

What Do Stakeholders Care About? Investigating Corporate Social and Environmental Disclosure in China

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Abstract This study investigates the social and environmental disclosure practices of socially responsible Chinese listed firms as displayed in their annual reports and corporate social responsibility (CSR) reports from the perspective of stakeholders. A stakeholder-driven, threedimensional social and environmental disclosure index that integrates the quantity and two aspects of the quality of disclosure perceived by stakeholders is constructed to assess the social and environmental disclosures in firm annual reports and CSR reports. The study results indicate that stakeholders perceive different disclosure types and disclosure items as important to differing degrees. CSR reports provide more stakeholder-relevant social and environmental disclosure than annual reports.

Keywords China · Corporate social responsibility · Social and environmental disclosure · Social and environmental disclosure index · Stakeholder

Introduction

Social and environmental disclosure is a relatively new practice for Chinese firms. Prior to 2005, few Chinese enterprises published social and environmental reports (including environmental reports, CSR reports, or

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sustainability reports). More recently, with sustainable development a national strategic priority, the Chinese government has actively encouraged Chinese enterprises to become more socially and environmentally responsible to their stakeholders. In response, the Shenzhen stock exchange (SZSE) issued social responsibility guidelines for listed firms in 2006, and the Shanghai stock exchange (SSE) issued its own guidance documents in 2008 to urge listed firms to publicly disclose social and environmental information in their annual reports or CSR reports. An increasing number of Chinese listed firms thus began to publish CSR reports or sustainability reports as supplements to their annual reports. A combination of governmental efforts and agency initiatives thus has precipitated a sudden surge in corporate social and environmental disclosure in China. According to the SSE, in 2008, 290 out of roughly 980 listed firms published CSR reports in addition to their financial reports, with 282 doing so for the first time (China Securities Journal 2009).

While social and environmental disclosure has been widely considered from academic and management perspectives in developed economies, the evidence concerning social and environmental disclosure from stakeholders' perspectives remains limited, especially in transitional economies such as China. This study thus aims to provide quantitative evidence of the extent and quality of the social and environmental disclosures of Chinese listed firms from the perspectives of stakeholders and thus to contribute to corporate policy within the broader context of public policy. To achieve this, we construct a stakeholder-driven, three-dimensional social and environmental disclosure index (SEDI) that integrates disclosure quantity with two aspects of disclosure quality as perceived by stakeholders.

The remainder of this paper is organized as follows. "Literature Review" section reviews the literature on

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corporate social and environmental disclosure. "Theoretical Framework" section then presents the theoretical framework of this study. Subsequently, "Research Methods" section describes the study sample and research methods. "Findings" section then presents the empirical findings, while "Further Discussion" section further discusses those findings. Finally, "Concluding Remarks" section presents conclusions.

Literature Review

Disclosures form part of the accountability action taken by firms in relation to their social and environmental activities that contribute to sustainability (Reynolds and Yuthas 2008). Since sustainability is a normative concept constructed by humans and actualized in the cultural systems they inhabit, social actors in different cultural systems understand and enact sustainability differently (Korhonen 2003). The sustainability concept occupies a continuum where it is understood quantitatively through an economic dimension, and qualitatively through a development dimension. Growth is a primary attribute in quantitative sustainability, while development is a primary attribute in qualitative sustainability. The classical economic model focuses on economic growth where sustainability activities are adjudicated strictly based on their market-worthiness. Meanwhile, the neoclassical model also focuses on economic growth, but sustainability activities are adjudicated based on whether they translate in the long term into some form of market-worthiness (e.g., reputation building). This model thus places a genuine moral constraint on firms in their pursuit of profits. Finally, a third economic model, termed the development model, focuses on ensuring that firms pursue profits without causing ecological damage; that is, it aims to ensure that firms use natural resources sustainably, and do not produce waste in excess of the absorption capacity of ecological systems (DesJardins 1998). Given that the sustainability concept can be situated anywhere on the continuum between the classical and development economic models, the concept has eluded a strict definition. In this study, given China's current economic status and cultural context, we propose that the most applicable economic model is the neoclassical model of sustainability. Social actors' perceptions of sustainability naturally influence sustainable development in a given cultural context, but the dominant social paradigm of that cultural context is what frames their actions in relation to how natural resources become inputs and outputs in a firm production system (Korhonen 2003).

A common interpretation of sustainable development is the simultaneous development of social, ecological, and economic systems. Within this context, sustainability comprises three dimensions—diversity, interdependency, and locality—that explain the ways natural resources are used and reused for sustainable development. Diversity arising from genetic variations in species is an essential dimension that helps natural systems (e.g., an ecosystem) to limit over-consumption of natural resources, and achieve an ecological balance of natural resources to sustain the system into the future. The interdependency between various actors in an ecosystem allows the natural matter and energy that one actor considers waste to be treated as a resource by another actor. In a natural ecosystem, diversity of actors and interdependency of various components of matter and energy as waste and resources, occurring in a given locality, restore the ecological balance at the local level (Korhonen 2003).

Korhonen (2002) argues that the dominant social paradigm is not sustainable as an ecological dimension in the classical and neoclassical economic models. For instance, fossil fuel resources constitute approximately 80 % of world energy consumption and are a nonrenewable natural resource (Williams 1994). Although natural ecosystems can accommodate biological emissions in a renewal growth cycle, they cannot accommodate emissions arising from fossil fuel use. Therefore, the use of fossil fuels to meet energy requirements in the modern economic model undermines sustainability. However, the dominant social paradigm guides the policies and practices of sustainability. In the classical and neoclassical economic models, sustainability is quantified as a monetary measure. This monetization can fall under three umbrellas: ecological footprint, lifecycle assessments of products, and industrial ecosystems. The ecological footprint entails measuring the area of land and water needed to support the consumption of matter and energy associated with a given activity (van den Bergh and Verbruggen 1999; Wackernagel and Rees 1996). Meanwhile, lifecycle assessment means measuring all the processes involved in the life of a product. Industrial ecosystems measure the matter and energy flow of entities using the analogy of a local natural ecosystem.

These broad measures involve various ethical issues, especially in places dominated by globalized trade and mass production (Costanza et al. 1997), such as China. For instance, understanding the ecological footprint does not provide a solution to dependence on fossil fuels for energy. Moreover, lifecycle assessment does not address the issue of developing nations, such as China, producing naturalresource-intensive products at low prices that they then exchange for other products from developed nations at high prices. Similarly, ecosystem assessment of China's use of coal for energy production cannot create technologies able to halt the depletion of natural resources (Korhonen 2003). As these ethical concerns intensify, social actors in a given cultural context question their views on sustainability. This then causes them to refocus away from the practical ethics of serving greater goals and the greater good, and back to the theoretical ethics of duty and intention. Theoretical ethics re-examine the norms and values of social actors in a cultural setting by contesting the greater goals and greater good of sustainability activities. Social actors then are likely to alter their interpretation of sustainability, and use the underlying world view based on ethics to describe and analyze sustainability.

The dominant social paradigm of sustainability (considered here as the neoclassical model) can be conceived as a point estimate represented by various social paradigms, each containing social actors with different norms and values about sustainability. Firms must serve these different social paradigms using different performance-based disclosure measures that determine sustainability goals consistently with the norms and values held by the relevant social actors (Logsdon and Yuthas 1997). Accordingly, this study surveys different stakeholder groups to understand their perceptions of the performance-based measures of sustainability disclosed by firms in their annual and CSR reports.

