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Information Overload in CSR Reports in China: An Exploratory Study

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Keywords

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Cover Page Footnote

Special thanks to Yi Jiao and Haoran Li, who assisted with data collection, Associate Professor Lee Moerman, Professor Rob Gray, Dr Joanne Dearlove, and the participants of the 17th International Conference on Sustainable Energy Technologies and 2018 Wuhan Forum of World-Renowned Scientists Lecturing in Hubei for their comments on the earlier drafts of the paper.



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Danhong Wu¹ and Sanja Pupovac²

Abstract

This paper is an exploratory analysis of information overload in a sample of 15 Chinese companies from mining, manufacturing, finance, electricity and information technology industries. Using an adaptation of Dahlsrud's (2008) five dimensional framework of Corporate Social Responsibility (CSR), we develop a longitudinal core information ratio analysis. Our findings suggest that while the length of the reports increased over the ten year period, the CSR information ratio, a measure of the proportion of the report comprising CSR disclosures, did not similarly increase. We argue that the driving force behind lengthy CSR reports is coercive pressure from the government and stock exchanges, and companies' attempts to manage their stakeholders' impressions. The results of this study have important implications for the Chinese government and Chinese stock exchanges as they consider ways to address and improve core CSR disclosures to be of greater value to users, rather than simply lengthier.³

JEL classification: M40, G38, H83.

Keywords information overload, CSR reports, China, coercive pressure, impression management

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1. Introduction

This paper uses institutional theory and understandings of impression management to examine information overload in corporate social responsibility (CSR) disclosures in a sample of companies in China. Increasing awareness of environmental and social concerns by investors, consumers and the general public has spawned corporate social responsibility (CSR) disclosures (Gallo and Christensen, 2011). More recently the conversation around climate change and global warming have provided further cause for environmental and social sustainability and CSR disclosures (Yu and Rowe, 2017) to shareholders. CSR disclosures are also receiving increasing attention from governments, regulators, and public institutions (Zheng et al., 2014). Even though governments, regulators and international groups have not agreed upon a common definition for CSR (Freeman and Hasnaoui, 2011), corporations have adopted CSR reporting as a standard practice (KPMG, 2011), voluntarily communicating to interested stakeholders their accountability in social and environmental terms (Gray et al., 1995). For corporations CSR reporting is one way to demonstrate their accountability extends beyond financial performance (Gray et al., 1987; 1993; 2001). However, many studies are critical of CSR reporting as a means of demonstrating corporate accountability. For example, Roberts (2003) argues that CSR reporting is a ‘narcissistic concern’ by corporations to appear responsible; an act of corporate egoism (Messner, 2009), a legitimation device (Patten, 1992; Cho and Patten, 2007;), a greenwashing strategy to revamp a business image (Seele and Gatti, 2015; Mahoney et al., 2013; Wilson, 2013), a “carefully tailored public relations documents” (Lock and Seele, 2016, p.187), is little more than self-laudatory public relations (Seele and Knebel, 2015), and is an opportunity for corporations to engage in impression management (Merkl-Davies and Brennan, 2007).

Despite these considerable criticisms of CSR reporting, the number of companies producing corporate responsibility and sustainability reporting is increasing. A recent KPMG International survey of 4,500 corporations from 49 developed and developing countries and regions found that 75% of N100⁴ and 93% of G250⁵ companies report on corporate responsibility (KPMG, 2017). According to KPMG (2017), this increasing global trend has largely been influenced by regulation and by stock exchange and investor pressure. This trend is evident in emerging economies such as China, a leader in the Asia Pacific region, with 75 per cent of companies registered in China publishing CSR reports (KPMG, 2015; Yu and Rowe, 2017). However, much of CSR reporting in China is a result of global attention surrounding environmental issues and ethical business dealings by companies (Noronha et al., 2015), and the result of increasing pressure from the government, the Shenzhen Stock Exchange and the Shanghai Stock Exchange.

This paper focuses on China as an emerging economy where CSR disclosures are widely criticised for their lack of quality, serving merely as a means of image management (Marquis and Qian, 2014). The paper provides an empirical analysis of information overload in stand-alone CSR reports of 15 large Chinese companies from different industries for the period 2006-2015. Patterns of change in the CSR information ratio (that is, the proportion of the reports devoted to CSR reporting) of these companies’ reports are related to instances of coercive pressure on Chinese institutions (as an external influencing factor) and impression-management (as an internal influencing factor) by Chinese institutions. The influence of the

4 The N100 refers to a worldwide sample of 4,900 companies comprising the top 100 companies by revenue in each of the 49 countries researched in this study. These N100 statistics provide a broad-based snapshot of CR reporting among both large and mid-cap firms around the world (KPMG, 2017, p. 3).

5 The G250 refers to the world’s 250 largest companies by revenue based on the Fortune 500 ranking of 2016. Large global companies are typically leaders in CR reporting and their behavior often predicts trends that are subsequently adopted more widely (KPMG, 2017, p. 3).

Chinese government on institutional reporting allows the development of hypotheses about the effects of external and internal pressure on these companies' CSR disclosures. These hypotheses are developed through the application of institutional theory. In particular, we investigate whether the decision by selected corporations to publish CSR reports results in information overload as determined by the CSR information ratio in concert with regulatory pressure from the Chinese government. This paper argues that the combined influence of coercive pressure on institutions with the need for impression management results in Chinese companies producing CSR reports in order to mitigate pressures from key stakeholders, including the government, and to manage their own public impression, image and reputation.

This paper builds on the previous literature on CSR reporting in China (e.g. Chen and Zhang, 2009; Meng et al., 2013; Noronha et al., 2013; Guan and Noronha, 2013; Dong et al., 2014; Situ et al., 2015; Noronha et al., 2015; Wang et al., 2016; Yu and Rowe, 2017) by providing an empirical example of information overload in CSR reports. To the best of our knowledge, there has been limited discussion about information overload in CSR reports in accounting literature. The rest of the paper is organised as follows. First, we introduce the concept of information overload from an accounting disclosure perspective. The next section provides background on CSR reporting in mainland China, followed by theoretical and methodological developments in understanding and measuring CSR ratio. We combine institutional coercive pressure (as an external) factor and impression-management (as an internal) factors to interpret and understand potential causes of information overload. The last section presents the analysis, discussion and conclusions of the paper.

2. Information overload

Information overload is a concept grounded in cognitive psychology, and was first coined by Bertram Gross in his book *"The Managing of Organizations"*. Gross (1964) associated information overload with the limited cognitive processing capacity of decision makers. In particular, 'overload' of information results in processing limitations for decision makers (Butcher, 1995; Bawden et al., 1999; Speier, 1999; Strother et al., 2012) and a poorer decision quality for the user (Gross, 1964). Researchers have defined information overload variably across many different fields of academic research, including business management, accounting and medicine. For example, Eppler and Mengis (2004) categorised definitions of information overload into classic and subjective types. Iselin (1988) categorised the definitions of information load according to the quantity of repeated dimensions and the quantity of different dimensions and then measured information load in terms of the number of values (i.e. numbers) provided to a decision maker. Thus, information overload has been investigated from multiple perspectives across multiple fields.

Many problems resulting from information overload have also been identified, including analysis paralysis (Stanley and Clipsham, 1997), cognitive overload (Vollmann, 1991), knowledge overload (Hunt and Newman, 1997) and information fatigue syndrome (Wurman, 2001). Paredes (2003, p. 416) uses the metaphor "blinded by the light" to illustrate the issue of "information overload". However, despite variations in the perspectives of information overload across different fields, a common and key issue is how the performance of an individual varies with the amount of information he or she receives. Schroder et al., (1967) developed a conceptual model describing the information utilisation patterns for examining the effects of accounting information load on individuals' decision making behaviour. They proposed that the individuals exhibited information overload when the available information exceeds their processing capabilities. Most researchers have generally agreed that the performance of an individual correlates positively with the amount of information he or she is exposed to up to a certain point, further increase in information provided beyond this point

results in the decline of the performance of the individual (Chewning and Harrell, 1990). In other words, information overload refers to processing limitations resulting from an ‘overload’ of information such that decision makers cannot assimilate information, and it negatively interferes with their capacity to make a decision (Butcher, 1995; Bawden et al., 1999; Speier, 1999; Strother et al., 2012).

From an accounting disclosure perspective, information overload has become one of the biggest concerns of investors and other stakeholders (Earnest and Young, 2012).

