the Czech Republic does a low number of companies satisfy these indicators. On the other two indicators in this category, performance is more dispersed.

With corporate governance, the overall performance is 65%. In Ireland and Italy all companies satisfy the two indicators. Japanese insurers show the lowest performance; approximately one-third of all Japanese firms satisfy the two indicators in this category. Only in this category was the performance of Japan significantly different from average. Most countries that perform well on the social and economic aspects also have a good performance in this category, except for Canada, Japan and Cyprus/Hungary.

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Country	No. of companies	Reporting etc.		Practices etc.		Social-Economic		Governance		Total	
		Performance	*p*-value	Performance	*p*-value	Performance	*p*-value	Performance	*p*-value	Performance	*p*-value
Austria	2	13%	0.01*	22%	0.00*	88%	0.01**	75%	0.06	50%	0.08
Belgium	2	31%	0.05	44%	0.01**	75%	0.10	50%	0.02*	50%	0.08
Cyprus/Hungary	2	6%	0.00*	39%	0.09	88%	0.01**	50%	0.01*	46%	0.09
Czech Republic	3	4%	0.00*	0%	0.00*	58%	0.04*	0%	0.00*	16%	0.02*
Denmark	5	8%	0.00*	11%	0.00*	25%	0.00*	50%	0.01*	24%	0.03*
Finland	2	13%	0.01*	39%	0.09	88%	0.01**	50%	0.01*	48%	0.10
France	7	48%	0.01**	62%	0.00**	100%	0.00**	93%	0.01**	76%	0.00**
Germany	7	29%	0.10	30%	0.10	39%	0.00*	64%	0.09	41%	0.04*
Ireland	2	19%	0.08	39%	0.09	100%	0.00**	100%	0.00**	65%	0.01**
Italy	7	27%	0.12	33%	0.10	68%	0.09	100%	0.00**	57%	0.07
the Netherlands	12	15%	0.01*	22%	0.00*	54%	0.03*	58%	0.10	37%	0.03*
Norway	3	29%	0.10	52%	0.01**	83%	0.01**	83%	0.02**	62%	0.01**
Spain	4	63%	0.00**	64%	0.00**	100%	0.00**	88%	0.01**	79%	0.00**
Sweden	4	41%	0.01**	53%	0.01**	75%	0.10	63%	0.09	58%	0.03**
Switzerland	5	25%	0.13	36%	0.09	65%	0.09	80%	0.03**	52%	0.07
UK	21	28%	0.11	40%	0.06	89%	0.01**	79%	0.04**	59%	0.05**
USA	44	4%	0.00*	7%	0.00*	42%	0.00*	41%	0.02*	24%	0.03*
Canada	7	14%	0.01*	17%	0.00*	64%	0.09	36%	0.01*	33%	0.03*
Japan	14	29%	0.10	30%	0.10	66%	0.09	32%	0.00*	39%	0.04*
Total	153										
Unweighted average		25%		35%		72%		65%		49%	
SD		15%		16%		22%		23%		16%	

Table 3. Country performance per category and total performance of the insurance companies on sustainability (performance is given in percentage with the corresponding *p*-value)
** Significantly better than average; * significantly worse than average.

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On the basis of the country analysis, we conclude that insurers in France, Spain, Ireland, Norway, Sweden and the UK outperform the overall sample. Insurers from the Czech Republic, Denmark, the Netherlands, Germany, the USA, Canada and Japan underperform.

Insurer Type

In this section, we analyze the performance of insurers on the basis of the type of insurance company: financial conglomerates, life insurers, general insurers and mixed insurers. A comparison is made per indicator, and we use a one-factor analysis of variance to determine whether the average performance significantly differs between the four types of insurers. The results are shown in Table 4.