Habermas believes that all communications assume four conditions, known as universal pragmatics. These four universal pragmatics are the objective part of a statement (truth), the subjective part of a statement (sincerity), the comprehensiveness of a statement (understandability), and the extent to which a statement complies with norms (appropriateness) (Habermas 1990; Reynolds and Yuthas 2008). Since corporate communication is subject to various economic and political pressures, the universal pragmatics of firm disclosure statements in their annual and CSR reports should not be taken for granted. Reynolds and Yuthas (2008) consider the design of the global reporting initiative (GRI) framework for corporate reporting purposes with a specific focus on issues of understandability and appropriateness. When information is verifiable, it meets the objective aspect of universal pragmatics. However, because firms are likely to follow a teleological approach to social and environmental disclosure, the sincerity of their disclosures is often questioned. This aspect can be validated by stakeholder consultation. Each stakeholder group is likely to have different norms and values through which they evaluate the sincerity of firm teleological disclosure statements. Although the GRI framework recommends numerous measures of disclosure, each stakeholder group can identify which measures appear sincere to them in their cultural context. This study seeks to understand the sincerity of communication between firms and stakeholders, to allow firms to focus on morally valid social and environmental disclosure.

Social and environmental disclosure, which involves the communication of the social and environmental effects of a

firm's economic actions to particular interest groups and society at large (Gray et al. 1987), underpins the concept of CSR. While the term CSR has been widely discussed and developed, no universally accepted definition exists because it is contextualized by the societal culture. CSR became popular with the emergence of the concept of sustainable development in the 1980 s, which assumed a 'triple bottom line' connection between the economic, environmental, and social responsibilities of a business (Elkington 1998; Carroll 1999). Logsdon and Yuthas (1997) identified the motivation of a firm to undertake and disclose CSR using Kohlberg's six stages of moral development. For instance, a firm in stage two of moral development is likely to engage in CSR to promote its own interests, such as attracting customers, receiving financial rewards, and gaining competitive advantages (Crane and Matten 2004). On the other hand, firms may also implement CSR to address certain social and environmental problems arising from their actions and thus help benefit society, behavior that falls into stage five of Kohlberg's moral development. Firms that prioritize CSR because it is 'the right thing to do,' a mindset considered to represent 'genuine' CSR, fall into stage six of Kohlberg's moral development (Smith 2003).

Since the 1990s, CSR has become an important aspect of business practices in relation to various moral issues, such as human rights, labor rights, environmental and sustainable development, and product safety (Hopkins 2004; Wang and Juslin 2009). With multinationals having introduced Western CSR to the Chinese market during the 'anti-sweatshop campaign' (Pun 2003; Zhou 2006), China has become a critical player in CSR because the neoclassical economic model requires adherence to minimum moral standards that offer long-term economic benefits. For instance, the recent 'milk powder scandal' focused global attention on Chinese CSR issues, and China's swift response supported its reputation for having a long-term focus on CSR.

Substantial research has investigated numerous topics related to social and environmental disclosure. These topics include disclosure quantity and quality (Deegan and Gordon 1996; Gao et al. 2005), determinants of disclosure (Hackston and Milne 1996; Cormier and Gordon 2001), managerial motivations for disclose (O'Donovan 2002; Milne and Patten 2002), and the relationship between disclosure and actual performance (Cho and Patten 2007; Clarkson et al. 2008).

Most previous studies measured corporate social and environmental disclosure using volume-based content analysis (Gray et al. 1995; Deegan and Gordon 1996; Hackston and Milne 1996; Gao et al. 2005). The selection of appropriate units for coding and measuring disclosure is important to content analysis (Abeysekera 2007). Common

measurement units in the social and environmental disclosure literature include the word (Deegan and Gordon 1996; Deegan and Rankin 1996), sentence (Tsang 1998; Deegan et al. 2000), page (Cowen et al. 1987; Hackston and Milne 1996), and page proportion (Guthrie and Parker 1989, 1990; Gray et al. 1995). Each measurement unit has its limitations with respect to quantifying disclosure quantity. For example, pages may include pictures that contain no information on social or environmental activities (Al-Tuwaijri et al. 2004), sentences may lead to relevant tables and figures being ignored, and page proportions entail subjective judgments on the treatment of blank portions (Unerman 2000). Debate regarding the most appropriate unit of analysis thus has persisted in the social and environmental disclosure literature (Milne and Adler 1999; Unerman 2000; Steenkamp and Northcott 2007). Alternatively, recent studies have favored the use of phrases, clauses, or themes as units of analysis (Beattie and Thomson 2007; Campbell and Abdul Rahman 2010). These measures establish the objective aspects of a statement, but fail to establish its subjective aspects in communication actions.

A key assumption underlying content analysis in social and environmental research is that the quantity of disclosure regarding an item signifies its relative importance (Unerman 2000). Nevertheless, recognition exists that reliance on the mere number of disclosures (i.e., quantitative measures) may be misleading or insufficient (Cowen et al. 1987; Toms 2002; Hasseldine et al. 2005). Furthermore, counting disclosure volume does not reveal the type and importance of the information being communicated (van der Laan Smith et al. 2005). The disclosure of more information does not necessarily mean that disclosure is high quality. It satisfies the objective aspect of the statement being communicated, as information is objectively verifiable, but does not address its subjective aspect. Some studies thus have investigated corporate social and environmental disclosure by measuring the subjective aspects of statements made in corporate communications, something known in the literature as disclosure quality (Cormier and Magnan 1999, 2003; Cormier and Gordon 2001; Liu and Anbumozhi 2009). Disclosure quality is usually assessed using a content analysis disclosure index. Such an index rates a disclosure in terms of each of the predefined items in a checklist based on the presence or absence of elaboration of each individual item, as well as the degree of that elaboration, and assumes that in evaluating the subjective part of those disclosure items, stakeholders perceive disclosure sincerity and quality to increase with the volume of information disclosed. For example, Wiseman (1982) proposed a quality rating scale ranging from one to three to evaluate the quality of different disclosure types (i.e., general narrative; specific narrative using nonquantitative terms; and description using monetary/quantitative terms), and her index was subsequently popularized by many researchers (Walden and Schwartz 1997; Choi 1999; Cormier and Gordon 2001). Some studies have updated the approach of Wiseman by developing other indices, such as the Hackston and Milne (1996) index and the SustainAbility/UNEP (1997) index. The most widely used indices in recent studies are based on the GRI framework (Clarkson et al. 2008; Liu and Anbumozhi 2009). Most of these extant disclosure indices focus only on disclosure quality, with the exception of the hybrid measure designed by Hasseldine et al. (2005), which integrates quality and quantity measures into a single disclosure index. This index thus captures the joint effect of quality measure (i.e., the subjective aspect of the statement) and quantity measure (i.e., the objective aspect of the statement) and provides stakeholders with a more pragmatic means of social and environmental disclosure.

Influential standards and guidelines such as the GRI and Account Ability increasingly inform leading-edge disclosure practice and underline the stakeholder accountability of the disclosure process (Cooper and Owen 2007). For example, according to the GRI (2002, p. 9):

a primary goal of reporting is to contribute to an ongoing stakeholder dialogue. Reports alone provide little value if they fail to inform stakeholders or support a dialogue that influences the decisions and behavior of both the reporting organization and its stakeholders.

Therefore, under the accountability principle, a concern related to corporate disclosure is the right of all stakeholders to receive all information on the firm, including social and environmental information, and the responsibility of the firm to provide such information, even when not actually required by regulatory bodies. In previous studies, researchers determined the quality of disclosure in a SEDI by assigning different values to different disclosure types (Toms 2002; van Staden and Hooks 2007; Clarkson et al. 2008). However, this approach introduces researcher judgments regarding to disclosure quality that may not align with stakeholder judgments, since only stakeholders themselves can evaluate the sincerity of communication as it appears to them (i.e., the subjective aspects of a statement). Therefore, the quality of social and environmental disclosure should be ascertained from the perspectives of stakeholders. No previous studies have examined this issue, except for Toms (2002), who conducted a questionnaire survey to ask investment professionals their perceptions of the importance of different types of qualitative environmental disclosure to environmental disclosure quality. However, Toms (2002) only considered the perceptions of investment professionals and ignored those of other interested stakeholders.