[w]hen disclosure gets to be “too much” or strays from its core purpose, it could lead to what some have called “information overload”– a phenomenon in which ever-increasing amounts of disclosure make it difficult for an investor to wade through the volume of information to ferret out the information that is most relevant (Jo, 2013, n.p.).

Drawing upon work in organisation theory, Schick et al., (1990, p.206) propose a definition of information overload in accounting as “when the information processing demands on an individual’s time to perform interactions and internal calculations exceed the supply or capacity of time available for such processing”. The spectre of accounting information overload and its impact on the quality of the decisions made has been raised in early studies in accounting with the focus on whether increases in accounting ‘information load’ for both external and internal reporting purposes could lead to information overload and, as a result, reduce users effectiveness in making decisions (e.g. Ashton, 1974; Fertakis, 1969; Revsine, 1970). Casey (1980, 1982), Iselin (1988, 1993), and Abdel-Khalik (1973) are the “authors with the highest impact for studies of information overload in the field of accounting” (Eppler and Mengis, 2004, p.292). For example, in examining the effect on loan officers' predictions of bankruptcy, Casey (1980) found that officers with the heaviest information load had no greater predictive accuracy than officers with a lesser information load. Abdel-Khalik (1973) showed that the perceived risk of the borrowing firm tends to be negatively influenced by the aggregation of financial reports only when the financial situation of that firm is marginal. This result supports imputing a higher utility for detailed data, but only under certain conditions.. These concerns are also continued in the later literature, with studies focusing on the impact of information overload on the overall effectiveness of financial-statement disclosures (e.g. Morunga and Bradbury, 2012; Paredes, 2003). However, accounting literature on information overload is limited and Tuttle and Burton (1999, p.685) called for “future studies to more rigorously examine the concept of information overload in accounting”. Therefore, we build on and extend the current literature by providing a contemporary example of information overload in CSR reports in an emerging economy context.

3. CSR reporting in Mainland China

In the mid-1990s, CSR reporting in China began developing at an unprecedented rate (Zheng et al., 2014) and is still developing (Weber, 2017). A study by the Chinese Academy of Social Sciences (CASS) in 2015 found the number of CSR reports in China increased from only 32 in 2006 to 1703 in 2015, with 600 out of 1027⁶ (58%) of reports published by the government

⁶ After deleting unavailable and non-profit orgnizaions, 1027 is the final number of reports. That means, although 1703 corporations, issued a CSR report, Chinese Academy of Social Sciences analysis is based on CSR reports that are both available to the public and issued by for-profit organization.

state-owned enterprises (SOEs). However, CSR reporting in China has been criticised for its lack of quality (China WTO Tribune, 2009; Liu and Anbumozhi, 2009; Yu et al., 2011; Zhao and Patten, 2016), considerable discrepancies and incomparability in reports (Zhang et al., 2007), for “presenting an overly positive picture of the reporting firms’ CSR performance” (Jin et al., 2017, p.4), and serving merely as a means of image management (Marquis and Qian, 2014). Zeng et al., (2010) expressed concerns about information overload in CSR reports by the Chinese SOEs since they readily respond to government pressure. Further, Li (2010) addressed the problem of information overload in the financial statement notes and voluntary non-financial disclosures, suggesting that more disclosure does not mean better disclosure.

In addition, a number of other researchers report that Chinese CSR reporting lack comparability, are incomplete, have low credibility and that the quality of information in the published CSR reports is at a preliminary stages (Noronha et al., 2015; Zhao and Patten, 2016). For Marquis and Qian (2014, p.141) CSR reports in China are “a symbolic act” since most reports fail to embrace international reporting standards, and few include meaningful indicators (Guan and Yu, 2011). Patten et al., (2015) further add that CSR reports in China appear to be more about legitimation than meaningful disclosure of social and environmental performance, and present “an overly positive picture of the reporting firms’ CSR performance” (Jin et al., 2017, p.4). This trend of criticism is continuing with a more recent study by Yu and Rowe (2017) who suggest that without mandatory reporting frameworks in China, the quality and credibility of CSR reports will continue to be impaired. We build on this previous literature by providing an example of information overload in a sample of CSR reports published by Chinese companies

4. Two-fold theoretical perspective

4.1 Institutional Theory and Coercive Pressure

Consistent with previous studies on China (see Zheng et al., 2014; Noronha et al., 2015; Zhao and Patten, 2016; Yu and Rowe, 2017), this paper uses institutional theory to explore external coercive pressures on CSR reporting and impression management to explore the internal pressures on selected companies and their CSR reporting practices. It investigates the relationship between these types of pressure and potential information overload in CSR reports. Institutional theory emphasizes the influence and impacts of societal norms on the strategies and activities of different institutions (DiMaggio and Powell, 1983). DiMaggio and Powell (1983) point to mimetic, coercive and normative isomorphism as three types of institutional pressures that organisations (including corporations) conform to. Companies, for example, will conform to prevalent structures that enhance their legitimacy and the way they are perceived in the ‘eyes of others’ (DiMaggio and Powell, 1983). In order to determine the drivers of information overload in CSR reports, this paper identifies coercive pressures that influence CSR reporting in China. Coercive pressure stems from formal and informal influences and “it may be felt as force, as persuasion” (DiMaggio and Powell, 1983, p.150) and from “cultural expectations in the society” (Zheng et al., 2014, p.228). Coercive pressure is often exercised by powerful entities such as the state through government regulation, but also, by other regulatory mechanisms (e.g. financial reporting requirements) and regulatory agencies (Bebbington et al., 2009; Chen and Roberts, 2010; Washington and Patterson, 2011).

The Chinese government plays a pivotal role in controlling the behavior of companies through different regulation that requires companies to publish CSR reports (Yu and Rowe, 2017; Situ and Tilt, 2018). China also has a strong tradition, and a belief in representative government and the “state is both the judge and the most powerful player in corporate China”

(Wang, 2014, p. 635). As noted by Sheng et al., (2011, p. 3), “the Chinese government still controls a significant portion of scarce resources, such as land, bank loans, subsidies and tax breaks,” and accordingly, being perceived by government officials or agencies as engaging in actions that are “desirable and proper” are important for firms’ legitimacy in the eyes of the state. In addition, Shenzhen Stock Exchange and the Shanghai Stock Exchange have a number of CSR guidelines that companies follow. The examples of coercive pressure in China are outlined in the following section.

4.2 Coercive Pressure and CSR reporting in China

From 2006-2015, both the Chinese government and the Shenzhen and the Shanghai Stock exchanges issued a number of regulatory reporting guidelines encouraging companies to engage in CSR reporting (Du et al., 2014; Noronha et al., 2015; Yu and Rowe, 2017; Situ and Tilt, 2018). The recognition of social responsibility in the *Chinese Company Law* in 2006 was one of the pivotal moments for CSR reporting in China.

Corporations in their business operation must abide by the laws, regulation, social and business morality and good faith rules, must accept supervision by government and the public, and must undertake social responsibilities (Chinese Company Law, 2006, Article 5, Chapter 1, p.2).

Following this, in 2008, the State-Owned Assets Supervision and Administration Commission of the State Council (SASAC⁷) issued the *Guidelines to Central State-owned Enterprises on Fulfilling Corporate Social Responsibilities* mandating companies to:

Establish a social responsibility reporting system. Enterprises if possible should issue social responsibility reports on a regular basis and disclose the status quo, plans and measures of how they fulfil their social responsibilities (SASAC, 2008, Opinion 18, p.3).

Further, the Economics Division of the Chinese Academy of Social Sciences (EDCAS) continued the CSR trend and in December 2009 issued the first *Guideline of Chinese Corporate Social Responsibility Reports*, at the time considered a benchmark for CSR reporting in China. In addition, the central government also promoted CSR in the 12th Five-Year Plan in the *Ecological Civilization Construction Project* (2012) in the report to the 18th National Congress of the Communist Party⁸ of China; and in the *China Dream Project*⁹. In 2015 China experienced another milestone when National Standardization Administration (NSA) issued the *GB/T 36001-2015* guidelines for companies on how to prepare CSR reports. The *GB/T 36001-2015* guidelines established the reference point for principles, standards and procedures to be followed in the absence of CSR reporting standards. This followed with a second set of guidelines known as the *Guiding Opinions on Better Fulfilling Social Responsibilities of State-owned Enterprises*, issued by SASAC in 2016, that specifically focused on central SOEs.

In addition to government initiatives, China’s two major stock exchanges also play an essential role in encouraging and mandating CSR reporting (Noronha et al., 2013). In 2006

⁷ SASAC is under direct supervision of central government. SASAC is a powerful player influencing all SOEs through its authority to appoint, transfer and dismiss the top executives.

