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Assessing non-financial reports according to the Global Reporting Initiative guidelines: Evidence from Greece

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ABSTRACT

In recent years a growing number of companies around the world have started reporting on issues other that those in the financial domain, in order to discharge their accountability efforts. While such non-financial accounting and reporting footprints, in terms of relevant policies and practices, are evident among all regions and such activities are becoming a universal trend, the level of uptake and diffusion varies from country to country. This paper contributes to the country-level analyses of non-financial reporting by assessing the quality and inclusiveness of triple-bottom-line reports published by companies operating in Greece. To accomplish this, a numerical scoring system was devised, based on the *de facto* global standard on corporate non-financial reporting, the Global Reporting Initiative guidelines. Overall findings reveal major gaps in the disclosing practices of Greek organizations and denote that there is much room for improvement in order to meet international standards and promote effective engagement with their stakeholders.

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1. Introduction

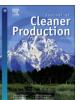
In recent years, the notions of corporate social responsibility (CSR) and triple-bottom-line (TBL) performance have become increasingly important issues among business managers, academics and policy makers. The conformance with societal norms of accountable and transparent business behavior beyond core profit activities and legal requirements that CSR reflects (Chapple and Moon, 2005), along with the TBL approach of business implications on the environment and people, as well as on economic capital (Elkington, 1997), are applied at a practical level by a growing number of companies around the world. In this regard, reporting on the three-dimensional (economic-environmental-social) impact of business operations, together with aspects of internal governance mechanisms, constitutes an integral part towards this discourse.

Among the different theories concerning business-society information flows, stakeholder, legitimacy and political economy theories have been proposed as the more insightful theoretical perspectives to explain non-financial reporting (for a discussion of the various theories of corporate non-financial disclosure and the relationships between them see (Adams et al., 1995; Gray et al., 1995, 1996)). In this context and drawing from prior literature, Morhardt et al. (2002) pinpoint the following reasons to explain why corporations engage in non-financial reporting practices as a vehicle to discharge their environmental and social accountability:

- Compliance with regulatory requirements and proactive costreduction of future, stricter regulations.
- Compliance with industry environmental codes, especially in the case of sanctions for non-compliance.
- Reduction of operating costs.
- Promotion of stakeholder relations.
- The perceived environmental visibility of the firm.
- The notion that reporting on such issues can yield competitive advantages.
- The sense that with active environmental management lacking, the organizational legitimacy of the company is questionable.
- The sense of the social responsibilities of doing business and desire to adhere to societal norms.

In the light of high profile corporate accountability failures, the number of organizations publishing information on intangible assets and non-financial issues has substantially increased





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(Context, 2006; Palenberg et al., 2006). Publicly available information on topics such as environmental and social performance, management quality or internal governance transparency is clearly now vital for investors and shareholders in order to make fully accurate decisions (Holland and Foo, 2003; Repetto, 2005; Rikhardsson and Holm, 2006), as well as for the rest of the stakeholders – customers, suppliers, employees, communities and other social groups – who also expect a higher standard of accountability and demand a more comprehensive depiction of corporate impacts, risks and performance (GRI, 2002; Kaptein and van Tulder, 2003; Logsdon and Lewelynn, 2000; Rasche and Esser, 2006; Woodward et al., 1996; World Business Council for Sustainable Development, 2002). In addition, this emerging form of reporting can facilitate corporate planning and decision-making (Adams and Mc Nicholas, 2007; Albelda-Pérez et al., 2007).

In this context, non-financial reports, the depiction of policies, plans and programmes an organization has put into place to monitor its TBL performance and discharge its stakeholder accountability, are emerging as a new vehicle in corporate reporting, integrating quantitative and qualitative information on economic, environmental, and social performance into a single publication/document.

According to a tri-annual international survey on corporate responsibility reporting practices, there has been a steady growth in the number of organizations reporting on non-financial issues. In 2008 the survey showed that 79% of the top 250 companies of the Fortune 500 (Global 250) issued separate non-financial reports, compared with 52% in 2005, while the rate of reporting among the largest 100 companies (N100) in 22 countries has risen on average from 33% to 45% (KPMG, 2008). The emergence of such reporting practices has been accompanied by numerous attempts over the years to standardise such practices, with the multiagency Global Reporting Initiative (GRI) being the primary mover in establishing international standards for non-financial reporting (Brown et al., 2009).

While CSR footprints in terms of relevant policies and practices are evident among all regions and non-financial reporting is becoming a mainstream issue for many organizations, the level of uptake and diffusion varies, since countries differ greatly in terms of their levels of economic development, legal-political systems, cultural standards and expectations concerning business conduct (Wotruba, 1997; Hofstede, 1991, 2001; Singhapakdi et al., 2001). As Muller and Kolk (2009) stress, research on CSR has traditionally tended to focus on developed countries, sometimes in a comparative perspective (Kolk, 2005; Maignan and Ralston, 2002; Welford, 2004). While attempts have been made to document developments in countries where CSR has not been widespread in business conduct and/or not yet investigated in general, the literature in country-level business environments with limited CSR awareness is, with few exceptions (for example see (Kraisornsuthasinee and Swierczek, 2006; Luken and Stares, 2005; Vives, 2006)), thin on the ground. Likewise, studies on non-financial disclosure conducted so far have been in the context of developed countries such as the USA, the UK, Japan, Australia, Canada, Germany, and New Zealand (Gray et al., 1995; Guthrie and Parker, 1990; Mathews, 1997; Adams et al., 1998; Adams, 2002) and to a far lesser degree on developing nations (Sobhani et al., 2009; Ratanajongkol et al., 2006; KLD, 2008).

With this in mind, the objective of this study is to examine in terms of inclusiveness and materiality the non-financial reports published by business organizations operating in Greece, a country where companies have a relatively limited non-financial reporting awareness. Research motivations are connected to the lack of relevant robust empirical evidence on CSR-related information disclosure as well as the need for a more systematic research on TBL accounting and reporting in Greece. In meeting this objective this research aims to explore the quality of Greek non-financial reports using the '*de facto*' standard on reporting, the GRI guidelines and to contribute to the existing but limited literature on country-level assessments of stand-alone non-financial reports.

The rest of the paper is organized as followed. The next section provides an outline of prior assessments of non-financial reports. Section 3 provides evidence on the engagement of the Greek business sector in non-financial disclosure practices. The fourth section outlines the assessment methodology and the identification of the sample reports. Section 5 presents the findings in conjunction with prior evidence from other countries, while the last section provides a discussion on non-financial reporting in Greece in conjunction with the results.

2. Scoring non-financial reports: prior literature

Evaluation assessments of non-financial reports have been developed as a benchmark tool in order to examine such documents primarily on the basis of their inclusiveness, allowing comparisons of individual companies in terms of CSR/TBL criteria with the aim of distinguishing between better and poorer reporters, while adding vital information on reporting practices and outlining the progress that has been made in the specific field of corporate accountability.

Benchmarking TBL reports according to a scoring system can yield potential benefits. It informs stakeholders in a simple but systematic manner about the efforts that have been made by the reporting organizations in order to provide adequate and meaningful information on their operations and impacts. It also assists the companies themselves, as they receive evaluation on the reporting procedures they follow and consequently how well they promote effective stakeholder communication. Moreover, it helps them to identify potential reporting strengths and weaknesses on this relatively new type of reports, but also to compare their reported performance against their peers. Still, it is an evolving process adapting to the reporting trends that constantly emerge and aiming to spotlight best practices in order to indirectly further raise the bar for better TBL reporting in the future.