In the first category of CSR indicators, we find that overall performance is poor. Financial conglomerates are at the top; their performance is 34%. The other types of insurers score 10% or less. In this category the highest scores are achieved on reporting. For example, an environmental or social responsibility report is published by 77% of the conglomerates. Reporting differs between conglomerates; several conglomerates publish a separate environmental report, whereas others publish a general CSR report that includes social and governance issues. General insurers perform poorest on reporting (22%). As to codes and statements, only conglomerates signed the ICC

	Total		FC		Life		General		Mixed		F-statistic	*p*-value
	N	%	*N*	%	*N*	%	*N*	%	*N*	%		
1 Sustainability reporting	78	51%	49	77%	9	41%	5	22%	15	34%	1.57	0.271
2 ICC Business Charter	12	8%	11	17%	0	0%	0	0%	1	2%	18.61	0.001
3 UNEP FI	45	29%	32	50%	3	14%	2	9%	8	18%	4.9	0.032
4 Equator Principles	20	13%	19	30%	0	0%	0	0%	1	2%	14.08	0.001
5 Global Compact	33	22%	23	36%	3	14%	3	13%	4	9%	0.88	0.491
6 Who Cares Wins	8	5%	5	8%	2	9%	0	0%	1	2%	0.51	0.686
7 ISO 14001	37	24%	26	41%	1	5%	4	17%	6	14%	1.18	0.378
8 EMAS	9	6%	8	13%	0	0%	0	0%	1	2%	0.77	0.542
Average		20%		34%		10%		8%		10%		
9 Environmental Policy	67	44%	47	73%	7	32%	5	26%	8	19%	3.55	0.067
10 Supply chain management	32	21%	28	44%	3	14%	0	0%	1	2%	2.41	0.143
11 Transparency performance	73	48%	47	73%	8	36%	7	30%	11	26%	1.29	0.344
12 Transparency goals	73	48%	47	73%	8	36%	7	30%	11	26%	1.29	0.344
13 Risk analysis	38	25%	30	47%	0	0%	2	9%	6	14%	9.38	0.005
14 Exclusions	10	7%	10	16%	0	0%	0	0%	0	0%	3.07	0.091
15 World Bank	23	15%	22	34%	0	0%	0	0%	1	2%	7.06	0.012
16 OECD	7	5%	7	11%	0	0%	0	0%	0	0%	3.07	0.091
17 Products	43	28%	30	47%	7	32%	2	9%	4	9%	3.82	0.058
Average		27%		46%		17%		12%		11%		
18 Community Involvement	111	73%	60	94%	17	73%	13	57%	21	49%	1.04	0.427
19 Sponsoring	111	73%	60	94%	15	68%	13	57%	23	53%	1.24	0.358
20 Education/training	78	51%	50	78%	10	45%	5	22%	13	30%	2.77	0.111
21 Equal career opportunities	75	49%	49	81%	9	41%	6	26%	11	26%	9.53	0.005
Average		62%		87%		57%		41%		40%		
22 Company ethics	88	58%	45	70%	9	41%	12	43%	22	49%	2.01	0.192
23 Compliance	87	57%	57	89%	11	50%	7	30%	12	28%	3.72	0.061
Average		58%		80%		46%		37%		39%		

Table 4. Comparison of the performance of the different categories of insurers (performance is given in percentages and the number of companies is the number that satisfy a criterion)

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Business Charter for Sustainable Development, and of the conglomerates only 17% signed this charter. Compared with the other indicators in this category, this percentage is low. Only in the case of *Who Cares Wins* is the performance lower. The UNEP FI is signed by all four insurer types, but a larger fraction of the conglomerates signed this declaration. The performance between the four types significantly differs on these two criteria. The Equator Principles is only signed by conglomerates and mixed insurance companies. From the mixed insurance companies, only Manulife from Canada adopted the Equator Principles. All types of insurers signed the Global Compact, but none of the North American companies signed up. Furthermore, none of the general insurance companies from Europe signed the Global Compact. For all codes and statements the conglomerates have the highest score. However, only for ICC, UNEP FI and the Equator Principles does performance significantly differ between the four types of insurers. As to environmental management systems, it appears that the ISO 14001 certification is adopted more often than EMAS certification (namely 37 and nine companies, respectively). General and mixed insurance companies more often have an ISO 14001 certification than life insurers do, but the average performance does not significantly differ between the four insurer types.