⁸ The National Congress is the highest decision-making body of the Communist Party of China. It is held once every five years.

⁹ The China Dream Project was articulated by current Chinese leader Xi Jinping in November 2012 as a vision for the nation's future. It aims to build a harmonious society with better education, stable jobs, higher incomes, greater social security, better medical and healthcare, improved housing conditions and better environmental quality. The plan emphasises the balance of economy, society and environment.

and 2008, both the Shenzhen Stock Exchange and the Shanghai Stock Exchange jointly issued the *Social Responsibility Guidelines* for listed companies, “calling for firms to make CSR disclosures” (Carey et al., 2017, p. 247). This was followed by the Shanghai Stock Exchange in 2008 mandating corporate governance index sample companies, companies issuing foreign capital stock and financial companies to engage in CSR reporting, and the Shenzhen Stock Exchange requiring Shenzhen *100 Index Sample* companies to disclose CSR information. As noted by Zhao and Patten (2016, p25), “the top-down emphasis on SER [social and environmental reporting] through the government and other quasi-state organizations such as the Shanghai and Shenzhen Stock Exchanges may be more effective in inducing conformity across actors than would be the case in other settings”.

4.3 Impression Management and CSR Disclosures

In 1959, Erving Goffman defined impression management as the performance of self-vis-à-vis an audience. For Goffman (1959, p.3), impression management represents “the presentation of self in everyday life”, suggesting that “individuals have an objective to achieve congruence between their image and the image that is necessary for the desired impression to be perceived”. Impression management also extends to corporations as they shape impressions others have of them (Bolino et al., 2008). When it comes to corporate disclosures in both regulated (annual reports) and voluntary (CSR reports) reporting, impression management is evident in the way “management selects the information to display and presents that information in a manner intended to distort readers’ perceptions of corporate achievement” (Godfrey et al., 2003, p. 96). Brennan et al., (2009) argue that impression management predominantly occurs in CSR reports as the less regulated area of disclosure and thus increases “the opportunity for impression management” (Merkl-Davies and Brennan, 2007, p. 118).

Previous studies in accounting demonstrate that managers use CSR disclosures opportunistically to manage public impressions (e.g. Cho et al., 2010), specifically as a strategy to alter the public's perception of the corporation's legitimacy (Hooghiemstra, 2000). Some researchers argue that CSR reports have “self-serving biases” (Cho et al., 2010, p.431), and allow the “opportunistic behavior of managers who select a style of presentation and choice of content that is beneficial to them” (Merkl-Davies and Brennan 2007, p.126). Other researchers explored impression management in terms of the relationship between the level of environmental performance and the disclosures (e.g. Patten, 2002; Cho and Patten, 2007), the volume and tone of environmental disclosures (Rodrigue et al., 2015), and corporate tactics used in environmental reporting (Bansal and Kistruck, 2006). Merkl-Davies and Brennan (2007, p. 118) argue that non-regulated disclosure increases “the opportunity for impression management” and since corporations perform to an audience to whom they are accountable and are consequently inclined to display positive bias/impression formed in their performance in CSR reports, serves as a vehicle to “strategically...manipulate the perceptions and decisions of stakeholders” (Yuthas et al., 2002, p. 142). In the Chinese context, Zhao and Patten (2016, p.24) argue that CSR reporting practice “is seen primarily as a tool for projecting a positive image of companies’ social and environmental impacts, it seems unlikely that firms will ever be willing to meaningfully disclose, in a transparent way, their real CSR performance”. They further argue that managers almost uniformly see the purpose of CSR disclosure as image enhancement which potentially explains the low quality of CSR reporting in China (Zhao and Patten, 2016). While the majority of the current literature includes a discussion of the use of CSR reports for impression management purposes, we use the length of the reports to develop a CSR information ratio and so assess information overload. The following section presents the method, followed by data analysis and the research findings.

5. Research method

5.1 Sample selection

The sample used is 15 large Chinese companies listed on the Shenzhen and Shanghai Stock exchanges. Each of these companies issued standalone CSR reports for ten years, from 2006 to 2015. Given that CSR reporting in China is an emerging practice, this sample of companies represents those companies that have some experience with CSR reporting. In total, 150 reports were sourced from the Syntao website. This website is managed by a Beijing-based consultancy firm that serves as a data partner in China for Global Reporting Initiative (GRI) sustainability reports, and also that promotes sustainability in the Asian region. In addition, the websites of all companies were used as an additional information source.

Given that SOEs represent the dominant business form of publicly listed companies and are the majority of listed firms on both the Shenzhen and Shanghai Stock exchanges (as opposed to privately controlled companies) (Marquis and Qian, 2014), the companies that met the criteria are all SOEs but one (Company I¹⁰). The sample is summarised in Table I below according to each company's industry sector.

Table I. Companies Grouped by Industry Sector

Industry Sector	Company	Ownership	Industry Sector	Company	Ownership
Mining	A	Central SOEs	Finance	G	Local SOEs
	B	Local SOEs		H	Local SOEs
	C	Central SOEs		I	No
	D	Central SOEs	Electricity	J	Local SOEs
	E	Central SOEs		K	Central SOEs
	F	Central SOEs		L	Central SOEs
Manufacturing	M	Local SOEs	IT Services	O	Central SOEs
	N	Local SOEs			

In addition, eight central SOEs in the sample are in major industries and under direct monitoring of SASAC; and of the remaining seven companies, six are local SOEs and thus under indirect supervision of SASAC. Further, six companies are from the mining industry ranging from mineral processing to petroleum, oil and gas production, and three companies are from the electricity sector. These industries are generally considered to be environmentally sensitive and are subject to greater public pressures with respect to environmental concerns. Previous studies in accounting suggest that companies with more environmental impact disclose more environmental information than others (e.g. Patten, 1991). In summary, the sample comprises a range of companies typical of those on the two major Chinese stock exchanges and includes companies who are likely to be reporting on CSR activities because of the nature of their businesses.

5.2 Dahlsrud's five dimensional framework

In the current literature, there is no universally accepted definition of CSR, and there is even less agreement regarding its measurement. Over time, the concept has acquired different meanings, representing a set of obligations, responsibilities, stakeholder rights and all forms of philanthropic activities (Moon, 2010). Although there is extensive discussion of the concept of CSR (Clarkson, 1995; Swanson, 1995; Rowley and Berman, 2000; Hillman and Keim, 2001), it is a term with culturally embedded meanings (Sweeney, 2007) and is a value-

¹⁰ To protect the privacy of the selected sample, we keep the companies anonymous as Company 'A' to Company 'O'.

laden concept (Deetz, 2013) which remains ambiguous and highly contestable in both its definition and measurement (Gray, 2010; Patten and Zhao, 2015). Consequently, it is not possible to agree on a generally accepted definition of CSR, as discussed earlier in this paper. Given the difficulty of finding a universally accepted definition of CSR and in order to determine an appropriate definition i adopts Dahlsrud's (2008) five dimensional framework of CSR since it draws broadly from existing research into CSR reporting and its dimensions. Dahlsrud (2008) analysed 37 existing definitions of CSR and found the following five dimensions were consistently components of current definitions: the environmental, the social, the economic, the stakeholder and the voluntariness, summarised in Table II below.

Table II. The Five Dimensions of CSR Definition

Dimensions	The definition is coded to dimension if it refers to	Example phrases
The environmental dimension	The natural environment	'a cleaner environment' 'environmental stewardship' 'environmental concerns in business operations'
The social dimension	The relationship between business and society	'contribute to a better society' 'integrate social concerns in their business operations' 'consider the full scope of their impact on communities'
The economic dimension	Socio-economic or financial aspects, including describing CSR in terms of a business operation	'contribute to economic development' 'preserving the profitability' 'business operations'
The stakeholders dimension	Stakeholders or stakeholder groups	'interaction with their stakeholders' 'how organizations interact with their employees, suppliers, customers and communities' 'treating the stakeholders of the firm'
The voluntariness dimension	Actions not prescribed by law	based on ethical values' 'beyond legal obligations' 'voluntary'

Source: Dahlsrud (2008, p. 4)

Given that traditional annual reports have sufficient financial disclosure of economic performance as required by accounting standards, it has been excluded in our CSR information ratio. We argue that including economic performance in the CSR report does not provide additional information for decision making purposes, but rather poses a potential risk for information overload for both report preparers and users. A similar argument has been discussed in a number of earlier definitions of CSR. The 1960s, for example, marked an extensive focus on corporate responsibility beyond economic profit. One of the most prominent CSR researchers, Davis (1960, p.70), argued that CSR refers to "businessmen's decisions and actions taken for reasons at least partially beyond the firm's direct economic or technical interest". Davis revised the concept further as "the substance of social responsibility arises from concern for the ethical consequences of one's acts as they might affect the interests of others" (Davis, 1967, p.46). In addition, Mahon and McGowan (1991, p.80) argue that CSR includes "behavior and actions beyond merely profit making that serve to improve the conditions of society and individuals within that society".