Among others, the British think-tank SustainAbility, in association with the UNEP has been conducting benchmark surveys focusing on leading reporters in different countries and sectors, while their overall findings since the first Global Reporters study was launched in 2000, show a steady improvement in reporting practices (SustainAbility/UNEP, 2000). Similarly, Deloitte Touche Tohmatsu implemented a number of sectoral surveys during the period 2000-2002 (Deloitte Touche Tohmatsu, 2001), evaluating the status of reporting practices of leading corporations in the car manufacturing, mining and pharmaceutical industries, revealing significant variability in the disclosure practices among companies of the same sector. Peck and Sinding (2003) examined the environmental and social disclosure within the mining industry. Their findings indicated that most of the mining organizations assessed either take the first steps towards external reporting or show little evidence of willingness to engage in social or environmental issues, while specific cultural and institutional preferences play a strong role in determining the extent of reporting. Morhardt et al. (2002) converted GRI 2000 reporting guidelines and ISO 14031 framework to a numerical scoring system, examined 40 of the largest companies in the motor vehicles' and parts', the electronics', the petroleum-refining and the gas-electric utilities' sectors and confirmed major gaps in disclosure practices according to international standards.

The aforementioned studies examined the reporting practices in a global context. Few other assessments have focused on country-

level examination of corporate non-financial reports. Such analyses have been carried out in Canada (STRATOS Inc, 2001), the U.S.A. (Roberts Environmental Center; Davis-Walling and Batterman, 1997; Morhardt, 2001), Japan (Ando, 2000), Australia (Jeyaretnam et al., 1999), New Zealand (Milne et al., 2003), Germany (Clausen et al., 2005), Spain (Gallego, 2006) and Switzerland (Daub, 2007).

Overall findings of these studies are in line with the identified relation between the amount of non-financial disclosures and size (see, e.g., Gray et al., 2001; Patten, 1991; Trotman and Bradley, 1981; Belkaoui and Karpik, 1989; Hackston and Milne, 1996; Deegan and Gordon, 1996), industry affiliation (see, e.g., Hackston and Milne, 1996; Deegan and Gordon, 1996; Cowen et al., 1987; Freedman and Jaggi, 1988; Adams et al., 1998; Roberts, 1992), as well as with the 'environmental sensitivity' of the organization (Gray et al., 2001; Patten, 1991; Hackston and Milne, 1996; Roberts, 1992).

However, while these scoring assessments offer fruitful insights on environmental-social accounting and reporting, they have concentrated primarily either on state-of-the-art reports prepared by organizations with rather extensive experience on preparing such documents or on countries where the notions of environmental and social responsibility have widely diffused among members of the business sector. In this regard, Daub (2007) comments that: "...in the case of the "Global Reporters" studies from SustainAbility/UNEP and the best Canadian reporters, only large, mostly multinational companies were evaluated. These companies have adequate financial means at their disposal to draft detailed reports in terms of content and design" (p. 79). Likewise, Morhardt (2001) and lately Skouloudis et al. (2009) have noticed problems of a methodological nature on previous assessments. pointing out that more robust, widely applicable and less subjective benchmark tools should be introduced. Moreover, regions and countries that are still lagging and have limited awareness on CSR practices, TBL accounting and non-financial reporting are underrepresented in these studies, stressing the need to expand the existing pool of knowledge, something to which this paper seeks to contribute.

3. Non-financial reporting and voluntary initiatives endorsement in Greece

As of the first months of 2008, eight organizations in Greece have indicated their adherence to the Global Reporting Initiative (GRI) Guidelines and two had certified their CSR reports according to the AA 1000 Assurance Standard.² Moreover, only ten firms have been certified to Social Accountability 8000 (SA8000) Standard³ while the number of organizations that have shown their commitment to the world's largest voluntary corporate responsibility initiative, the UN Global Compact principles, was similarly low. This was already identified by Midttun et al. (2006) who examined the CSR engagement of Western economies and indicated that the Greek industrial sector ranked far lower than the other Mediterranean countries in terms of non-financial reporting and the adoption of voluntary standards.

Thus, there has been has been very little debate on the evolution of non-financial disclosure practices in Greece. The KPMG International Survey of Corporate Sustainability Reporting 2002 (KPMG/ UvA, 2002) is the only global empirical study that included Greece in the sample. The study examined the top 100 companies on the basis of their sustainability, non-financial reporting practices. Results confirmed that Greece has a relatively low reporting rate, with a mere 2% of the top 100 Greek companies publishing a report and disclosed fewer health and safety, environmental or TBL information in their annual financial reports compared to most other countries.

Furthermore, Floropoulos (2004), who examined the voluntary disclosure of environmental information in the financial statements of Greek firms listed in the Athens Stock Exchange (ASE) during the period 2000–2004, found that among the 351 companies listed in ASE, *less than ten* provided information on relevant environmental issues in some of their statements. The author states that disclosure of environmental information has been noticed in annual reports, but in no case in the balance sheet or the income statement. As denoted in his study, this lack of sufficient information on environmental aspects of business activity led the National Statistical Service of Greece to conduct a survey on the environmental protection expenditures by Greek firms.

In the same direction, Tsipouri and Xanthakis (2004) found that issues like stakeholder rights or social responsibility among other corporate governance practices of companies listed in the ASE, received a relatively low degree of compliance. Additionally, the authors justify their decision to limit issues of this type to a minimum and also to attribute very low weightings to such criteria in their assessment design, by expressing their concern that including in their assessment CSR criteria "...might create a reluctance of companies to cooperate, as there has been a clear tension between managers and shareholders on the one side and government on the other in earlier years on such issues" (p. 21).

In terms of CSR policy design and formation. Greece, among other Mediterranean countries, is identified as one of the late adopters of CSR policies in Europe since it only recently started to design a CSR agenda, motivated mainly by the European Commission initiatives to promote a European framework for CSR as well as the impact of global CSR/TBL initiatives (Albareda et al., 2007). In this regard, the Directive 2001/453/EC recommends the recognition, measurement and disclosure of environmental issues in the annual accounts and annual reports of companies while Directive 2003/51/EC encapsulates the European Commission's view of non-financial reporting on annual corporate accounts, which for the first time invites enterprises to publish broader, nonfinancial data in addition to the financial requirements. A more recent Communication (March 2006) confirmed this approach by encouraging enterprises (especially large ones) to voluntarily make information on their CSR strategies publicly available in order to address "the transparency and communication challenge and to make the non-financial performance of companies and organizations more understandable for all stakeholders and better integrated with their financial performance" (COM(2006)136 final, p. 12). In this context, while several EU Members have taken important steps towards corporate non-financial disclosure, Greece (among few others), not keen on innovative or proactive CSR public policies, has not demonstrated fair indications of activity concerning either mandatory or voluntary reporting on the non-financial performance of the major companies in their countries, apart from a few guidelines regarding the insurance and banking sector (Allini and Rossi).

4. Methodology and sample identification

The Centre for Environmental Policy and Strategic Environmental Management of the University of the Aegean developed a methodological system to evaluate the quality and broadness of issues covered in Greek reports. It is based on the GRI Sustainability Reporting Guidelines in their 2002 version (G2). GRI is a long-term, multi-stakeholder, international process whose mission is to

² According to corporateregister.com database.

³ Attika Edesmata Syntagma Ltd. (Gilli Diet), EPOM SA, Intracom Defense, Intracom Holdings, Intracom IT, Intracom Telecommunication, O.P.A.P. S.A., Pelasgis S.A., Studio Alpha S.A., TNT Skypack Hellas.

develop and disseminate applicable sustainability reporting guidelines globally. These guidelines are for voluntary use by organizations for reporting on the economic, environmental and social dimensions of their activities, products and services (Global Reporting Initiative (GRI), 2002). A GRI-based report should cover a list of topics grouped into four major sections: Vision and Strategy; Profile; Governance Structure and Performance Indicators. Performance indicators are sub-grouped under three categories covering the economic, environmental and social dimensions of sustainability, according to the conventional definition of the concept.

A numerical scoring system was devised for each one of the 141 topics as defined in part C of the GRI 2002 Guidelines. Each topiccriterion was scored between 0 and 4 points (with a possible maximum score of 564 points), following the structure and rationale of previous scoring systems. When a specific topic was not mentioned in the assessed report then no points were given; brief or generic statements received 1 point, a more detailed coverage 2 points; extensive coverage 3 points and the maximum score was given to a topic when coverage was full and systematic, allowing comparability of provided information. The methodology was sent for consultation and external assurance to the Union of Environmental Scientists of Greece. As a result a number of modifications were adopted in the initially devised assessment methodology.