A review of the literature on the use of disclosure indices in accounting research reveals that researchers are divided on whether disclosure items should be assigned equal or unequal values. Studies assuming equal importance for disclosure items argue that the assignment of subjective weights to items can result in items averaging each other out (Cooke 1989), and that the sincerity of corporate social and environmental disclosure is best evaluated by treating all disclosure items as equally important to stakeholders. In contrast, studies proposing unequal values for disclosure items emphasize the notion that certain items are more important than others, and suggest that the importance weighting of items helps enhance disclosure sincerity as some disclosure items inform stakeholders more than others. They further note that an attitude survey among relevant stakeholders can provide information about the relative importance of disclosure items (Beattie et al. 2004). For example, Schneider and Samkin (2008) consulted a stakeholder panel regarding their opinions on the relative importance of disclosure items included in an intellectual capital disclosure index. The social and environmental disclosure literature contains no studies on the relative importance of disclosure items to stakeholders; in contrast, studies in this field have assumed all disclosure items to be of equal value (Clarkson et al. 2011).

Stakeholders are the users of corporate social and environmental disclosure. Considering the absence of studies that adopt stakeholder perspectives on corporate social and environmental disclosure to address the sincerity of communication, this study aims to provide evidence of the social and environmental disclosure practices of Chinese listed firms through constructing a SEDI that combines stakeholders' perceptions of the quality and quantity of corporate social and environmental disclosure (i.e. its sincerity and objective aspects).

Theoretical Framework

In relation to a firm, society can be grouped into shareholders, creditors, regulators, employees, customers, and suppliers, all of whom may be interested in firm social and environmental activities. Freeman (1984) identified these groups as 'stakeholders.' Stakeholders have the power to influence managerial strategic decisions through their control over the resources that support the continued existence of a firm (Ullmann 1985). To ensure its continued existence, a firm must seek and maintain stakeholder support (Freeman 1984). Stakeholder theory focuses on the need to manage powerful stakeholder groups that control resources necessary to a firm's operations (Ullmann 1985; Deegan 2002), with information being a major element that firms can employ to indicate their conformance to stakeholder expectations. Corporate social and environmental disclosure is therefore expected to be an effective management strategy for developing and maintaining satisfactory relationships with various stakeholders. Researchers have recently used stakeholder theory to investigate stakeholder engagement in social and environmental disclosure, as well as external stakeholder perceptions of corporate social and environmental disclosure (Unerman 2007; Tilt 2007).

Owing to pressure from foreign buyers, Chinese firms have passively begun to accept Western standards, regulations, and codes of conduct relating to CSR in order to consider certain relevant stakeholder concerns (e.g., working conditions, as well as health and safety issues) (Wang and Juslin 2009). This is consistent with the neoclassical economic model. As Chinese firms go through this transition, concepts such as stakeholder engagement to fulfill CSR can help them better understand how to meet new political, economic, and cultural expectations when accessing new foreign markets (Zhou 2006). This study employs stakeholder theory from the perspective of report users to investigate how Chinese firms consider specific and identifiable stakeholder groups in corporate social and environmental disclosure.

Research Methods

Sample and Data Source

This study adopted a 'best practice' approach by using the 100 socially responsible firms identified by the 2008 Chinese Stock-listed Firms' Social Responsibility Ranking List. This list, the first CSR rating system in China, was initiated by Southern Weekend (one of China's most popular newspapers) and is based on investigation by the All-China Federation of Trade Unions, All-China Federation of Industry & Commerce, Peking University, Fudan University, and Nankai University. The listed firms are large Chinese listed firms from all over mainland China with minimum annual operating revenues of 10 billion Chinese Yuan (Southern Weekend 2008).

This study used two avenues to access the data considered in the analysis: firm reports and a questionnaire survey. On the one hand, the annual reports and CSR reports of sample firms for the year 2008 were used to identify corporate social and environmental disclosure. Early studies viewed annual reports as the principal means for corporate communication of operations to the public (Wiseman 1982), and all previous social and environmental disclosure studies were based on such reports (Guthrie and Parker 1989; Harte and Owen 1991; Gray et al. 1995; Deegan and Gordon 1996; Campbell 2004). Furthermore, the literature also uses sources other than annual reports, such as stand-alone social and environmental reports (Frost et al. 2005; Clarkson et al. 2008; Murthy and Abeysekera 2008). This study used both annual reports and CSR reports because stakeholders are likely to consider all publicly available reports in decision-making (Van Staden and Hooks 2007). Although firms may disclose social and environmental information via media other than annual reports and CSR reports (e.g., corporate websites), as Unerman et al. (2007, p. 203) suggested, "for pragmatic reasons, it was necessary to place limits on the scope of documents analysed-if this were not done then the number of documents to be analysed for any single firm could have been overwhelming." Therefore, this study focused solely on annual reports and CSR reports.

On the other hand, empirical data were collected through a questionnaire survey to ascertain stakeholders' perceptions of the relative importance of different disclosure types identified from the literature. Empirical data were also collected through consulting a panel of stakeholders to ascertain stakeholder perceptions of the relative importance of disclosure items. Opinions of relevant stakeholders' regarding different disclosure types and disclosure items were sought because the quality measure ascertaining the sincerity aspect of the disclosure should have a strong theoretical underpinning. For instance, when applying agency theory, investors become the focus in measuring quality, and the quality measure should reflect investor perspectives. Meanwhile, when using stakeholder theory, stakeholders become the focal point, and the quality measure should be relevant to their decision-making. This study thus set out to provide insights into the social and environmental disclosures of sample firms from the perspectives of stakeholders rather than that of the researcher.

A Stakeholder-Driven, Three-dimensional SEDI

This study constructed a SEDI based on the GRI Sustainability Reporting Guidelines (G3 version) to assess firms' social and environmental disclosures in their annual reports and CSR reports. The GRI Guidelines provide an internationally recognized framework for social and environmental disclosure, which is comprehensive and covers all aspects, such as economic, social, and environmental performance (Frost et al. 2005). The standardization of metrics supports the reliability of disclosure measurement. However, GRI has been criticized for its 'one size fits all' nature (Sherman 2009), and the GRI reporting framework has questionable ability to meet the requirements of diverse nations, industries, organizational sizes, and stakeholders. Even with the wide acceptance of the framework, the disparities in what is reported and how continues to be frustrating (Sherman 2009). Therefore, we must recognize a balance between standardization of metrics and disclosure data on the one hand, and customization and stakeholder engagement on the other. This study argues that the GRI reporting framework is only a tool and the priority is to involve stakeholders. The use of the GRI framework to analyze corporate social and environmental disclosure also enables greater stakeholder engagement.

Previous studies have used the GRI Guidelines as a coding framework to analyze corporate social and environmental disclosure (Frost et al. 2005; Clarkson et al. 2008; Adnan et al. 2010). The GRI (G3) Guidelines generally comprise two broad parts: the overall context for understanding organizational performance (i.e., Strategy and Analysis, Organizational Profile, Report Parameters, and Governance, Commitments, and Engagement), and organizational performance indicators (i.e., Economic Performance [EC], Environmental Performance [EN], and Social Performance [including Labor Practices (LA), Human Rights (HR), Society (SO), and Product Responsibility (PR)]). In total, the GRI (G3) contains 121 reporting items (GRI, 2006). This study used these 121 reporting items as predefined items to codify corporate social and environmental disclosure.

Disclosure Quantity

The SEDI comprises three dimensions: the quantity measure, quality measure for disclosure types, and quality measure for disclosure items. The quantity dimension of the SEDI was approached by using content analysis to collect data on the frequency with which firms disclosed each of the 121 GRI items in their annual reports and CSR reports. The definitions from the GRI framework for each reporting item were used to guide the coding of corporate annual reports and CSR reports. Using the underlying theme of each GRI item as the coding and measuring unit, social and environmental disclosures were identified by the 'meaning' implied in the text according to the definition of the GRI item, and were measured based on the number of times each item was mentioned in the annual and CSR reports. This enabled us to capture disclosure items more comprehensively than with a manifest content analysis technique such as searching for pre-determined words in annual reports and CSR reports.