In the last 20 years, the economy of China shifted to an advanced industrially emerging economy with high-tech, low carbon emissions and development the potential for sustainable economic growth. In particular, the environmental protection, social/ community involvement, labor conditions and a customer focus are the top issues on China's political and economic agendas. In accordance with the planning goals of the central government, more and more companies are pursuing green development by promoting a green and low-carbon development model and lifestyle, protecting ecological system, achieving economic, social and environmental development in a balanced manner. Those practices are also incorporated and reflected in the CSR reports of some Chinese companies. For example, an early study by Li and Xiang (2007), found the most frequently disclosed topics in CSR report to be around employees, products, charity work and the environment. More recently, in 2017 research by Golden Bee¹ on CSR reporting in China, found that companies assign more weight to disclose information about customers, employees, environment, community, investors, suppliers and the government. This is consistent with our findings presented in the following section, and environment protection, social/ community, labor condition and customer dimensions are widely evident in CSR reports by our sample of companies.

Taking into considerations the CSR practices in China, we modified Dahlsrud's five dimensions into four selected topics for identification in CSR information in the sample companies' reports (see Table III below). These four topics are: environmental protection, social/community involvement, labor conditions and consumer rights. To further build the CSR information ratio, we identified a set of subtopics including: ten environmental subtopics, nine social or community subtopics, five labor subtopics and five consumer subtopics in all 150 reports. Further, we considered that our selected reports disclosed the CSR topics when the subtopics are disclosed either in qualitative or quantitative (e.g, graph, figures, tabular) or other forms. The information overload is then measured by the proportion of the volume of four main CSR topics relative to the length of each of the reports.

Table III. CSR Topics

CSR Topics	Sub-topics
Environmental protection	(1) waste-emissions compliance. (2) protection of biodiversity and resource development. (3) rationality of development and consumption of natural resources. (4) sewage treatment. (5) energy-saving, emissions-reduction measures. (6) compliance with environmental laws and regulations. (7) development of environmentally friendly products and environmental protection. (8) low-carbon life. (9) sustainable use of resources. (10) climate change and environmental-protection training.
Social/community involvement	(1) anti-corruption, anti-money and anti-commercial bribery. (2) compliance with tax law. (3) fair and trustworthy business-operation practice. (4) support for the construction of public infrastructure. (5) charity and donations to the disadvantaged. (6) public safety and emergency management. (7) green supply chain with suppliers. (8) promotion of local employment and entrepreneurship. (9) promotion of the progress of the industry.
Labor conditions	(1) employment number. (2) health, safety and training of employees. (3) employee welfare and social security. (4) employee performance evaluation. (5) unemployment policy.
Consumer rights	(1) guarantee of the health and safety of consumers. (2) protection of consumers' rights.(3) product promotion, service and customer service. (4) R&D. (5) promotion of sustainable consumption.

5.3 Computing CSR information Ratio

In prior studies, the amount of information, the available processing time (Iselin, 1988, Schick et al., 1990) and the characteristics of the information such as overall quality, level of novelty, ambiguity, uncertainty, intensity or complexity (Iselin, 1993; Keller and Staelin, 1987) are seen as major measurements of overload. In order to compute the CSR information

ratio we used the processing time as the measure of information load. Processing time was taken to mean the length of the reports and how long it took to read them. This use of the length of financial reports as a proxy for information load has been recognised in prior accounting literature. For example, Morunga and Bradbury (2012) counted the number of pages or part-pages dedicated to selected topics in an analysis of the impact of international financial reporting standards on the annual reports of listed companies in New Zealand. Furthermore, in a developing country context, Ormin et al., (2016) used the length of financial reports to examine the impact of international financial reporting standards on reports in a sample of Nigerian companies. Li (2008) used the length of annual reports as a measure when analysing the relationship between the readability of annual reports and financial performance. Li's (2008) study suggests that the lengthier an annual report is, the less transparent it may be, potentially hiding adverse information from the investors in the details it provides. Unlike financial reporting frameworks (e.g. . GAAP or IFRS) which are enforced through a combination of the threat of litigation, external audit and regulatory oversight, CSR reporting, which is largely voluntary, lacks a standard and enforceable accountability framework for its content (Ramanna, 2013). This is problematic as exemplified by Lock and Seele (2016, p.187) who argue that companies have "extensive leeway in choosing what to report, which has led to diverse topics being included in CSR reports". Therefore, with no regulatory oversight guiding the content and format of CSR reports and a lack of third-party verification of information, companies are simply left "free to roam" (Ramanna, 2013). With companies having significant discretion in whether and how much to disclose, CSR reports can vary greatly in size and content. Building on the previous literature, we propose that the longer the CSR report, the higher the possibility of information overload, requiring more time, work and effort by different stakeholders to process the disclosures.

The volume of CSR information in reports has not been given sufficient attention in accounting literature. Few people other than professional accountants, lawyers, and auditors are likely to take the time to read every detail and every number on every page in a CSR report. While reports are getting longer and more complex, there is no guide on the type of CSR information that should be included, and so reports vary considerably in both length and detail. Therefore, in order to measure the information overload in CSR reports, we need to weigh the CSR information and calculate its proportion relative to the number of pages of the selected report. As our sample of companies issued a CSR report every year, we calculated the average page number of the reports for each year as follows:

$$\text{Total number of pages for the CSR reports} / \text{number of companies}$$

In order to measure the possibility of information overload in CSR reports, the CSR information was calculated as a proportion of the total number of pages in each report. Although, each company in our sample issued individual stand-alone CSR report, the reports greatly varied in format, length and content. Therefore, while developing CSR information ratio, we referred to Groves (1994) approach in his analysis of information overload in financial disclosures. For each report, we first collected the total number of pages and then counted the total number of pages devoted to the four CSR topics. To reduce subjectivity and bias in identifying the topics, two assistants read each of the reports. If there was no consensus about the number of pages containing the four topics, assistants exchanged opinions and re-read reports until a final congruence on the number of pages was reached. This was especially evident for low-ratio reports that were also particularly lengthy. The CSR information ratio for each report is calculated as follows:

Sum of the number of pages of the four topics / page number of the report

6. Analysis and Findings

6.1 Lengthy Reports

The results show that a large number of the reports are lengthy, and on average, between 61 and 80 pages. In addition, 18 reports were between 81 and 100 pages, and 18 reports were 101 pages or more. Our analysis begins with 2006 as this marked the beginning of CSR reporting in China. Company K (SOE), an electric utility monopoly, issued the first CSR report that triggered other Chinese companies, especially SOEs to start issuing CSR reports. In terms of the shortest (minimum number of pages) reports, Company J (2007) and Company M (2010) issued the shortest CSR reports, each comprising of five pages, this is in stark contrast compared to the lengthiest (or the maximum number of pages) 150 page report issued by Company H¹¹ in 2010, which was written in both Chinese and English. Together with Company N, Company H was one of only two companies in the sample to issue reports in both languages, which contributed to the length of the report. For example, the Chinese-language section of the report released by Company H in 2008 was 73 pages long, and the English-language section was 67 pages; totaling 140 pages and making it the longest report for that year among all the reports. In a previous attempt to measure the length of CSR reports in China, Guo et al., (2010) analysed 71 CSR reports and found the average length to be 22 pages, with 56% of the reports no longer than 10 pages. In comparison to Guo et al., (2010) our analysis indicates that the average number of pages in CSR reports in our sample has significantly increased from 43 pages in 2006 to 77 pages in 2015.