The analysis was based on all the available sustainability reports with 2005 as the year of reference. Where these were not available, reports from 2004 were included. In order to identify all the Greek reporters a web-based search was conducted. Initially a search was conducted in the GRI database where all the companies that use the Guidelines are invited to register their report. The second search stage concentrated on the firms which are core members of the Hellenic CSR Network and finally we expanded to other large Greek companies and global corporations operating in the country.

At the time this research was conducted, among the 66 core members of the Network, 55 were industries and service providers while the rest were consultancies and business associations. Out of these 55 companies only 15 (27%) published a report during 2004– 2005. A few of the rest, as subsidiaries of large multinationals, referred to the global report of the parent company (British American Tobacco Hellas, DHL International Hellas, Johnson Diversey Hellas, and Shell Hellas) (Fig. 1). Only those reports prepared by Greek companies or those that provided information and data on the company's operations in Greece were considered. For this reason, multinational corporations with operations in the country were excluded if they only produced a global, corporatelevel report, with no breakdown of information at country level.

In total, 19 reports were identified, of which 16 were included in our sample, with three reports excluded from the assessment (TIM

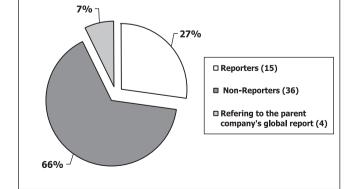


Fig. 1. Publication of reports among the core members of the Hellenic CSR Network.

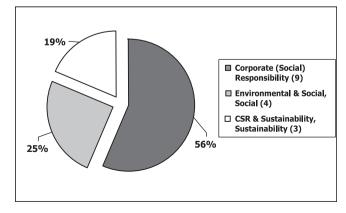
Hellas, the National Bank of Greece and Halyps Cement), since they were short, providing mostly generic statements and would have scored too low on the assessment thus would not have significantly contributed to the overall conclusions. Out of the 16 reporters, it was the first time seven (44%) had produced a report while the rest had had some reporting experience during the previous years. This considerably small sample size is in contrast to the volume of reports produced in other countries (KPMG, 2008).

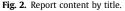
Moreover, and if assuming that a company predominantly selects the report title in order to communicate the issues it intends to cover, only one report was clearly defined as a "sustainability report", while the rest were mostly presented as "social" or "CSR" reports (Fig. 2).

5. Findings

Overall results revealed that the GRI guidelines are a very "demanding" framework for Greek reporters to adopt. Apart from Coca-Cola HBC which generated almost half of the maximum possible score and provided a comparatively more balanced and inclusive report (which could be compared to international best practices), all the other reports suffer from major gaps. In line with previous studies on corporate non-financial disclosures from other countries (see relevant findings by Milne et al. (2003). Chapman and Milne (2004), Adams (2004) and Hedberg and von Malmborg (2003)) Greece's early non-financial reports vary significantly in terms of materiality and completeness of information disclosed. Furthermore, it was only six companies which had adopted the GRI reporting framework by then, while none of these prepared a report in accordance to the guidelines. Such low numbers of GRI adopters has already been noted by Context (2006) for European top companies, Birth et al. (2008) for Swiss companies and Chan and Welford (2005) for Hong Kong listed enterprises.

The score results ranged from 263/564 (47%) to 66/564 (12%). The average score achieved by the sample firms is around 21% of the maximum possible points, while considerable differences in the disclosing practices and presentation of issues discussed was evident. Three different sub-groups of companies can be derived considering the average score of reports: those who achieved a score above average, those whose score is notably close to the average and a third group which produced reports of minimal quality, thus scoring considerably lower than the sample's average points (Fig. 3). Moreover, companies assessed received more points on the clusters of criteria concerning the company's profile and their governance structure, rather than on the reporting of their economic, environmental and social performance during the reporting period. This major shortcoming of Greek reports denotes that the assessed instrument of corporate communication fails to





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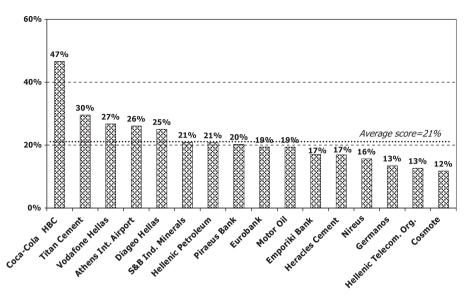


Fig. 3. Ranking of Greek reporters against the GRI 2002 framework.

address its key purpose; to promote stakeholder engagement and to discharge the organizational accountability towards the wider society.

5.1. Vision & strategy

Stating their vision and strategy, most of the companies underline their commitment to promote a CSR policy, but only a few attempt to explain the major challenges they face towards environmental and social responsibility and the organization's objectives and measures taken on such issues. Introductory CEO messages are self-laudatory and, while they mention some stakeholder groups of the company, they fail to clarify the company's approach to stakeholder engagement and dialogue. Elements recommended by the GRI for inclusion in the CEO statement are not fulfilled. Statements are usually very brief and generic with no highlights of the report content mentioned, such as the achievement of the previous year's targets. Moreover, in many cases, future targets highlighted are financial-economic rather than environmental and/or social. Coca-Cola HBC and Titan Cement were the only companies that disclosed in their introductory statements successes and important corporate facts over the reporting period in a relatively more communicative manner.

5.2. Organizational profile

Greek organizations disclosed more information on the major products or services they produce, their major operating facilities, subsidiaries and joint ventures, the countries in which they operate, the legal form of ownership and basic figures to understand the scale of the reporting organization. Whereas reports provide an overview of the reporting entity, little information is available on the boundaries of the report. In many cases, boundary setting and disclosure or specific limitations of the scope of the report are not clearly defined, thus the reader is unsure if the information deals with the full range of operations or not. However, such deficiency is already identified by Archel et al. (2008) in much more comprehensive reports (labelled as 'in accordance' to GRI guidelines) where only a few managed to correctly define the organizational boundaries from a strict financial viewpoint.

Similar to Chapman and Milne's (2004) findings in New Zealand and in contrast to Context's (2006) view of CSR reporting trends among the top European companies, disclosures concerning the independent assurance for the full report or future plans with regard to seeking external assurance are also patchy. Coca-Cola HBC notes that the data and targets stated in the report have been independently audited and validated; however, at the time this study was conducted, the web link to the auditors' full report was not working. Vodafone Hellas vaguely states that as a subsidiary of the Vodafone Group of companies it has "...provided input on the procedure, the collection and management of information included in the Corporate Social Responsibility Report". It further asserts that this initiative forms part of the relevant assurance work performed by Deloitte for the Group's CSR report, without clearly stating that the Greek report has undergone external assurance procedures. Diageo Hellas is the only firm that incorporated the statement of the assurance provider in the report, in accordance to international reporting trends. Apart from the three aforementioned companies, Titan Cement and Athens Int. Airport, briefly mention as one of their future targets the assurance of their reports, while the rest of the sample firms omit relevant information and conceal their non-disclosure of assurance procedures on reporting practices.

The average score in the specific cluster of criteria was 39% (Fig. 4), the highest average points assigned among the four sections of the benchmark. Coca-Cola HBC and Vodafone Hellas scored higher in this cluster with 56% and 55% respectively.

5.3. Stakeholder identification and engagement

Only a few companies included contact information of the person(s)/department responsible for the report, including both email and web addresses. Athens International Airport, Vodafone Hellas and Coca-Cola HBC were the only reporters that provided adequate means by which report users can obtain additional information about the organization and its operations, while the rest mostly refer to their website homepage address. Only five reports denoted the general criterion for defining the major stakeholder groups of the company, while the three aforementioned organizations were also the only ones that attempted to present a list of their identified stakeholder groups, some of their key attributes and the relationship to the reporting entity. Such an apparent lack of a communication channel and stakeholder identification sets back effective stakeholder dialogue and questions the

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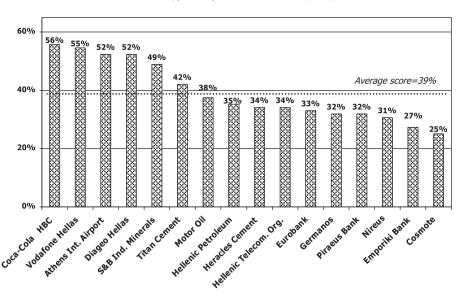


Fig. 4. Benchmark results in the profile cluster of criteria.

impact of stakeholder discourse on actual accountability (Unerman and Bennett, 2004).