Disclosure Type Quality

The quality dimension relating to disclosure types was approached by conducting a questionnaire survey to gather data on stakeholder perceptions of preferences for different disclosure types as identified from the literature. Based on the literature (Toms 2002; Clarkson et al. 2008), five disclosure types were identified: (1) general narrative; (2) specific endeavor communicated in nonquantitative terms; (3) quantified performance data; (4) quantified performance data relative to benchmarks (e.g., targets, industry, previous periods); and (5) quantified performance data at a disaggregate level (e.g., plant, business unit, geographic segment). A preview of the annual and CSR reports of the sample firms revealed that firms reported their performance information (i.e., EC performance, EN performance, LA performance, HR performance, SO performance, and PR performance) based on all the above disclosure types. Besides performance information, firms were also found to report their contextual information but in doing so used fewer disclosure types, namely general narrative, specific endeavor communicated in nonquantitative terms, and quantified data. Even for the GRI context categories, strategy and analysis and report parameters, sample firms were found to use far fewer disclosure types. This study thus designed the questionnaire using different disclosure types for GRI performance and context (please see Table 1). The questionnaire adopted a continuous rating scale that asked stakeholders to rate the relative importance of five disclosure types by placing a mark on a continuous line between two fixed points labeled 0 and 100 (Brace 2004).

As corporate stakeholders include various interest groups focused on different categories of corporate social and environmental disclosure, we surveyed the given stakeholder groups only about the disclosure most relevant to them. This study thus designed six stakeholder-specific versions of the questionnaire (i.e., EC version, EN version, LA version, HR version, SO version, and PR version) for six broad stakeholder groups identified in the GRI framework (i.e., economic stakeholders, environmental stakeholders, labor stakeholders, human rights stakeholders, social stakeholders, and product stakeholders). Each questionnaire version asked the given stakeholder group to rate the five disclosure types from 0 to 100 by providing specific examples that represented disclosure in the relevant performance category for each disclosure type. Additionally, all stakeholder-specific questionnaires provided common examples for each disclosure type for context items in the GRI framework.

While firms are legally required to maintain a registry of their shareholders, the same does not apply to stakeholders, and hence the lack of information about stakeholder composition posed a challenge to the selection of stakeholders for survey. Firm management is experientially aware of stakeholder composition since they prepare the annual and CSR reports for corporate stakeholders. Hence, this study contacted corporate executives involved in preparing annual reports and/or CSR reports and requested that they distribute the six versions of the questionnaire to relevant groups of stakeholders. Based on the judgments of corporate executives, each stakeholder group thus was surveyed to ascertain their perceptions regarding their preferences for different types of corporate social and environmental disclosure. A written request was made in the initial recruitment email to ask executives of the 100 sample firms to distribute the questionnaires among their stakeholders. The respondents were required to return the questionnaires directly to the researcher rather than the firm.

Disclosure Item Quality

The quality dimension relating to disclosure items was approached through a panel consultation of stakeholders to ascertain their perceptions of the relative importance of 121 GRI reporting items. A stakeholder panel serves an approach for better understanding of the business impact on stakeholders, and this form of stakeholder engagement offers valuable perspectives through directly engaging with stakeholders (UN Global Compact 2010). Another reason for using a stakeholder panel consultation is due to that a large number (121) of items need to be examined for their relative importance. A typical questionnaire survey would

Table 1 Disclosure types in thequestionnaire survey

- Stakeholder-specific disclosure (performance items)
- 1 General narrative
- 2 Specific endeavor communicated in nonquantitative terms
- 3 Quantified performance data
- 4 Quantified performance data relative to benchmarks (e.g., targets, industry, previous periods)
- 5 Quantified performance data at a disaggregate level (e.g., plant, business unit, geographic segment) Context disclosure
- 1 General narrative
- 2 Specific endeavor communicated in nonquantitative terms
- 3 Quantified data

take around 2 h to complete it, and respondents are unlikely to allocate such a long-time period. The stakeholder panel comprised a group of stakeholder representatives convened by a sample firm to give responses on the relative importance of GRI reporting items. Specifically, the panel comprised 12 stakeholder members: (1) a large individual shareholder; (2) a manager from an institutional shareholder; (3) a loan manager from a partner bank; (4) a chief officer from a government authority; (5) an academic; (6) an auditor partner; (7) a human resource manager; (8) an employee representative; (9) a customer representative; (10) a manager from a major supplier; (11) a representative of the local community; and (12) a local media manager. Panel members were selected from a wide range of stakeholder groups because the investigated disclosure items cover diverse GRI categories (i.e., EC, EN, LA, HR, SO, and PR). The size of the panel depends on the research objectives, and a larger panel has the advantage of offering diverse perspectives (UN Global Compact 2010). This study selected the panel members based on their involvement in corporate social and environmental activities, knowledge of the possible content of corporate annual reports and CSR reports, and personal experience. To ensure the effectiveness of the stakeholder panel, each member was given a questionnaire that asked them to review the list of 121 GRI items. For each item, panel members were asked their opinions on whether or not that item should be disclosed, and if so its degree of importance assessed using the rating scales adapted from Schneider and Samkin (2008) (see Table 2). The relative importance of each item was determined as the mean (or average) score derived from the opinions of the 12 panel members.

In conclusion, the stakeholder-driven, three-dimensional SEDI constructed in this study was a product of the three disclosure dimensions: disclosure quantity score * disclosure type quality score * disclosure item quality score. Our disclosure index thus combined the objective and subjective aspects of disclosure from the perspectives of stakeholders (please see Fig. 1).

 Table 2 Rating scales used for disclosure items in the stakeholder panel consultation

Score	Description
0	Should not be disclosed
1	Should be disclosed but is of minor importance
2	Should be disclosed and is of intermediate importance
3	Should be disclosed and is of great importance
4	It is essential to disclose this item

Source Schneider and Samkin (2008)

Findings

Results of the Questionnaire Survey

As discussed above, this study conducted a questionnaire survey to investigate stakeholder preferences regarding disclosure types. A total of 217 completed questionnaire forms were received, the largest proportion of which (45 out of 217) were on the LA version. In contrast, relatively few completed questionnaires were received that dealt with the EN and HR versions. HR disclosure is sensitive in China, which is often criticized for practices such as 'sweatshop' production to supply foreign firms (World Bank 2004).

In this study, the GRI Context disclosure was included in all the questionnaire versions and was rated by all relevant stakeholder groups. Table 3 indicates the mean values of stakeholders' perceptions of the relative importance of different disclosure types in terms of context categories, according to the returned questionnaires. The importance of various disclosure types of context categories that stakeholders evaluated was generally low, with the mean of each being around 20, based on a continuous rating scale ranging from 0 to 100. For the categories Organizational Profile and Governance, Commitments, and Engagement (each of which had more than two disclosure types), a nonparametric Kruskal-Wallis test was conducted to determine whether the importance responses differed significantly among various disclosure types (results not reported here), and found no statistically significant difference. Furthermore, Mann-Whitney U tests were performed to determine whether a significant difference existed between each two disclosure types for all Context categories except Strategy and Analysis (which had only one disclosure type), and again no statistically significant difference was found (results not reported here). Stakeholders did not rate different disclosure types (i.e., general narrative, specific endeavor communicated in nonquantitative terms, and quantified data) differently, indicating the absence of a quality hierarchy in terms of disclosure type for GRI context-related disclosures.