The significant increase in the average length of the reports reflects the number of major political events taking place in China throughout the reporting period. In 2008, SASAC issued *Guidelines to Central State-owned Enterprises on Fulfilling Corporate Social Responsibilities* and further increased pressures on SOEs to engage with CSR reporting. Another milestone, in 2012, was the proposal of the *Ecological Civilization Construction Project* published in the report by the 18th National Congress of the Communist Party. In November of the same year, General Secretary Xi Jinping in his speech during an exhibition, proposed the *China Dream* and emphasised the importance of CSR reporting and sustainable development. Following these events the *Environmental Protection Law of China* was amended in 2014. Given that the majority of companies in our sample are SOEs, we question whether lengthy reports reflect genuine commitment to CSR or simply serve as an instrument by which to build a positive image (Gray et al., 1993) to maintain legitimacy, and manage a relationship with the Chinese government, not only as the regulator but also as a major shareholder. Since the government is not only a key regulator and a policymaker, but also holds ownership stakes in many firms, both large and small (Marquis and Qian, 2014, p.131), the decision to include a CSR report can be influenced by political conditions in China (Piotroski and Wong, 2012). SOEs are often characterised as dependent on government support and funding, and as a consequence operate within a politically controlled and favourably financed environment. This is consistent with Unerman and Bennett (2004, p.692) findings. They argue that:

CSR initiatives... are not usually strongly motivated by managerial desires to discharge moral responsibilities....[T]hey tend to be motivated more by managerial desires to maintain or advance the power and wealth of capital.

¹¹ The 150 pages was the length of the report when the English and Chinese versions were combined. Since its Chinese version and English version is combined, the computation of its CSR information ratio is not impacted because both the numerator and denominator are counted in two languages when the ratio is computed.

In addition to economic contributions, these companies are expected to serve political goals, including fostering indigenous innovation, supporting social stability and assisting with crisis responses in China (Leutert, 2016). Further, the companies in our sample play a leading role in the Chinese economy, operating in pillar industries including mining, manufacturing, finance, electricity supply and information technology services. Therefore, SOEs in China may feel great pressure from the government in terms of CSR reporting. In addition, they are the most vulnerable group to public attack for CSR performance given their connection with the government.

6.2 CSR Information Ratio Analysis

(1) Average CSR Information Ratio and Information Overload

Table IV below presents a summary of the calculated CSR information ratio for each company in the sample. The results suggest that the average CSR information ratio varies widely between companies but remains consistent across time for most companies. For example, the average CSR information ratio for most companies did not significantly change over the years, and is between 0.56 and 0.58. The ratio did, however, show a slight increase from 0.62 in 2014 to 0.65 in 2015.

Table IV. CSR Information Ratio 2006-2015

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Avg. Ratio
Companies	<hr/>										
A	0.50	0.49	0.55	0.55	0.58	0.57	0.59	0.61	0.56	0.54	0.55
B	0.86	0.70	0.66	0.63	0.65	0.55	0.51	0.56	0.65	0.56	0.63
C	0.56	0.46	0.48	0.46	0.56	0.68	0.62	0.70	0.63	0.72	0.59
D	0.74	0.55	0.66	0.49	0.40	0.45	0.50	0.66	0.74	0.74	0.67
E	0.65	0.58	0.51	0.52	0.55	0.58	0.60	0.60	0.60	0.62	0.58
F	0.47	0.51	0.48	0.45	0.56	0.59	0.62	0.59	0.62	0.65	0.55
G	0.64	0.78	0.68	0.69	0.71	0.57	0.62	0.68	0.69	0.70	0.70
H	0.63	0.63	0.64	0.52	0.58	0.59	0.58	0.55	0.38	0.45	0.50
I	0.44	0.56	0.57	0.57	0.58	0.59	0.60	0.61	0.60	0.60	0.57
J	0.77	0.43	0.43	0.55	0.66	0.50	0.46	0.51	0.48	0.60	0.54
K	0.61	0.61	0.65	0.66	0.68	0.62	0.66	0.63	0.64	0.69	0.65
L	0.62	0.58	0.66	0.49	0.50	0.44	0.52	0.48	0.58	0.60	0.52
M	0.62	0.62	0.65	0.62	0.53	0.53	0.50	0.55	0.68	0.71	0.60
N	0.54	0.62	0.57	0.70	0.57	0.53	0.58	0.59	0.71	0.73	0.73
O	0.53	0.61	0.60	0.75	0.69	0.66	0.60	0.58	0.76	0.77	0.66
Avg. Ratio	0.61	0.57	0.56	0.57	0.58	0.57	0.57	0.58	0.62	0.65	---

As a result of government and stock exchange guidelines, a large number of reports increased significantly in volume (i.e. length) but without any increase in the CSR information ratio. This confirms our assumptions that demand for reporting CSR performance will potentially result in information overload for both information preparers and information users. Given there is no positive correlation between the length of a report and the CSR information ratio, the analysis suggests that longer reports do not necessarily equate to more CSR information. Lengthy reports may not have a high CSR information ratio, and reports with high CSR information ratios may not be lengthy. To further confirm information overload in our

sample, we analysed the CSR information ratio of the longest and shortest report. We also presented the page number of reports with the highest and the lowest ratio (Table V).

Table V. Comparison of Number of Pages and CSR Information Ratio

Year	The ratio of longest report		The ratio of shortest report		The page of highest ratio		The page of lowest ratio	
	Ratio	The longest report page	Ratio	The shortest report page	Page	The highest ratio	Page	The lowest ratio
2006	0.50	86	0.86	7	7	0.86	34	0.44
2007	0.49	112	0.62	5	40	0.78	9	0.43
2008	0.65	140	0.43	6	15	0.66	6	0.43
2009	0.66	140	0.63	12	64	0.75	62	0.42
2010	0.37	150	0.66	5	62	0.69	100	0.37
2011	0.62	108	0.50	11	63	0.66	57	0.44
2012	0.66	128	0.46	9	84	0.66	9	0.46
2013	0.63	117	0.51	10	96	0.63	56	0.48
2014	0.69	131	0.48	12	66	0.77	53	0.38
2015	0.56	117	0.46	10	54	0.77	37	0.45

As Table V indicates, there is no obvious positive association between the length of the reports (i.e. the number of pages) and their CSR information ratio. For example, we can see that the report with the highest CSR information ratio (0.86) was only seven pages in length, and the report with the lowest ratio (0.37) was 150 pages. Similarly, the CSR information ratio of the report (131 pages) was 0.69, close to that of the shortest reports (there were two reports with 5 pages) with ratios of 0.62 and 0.66. This lack of association between a report's length and its CSR information ratio is found across the table for all years and all companies.

We further propose that long reports do not necessarily provide the desired CSR information nor better-quality information. Rather, lengthy reports meet legal requirements for the companies, but are potentially less useful to investors in their decision-making process. Our findings are similar to that of Guo et al., (2008), who hold that a useful CSR report does not depend on the *amount* but rather on the *quality* of information disclosed.

As the length of the report reaches its limits, the quality will not increase as the length increases. On the contrary, it may impair the clarity and readability of the report if too much unnecessary information is included (Guo et al., 2008, p.9).

We considered CSR reports to be of higher quality if they have a relatively higher CSR information ratio, in the same way, CSR reports with a lower ratio can be considered to provide less CSR information resulting in information overload for information users.

(2) Patterns of Change in Ratio

We found two significant patterns in the changes of CSR information ratios identified in this research. The first pattern is that the ratios for some reports remained steady, with little change over the reporting period employed in this research. For example, the CSR information ratio changed by less than 0.05 for companies such as Company A, Company K and Company I over the ten years under investigation. The second pattern is the inconsistent fluctuation in most ratios over the years of reporting considered in this research. In particular, we identify three periods in which this fluctuation is most evident. In the first period from 2006 - 2007, nine reports indicate a significant change in the CSR information ratio, more than 0.05. Company G's CSR report ratio soared from 0.64 in 2006 to 0.78 in 2007, followed

by a drop to 0.68 in 2008. Similarly, Company J's ratio of 0.77 in 2006 subsequently dropped to 0.43 in 2007 and Company B's ratio also dropped from 0.86 in 2006 to 0.70 in 2007. The 2006-2007 period marked significant fluctuations in the CSR information ratio for the majority of the sample. This trend of CSR information ratio fluctuations continued also in the second period from 2008-2010. In this period, six reports had a ratio change of more than or equal to 0.05 from 2008 to 2009 and eight reports had a similar ratio change from 2009 to 2010. In the third period, from 2013 to 2014, eight reports had a ratio change of over 0.05.