Likewise, stakeholder engagement activities are poorly discussed and mostly refer to communication with employees. This could be taken as an indication that companies consider their employees (one of) the principal readers of this kind of publication who are, as Sobhani et al. (2009) relevantly comment, "...probably the most important stakeholders, and, therefore, need to be taken care of".

5.4. Corporate governance

Under the corporate governance cluster of assessment criteria, Piraeus and Emporiki banks presented extensive information on their governance structure, with sufficient information on the major committees under the board of directors responsible for the overseeing of business operations and for ensuring transparency. The rest of the reports omit relevant discussion on their internal governance mechanisms. Moreover, reference to the organizational structure and the key individuals responsible for the implementation of economic, environmental, social and related policies is also poor; only Coca-Cola HBC's report presents comparatively more information on the coordinators of the company's CSR policy and scored much higher than the second in this cluster (61%). The average score is considerably low, 28% (Fig. 5) and organizations could have used links to the corporate website or the annual report in order to avoid excluding necessary information in their sustainability report. These results further confirm previous findings by Xanthakis et al., Tsipouri and Xanthakis (2004) and Spanos et al., who rated low Greek firms on CSR-related aspects of corporate governance, and by Florou and Galarniotis (2007) who stressed the reluctance of Greek listed companies to disclose information about their governance practices.

However, all reporters tended to state their corporate mission, values and principles along with internal codes of conduct in detail as well as externally developed initiatives the company endorses or subscribes to along with the industry and business associations to which they belong. Likewise, all companies that have achieved

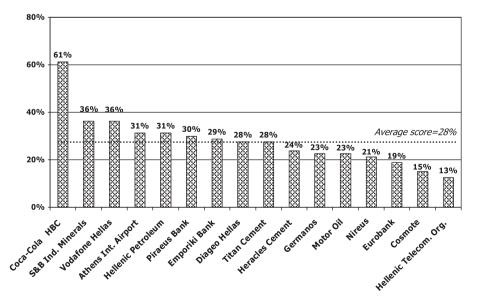


Fig. 5. Benchmark results in the governance structure cluster of criteria.

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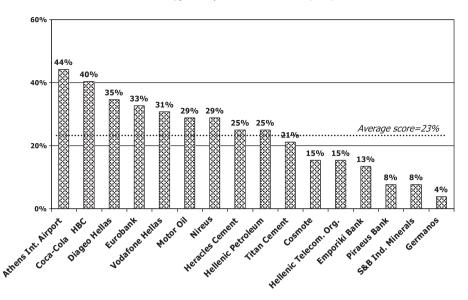


Fig. 6. Benchmark results in economic performance indicators.

verification of their environmental or health and safety management systems underline their adherence to such formal standards (such as ISO 14001 and OHSAS 18001).

5.5. Disclosures of TBL performance

5.5.1. Economic performance

The economic dimension of the triple-bottom-line is poorly presented in Greek reports (Fig. 6). Most sample companies are content to leave information concerning their economic performance to their annual financial reports; only turnover/net sales, philanthropy-charitable contributions and donations to community are reported by all the firms analyzed. Similar findings are already noted in prior literature (see Vormedal and Ruud, 2009; Hedberg and von Malmborg, 2003).

Only two companies report in a relatively satisfactory manner, while as many as six provided minimal disclosures related to economic performance. Moreover, only one company gave a neat and effective geographic breakdown of the national markets where it operates; the rest of the reports tended to only name the countries or the regions where the organization operates, with no additional information. Reporters also tended to disclose the total payroll, without further analysis by country or region, while out of the other monetary flow indicators the most commonly covered was the total sum of taxes paid, again with no further distinction by country. Donation and charitable contributions were more or less emphasized by all companies, but in many cases the relevant information was not presented in economic terms as well; companies that did include information on their support of charities and similar organizations tended to mention the total amount spent, but did not break this down in terms of cash and in-kind donations per type of group. For example, one company dedicated 12 pages of its 75-page report to its donations-contribution to society mentioning only the total sum with no further analysis as to the specific charities sponsored.

5.5.2. Environmental performance

Already noted by Roberts (1991), Adams et al. (1998), Sahay (2004) and Ratanajongkol et al. (2006) in previous assessments of corporate environmental disclosures from other parts of the world, the most important shortcoming of Greek reporters is their weakness in effectively communicating their environmental

performance. On average, the points assigned to this section is significantly low (13%), with neither quantified targets nor indicators of past performance presented by most companies, revealing the major gaps in disclosure practices (Fig. 7). Apart from Coca-Cola HBC and Titan Cement which scored 45% and 41% respectively, the rest of the sample firms do not cover the fundamental issues in sufficient detail, so that the report user can properly understand and evaluate the impact of their operations on the environment. In contrast to prior empirical findings (e.g. as shown by Patten (1991), Roberts (1992), Hackston and Milne (1996), Deegan and Gordon (1996), Context (2006), Ratanajongkol et al. (2006) and García-Sánchez (2008) manufacturing, industrial and environmentally sensitive Greek companies did not report an adequate amount of relevant information and are far from articulating their environmental impact.

Core environmental performance indicators, such as the total quantity of materials used, the total energy consumption and the total amount of generated waste, are either not discussed at all or briefly mentioned. Furthermore, companies tended to refer to the methods of waste treatment and/or the amount of recycled materials, but not to the total amounts accordingly. In addition, only two reports (by Titan Cement and Vodafone Hellas) attempted to depict in an inclusive and understandable manner the significant environmental impacts of principal products and services they produce and provide. Commonly addressed indicators were the total direct energy use and greenhouse (CO₂) emissions covered in the majority of reports, but probably the most cited environmental topic by Greek reporters is a discussion on the internally developed initiatives to increase energy efficiency and to promote renewable energy sources.

5.5.3. Social performance

Disclosure on social issues is consistent with the pattern in nonfinancial reporting from other countries (for instance see studies by Gallego-Alvarez (2008) and Sobhani et al. (2009). Indicators related to employee issues were mostly covered by Greek companies, followed by a large margin by information on broader social topics as well as product responsibility and lastly by human rights policies (Figs. 8 and 9).

As regards to labor practices, all reports included an analysis of the workforce, usually by age, education and work experience, but only a few according to GRI-recommended criteria; by region/

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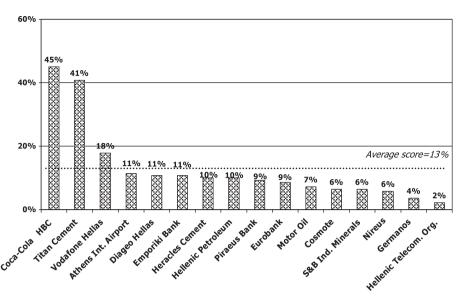


Fig. 7. Benchmark results in environmental performance indicators.

country, status, employment type or contract. Additionally, the majority of assessed companies reported on internal health and safety practices, as well as on quantitative data on workplace injury rates and fatalities. They also provided a discussion of their policies and programmes for employee training and skills management and mentioned the data on average training hours during the reporting period. Finally, an issue identified in almost all Greek reports was employee benefits provided other than those required by law.

Taking into account disclosures on broader social topics, many companies briefly mentioned or clearly stated their efforts to manage the impact on communities in areas affected by their business activities, as well as awards received relevant to social, ethical, and/or environmental performance. On the contrary, almost no report included the organization's approach to bribery and corruption and towards political contributions or competition and pricing.