Each questionnaire version dealt with a single performance category and was sent to the stakeholder group directly concerned with disclosure in relation to that performance category. Table 4 lists the mean values of stakeholders' responses regarding the relative importance of disclosure types for each performance category. The table shows that for each performance category, different disclosure types had different mean values of importance assigned by stakeholders, and the mean importance values increased from general narrative to specific endeavor communicated in nonquantitative terms and finally

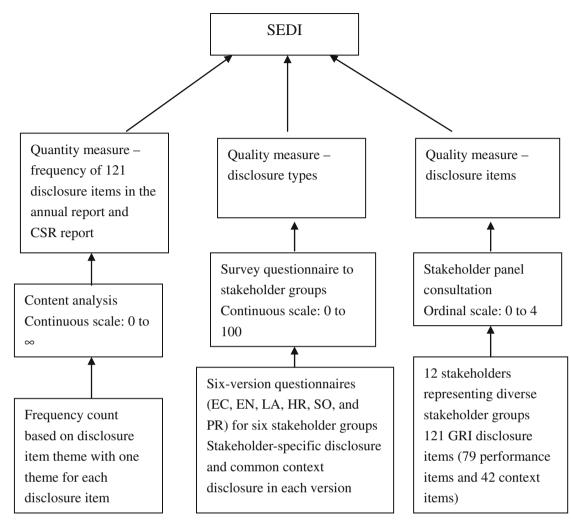


Fig. 1 SEDI construction

Category	Disclosure type	Mean
Strategy and analysis	Specific endeavor communicated in nonquantitative terms	20.00
Organizational profile	General narrative	19.68
	Specific endeavor communicated in nonquantitative terms	20.32
	Quantified data	20.60
Report parameters	General narrative	19.35
	Specific endeavor communicated in nonquantitative terms	20.28
Governance, commitments and engagement	General narrative	19.45
	Specific endeavor communicated in nonquantitative terms	20.28
	Quantified data	20.74

Disclosure types were rated on a continuous scale (0 unimportant to 100 important)

quantified performance data at the disaggregate level. A Kruskal–Wallis test was performed to determine whether the 'importance' responses differed significantly among various disclosure types for each performance category (results not reported here). The results indicated a statistically significant difference in the 'importance' responses in terms of disclosure types for each performance category. Since the Kruskal–Wallis test indicates only whether

 Table 4
 Stakeholders' perceived importance of different disclosure types—performance categories

Category	Disclosure type	Mean
EC	1	20.00
	2	39.47
	3	60.53
	4	80.26
	5	90.00
EN	1	20.00
	2	39.68
	3	60.65
	4	80.00
	5	90.00
LA	1	20.00
	2	39.56
	3	60.67
	4	80.00
	5	90.00
HR	1	20.31
	2	40.00
	3	60.31
	4	80.63
	5	87.81
SO	1	19.72
	2	40.00
	3	59.72
	4	79.44
	5	89.17
PR	1	20.00
	2	40.00
	3	60.57
	4	79.43
	5	90.29

I general narrative, 2 specific endeavor communicated in nonquantitative terms, *3* quantified performance data, *4* quantified performance data relative to benchmarks, *5* quantified performance data at a disaggregate level. Disclosure types were rated on a continuous scale (0 unimportant to 100 important)

disclosure types differ overall, and not whether specific types differ from others, further analysis in the form of Mann–Whitney U tests was conducted to determine whether a given two disclosure types differed significantly in each performance category (results not reported here). A significant statistical difference thus was found between each two disclosure types for each category. Stakeholders thus assigned significantly different importance to the different disclosure types, and displayed a clear preference for the quantified and objectified performance disclosures. This suggested the existence of a quality hierarchy in terms of disclosure type for performance categories. This study provides evidence regarding the quality hierarchy of disclosure types from the perspectives of stakeholders in a developing country setting, and thus advances the previous literature on developed country settings (Robertson and Nicholson 1996; Toms 2002).

As discussed in the method section, this study used the mean values of stakeholders' responses on each disclosure type for each GRI category as the disclosure type quality rating in calculating sample firm SEDI.

Results of Stakeholder Panel Consultation

A stakeholder panel consultation was conducted to collect the data on stakeholders' perceptions of the relative importance of 121 GRI reporting items. The mean values of panel members' responses on the importance of each GRI item are presented in Table 7 (Appendix). The level of importance accorded to most GRI items lays between "intermediately important" (score = 2) and "essential to disclose" (score = 4). The lowest mean score (1.92) was awarded to the Report Parameter item "state any specific limitations on the scope or boundary of the report," indicating that stakeholders viewed it as the least relevant to them. Meanwhile, the highest mean score (4) was awarded to both the Organizational Profile item "name of the organization" and the Report Parameter item "reporting period for information provided," indicating that stakeholders considered disclosure of these two items essential. Some items had the importance score 3.92 closing to "essential to disclose," which were EC1 (direct economic value generated and distributed), EC8 (development and impact of infrastructure investments and services provided primarily for public benefit), EN30 (total environmental protection expenditures and investments by type), LA7 (rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region), and SO1 (nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities). The disclosures in these items indicate a firm's financial performance, its contributions to the society and environmental protection, and negative information on its occupational diseases and death, which were also viewed as great important by stakeholders.

This study used the mean scores of panel members' responses regarding the importance of each GRI item as the disclosure item quality to calculate sample firm SEDI.

Comparison of Social and Environmental Disclosure (SEDI) Between Two Reporting Media

Based on the reporting frequency of each disclosure type, the quality rating scores of each disclosure type identified by the questionnaire survey, and the relative importance of

Table 5 Descriptive statisticsof SEDI for two reporting media	Reporting media	0	os. Me	an	SD	Min.		Max.	Median
	SEDI (Annual rep	ort) 10	0 6	495.71	1477	.62 4570	.83	14,359.99	6062.50
	SEDI (CSR report) 10	0 6	288.15	4741	.58 0		20,815	5716.67
	SEDI (Total)	10	0 12	783.86	5253	.86 5172	2.50	33,299.16	12,034.17
Table 6 Comparison of social and environmental disclosure		Mean	SD	Me	dian	t test		Wilcoxo	
between annual reports and CSR reports $(n = 81)$						t-stat.	Sig.	z-stat.	Sig.
CSK reports $(n - \delta I)$	Annual report CSR report	6380.81 7763.15	1544.17 4028.40		25.83 70	-3.4279	0.001	-2.507	0.0122

the GRI items as determined by the stakeholder panel, an SEDI for each sample firm was calculated to evaluate social and environmental disclosure in the firm's annual report and CSR report. When calculating the SEDI of a firm, the quality score of each disclosure type for a given GRI item was multiplied by the disclosure frequency for that disclosure type and then added up for all disclosure types to get the total of that GRI item; this total score was multiplied by the importance score of the GRI item to achieve the final disclosure score of this item. The aggregated scores of all 121 items in this way became the SEDI for the given firm. Table 5 lists the results of descriptive statistics of SEDI for the two reporting media (i.e., annual report and CSR report). The SEDI (total) ranged from a minimum score of 5172.50 to a maximum of 33,299.16, with mean 12,783.86 and standard deviation 5253.86, indicating that firms differed widely in their stakeholderrelevant social and environmental disclosure. Comparing the two reporting media, the variation in disclosure among firms for CSR reports, with SEDI (CSR report) having mean 6288.15 and standard deviation 4741.58, exceeded that for annual reports, with SEDI (Annual report) having mean 6495.71 and standard deviation 1477.62. A minimum score of 0 for SEDI (CSR report) shows that some sample firms did not publish a CSR report for 2008 containing any information related to GRI. On the other hand, all annual reports contained some disclosure related to GRI items.

For 81 sample firms that published CSR reports, both paired samples t test and Wilcoxon matched-pairs signed-ranks test were used to examine whether social and environmental disclosure varied between the annual and CSR reports. The results are shown in Table 6. As the table indicates, social and environmental disclosure varied significantly between the annual and CSR reports, with former containing less stakeholder-relevant social and environmental disclosure than the latter. This finding is consistent with previous studies (Frost et al. 2005; Adnan et al. 2010), and may be due to the explicit purpose of the CSR report being the provision of social and environmental disclosure,

and due to the two reports being directed at different user groups (Rowbottom and Lymer 2009).

In sum, socially responsible Chinese listed firms vary considerably in terms of social and environmental disclosure, confirming that what is considered sincere disclosure (i.e., the subjective assessment of disclosure) varies among stakeholder groups. While social and environmental disclosure remains voluntary in China, it is encouraged by the Chinese government, and most firms on the social responsibility ranking list published CSR reports for 2008. Compared with the annual report, the CSR report is a more valuable source of stakeholder-relevant information on firms' social and environmental activities.