The fluctuations in the ratio are attributable to the number of pages in the reports, either significantly increasing or decreasing while the proportion of CSR information showed slight or no changes at all. In addition, the proportion of the CSR information either increased or decreased while the length of the reports showed minor changes. For example, in 2006-2007 Company G report increased from 33 to 40 pages. However, the aggregated volume of CSR information increased from 21 pages to 31 pages indicating that the change in the proportion of CSR information is greater than the change in number of pages. The patterns of change in the reporting periods coincide with government interventions and institutional changes in China. For example, the *Company Law Act No.5* in China was enacted in 2006, and many companies subsequently responded with changes in both the content and the length of CSR reports. In our sample this is especially evident in the variations within the first time period, 2006-200. In the second time period, from 2008-2010, the issuance of *Guidelines to Central State-owned Enterprises on Fulfilling Corporate Social Responsibilities* directly from the Central Government by SASAC (2008) as well as the announcement of *Guideline of Chinese Corporate Social Responsibility Reports* by EDCAS in 2009 contributed to continued pressure on SOEs to produce lengthier reports. In addition, at the beginning of 2008, the Shanghai Stock Exchange mandated that Corporate Governance Index Sample companies, companies issuing foreign capital stock and financial companies engage in CSR reporting. In the same year, Shenzhen Stock Exchange followed this by requiring companies listed on the Shenzhen 100 Index Sample to disclose CSR information. In the third time period, from 2013-2014, the Central Government initiated the *Ecological Civilization Construction Project* in the 12th Five-Year Plan in the Report to the 18th National Congress of the Communist Party¹² of China and the *China Dream Project* was proposed by President Xi Jinping. As a result, a large number of companies responded and engaged in a serious effort to integrate CSR reports as part of their public disclosures.

In addition to responding to coercive pressure, companies can also use lengthy reports to influence outsiders' impressions of their CSR performances (Jin et al., 2015). Many critics see CSR reports as little more than public relations tools designed to “win (or maintain) the approval of those stakeholders whose continued support is crucial for the survival and profitability of the business” (Unerman et al., 2007, p. 3). In particular, it is an opportunity for SOEs to “secure the self in other's eyes” (Roberts, 2009, p. 965), especially in the eyes of government as their main shareholder. Therefore, issuing dense and long CSR reports is one way for companies to respond to these pressures, to show a good image and maintain legitimacy (Hooghiemstra, 2000; Patten et al., 2015). As Neu et al., (1998, p. 265) argue, one of the reasons companies try to maintain legitimacy is “to ensure the continued inflow of capital, labour and customers necessary for viability”. This appears to be the case for the majority of companies in our sample since they are dependent on the Chinese government as a major shareholder.

¹² The National Congress is the highest decision-making body of the Communist Party of China. It is held once every five years.

7. Concluding Discussion

This exploratory study analysed information overload in a sample of 15 Chinese companies from the mining, manufacturing, finance, electricity supply and information technology services industries. Our results suggest that selected companies reacted to the promulgation of new CSR reforms by the Chinese government, the Shenzhen Stock Exchange and the Shanghai Stock Exchange as evident in the increase of the length of the reports. Since all but one company in our sample are SOEs and controlled by the government, they conform to these pressures more readily than the rest of the market. This is consistent with previous literature that points to the Chinese government as the driving force behind CSR reporting (e.g. Zhao and Patten, 2016 and Yu and Rowe, 2017). In addition, given that most of the current accounting literature focusses on impression management tactics in CSR reports (e.g. Hooghiemstra, 2000; Guthrie and Farneti, 2008) theoretically we add to this literature by identifying CSR report itself as impression management in China.

Further, this paper has potential implications for the development of CSR reporting practices in China. The Chinese government calls for more environmental and social disclosures but gives no consideration to how information overload could potentially impair the decision-making capacity of users. To prevent this impairment, companies should learn to identify material CSR topics and avoid information overload. Future research can identify the information overload in international firms based on GRI indicators or investigate a more comprehensive CSR topic list. Whether increasing the number of pages and volume of reports actually benefits or harms some stakeholders (users) is uncertain, and this uncertainty presents an opportunity for future research. We suggest that future research includes an analysis of information overload on decision makers and the quality of their decisions.

Finally, the paper is not without limitations. First, the majority of the sample companies in this study are large listed SOEs which are heavily regulated and influenced by the government, and this may pose inherent limitations to our findings. Due to the small sample size, we had no opportunity to test the impacts of coercive pressure and whether it resulted in CSR reports by both SOEs and Non-SOEs. However, this provides an opportunity for a future comparative study between SOEs and Non-SOEs and companies that are listed/private owned. Lastly, another limitation is in our application of Dahlsrud's (2008) framework which is of an exploratory nature and has not been applied in this way in previous research.

References

- Abdel-Khalik, A. R. (1973) The effect of aggregating accounting reports on the quality of the lending decision: An empirical investigation, *Journal of Accounting Research*, 11, pp. 104-138. <https://doi.org/10.2307/2490031>
- Ashton, R.H. (1974) Behavioral Implications of Information Overload in Managerial Accounting Reports, *Cost and Management*, July/August, pp.229-242.
- Bansal, P. and Kistruck, G. (2006) Seeing is (not) believing: managing the impressions of the firm's commitment to the natural environment, *Journal of Business Ethics*, Vol. 67 No. 2, pp. 165-180. <https://doi.org/10.1007/s10551-006-9021-9>
- Bawden, D., Holtham, C. and Courtney, N. (1999) Perspectives on information overload, *Aslib Proceedings*, Vol.51No 8, pp.249-255. <https://doi.org/10.1108/EUM0000000006984>
- Bebbington, J., Higgins, C. and Frame, B. (2009) Initiating sustainable development reporting: evidence from New Zealand, *Accounting, Auditing and Accountability Journal*, Vol. 22, No. 4, pp. 588-625. <https://doi.org/10.1108/09513570910955452>
- Bolino, M., Long, D., and Turnley, W. (2008), Impression Management in Organizations: Critical Questions, Answers, and Areas for Future Research, *Annual Review of Organizational Psychology and Organizational Behavior*, Vol. 3, pp. 377-406. <https://doi.org/10.1146/annurev-orgpsych-041015-062337>
- Brennan, N. M., Guillamon-Saorin, E. and Pierce, A. (2009), Impression management: developing and illustrating a scheme of analysis for narrative disclosures – a methodological note, *Accounting, Auditing and Accountability Journal*, 22 (5), pp. 789-832. <https://doi.org/10.1108/09513570910966379>
- Butcher, H. (1995) Information overload in management and business, *IEE Colloquium on Information Overload*, 29 Nov. London, UK. <https://doi.org/10.1049/ic:19951426>
- Carey, P., Li L. and Qu, W. (2017), Voluntary corporate social responsibility reporting and financial statement auditing in China, *Journal of Contemporary Accounting & Economics*, 13, pp. 244-262. <https://doi.org/10.1016/j.jcae.2017.09.002>
- Casey, C. J. (1980) Variation in accounting information load: The effect on loan officers' predictions of bankruptcy, *The Accounting Review*, 55, pp. 36-50.
- Casey, C.J. (1982) Coping with Information Overload: The Need for Empirical Research, *Cost and Management*, 4, pp. 31-38.
- Chen, H. and Zhang, H. (2009) Two-way communication strategy on CSR information in China, *Social Responsibility Journal*, Vol. 5 No. 4, pp. 440-449. <https://doi.org/10.1108/17471110910995311>
- Chen, J.C. and Roberts, R.W. (2010) Toward a more coherent understanding of the organization-society relationship: a theoretical consideration for social and environmental accounting research, *Journal of Business Ethics*, Vol. 97 No. 4, pp. 651-665. <https://doi.org/10.1007/s10551-010-0531-0>