Finally, corporate responsibility to produced products and services was expressed primarily (though not in all assessed reports) with the description or statement of the policy and procedures related to customer satisfaction, in some cases including results of surveys measuring customer satisfaction or complaints. On the other hand, internal policies for preserving customer health and safety during use of products and services and to product information and labelling are covered only by a minority of reports.

5.5.4. GRI core performance indicators

Taking into account the core performance indicators – those that the GRI guidelines stress are relevant to most organizations and the information contained therein most relevant to stakeholder groups – ranking of Greek reports changed accordingly (Fig. 10).

Titan's report received the second highest overall score, but dropped to 6th place in the core indicators coverage ranking. Even though S&B's report is ranked 6th in the overall results, under the coverage of core indicators it received a score significantly lower than the sample's average. Similarly, while Hellenic Petroleum's report followed S&B's in the overall scores, when considering the core performance information it covered it is in 12th place.

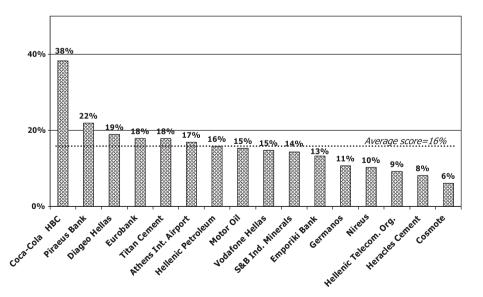


Fig. 8. Benchmark results in social performance indicators.

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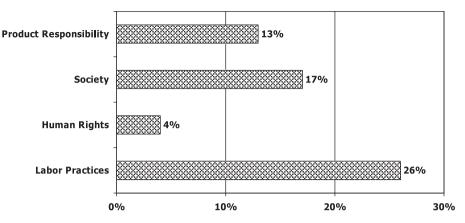


Fig. 9. Average benchmark results in the four clusters of social performance indicators.

Conversely, Nireus's report is in 13th place in the overall ranking but in the cluster of core performance criteria moves up to 6th place, while Cosmote's report that got the lowest score in the overall ranking, achieved a comparatively higher score under the set of core indicators moving up to 10th place.

These changes in the ranking of reports are indicative that in an evaluation system such as the one currently discussed it is important to further scrutinize the total scores under specific clusters of criteria or even under specific topics. A company may score well for presenting information on the overview of its operations or its corporate structure rather than its performance during the reporting period, which is probably the most essential part of this kind of report. A high total score does not necessarily mean that a report is inclusive and balanced; this can be confirmed by closely examining the components of this score.

6. Discussion

This paper, developed on the basis of the Greek companies which are issuing stand-alone TBL reports, assessed their disclosing practices against the most acknowledged non-financial reporting standard, the GRI guidelines. To this regard, a methodology, easily replicable to other countries, has been employed from that utilized in previous papers. Owing to the small number of companies in each industry type, results are only indicative. However, overall findings revealed that preparation of non-financial reports in Greece is inadequate, still lagging significantly behind the international experience and lacking materiality and comprehensiveness. This major shortcoming of Greek reports denotes that the assessed instrument of responsible business practices fails to address its key purpose: to promote stakeholder engagement and dialogue and to discharge the organizational accountability towards the broad society. On the other hand, one might assert that stakeholder pressure applied to Greek firms in order to undertake such accountability efforts is minimal, partially explaining why the majority of CSR reports seem more of a PR task rather than part of an integrated strategic intent towards CSR and TBL accounting.

Though the study's findings refer to data obtained during 2004–2005 (nearly five years ago) and one would expect a degree of improvement along with growth in stand-alone non-financial reports published over time, this is not the case. More recent evidence by Panayiotou et al. (2008, 2009) reflect that CSR reporting is still an unsystematic activity and domestic companies are at least keen to adopt such accountability practices. They further denote that CSR penetration in Greece is definitely low (promoted mainly by subsidiaries of large multinationals), a conclusion further confirmed by Gjølberg (2009a,b) as well as Apostolakou and Jackson (2009). The significant contribution of

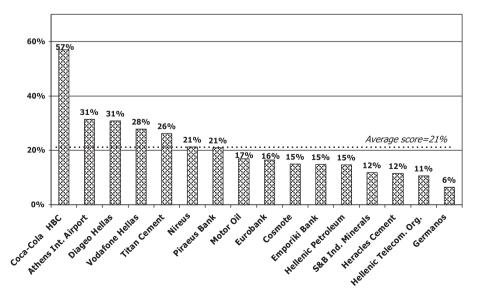


Fig. 10. Ranking of Greek reports based on core performance indicators.

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these authors to cross-national CSR measurement and comparison clearly indicated that Greece is a laggard on CSR issues, well behind other European members. This should come as no surprise, since a domestic firm's CSR agenda generally pertains to the responsibilities of the public relations, communication or marketing departments and is mostly narrowed to charitable contributions or community donations. On the other hand, however, the recent establishment of leading sustainability indices in Greece, (AccountAbility Rating, BITC CR index) contributes to the penetration of CSR in domestic business conduct, along with a handful of domestic companies which seem to start to adopt a strategic approach towards non-financial performance (and reporting). Future research can and should examine whether the recent global economic downturn strongly affects the advancement of CSR in a country with limited CSR (and non-financial reporting in particular) awareness, such as Greece, giving an outright answer whether public scepticism of business CSR initiatives is justified or not.

Drawing from environmental policy-making in Greece, it is clear why non-financial reporting and the adoption of voluntary CSR initiatives are not widespread among domestic business organizations, as the aforementioned evidence have revealed. While the adoption of voluntary system standards and initiatives represents a new form of governance in which governments play a more limited role resulting in an extremely fragmented and decentralized form of policy-making (Kollman and Prakash, 2002), this form of policy-making has been slow to take hold in Greece. Supporting evidence for this claim is provided by (Getimis and Giannakourou, 2001), who note the normative, rigid, centralised and strongly bureaucratic nature of environmental policy-making in Greece, which is also evident in the low level of awareness of the various stakeholders, thus explaining (Kollman and Prakash, 2002) both the low uptake of such standards and voluntary initiatives, as well as the fact that Greek companies appear to be less proactive than those in other countries. Specifically, the government in Greece has retained the right to policy-making, with regional and local authorities having mainly a consultative role. NGOs, corporations or independent institutions have rarely been consulted and utilized in the formulation and execution of environmental policy reinforcing its normative, legalistic and mandatory nature. Their exclusion from the process is the result of a widespread perception, that environmental policy design would be compromised if it involved NGOs or other independent institutions, as well as stemming from a fear on the part of bureaucrats that they might lose the privilege to maintain client-based relations with companies. It this context, the administrative approach is in favour of command and control strategies rather than the development of self-regulation through proactive actions.⁴ The latter is particularly true with Getimis and Giannakourou (2001) noting that:

"...Environmental policy is characterised by command and control type regulatory rules defining specific objectives that leave others with only limited discretion and flexibility" (p. 292).

Indeed, while the nature of environmental law in countries such as the UK or Germany seems to encourage companies to embrace voluntary initiatives, in Greece, legislation appears to have the opposite effect (Watson and Emery, 2004). As Heinelt and Toller (2001) denote, companies in Greece find it difficult to fulfil their formal legal obligations and they appear reluctant to publish corporate information:

"In Greece the obligation to publish an environmental statement under the EMAS rules is one of the factors that make companies choose ISO 14001... The pursuit of their own interests by companies is viewed so negatively in Greek society that asking companies to make a voluntary contribution to environmental protection would not be understood by the general public. Publication in this setting of internal company data would only add more fuel to the fire" (p. 381).

Apart from being a voluntary activity, Hedberg and von Malmborg (2003) among others refer to new institutional theory (Powell and DiMaggio, 1991) to explain the variability in the reports as the reporting activities depend on their apprehension of their market situation and relation to the stakeholders. They further stress that any similarities in report design can be attributed to the same conceptual framework since "...companies interact with each other and create isomorphic patterns for the design of environmental and sustainability reports. The companies are watching each other in order not to do anything that is considered too much" (p. 159).