Further Discussion

Stakeholders' perceptions reflect social norms and ethical values. For example, stakeholders' responses on the importance of LA items assigned more importance to LA1 "total workforce" and LA7 "work-related injuries, diseases and fatalities"; meanwhile, LA 14 "ratio of basic salary of men to women by employee category" was assigned less importance. Such variations imply that stakeholders paid more attention to corporate workforce (an indicator of corporate size) and occupational health and safety. From the stakeholder perspective, corporate size is related to public scrutiny (Cormier and Gordon 2001; Liu and Anbumozhi 2009), and commitment to occupational health and safety reflects corporate fulfillment of social norms and stakeholders' expectations. Large firms use more societal and environmental resources, and therefore should be more obligated to give back to their host society. Hence, stakeholders likely viewed these items as more important and so preferred more associated disclosure. In contrast, stakeholders had less interest in the item on gender differences in remuneration by employee category, despite this being an item that may raise ethical issues in some cultural contexts. One possible reason for this response is that, unlike in some other Asian countries, gender differences in remuneration are not considered a serious issue in China.

The sample firms are socially responsible firms recognized by the ratings agency according to their actual social and environmental performance. Crane and Matten (2004) commented on the difficulty and impossibility at times of determining corporate motives. Firms may not undertake CSR for purely ethical purposes, but recognize the importance of behaving responsibly to achieve what may be seen as their ultimate goal, making profit, which is consistent with the neoclassical economic model. Thus, even from a pure self-interest perspective, it is better for a firm to engage in CSR (Asmah 2009).

Concluding Remarks

This study provides evidence of how stakeholders perceive the social and environmental disclosure practices of socially responsible Chinese listed firms. The results suggest that stakeholders perceive a quality hierarchy of different disclosure types in terms of GRI performance disclosure. Stakeholders also assign different importance to different disclosure items. The results also show that most socially responsible Chinese listed firms (as identified by the social responsibility ranking list) published CSR reports for 2008, but their social and environmental disclosure varied widely. From the perspective of stakeholders, CSR reports provide more stakeholder-relevant social and environmental disclosure than annual reports.

This study extended the current research on social and environmental disclosure to the context of a developing country, China. The findings on socially responsible Chinese listed firms can contribute to the development and improvement of social and environmental policies in China. The Chinese government has issued regulations and guidelines in promoting firms' CSR behaviors and social and environmental disclosure practices. However, ambiguity and uncertainty within governmental regulations and guidelines led to noncomparable and jagged disclosure practices among firms. Therefore, the Chinese government needs to make continuous efforts by providing more detailed guidance regarding the content and extent of social and environmental disclosure to assist firms to communicate their CSR activities effectively to regulatory bodies and other stakeholders. Findings of this study provide insights in revising and streamlining future governmental regulations and guidelines to make firms disclose CSR relevant to stakeholders for decision-making. An additional policymaking aspect is to improve the quality and credibility of social and environmental disclosure, external assurance should be provided as part of the accountability process (Adams 2004). In the current Chinese context, verification of CSR reports through independent third parties is still in its infancy. In the future, audit firms can be encouraged to provide reasonable assurance for firms' social and environmental disclosure in annual reports and CSR reports with a stakeholder-relevant focus.

This study also makes a methodological contribution to the literature in terms of instrument development by constructing a stakeholder-driven, three-dimensional SEDI. However, the interpretation of the study findings must consider the following limitations. First, owing to the manual collection of disclosure data and a labor-intensive latent content analysis process, the study sample was relatively small, which may limit the generalizability of the findings to firms outside the social responsibility ranking list. Second, a questionnaire survey and a panel consultation were adopted as the primary method of inquiry to understand the perceptions of relevant stakeholders regarding corporate social and environmental disclosure, and participants were approached by the firms studied. This approach was adopted as managers are well aware of their stakeholder profiles of the firm. However, managers may have brought bias in selecting stakeholders representing their firm. Also, the cognitive outlook of stakeholders may also have introduced bias. Hence, as with most research that relies on surveys as an information source, the results must be interpreted in a manner that acknowledges potential bias and inaccuracy. Third, we cannot conclude whether the motivations behind social and environmental disclosure are ethical, and thus, future research could examine this question.

The SEDI is a theoretically grounded index, constructed to measure the quality of stakeholder-relevant disclosure, and hence can be used for theory testing and theoretical interpretations (Abeysekera 2014). The SEDI considers disclosures that are relevant to stakeholders only. High score indicates higher stakeholder-relevant disclosure. The SEDI constructed in this study can be used in several ways to advance knowledge. First, SEDI is measurable index and can be used to measure the effectiveness of social and environmental disclosures of firms from the stakeholders' perspective. It can be used as a measure to compare social and environmental disclosures of organizations. Second, SEDI can be used as an outcome to examine how organizational factors influence stakeholder-relevant disclosure. For example, firm characteristics, ownership, and board composition are known to influence voluntary disclosure; studies can examine the extent that those factors influence stakeholder-relevant social and environmental disclosure using statistical models such as regression.

The findings provide a springboard for further research, which could examine whether the GRI framework is a sufficient instrument for firms to involve stakeholders with

different levels of power and resources in a moral discourse about corporate social and environmental disclosure. Stakeholder theory, which we adopted in this study, considers that firms treat stakeholders equally. However, in practice, some stakeholder groups are more influential than others. Rather than researchers assigning weights to various stakeholder groups to recognize their influence on firms and vice versa, a study can ascertain the influence of various stakeholder groups on a firm and vice versa in different societal and cultural contexts. The social permission theory argues that firms exist and act with the permission of society and that society has ultimate responsibility to determine their moral obligations and responsibilities (Hussain 1999). The findings of this study can inform the debate on these issues by helping to clarify whether firms' social and environmental disclosure practices are both truthful and fair to various stakeholder groups.

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Appendix

See Table 7.

Table 7 Importance	of	disclosure	items
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No.	GRI code	Importance score
Strategy an	ed analysis	
1	1.1	2.83
2	1.2	2.42
Organizatio	onal profile	
3	2.1	4.00
4	2.2	3.33
5	2.3	2.92
6	2.4	2.17
7	2.5	2.42
8	2.6	2.67
9	2.7	3.00
10	2.8	3.00
11	2.9	2.42
12	2.10	2.67
Report part	ameters	
13	3.1	4.00
14	3.2	2.08
15	3.3	2.33
16	3.4	3.17
17	3.5	2.42

62

EN11

Table 7 co	ontinued	
No.	GRI code	Importance score
18	3.6	2.17
19	3.7	1.92
20	3.8	2.42
21	3.9	2.25
22	3.10	2.00
23	3.11	2.17
24	3.12	2.58
25	3.13	2.42
Governance	e, commitments, and eng	agement
26	4.1	3.25
27	4.2	2.92
28	4.3	2.92
29	4.4	3.00
30	4.5	2.42
31	4.6	2.42
32	4.7	2.42
33	4.8	2.67
34	4.9	2.42
35	4.10	2.42
36	4.11	2.42
37	4.12	2.17
38	4.13	2.08
39	4.14	3.67
40	4.15	3.00
41	4.16	3.67
42	4.17	3.00
	performance indicators	5.00
43	EC1	3.92
44	EC2	3.25
45	EC2 EC3	3.00
46	EC4	3.00
40		
	EC5	2.92
48	EC6	3.00
49	EC7	3.00
50	EC8	3.92
51 Environmen	EC9 ntal performance indicate	2.83
52	EN1	3.83
52 53		
	EN2	3.00
54 55	EN3	3.83
55 56	EN4 EN5	3.00
56 57	EN5	3.83
57	EN6	2.92
58	EN7	2.25
59	EN8	3.83
60	EN9	2.92
61	EN10	3.00