- Chewning, E. G., & Harrell, A. M. (1990). The effect of information load on decision makers' cue utilization levels and decision quality in a financial distress decision task. *Accounting, Organizations and Society*, 15(6), 527–542. [https://doi.org/10.1016/0361-3682\(90\)90033-Q](https://doi.org/10.1016/0361-3682(90)90033-Q)
- China WTO Tribune. (2009) Four discoveries of the research on CSR reports in China from 2001 to 2009. (In Chinese), available from: <http://www.xueshu.com/wtojjdk/200912/10247349.html> accessed 23 May 2017.
- Cho, C.H. and Patten, D. M. (2007) The role of environmental disclosures as tools of legitimacy: a research note, *Accounting, Organizations and Society*, Vol. 32 No.7. pp.639-647. <https://doi.org/10.1016/j.aos.2006.09.009>
- Cho, C. H., Roberts, R. W., and Patten, D. M. (2010) The language of US corporate environmental disclosure, *Accounting, Organizations and Society*, Vol. 35 No. 4, pp.431-443. <https://doi.org/10.1016/j.aos.2009.10.002>
- Clarkson, M. B. E. (1995) A stakeholder framework for analyzing and evaluating corporate social performance, *Academy of Management Review*, 20 (1), pp. 92-117. <https://doi.org/10.5465/amr.1995.9503271994>
- Company Law of China. (2005) *Act No.5* (in Chinese), available from: <http://www.sasac.gov.cn/n2588035/n2588320/n2588335/c4260666/content.html> accessed 11 October 2018.
- Dahlsrud, A. (2008) How corporate social responsibility is defined: an analysis of 37 definitions, *Corporate Social Responsibility and Environmental Management*, Vol. 15, No.1, pp.1-13. <https://doi.org/10.1002/csr.132>
- Davis, K. (1960) Can business afford to ignore social responsibilities? *California Management Review*, 2, pp. 70-76. <https://doi.org/10.2307/41166246>
- Davis, K. (1967) Understanding the social responsibility puzzle: What does the businessman owe to society? *Business Horizons*, 10, pp. 45-50. [https://doi.org/10.1016/0007-6813\(67\)90007-9](https://doi.org/10.1016/0007-6813(67)90007-9)
- DiMaggio, P. J. and Powell, W. W. (1983) The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields, *American Sociological Review*, Vol.48 No.2, pp.147-160. <https://doi.org/10.2307/2095101>
- Deetz, S. A. (2013) Corporate governance, corporate social responsibility and communication, paper presented at the annual meeting of the International Communication Association, TBA, San Francisco, CA, available from http://citation.allacademic.com/meta/p171069_index.html, accessed 13 March 2017.
- Dong, S., Burritt, R. and Qian W. (2014), “An assessment of CSR reporting practice in China’s mining and minerals industry, *Transplantation*, Vol. 59 No.11, pp. 1606-1613. <https://doi.org/10.1016/j.jclepro.2014.01.012>
- Du, X., Jian, W., Zeng, Q. and Du, Y. (2014) Corporate environmental responsibility in polluting industries: does religion matter?, *Journal of Business Ethics*, Vol. 124 No. 3, pp. 485-507. <https://doi.org/10.1007/s10551-013-1888-7>

- Eppler, M., and Mengis, J. (2004) The concept of information overload: A review of literature from organization science, accounting, marketing, MIS, and related disciplines. *Information Society*, 20(5), pp. 325-344. <https://doi.org/10.1080/01972240490507974>
- Ernst and Young. (2012) To the Point, Now is the time to address disclosure overload, available from: [http://www.ey.com/Publication/vwLUAssets/ToThePoint_BB2367_DisclosureOverload_21June2012/\\$FILE/ToThePoint_BB2367_DisclosureOverload_21June2012.pdf](http://www.ey.com/Publication/vwLUAssets/ToThePoint_BB2367_DisclosureOverload_21June2012/$FILE/ToThePoint_BB2367_DisclosureOverload_21June2012.pdf) accessed 2 February 2016.
- Fertakis, J.P. (1969) On Communication, Understanding, and Relevance in Accounting Reporting, *The Accounting Review*, Vol. 4 No. 4, pp.680-691.
- Freeman, I. and Hasnaoui, A. (2011) The meaning of corporate social responsibility: the vision of four nations, *Journal of Business Ethics*, Vol. 100 No. 3, pp. 419-443. <https://doi.org/10.1007/s10551-010-0688-6>
- Gallo, P. J. and Christensen, L.J. (2011) Firm size matters: an empirical investigation of organizational size and ownership on sustainability-related behaviours, *Business and Society*, Vol. 50 No. 2, pp. 315-349. <https://doi.org/10.1177/0007650311398784>
- Goffman, E. (1959) *The Presentation of Self in Everyday Life*. Harmondsworth: Penguin, 1990.
- Global Reporting Initiative (GRI). (2013) *G4 Sustainability Reporting Guidelines*. Amsterdam: Global Reporting Initiative.
- Gross, B., (1964) *The Managing of Organizations*, Free Press of Glencoe, New York.
- Godfrey, J. Mather, P. and Ramsay, A. (2003) Earnings and impression management in financial reports: the case of CEO changes, *Abacus*, Vol.39 No.1, pp. 95-123. <https://doi.org/10.1111/1467-6281.00122>
- Gray R.H., D.L.Owen&K.T.Maunders (1987) *Corporate Social Reporting: Accounting and accountability*. Hemel Hempstead: Prentice Hall.
- Gray R., Bebbington, J. and Walters, D. (1993) *Accounting for the Environment: The greening of accountancy*. Part II, Paul Chapman: London.
- Gray, R., Kouhy, R., and Lavers, S. (1995) Methodological themes constructing a research database of social and environmental reporting by UK companies. *Accounting, Auditing and Accountability Journal*, 8 (2), pp. 78-101.
- Gray, R., M. Javad, D. M. Power, and C. D. Sinclair. (2001) Social and Environmental Disclosure and Corporate Characteristics: A Research Note and Extension, *Journal of Business Finance & Accounting*, Vol. 28, No. 3-4, pp. 327-356. <https://doi.org/10.1111/1468-5957.00376>

- Gray, R.H., Bebbington, J. and Gray, S. (2010), "Social and Environmental Accounting Developing the Field", Vol. II, Sage, London.
<https://doi.org/10.4135/9781446263440>
- Groves, R. J. (1994) Financial disclosure: when more is not better, available from <https://www.thefreelibrary.com/Financial+disclosure%3a+when+more+is+not+better.-a015499589> accessed at 20 March 2017.
- Guan, Z. and Yu, Z. (2011) A study of corporate social responsibility reports in China, *The China Nonprofit Review*, Vol. 3 No. 2, pp. 171-193.
<https://doi.org/10.1163/187651411X615798>
- Guan, J. and Noronha, C. (2013) Corporate social responsibility reporting research in the Chinese academia: a critical review, *Social Responsibility Journal*, Vol. 9 No. 1, pp. 156-165. <https://doi.org/10.1108/17471111311307804>
- Guo, P., Zhong, C., Chen, Y., Wang, X., Li, W. (2008) A Journey to Discover Values: Study of Sustainability Reporting in China, available from http://www.syntao.com/Uploads/%7B065554F3-B9D7-4DDC-8BA9-3DFE894119A9%7D_A%20journey%20to%20discover%20values%202008.pdf accessed 20 November 2017.
- Guo, P., Zhang H., Chen Y, Li, W., Nette, A., Zhang J., and Gong, J. (2010) A journey to discover values: 2010, a study of sustainability reporting in China, available from <http://doc.mbalib.com/view/6440ebaf5f6b5a6a5f7f8503786106e7.html> accessed 20 May 2017.
- Guthrie, J. and Farneti, F. (2008) GRI Sustainability reporting by Australian public sector organisations, *Public Money and Management*, Vol. 28 No. 6, pp. 361-366.
<https://doi.org/10.1111/j.1467-9302.2008.00670.x>
- Hillman A, Kein G. (2001) Shareholder value, stakeholder management, and social issues: what's the bottom line? *Strategic Management Journal*, 42, pp. 479-487.
- Hooghiemstra, R. (2000) Corporate communication and impression management – new perspectives why companies engage in corporate social reporting, *Journal of Business Ethics*, Vol.27 No. 1/2, pp.55-68. https://doi.org/10.1007/978-94-011-4311-0_7
- Hunt, R.E., and Newman, R.G. (1997). Medical knowledge overload: A disturbing trend for physicians. *Health Care Management Review*, 22, pp. 70-75.
<https://doi.org/10.1097/00004010-199724000-00009>
- Iselin, E. R. (1988) The effects of information load and information diversity on decision quality in a structured decision task, *Accounting, Organizations and Society*, 13, pp. 147-164. [https://doi.org/10.1016/0361-3682\(88\)90041-4](https://doi.org/10.1016/0361-3682(88)90041-4)
- Iselin, E. R. (1993) The effects of the information and data properties of financial ratios and statements on managerial decision quality, *Journal of Business Finance & Accounting*, 20, pp. 249-267. <https://doi.org/10.1111/j.1468-5957.1993.tb00663.x>