While it is difficult to make outright comparisons and rigorously analyze the results with previous assessments, since different approaches have been applied in each study (Graafland et al., 2004), similarities in the disclosing practices of Greek companies with those of peer organizations from other country-level assessments can be identified. The most noticeable one is that reporting entities tend to disclose more performance indicators pertaining to their internally developed labor practices compared to other aspects of social performance and to environmental management. A reasonable explanation for this is the fact that the majority of employee-related information is already available from the human resources department of the organization, while aspects related to occupational health and safety are often required by national legislation. Furthermore consistent with evidence from Italy (Secchi, 2006), Finland (Niskanen and Nieminen, 2001), Thailand (Ratanajongkol et al., 2006) and more recently from Bangladesh (Sobhani et al., 2009) few Greek enterprises report on negative aspects of performance, while providing inadequate environmental performance data as in the case of Swiss companies (Daub, 2007) and New Zealand's early reporters (Chapman and Milne, 2004).

Responsible business behavior has surely become a universal concept with regional - country variations based on the national institutional environment and culture. In this regard, it is crucial for business associations and public administration in Greece to timely adapt to international CSR and non-financial reporting standards (such as the UN Global Compact, the GRI guidelines, the AA 1000 standard and the upcoming ISO 26000 "Guidance on Social Responsibility") in order to shape the effective implementation of CSR practices and raise non-financial reporting awareness of domestic organizations. Along with local NGOs who should monitor reported corporate social behavior more closely and turn on the heat on TBL accounting of domestic corporate impacts, they can potentially play a key role in closing the non-financial reporting gap between Greece and international practice by promoting and facilitating public policies towards that direction. In line with Campbell's (2006) arguments, it is the authors' belief that the activity of these constituencies is essential to shift the agenda of corporate managers towards more socially responsible business conduct and consequently more comprehensive TBL reporting. When firms are stimulated by a new government vision, that actively promotes CSR and rewards responsible behavior in order to motivate the companies and when they encounter collective industrial self-regulation along with NGOs' and other independent organizations' efforts towards more inclusive reporting, in

⁴ The bureaucratic and centralised nature of environmental policy-making in Greece was demonstrated by the delayed response of the Ministry of Development in setting up the relevant committee of verifiers for EMAS implementation. Specifically, while the EMAS regulation came into force in 1995 it took four years to adhere to the requirements of the regulation.

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a normative institutional environment that encourages socially responsible behavior, it is expected that the existing institutional systems will affect corporate responses to dynamic pressures to not only account for their economic performance, but also for their non-financial impact as well.

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Appendix 1. List of companies included in the benchmark survey

n/n	Organization name	Sector	Web address
1	Athens International Airport	Transportation	http://www.aia.gr
2	Coca-Cola HBC	Food & Beverage	http://www.coca-colahbc. com
3	Cosmote	Telecommunications	http://www.cosmote.gr
4	Diageo Hellas	Food & Beverage	http://www.diageo.com
5	Emporiki bank	Financial Services	http://www.emporiki.gr
6	Eurobank	Financial Services	http://www.eurobank.gr
7	Germanos	Retail	http://www.
			germanosgroup.gr
8	Hellenic Telecom. Org. (OTE)	Telecommunications	http://www.ote.gr
9	Hellenic Petroleum	Oil & Gas	http://www.hellenic-
			petroleum.gr
10	Heracles Cement	Construction &	http://www.aget.gr
		Materials	
11	Motor-Oil	Oil & Gas	http://www.moh.gr
12	Nireus	Food & Beverage	http://www.nireus.com
13	Piraeus bank	Financial Services	http://www.piraeusbank.gr
14	S&B Industrial Minerals	Basic Resources	http://www.sandb.com
15	Titan Cement	Construction &	http://www.titan-cement.
		Materials	com
16	Vodafone Hellas	Telecommunications	http://www.vodafone.gr

Appendix 2. Ranking of Greek reports according to the GRIbased benchmark assessment

n/n	Organization	Report title	Year	Score (max 564 points)	Score (%)
1	Coca-Cola HBC	Social responsibility	2005	263	47%
2	Titan Cement	Corporate social responsibility & sustainability	2005	167	30%
3	Vodafone Hellas	Corporate responsibility	2004– 2005	151	27%
4	Athens Int. Airport	Corporate responsibility	2005	147	26%
5	Diageo Hellas	Corporate citizenship	2004	141	25%
6	S&B Ind. Minerals	Social	2005	118	21%
7	Hellenic Petroleum	Social & environmental	2005	117	21%
8	Piraeus bank	Corporate social responsibility	2005	114	20%
9	Eurobank	Corporate social responsibility & sustainability	2005	109	19%
10	Motor Oil	Environmental & social	2005	109	19%
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n/n	Organization	Report title	Year	Score (max 564 points)	Score (%)
11	Emporiki bank	Corporate social responsibility	2005	96	17%
12	Heracles Cement	Sustainability	2005	95	17%
13	Nireus	Social & environmental	2005	88	16%
14	Germanos	Corporate social responsibility	2004	76	13%
15	Hellenic Telecom. Org.	Corporate social responsibility	2005	71	13%
16	Cosmote	Corporate responsibility	2005	66	12%

References

- Adams, C.A., Mc Nicholas, P., 2007. Making a difference: sustainability reporting, accountability and organisational change. Accounting, Auditing and Accountability Journal 20 (3), 382–402.
- Adams, C.A., Coutts, A., Harte, G., 1995. Corporate equal opportunities (non-) disclosure. British Accounting Review 27 (2), 87–108.
- Adams, C.A., Hill, W.Y., Roberts, C.B., 1998. Corporate social reporting practices in Western Europe: legitimating corporate behaviour? British Accounting Review 30 (1), 1–21.
- Adams, C.A., 2002. Internal organizational factors influencing corporate social and ethical reporting: beyond current theorising. Accounting, Auditing and Accountability Journal 15 (2), 223–250.
- Adams, C.A., 2004. The ethical, social and environmental reporting performance portrayal gap. Accounting, Auditing and Accountability Journal 17 (5), 731–757.
- Albareda, L, Lozano, J.M., Ysa, T., 2007. Public policies on corporate social responsibility: the role of governments in Europe. Journal of Business Ethics 74, 391–407.
- Albelda-Pérez, E., Correa-Ruíz, C., Carrasco-Fenech, F., 2007. Environmental management systems and management accounting practices as engagement tools for Spanish companies. Accounting, Auditing and Accountability Journal 20 (3), 403–422.
- Allini, A., Rossi, FM.. The evolution of non-financial disclosure in a European perspective. Milano; The Fondazione Eni Enrico Mattei Series Index. Available from: http://www.feem.it/Feem/Pub/Publications/CSRPapers/default.htm (accessed February 2009).
- Ando, N., 2000. Japanese Ranking of Environmental Reports. Kyoto-Seika University, Kyoto. http://www.enviroreporting.com/others/japanrating.pdf> (accessed 28.10.06).
- Apostolakou, A., Jackson, G., 2009. Corporate social responsibility in Western Europe: an institutional mirror or substitute?. In: University of Bath School of Management Working Paper Series, 2009.1 University of Bath, Bath.
- Archel, P., Fernández, M., Larrinaga, C., 2008. The organizational and operational boundaries of triple bottom line reporting: a survey. Environmental Management 41, 106–117.
- Belkaoui, A., Karpik, P., 1989. Determinants of the corporate decision to disclose social information. Accounting, Auditing and Accountability Journal 2 (1), 36–51.
- Birth, G., Illia, L., Lurati, F., Zamparini, A., 2008. Communicating CSR: practices among Switzerland's top 300 companies. Corporate Communications: An International Journal 13 (2), 182–196.
- Brown, H., De Jong, M., Levy, D., 2009. Building institutions based on information disclosure: lessons from GRI's sustainability reporting. Journal of Cleaner Production 17 (4), 571–580.
- Campbell, J.L., 2006. Institutional analysis and the Paradox of corporate social responsibility. American Behavioral Scientist 49 (7), 925–938.
- Chan, J.C., Welford, R., 2005. Assessing corporate environmental risk in China: an evaluation of reporting activities of Hong Kong listed enterprises. Corporate Social Responsibility and Environmental Management 12, 88–104.
- Chapman, R., Milne, M.J., 2004. The triple bottom line: how New Zealand companies measure up. Corporate Environmental Strategy: International Journal for Sustainable Business 11 (2), 37–50.
- Chapple, W., Moon, J., 2005. Corporate social responsibility (CSR) in Asia: a sevencountry study of CSR web site reporting. Business & Society 44, 415–441.
- Clausen, J., Loew, T., Westermann, U., 2005. Sustainability Reporting in Germany: Summary of the Results and Trends of the 2005 Ranking. IÖW, Berlin. Available from: http://www.ranking-nachhaltigkeitsberichte.de (accessed November 2006).
- Context, 2006. Reporting in Context: Global Corporate Responsibility Trends 2006. Context, London.
- Cowen, S., Ferreri, L., Parker, L.D., 1987. The impact of corporate characteristics on social responsibility disclosure: a typology and frequency-based analysis. Accounting, Organizations and Society 12 (2), 111–122.