3.00

Table 7 continued

No.	GRI code	Importance score
63	EN12	3.00
64	EN13	2.42
65	EN14	2.25
66	EN15	2.08
67	EN16	3.67
68	EN17	3.00
69	EN18	2.92
70	EN19	3.00
71	EN20	3.00
72	EN21	3.00
73	EN22	3.00
74	EN23	3.00
75	EN24	2.25
76	EN25	2.25
77	EN26	3.00
78	EN27	3.00
79	EN28	3.00
80	EN29	2.25
81	EN30	3.92
Social perfe	ormance indicators	
Labor prac	tices and decent work pe	erformance indicators
82	LA1	3.67
83	LA2	3.00
84	LA3	3.00
85	LA4	3.00
86	LA5	2.25
87	LA6	2.83
88	LA7	3.92
89	LA8	3.00
90	LA9	2.83
91	LA10	3.00
92	LA11	3.00
93	LA12	3.00
94	LA13	3.00
95	LA14	2.42
Human rigi	hts performance indicato	rs
96	HR1	2.42
97	HR2	2.42
98	HR3	2.83
99	HR4	3.00
100	HR5	3.08
101	HR6	3.17
102	HR7	3.25
103	HR8	2.42
104	HR9	2.42
Society per	formance indicators	
105	SO1	3.92
106	SO2	3.00

Table 7	continued

No.	GRI code	Importance score
107	SO3	3.00
108	SO4	3.00
109	SO5	3.00
110	SO6	3.67
111	SO7	2.83
112	SO8	3.00
Product re	sponsibility performance	indicators
113	PR1	3.25
114	PR2	3.00
115	PR3	3.00
116	PR4	2.42
117	PR5	3.33
118	PR6	3.58
119	PR7	2.92
120	PR8	2.42
121	PR9	3.00

References

- Abeysekera, I. (2007). Intellectual capital accounting: Practices in a developing country. New York: Routledge.
- Abeysekera, I. (2014). Do empirical variables represent expressed theoretical constructs? Secondary analysis of two environmental practice articles as case presentations. *Journal of Cleaner Production, 15*, 7–17.
- Adams, C. A. (2004). The ethical, social and environmental reporting - performance portrayal gap. Accounting, Auditing & Accountability Journal, 17(5), 731–757.
- Adnan, S. M., Van Staden, C., & Hay, D. (2010). Do culture and governance structure influence CSR reporting quality: Evidence from China, India, Malaysia and the United Kingdom. Proceedings of the 6th Asia Pacific Interdisciplinary Research in Accounting Conference, Sydney.
- Al-Tuwaijri, S. A., Christensen, T. E., & Hughes, K. E. (2004). The relations among environmental disclosure, environmental performance and economic performance: A simultaneous equations approach. Accounting, Organizations and Society, 29(5–6), 447–471.
- Asmah, G. (2009). Corporate social responsibility: Does motivation matter? Does it matter whether a corporation's participation in CSR is an exercise in window-dressing or genuine CSR in action? Available at SSRN: http://ssrn.com/abstract=1553181.
- Beattie, V., McInnes, B., & Fearnley, S. (2004). A methodology for analysing and evaluating narratives in annual reports: A comprehensive descriptive profile and metrics for disclosure quality attributes. *Accounting Forum*, 28(3), 205–236.
- Beattie, V., & Thomson, S. J. (2007). Lifting the lid on the use of content analysis to investigate intellectual capital disclosures. *Accounting Forum*, 31(2), 129–163.
- Brace, I. (2004). *Questionnaire design: How to plan.* London: Structure and Write Survey Material for Effective Market Research, Kogan Page.
- Campbell, D. (2004). A longitudinal and cross-sectional analysis of environmental disclosure in UK companies—a research note. *The British Accounting Review*, 36(1), 107–117.

- Campbell, D., & Abdul Rahman, M. R. (2010). A longitudinal examination of intellectual capital reporting in Marks & Spencer annual reports, 1978–2008. *The British Accounting Review*, 42(1), 56–70.
- Carroll, A. B. (1999). Corporate social responsibility: Evolution of a definitional construct. *Business and Society*, 38(3), 268–295.
- China Securities Journal. (2009). 290 Listed firms disclose corporate social responsibility reports. Retrieved September 1, 2009 from http://www.cs.com.cn/ssgs/02/200905/t20090511_1891772.htm.
- Cho, C. H., & Patten, D. M. (2007). The role of environmental disclosures as tools of legitimacy: A research note. Accounting, Organizations and Society, 32(7–8), 639–647.
- Choi, J. S. (1999). An investigation of the initial voluntary environmental disclosures made in Korean semi-annual financial reports. *Pacific Accounting Review*, 11(1), 73–102.
- Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008). Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. Accounting, Organizations and Society, 33(4/5), 303–327.
- Clarkson, P. M., Overell, M. B., & Chapple, L. (2011). Environmental reporting and its relation to corporate environmental performance. ABACUS, 47(1), 27–60.
- Cooke, T. E. (1989). Disclosure in the corporate annual reports of Swedish companies. Accounting and Business Research, 19(Spring), 113–124.
- Cooper, S., & Owen, D. (2007). Corporate social reporting and stakeholder accountability: The missing link. Accounting, Organisations and Society, 32(7–8), 649–667.
- Cormier, D., & Gordon, I. M. (2001). An examination of social and environmental reporting strategies. Accounting, Auditing & Accountability Journal, 14(5), 587–616.
- Cormier, D., & Magnan, M. (1999). Corporate environmental disclosure strategies: Determinants, costs and benefits. *Journal of Accounting, Auditing and Finance, 14*(4), 429–451.
- Cormier, D., & Magnan, M. (2003). Environmental reporting management: A continental European perspective. *Journal of Accounting and Public Policy*, 22(1), 43–62.
- Costanza, R., Cumberland, J., Daly, H., Goodland, R., & Norgaard, R. (1997). An introduction to ecological economics. Boca Raton, CA: St. Lucie Press.
- Cowen, S. S., Ferreri, L. B., & 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.
- Crane, A., & Matten, D. (2004). Business ethics: A European perspective, managing corporate citizenship and sustainability in the age of globalization. Oxford: Oxford University Press.
- Deegan, C. (2002). The legitimising effect of social and environmental disclosures—a theoretical foundation. Accounting, Auditing & Accountability Journal, 15(3), 282–311.
- Deegan, C., & Gordon, B. (1996). A study of environmental disclosure practices of Australian corporations. Accounting and Business Research, 26(3), 187–199.
- Deegan, C., & Rankin, M. (1996). Do Australian companies report environmental news objectively?—an analysis of environmental disclosures by firms prosecuted successfully by the Environmental Protection Authority. Accounting, Auditing & Accountability Journal, 9(2), 50–67.
- Deegan, C., Rankin, M., & Voght, P. (2000). Firms' disclosure reactions to major social incidents: Australian evidence. Accounting Forum, 24(1), 101–130.
- DesJardins, J. (1998). Corporate environmental responsibility. Journal of Business Ethics, 17, 825–838.
- Elkington, J. (1998). Cannibals with Forks—The Triple Bottom-line. Oxford: Capstone.