In the second category, we witness the same pattern as before: financial conglomerates perform much better than the other types of insurance firms. The highest performance is with environmental responsibility in practice and with transparency. All insurers perform very poorly when it comes to the exclusion of particular sectors or industries. As to the transparency of CSR performance and goals, we find that when a company is transparent regarding its performance it is also transparent about the goals. Almost three-quarters of the conglomerates report on their performance and goals, which is a much higher percentage than for the other three types of insurers. When we examine the percentage of companies that report on their performance and goals in a *quantitative* manner (not reported here) it appears that the percentages are substantially lower. It is somewhat surprising that the insurers score poorly on environmental risk analysis. For example, none of the life insurance companies included in this analysis perform an environmental risk analysis. Only conglomerates exclude specific sectors from their business activities. Insurers use the guidelines of the World Bank more often than those of the OECD. This can be explained by the fact that firms that follow the Equator Principles also follow the World Bank guidelines. As to the provision of sustainable financial products, conglomerates and life insurance companies perform best: 47% of the conglomerates offer these products and 32% of the life insurance companies. Companies belonging to the other two types of insurers offer much less sustainable financial products.

It appears that the overall performance of insurers is best in the third and fourth categories. Most insurance companies are involved in community activities. The companies either participate through donations, voluntary work or both. Furthermore, of the conglomerates, 94% is engaged in some form of sponsoring; life, general, mixed insurance companies score substantially below this figure. Conglomerates score well on working conditions: 77% offer training and educational facilities and 81% provide equal career opportunities. The results from the analysis of variance test show that the performance between the four types of insurers on training does not differ significantly but the performance on equal career opportunities does. As to corporate governance, most conglomerates have a Code of Conduct, namely 70%. This is substantially above that of the other insurer types. Apart from the conglomerates, the percentages differ more between the regions (not reported in Table 4). In line with these results, the conglomerates comply more often with a code than other insurers do. About 50% of the life insurers have adopted a code, compared with approximately one-third of the general and mixed insurance companies.

In all, we conclude that financial conglomerates outperform other types of insurance firms in most respects. The life insurance companies usually perform slightly better than the general and the mixed insurers. Overall, all insurance firms perform poorly if it comes to reporting and integrating CSR in their daily business. However, their performance with respect to governance, community, sponsoring and employees is much better.

Additional Analysis

In addition, we perform two different types of analysis. We investigate whether there is a relationship between company size and CSR performance. Size can be relevant because smaller firms may not exhibit as many overt socially responsible behaviors as larger firms do. This may be the case because as firms grow, they attract more attention from external constituents and need to respond more openly to stakeholder demands (see Waddock and Graves, 1997). Furthermore, we examine the connection between the inclusion of insurance companies in

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sustainability indices and their CSR performance. As such, we want to establish whether our metrics is able to explain why an insurance firm is included in such an index.

First, we examine if there is a relationship between the size of the insurance companies and their CSR performance. We use the Spearman rank correlation test to examine whether there is a relationship between company size and CSR performance (results are not reported here for brevity sake but are available upon request). We analyze (overall) CSR performance per company and the four measures of company size. The result from this analysis is a correlation of 0.73 between total assets and CSR performance, and this correlation coefficient is significant (at 1% significance level). The correlation coefficients between CSR performance on the one hand and number of employees and amount of premiums on the other hand are 0.65 and 0.17 respectively and are significant at the 5% level. The correlation between total CSR performance and the equity size of the insurance firm is small (0.16) and not statistically significant. From these results we conclude that CSR performance is positively related to company size in the insurance industry, as measured by assets, employees and premiums.

To determine whether there is a connection between the CSR performance of the insurance firm and the inclusion of insurers in sustainability indices we also rely on Spearman rank correlation. We use five sustainability indices, namely DJSGI, FTSE4Good, Ethibel ESI, DSI and CCI (see Table 1). We use standardization to determine the inclusion in sustainability indices. For example, if an insurance company is included in two of the five indices then the inclusion is 40%. For CSR performance, we use (overall) CSR performance of the insurance companies. We find that the correlation between the two categories is 0.70, which is statistically significant at the 5% level. Hence, there is a significantly positive relationship between the inclusion in sustainability indices and the performance on the sustainability criteria. This suggests that our metrics helps to explain the inclusion in a sustainability index.