11

Daub, C.H., 2007. Assessing the quality of sustainability reports: an alternative methodological approach. Journal of Cleaner Production 15, 75–85.

Davis-Walling, P., Batterman, S.A., 1997. Environmental reporting by the Fortune 50 firms. Environmental Management 21, 865–875.

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ARTICLE IN PRESS

A. Skouloudis et al. / Journal of Cleaner Production xxx (2009) 1-13

Deegan, C., Gordon, B., 1996. A study of the environmental disclosure practices of Australian corporations. Accounting and Business Research 26 (3), 187–199.

Deloitte Touche Tohmatsu, 2001. The sustainable auto report. Available from: http:// www.deloitte.com/dtt/cda/doc/content/The%20sustainable%20auto%20report.

- pdf; [accessed 07.11.07]; Deloitte Touche Tohmatsu, 2002a. Mining for the best report. Deloitte Touche Tohmatsu Global Sustainability Group. Available from: http://www.deloitte.com/dtt/cda/doc/content/DTT_ERS_MMStudy_040506(1). pdf; [accessed 07.11.07]; Deloitte Touche Tohmatsu, 2002b. The diagnostics of corporate sustainability reporting. Deloitte Touche Tohmatsu Global Sustainability Group. Available from: http://www.deloitte.com/dtt/cda/doc/content/ DTT_ERS_Pharmabrief2006_040506.pdf [accessed 07.11.07].
- Elkington, J., 1997. Cannibals with Forks: the Triple Bottom Line of the 21st Century. Capstone Publishing, Oxford. Floropoulos, I., 2004. Voluntary Disclosure of Environmental Information in
- Floropoulos, I., 2004. Voluntary Disclosure of Environmental Information in Financial Statements. University of Thessaloniki, Department of Economics, Thessaloniki. Available from: http://www.cosmoglob.com/files/fl.doc (in Greek) (accessed November 2006).
- Florou, A., Galarniotis, A., 2007. Benchmarking Greek corporate governance against different standards. Corporate Governance: An International Review 15 (5), 979–998.
- Freedman, M., Jaggi, B., 1988. An analysis of the association between pollution disclosure and economic performance. Accounting, Auditing and Accountability Journal 1 (2), 43–58.
- Gallego, I., 2006. The use of economic, social and environmental indicators as a measure of sustainable development in Spain. Corporate Social Responsibility and Environmental Management 13, 78–97.
- Gallego-Alvarez, I., 2008. Analysis of social information as a measure of the ethical behaviour of Spanish firms. Management Decision 46 (4), 580–599.
- García-Sánchez, I.M., 2008. Corporate social reporting: segmentation and characterization of Spanish companies. Corporate Social Responsibility and Environmental Management 15 (4), 187–198.
- Getimis, P., Giannakourou, G., 2001. The development of environmental policy in Greece. In: Heinelt, H., Malek, T., Smith, R., Toller, A.E. (Eds.), European Union Environmental Policy and New Forms of Governance. Ashgate, Aldershot, pp. 289–294.
- Gjølberg, M., 2009a. Measuring the immeasurable? Constructing an index of CSR practices and performance in 20 countries. Scandinavian Journal of Management 1, 10–22.
- Gjølberg, M., 2009b. The origin of corporate social responsibility: global forces or national legacies? Socio-Economic Review 7, 605–637.
- Global Reporting Initiative (GRI), 2002. Sustainability Reporting Guidelines. GRI, Boston.
- Graafland, J.J., Eijffinger, S.C.W., Smid, H., 2004. Benchmarking of corporate social responsibility: methodological problems and robustness. Journal of Business Ethics 53, 137–152.
- Gray, R.H., Kouhy, R., Lavers, S., 1995. Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure. Accounting, Auditing and Accountability Journal 2, 47–77.
- Gray, R.H., Owen, D., Adams, C.A., 1996. Accounting and Accountability: Changes and Challenges in Corporate Social and Environmental Reporting. Prentice Hall, Hemel Hempstead.
- Gray, R., Javad, M., Power, D., Sinclair, C.D., 2001. Social and environmental disclosures and corporate characteristics: a research note and extension. Journal of Business Finance and Accounting 28 (3), 327–356.
- GRI, 2002. Sustainability Reporting Guidelines 2002. Global Reporting Initiative, Amsterdam.
- Guthrie, J.E., Parker, I.D., 1990. Corporate social disclosure practice: a comparative international analysis. Advances in Public Interest Accounting 3, 159–176.
- Hackston, D., Milne, M.J., 1996. Some determinants of social and environmental disclosures in New Zealand companies. Accounting, Auditing and Accountability Journal 9 (1), 77–108.
- Hedberg, C.J., von Malmborg, F., 2003. The global reporting initiative and corporate sustainability reporting in Swedish companies. Corporate Social Responsibility and Environmental Management 10, 153–164.
- Heinelt, H., Toller, A.E., 2001. Comparing EIA and EMAS in Germany, Britain and Greece. In: Heinelt, H., Malek, T., Smith, R., Toller, A.E. (Eds.), European Union Environmental Policy and New Forms of Governance. Ashgate, Aldershot, pp. 350–389.
- Hofstede, G., 1991. Cultures and Organizations: Software of the Mind. McGraw Hill, New York.
- Hofstede, G., 2001. Cultures Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations. Sage Publications, Thousand Oaks, CA.
- Holland, L., Foo, Y.B., 2003. Differences in environmental reporting practices in the UK and US: the legal and regulatory context. British Accounting Review 35, 1–18.
- Jeyaretnam, T., Tunney, J., Hughes, T., 1999. Public Environmental Reporting: Where Does Australia Stand? SMEC, Melbourne.
- Kaptein, M., van Tulder, R., 2003. Toward effective stakeholder dialogue. Business and Society Review 108, 203–224.
- KLD, 2008. Sustainability reporting in emerging markets. Available from: http://www.socialinvest.org/resources/research/documents/SIF-SIRAN KLDReportfor EMTransparency2008.pdf> (accessed March 2009).
- Kolk, A., 2005. Environmental reporting by multinationals from the Triad: convergence or divergence? Management International Review 45 (Special issue 1), 145–167.