- Freeman, R. E. (1984). *Strategic management: A stakeholder* approach. Marshall, MA: Pitman.
- Frost, G., Jones, S., Loftus, J., & Van Der Laan, S. (2005). A survey of sustainability reporting practices of Australian reporting entities. *Australian Accounting Review*, 15(1), 89–96.
- Gao, S. S., Heravi, S., & Xiao, J. Z. (2005). Determinants of corporate social and environmental reporting in Hong Kong: A research note. Accounting Forum, 29(2), 233–242.
- Global Reporting Initiative (GRI) (2002[2006]). Sustainability reporting Guidelines. Retrieved September 11, 2009, from http://www.globalreporting.org.
- Gray, R. H., Kouhy, R., & Laver, S. (1995). Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure. Accounting, Auditing & Accountability Journal, 8(2), 47–77.
- Gray, R. H., Owen, D. L., & Maunders, K. T. (1987). Corporate social reporting: Accounting and accountability. Hemel Hempstead: Prentice-Hall.
- Guthrie, J. E., & Parker, L. D. (1989). Corporate social reporting: A rebuttal of legitimacy theory. Accounting and Business Research, 9(76), 343–352.
- Guthrie, J. E., & Parker, L. D. (1990). Corporate social disclosure practice: A comparative international analysis. Advances in Public Interest Accounting, 3(2), 159–176.
- Habermas, J. (1990). Moral consciousness and communicative action. Cambridge: MIT Press.
- Hackston, D., & Milne, M. J. (1996). Some determinants of social and environmental disclosures in New Zealand companies. Accounting, Auditing & Accountability Journal, 9(1), 77–108.
- Harte, G., & Owen, D. L. (1991). Environmental disclosure in the annual reports of British companies: A research note. Accounting, Auditing & Accountability Journal, 4(3), 51–61.
- Hasseldine, J., Salama, A. I., & Toms, J. S. (2005). Quantity versus quality: The impact of environmental disclosures on the reputations of UK plcs. *British Accounting Review*, 37(2), 231–248.
- Hopkins, M. (2004). Corporate social responsibility: An issue paper. Working paper No. 27, International Labour Organization, Geneva.
- Hussain, S. S. (1999). The ethics of 'going green': The corporate social responsibility debate. *Business Strategy and the Environment*, 8, 203–210.
- Korhonen, J. (2002). The dominant economics paradigm and corporate social responsibility. *Corporate Social Responsibility* and Environmental Management, 9(1), 67–80.
- Korhonen, J. (2003). On the ethics of corporate social responsibility—considering the paradigm of industrial metabolism. *Journal* of Business Ethics, 48, 301–315.
- Liu, X., & Anbumozhi, V. (2009). Determinant factors of corporate environmental information disclosure: An empirical study of Chinese listed companies. *Journal of Cleaner Production*, 17(6), 593–600.
- Logsdon, J. M., & Yuthas, K. (1997). Corporate social performance, stakeholder orientation, and organisational moral development. *Journal of Business Ethics*, 16, 1213–1226.
- Milne, M. J., & Adler, R. W. (1999). Exploring the reliability of social and environmental disclosures content analysis. Accounting, Auditing & Accountability Journal, 12(2), 237–256.
- Milne, M. J., & Patten, D. M. (2002). Securing organizational legitimacy: An experimental decision case examining the impact of environmental disclosures. *Accounting, Auditing & Accountability Journal, 15*(3), 372–405.
- Murthy, V., & Abeysekera, I. (2008). Corporate social reporting practices of top Indian software firms. *Australian Accounting Business & Finance Journal*, 2(1), 36–59.

- O'Donovan, G. (2002). Environmental disclosures in the annual report: Extending the applicability and predictive power of legitimacy theory. *Accounting, Auditing & Accountability Journal, 15*(3), 344–371.
- Pun, N. (2003). The moral economy of capital: Transnational corporate codes of conduct and labour rights in China. Presented at the Chinese University Conference: Chinese trade unions and the labour movement in the market economy. October, 2003.
- Reynolds, M. A., & Yuthas, K. (2008). Moral disclosure and corporate social responsibility reporting. *Journal of Business Ethics*, 78, 47–64.
- Robertson, D., & Nicholson, N. (1996). Expressions of corporate responsibility in UK firms. *Journal of Business Ethics*, 15(10), 1095–1106.
- Rowbottom, N., & Lymer, A. (2009). Exploring the use of online corporate sustainability information. *Accounting Forum*, 33(2), 176–186.
- Schneider, A., & Samkin, G. (2008). Intellectual capital reporting by the New Zealand local government sector. *Journal of Intellectual Capital*, 9(3), 456–486.
- Sherman, W. R. (2009). The global reporting initiative: What value is added? International Business & Economics Research Journal, 8(5), 9–22.
- Smith, N. C. (2003). Corporate social responsibility: Whether or How? California Management Review, 45(4), 52–76.
- Southern Weekend. (2008). Rating criteria of the Chinese stock-listed firms' social responsibility ranking list. Retrieved March 26, 2000, from http://www.infzm.com/content/17501, (in Chinese).
- Steenkamp, N., & Northcott, D. (2007). Content analysis in accounting research: The practical challenges. *Australian Accounting Review*, 17(3), 12–25.
- SustainAbility/UNEP. (1997). Engaging stakeholders: The 1997 Benchmark Survey—The 3rd international progress report on company environmental reporting. London: SustainAbility.
- Tilt, C. A. (2007). External stakeholders' perspectives on sustainability reporting. In J. Unerman, J. Bebbington, & B. O'Dwyer (Eds.), *Sustainability accounting and accountability* (pp. 104–126). New York, NY: Routledge.
- Toms, J. S. (2002). Firm resources, quality signals and the determinants of corporate environmental reputation: some UK evidence. *British Accounting Review*, *34*(3), 257–282.
- Tsang, E. W. K. (1998). A longitudinal study of corporate social reporting in Singapore: The case of the banking, food and beverages and hotel industries. Accounting, Auditing & Accountability Journal, 11(3), 624–635.
- Ullmann, A. E. (1985). Data in search of a theory: A critical examination of the relationships among social performance,

social disclosure and economic performance of US firms. Academy of Management Review, 10(3), 540–557.

- Unerman, J. (2000). Methodological issues: Reflections on quantification in corporate social reporting content analysis. Accounting, Auditing & Accountability Journal, 13(5), 667–680.
- Unerman, J. (2007). Stakeholder engagement and dialogue. In J. Unerman, J. Bebbington, & B. O'Dwyer (Eds.), *Sustainability accounting and accountability* (pp. 86–103). New York, NY: Routledge.
- Unerman, J., Guthrie, J., & Striukova, L. (2007). UK reporting of intellectual capital. London: Institutes of Chartered Accountants in England and Wales.
- UN Global Compact. (2010). Setting up a multi-stakeholder panel as a tool for effective stakeholder dialogue. Retrieved December 12, 2011 from http://www.unglobalcompact.org/docs/issues_ doc/human_rights/Resources/Stakeholder_Panels_Good_Practice_ Note.pdf.
- Van den Bergh, J. J. M., & Verbruggen, H. (1999). Spatial sustainability, trade and indicators: An evaluation of the "Ecological Footprint". *Ecological Economics*, 29, 61–72.
- Van der Laan Smith, J., Adhikari, A., & Tondkar, R. H. (2005). Exploring differences in social disclosures internationally: A stakeholder perspective. *Journal of Accounting and Public Policy*, 24(2), 123–151.
- Van Staden, C. J., & Hooks, J. (2007). A comprehensive comparison of corporate environmental reporting and responsiveness. *The British Accounting Review*, 39(3), 197–210.
- Wackernagel, M., & Rees, W. (1996). Our Ecological Footprint. Gabriola Island, BC: New Society Publishers.
- Walden, W. D., & Schwartz, B. N. (1997). Environmental disclosures and public policy pressure. *Journal of Accounting and Public Policy*, 16(2), 125–154.
- Wang, L., & Juslin, H. (2009). The impact of Chinese culture on corporate social responsibility: The harmony approach. *Journal* of Business Ethics, 88(3), 433–451.
- Williams, R. (1994). Roles for Biomass energy in sustainable development. In R. Socolow, C. Andrews, F. Berkhout, & V. Thomas (Eds.), *Industrial ecology and global change* (pp. 199–228). Cambridge, UK: Cambridge University Press.
- Wiseman, J. (1982). An evaluation of environmental disclosures made in corporate annual reports. Accounting, Organizations and Society, 7(1), 53–63.
- World Bank. (2004). Opportunities and obstacles for corporate social responsibility in developing countries. Washington, DC: World Bank.
- Zhou, W. D. (2006). Will CSR work in China? Leading perspectives, CSR in the People's Republic of China (Summer 2006), 5–7.