Conclusion

We examine the CSR performance of international insurance companies. The insurance industry can be leading in CSR and has characteristics which are required for this role: The insurance industry is dynamic and selects, screens, monitors and advises companies on their business activities (see Mills and Lecomte, 2006; Scholtens, 2006). Insurers may have a small direct impact on sustainable development because of the low resource intensity of their production processes (Kolk *et al.*, 2001). However, their indirect impact, like that of other financial intermediaries such as banks, is substantial because insurers facilitate economic activity (Scott, 2003).

We engage in a cross-sectional analysis of the CSR policies of different types of insurance firms in 2007. In total, 153 insurance companies from 20 countries are included in the analysis. The analysis provides an overview of the CSR policies of insurance companies per geographic region, per country and per type of insurer. We look into the performance of the insurers regarding 23 different CSR policy indicators. The aim is to find out to what extent the insurance industry incorporates CSR in its business.

We find that insurance companies are active regarding the social aspects of CSR, such as sponsoring and voluntary work. A large percentage of the insurers also satisfy the corporate governance indicators. When we examine the performance on the indicators related to environmental aspects of CSR (i.e. reporting and practices) the results are much less positive. Only a small number of companies has adopted codes, has a certification of their management system, has responsible products, engages in environmental risk analysis or excludes particular sectors and industries. In particular, it appears that general and mixed insurance companies barely comply with these criteria. Insurance companies are often transparent about their own environmental performance and goals. However, their environmental performance is usually limited to internal waste and energy management and greenhouse gas emissions. In general, these results suggest that the social and ethical aspects of CSR are more incorporated in the business activities of insurers than are the environmental aspects. European insurance companies appear to be more inclined to provide sustainable financial products than North American insurance companies. From the regional analysis, we conclude that European and Japanese insurance companies are leading in CSR, and that the CSR policies of North American insurance companies are less advanced. The results from the country analysis also indicate that European insurers are leading. The best-performing insurers are headquartered in France, Spain and Norway but the CSR performance of the European insurers differs a lot and there are also European countries

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whose insurers significantly underperform, namely Denmark, Germany and the Netherlands. If we look into the different types of insurers, we find that financial conglomerates perform best in all respects. On most policy indicators, there performance is three to four times as high as that of other types of insurers. We also find that there is a positive association between CSR policies and company size as measured by assets, employees and insurance premiums. We find no significant relationship between CSR and equity capital. Insurers that perform well on CSR according to our framework are also very likely to be included in the sustainability indices used on financial markets.

In all, we conclude that most insurance companies do not thoroughly integrate CSR into their business activities. However, the differences in CSR policies between the insurance companies are substantial. Insurance companies have usually integrated the social aspects into their activities; they are active in community involvement and in sponsoring. However, many insurance companies have not integrated environmental aspects. For the insurance industry in general, their role is not limited to their own contribution to a more sustainable world, but this industry could use its influence to enhance the CSR performance of households and firms in other industries too. By selecting, screening and monitoring customers they can enhance their CSR performances. Examples are environmental risk analysis, sustainable financial products, CSR criteria for investment decisions and the exclusion of sectors. However, less than half of the insurance companies offer sustainable financial products, and less than 10% of the insurance companies exclude sectors. It appears that many insurance companies are not using their full potential to advance in the direction of a more sustainable society.

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Region	Type of insurance company					%
	Financial conglomerates	Life insurers	General insurers	Mixed insurers	Total	
Europe	54	11	6	17	88	58%
North America	7	8	12	24	51	33%
Japan	3	3	5	3	14	9%
Total	64	22	23	44	153	100%
%	42	14	15	29	100	

Appendix 1. Type and region of insurance companies in the sample

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