- Kollman, K., Prakash, A., 2002. EMS-based environmental regimes as club goods: examining variations in firm-level adoption of ISO 14001 and EMAS in UK, USA and Germany. Policy Sciences 35, 43–67.
- KPMG, 2008. International Survey of Corporate Responsibility Reporting 2008. KPMG Global Sustainability Services, Amsterdam.
- KPMG/UvA, 2002. KPMG International Survey of Corporate Sustainability Reporting 2002. KPMG Global Sustainability Services, De Meern.
- Kraisornsuthasinee, S., Swierczek, F., 2006. Interpretations of CSR in Thai companies. Journal of Corporate Citizenship 22 (Summer), 53–65.
- Logsdon, M.J., Lewelynn, P.G., 2000. Expanding accountability to stakeholders: trends and predictions. Business and Society Review 105, 419–435.
- Luken, R., Stares, R., 2005. Small business responsibility in developing countries: a threat or an opportunity? Business Strategy and the Environment 14, 38–53.
- Maignan, I., Ralston, D., 2002. Corporate social responsibility in Europe and the US: insights from businesses' self-presentations. Journal of International Business Studies 33 (3), 497–514.
- Mathews, M.R., 1997. Twenty-five years of social and environmental accounting research: is there a silver jubilee to celebrate. Accounting, Auditing and Accountability Journal 10 (4), 481–531.
- Midttun, A., Gautesen, K., Gjølberg, M., 2006. The political economy of CSR in Western Europe. Corporate Governance 6 (4), 369–385.
- Milne, M.J., Tregidga, H., Walton, S., 2003. The triple-bottom-line: benchmarking New Zealand's early reporters. University of Auckland Business Review 5, 36–50.
- Morhardt, J.E., 2001. Scoring corporate environmental reports for comprehensiveness: a comparison of three systems. Environmental Management 26, 881–892.
- Morhardt, J.E., Baird, S., Freeman, K., 2002. Scoring corporate environmental and sustainability reports using GRI 2000, ISO 14031 and other criteria. Corporate Social Responsibility and Environmental Management 9, 215–233.
- Muller, A., Kolk, A., 2009. CSR performance in emerging markets evidence from Mexico. Journal of Business Ethics 85, 325–337.
- Niskanen, J., Nieminen, T., 2001. The objectivity of corporate environmental reporting: a study of Finnish listed firms' environmental disclosures. Business Strategy and the Environment 10, 29–37.
- Palenberg, M., Reinicke, W., Witte, J.M., 2006. Trends in Non-financial Reporting. Paper Prepared for the United Nations Environment Programmes, Division of Technology, Industry and Economics (DTIE), November 2006. Global Public Policy Institute, Berlin, Germany. Available from: www.gppi.net.
- Panayiotou, N., Aravossis, K., Moschou, P., 2008. Greece: a comparative study of CSR reports. In: Idowu, S.O., Filho, W.L. (Eds.), Global Practices of Corporate Social Responsibility. Springer-Verlag, Berlin, Heidelberg, pp. 149–164.
- Panayiotou, N., Aravossis, K., Moschou, P., 2009. A new methodology approach for measuring corporate social responsibility performance. Water, Air and Soil Pollution: Focus 9, 129–138.
- Patten, D., 1991. Exposure, legitimacy and social disclosure. Journal of Accounting and Public Policy 10 (4), 297–308.
- Peck, P., Sinding, K., 2003. Environmental and social disclosure and data richness in the mining industry. Business Strategy and the Environment 12, 131–146.
- Powell, W.W., DiMaggio, P.J., 1991. The New Institutionalism in Organizational Analysis. University of Chicago Press, Chicago.
- Rasche, A., Esser, D.E., 2006. From stakeholder management to stakeholder accountability. Journal of Business Ethics 65, 251–267.
- Ratanajongkol, S., Davey, H., Low, M., 2006. Corporate social reporting in Thailand: the news is all good and increasing. Qualitative Research in Accounting & Management 3 (1), 67–83.
- Repetto, R., 2005. Protecting investors and the environment through financial disclosure. Utilities Policy 13, 51–68.
- Rikhardsson, P., Holm, C., 2006. The effect of environmental information on investment allocation decisions: an experimental study. Business Strategy and the Environment 17, 382–397.
- Roberts, C.B., 1991. Environmental disclosures: a note on reporting practices in mainland Europe. Accounting, Auditing and Accountability Journal 4 (3), 62–71.
- Roberts, R.W., 1992. Determinants of corporate social responsibility disclosure: an application of stakeholder theory. Accounting, Organizations and Society 17 (6), 595–612.
- Roberts Environmental Center. Roberts environmental center website: articles & publications. Available from: http://www.roberts.cmc.edu/PSI/SectorReports.asp (accessed December 2008).
- Sahay, A., 2004. Environmental reporting by Indian corporations. Corporate Social Responsibility and Environmental Management 11, 12–22.
- Secchi, D., 2006. The Italian experience in social reporting: an empirical analysis. Corporate Social Responsibility and Environmental Management 13, 135–149.
- Singhapakdi, A., Karande, K., Rao, C.P., Vitell, S.J., 2001. How important are ethics and social responsibility? A multinational study of marketing professionals. European Journal of Marketing 35 (1), 133–152.
- Skouloudis, A., Evangelinos, K., Kourmousis, F., 2009. Development of an evaluation methodology for triple bottom line reports using international standards on reporting. Environmental Management. online first: doi:10.1007/s00267-009-9305-9.
- Sobhani, F.A., Amran, A., Zainuddin, Y., 2009. Revisiting the practices of corporate social and environmental disclosure in Bangladesh. Corporate Social Responsibility and Environmental Management 16 (3), 167–183.
- Spanos, L., Tsipouri, L., Xanthakis, M., Corporate governance rating and family firms: the Greek case. EconWPA. Available from: http://129.3.20.41/eps/fin/papers/0503/0503011.pdf> (accessed January 2009).

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- STRATOS Inc, 2001. Stepping Forward: Corporate Sustainability Reporting in Canada. Ottawa: Stratos; STRATOS Inc., 2003 Building Confidence: Corporate Sustainability Reporting in Canada. Ottawa: Stratos; STRATOS Inc., 2005 Gaining Momentum: Corporate Sustainability Reporting in Canada. Ottawa: Stratos:
- SustainAbility/UNEP, 2000. The Global Reporters: the 2000 Benchmark Study. London: SustainAbility; SustainAbility/UNEP, 2002. Trust Us: the Global Reporters 2002 Study of Corporate Sustainability. London: SustainAbility; SustainAbility/UNEP, 2004. Risk & Opportunity: the Global Reporters 2004 Survey of Corporate Sustainability Reporting. London: SustainAbility; Sustain-Ability/UNEP, 2006. Tomorrow's Value: the Global Reporters 2006 Survey of Corporate Sustainability Reporting. London: SustainAbility;
- Trotman, K.T., Bradley, G.W., 1981. Associations between social responsibility disclosure and characteristics of companies. Accounting, Organizations and Society 6 (4), 355–362.
- Tsipouri, L., Xanthakis, M., 2004. Can corporate be rated? Ideas based on the Greek experience. Corporate Governance: An International Review 12 (1), 16–28.
- Unerman, J., Bennett, M., 2004. Increased stakeholder dialogue and the internet: towards greater corporate accountability or reinforcing capitalist hegemony? Accounting, Organizations and Society 29, 685–707.

- Vives, A., 2006. Social and environmental responsibility in small and medium enterprises in Latin America. Journal of Corporate Citizenship 21 (Spring), 39–50.
- Vormedal, I., Ruud, A., 2009. Sustainability reporting in Norway an assessment of performance in the context of legal demands and socio-political drivers. Business Strategy and the Environment 18 (4), 207–222.
- Watson, M., Emery, A.R.T., 2004. Law, economics and the environment: a comparative study of environmental management systems. Managerial Auditing Journal 19 (6), 760–773.
- Welford, R., 2004. Corporate social responsibility in Europe, North America, and Asia: 2004 survey results. Journal of Corporate Citizenship 17, 33–52.
- Woodward, D.G., Edwards, P., Birkin, F., 1996. Organizational legitimacy and stakeholder information provision. British Academy of Management 7, 329–347.
 World Business Council for Sustainable Development, 2002. Sustainable Develop-
- ment Reporting: Striking the Balance. World Business Council for Sustainable Development, Geneva.
- Wotruba, T.R., 1997. Industry self-regulation: a review and extension to a global setting. Journal of Public Policy & Marketing 16 (1), 38–54.
- Xanthakis, M., Tsipouri, L., Spanos, L. The construction of a corporate governance rating system for a small open capital market: methodology and applications in the Greek market. <www.hfaa.gr> (accessed 28.01.09).