- Jin, Y., Shi, H., and Zhang, X. (2017) Religious social norms and CSR deficiency disclosure, *Asia-Pacific Journal of Accounting & Economics*, DOI:10.1080/16081625.2017.1318078.
- Jin, G, Z. Luca, M and Martin, D. (2015) Is no news (perceived as) bad news? An experimental investigation of information disclosure, available from http://www.hbs.edu/faculty/Publication%20Files/15-078_9be43759-b989-47d1-803a-b5ff8dc7fbb7.pdf accessed at 6 September 2017.
- Jin, Y., Shi, H. and Zhang, X. (2017) Religious social norms and CSR deficiency disclosure, *Asia-Pacific Journal of Accounting & Economics*, DOI: 10.1080/16081625.2017.1318078.
- Jo, M. (2013) The Path Forward on Disclosure. National Association of Corporate Directors, Leadership Conference 2013 in National Harbor. Oct.15, 2013, available from <https://www.sec.gov/news/speech/spch101513mjw>, accessed 15 February 2017.
- KPMG. (2017) The Road Ahead. The KPMG Survey of Corporate Responsibility Reporting. available from <https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2017/10/kpmg-survey-of-corporate-responsibility-reporting-2017.pdf> accessed 11 December 2018.
- KPMG. (2015) The KPMG Survey of Corporate Responsibility Reporting 2015: Chinese Findings, available from <https://assets.kpmg.com/content/dam/kpmg/pdf/2015/12/corporate-responsibility-reporting-2015-Chinese-findings-201512.pdf> accessed 3 December 2017.
- KPMG. (2011), Disclosure Overload and Complexity: Hidden in Plain Sight, available from: <http://www.docin.com/p-383134692.html> accessed at 3 December 2017.
- Leutert, W. (2016) Challenges ahead in China's reform of state-owned enterprises, *Asia Policy*, Vol. 21, pp.83-99. <https://doi.org/10.1353/asp.2016.0013>
- Li, Z., and Xiang R. (2007) Study on content definition, measure methods and status Quo of information disclosure on corporate responsibility in Chinese enterprises, *Accounting Review of China*, 7, pp. 3-11.
- Li, F. (2008) Annual report readability, current earnings, and earnings persistence, *Journal of Accounting and Economics*, Vol.45 No.2-3, pp. 221-247. <https://doi.org/10.1016/j.jacceco.2008.02.003>
- Li, L. (2010) A study on the information overload in non-financial disclosure, *China Management Informationization*, Vol.13 No.2, pp.36-38.
- Liu, X. and Anbumozhi, V. (2009) Determinant factors of corporate environmental information disclosure: an empirical study of Chinese listed companies, *Journal of Cleaner Production*, Vol. 17 No. 6, pp. 593-600. <https://doi.org/10.1016/j.jclepro.2008.10.001>
- Lock, I. and Seele, P. (2016) The credibility of CSR (corporate social responsibility) reports in Europe. Evidence from a quantitative content analysis in 11 countries, *Journal of Cleaner Production*, Vol. 122, pp. 186-200. <https://doi.org/10.1016/j.jclepro.2016.02.060>

- Mahon, J. F. and McGowan, R. A. (1991) Searching for the common good: A process-oriented approach, *Business Horizons*, Vol.34No.4, pp. 79-86.
[https://doi.org/10.1016/0007-6813\(91\)90010-S](https://doi.org/10.1016/0007-6813(91)90010-S)
- Mahoney, L.S., Thorne, L., Cecil, L. and La Gore, W. (2013) A research note on standalone corporate social responsibility reports: Signaling or greenwashing? *Critical Perspectives on Accounting*, Vol. 24(4-5), pp. 350-359.
<https://doi.org/10.1016/j.cpa.2012.09.008>
- Marquis, C., and C. Qian (2014) Corporate Social Responsibility Reporting in China: Symbol or Substance? *Organization Science*, Vol. 25, No.1, pp. 127-148.
<https://doi.org/10.1287/orsc.2013.0837>
- Merkel-Davies, D. M. and Brennan, N.M. (2007) Discretionary disclosure strategies in corporate narratives: incremental information or impression management? *Journal of Accounting Literature*, Vol.26, pp.116-196.
- Meng, X. H., S. X. Zeng, and C. M. Tam. (2013) From Voluntarism to Regulation: A Study on Ownership, Economic Performance and Corporate Environmental Information Disclosure in China”, *Journal of Business Ethics* Vol, Iss. 1, pp. 217-232.
<https://doi.org/10.1007/s10551-012-1462-8>
- Messner, M. (2009) The limits of accountability, *Accounting, Organizations and Society*, 34, 918-938. <https://doi.org/10.1016/j.aos.2009.07.003>
- Moon, J., X. Shen. (2010). “CSR in China research: Salience, focus and nature”, *Journal of Business Ethics*, Vol. 94, No 4, pp. 613-629.
<https://doi.org/10.1007/s10551-009-0341-4>
- Morunga, M. and Bradbury, M. E. (2012) The impact of IFRS on annual report length, *Australasian Accounting, Business and Finance Journal*, Vol. 6 No.5, pp. 47-62.
- Neu, D., Warsame, H. and Pedwell, K. (1998) Managing public impressions: environmental disclosures in annual reports, *Accounting, Organisations and Society*, Vol. 23 No. 3, pp. 265-282. [https://doi.org/10.1016/S0361-3682\(97\)00008-1](https://doi.org/10.1016/S0361-3682(97)00008-1)
- Noronha, C., Si Tou, M.I.C. and Guan, J.J. (2013) Corporate social responsibility reporting in China: an overview and comparison with major trends, *Corporate Social Responsibility and Environmental Management*, Vol. 20 No. 1, pp. 29-42.
<https://doi.org/10.1002/csr.1276>
- Noronha, C., Cheng Han Leung, T. and Lei, O.L. (2015) Corporate social responsibility disclosure in Chinese railway companies: Corporate response after a major train accident, *Sustainability Accounting, Management and Policy Journal*, Vol. 6 Issue: 4, pp. 446-474.
- Ormin, Koholga, and M. Jerry. (2016) International Financial Reporting Standards Adoption and Financial Reporting Information Overload: Evidence from Nigerian Banks. *International Conference on Accounting and Finance*.
https://doi.org/10.5176/2251-1997_AF16.13

- Paredes, T. A. (2003) Blinded by the light: information overload and its consequences for securities regulation, *Washington University Law Quarterly*, Vol.81.No 2, pp. 417-485. <https://doi.org/10.2139/ssrn.413180>
- Patten, D.M. (1991) Exposure, Legitimacy, and Social Disclosure, *Journal of Accounting and Public Policy*, Vol.10 No.4, pp. 297-308. [https://doi.org/10.1016/0278-4254\(91\)90003-3](https://doi.org/10.1016/0278-4254(91)90003-3)
- Patten, D. M. (1992) Intra-Industry Environmental Disclosures in Response to the Alaskan Oil Spill: A Note on Legitimacy Theory, *Accounting Organizations and Society* 17 (5), pp. 471-475. [https://doi.org/10.1016/0361-3682\(92\)90042-Q](https://doi.org/10.1016/0361-3682(92)90042-Q)
- Patten, D. M. (2002) The relation between environmental performance and environmental disclosure: a research note, *Accounting, Organizations and Society*, Vol. 27 No.8, pp.763-773. [https://doi.org/10.1016/S0361-3682\(02\)00028-4](https://doi.org/10.1016/S0361-3682(02)00028-4)
- Patten, D M., Ren, Y. and Zhao, N. (2015) Standalone corporate social responsibility reporting in China: an exploratory analysis of its relation to legitimation, *Social and Environmental Accountability Journal*, Vol. 35 No.1, pp. 17-31. <https://doi.org/10.1080/0969160X.2015.1007467>
- Piotroski, J. D., and Wong, T. (2012) Institutions and information environment of Chinese listed firms. *Capitalizing China*, c, 5.
- Ramanna, K. (2013) A framework for research on corporate accountability reporting, *Accounting Horizons*, Vol. 27 No. 2, pp. 409-432. <https://doi.org/10.2308/acch-50412>
- Revsine.L. (1970) Data Expansion and Conceptual Structure, *The Accounting Review*, Vol. 45 No.4, pp. 704-711.
- Roberts, J. (2003) The Manufacture of Corporate Social Responsibility: Construction Corporate Sensibility. *Organization Ethics, Politics and Organizing* 10 (2), Sage: London. <https://doi.org/10.1177/1350508403010002004>
- Roberts, J. (2009) No one is perfect: The limits of transparency and an ethic for ‘intelligent’ Accountability, *Accounting, Organizations and Society*, Vol 34 No 8, pp. 957-970. <https://doi.org/10.1016/j.aos.2009.04.005>
- Rodrigue M., Cho,C. H. and Laine, M. (2015) Volume and tome of environmental disclosure: a comparative analysis of a corporation and its stakeholders, *Social and Environmental Accountability Journal*, Vol. 35 No.1, pp.1-16. <https://doi.org/10.1080/0969160X.2015.1007465>
- Rowley, T. and Berman, S. (2000) A brand new brand of corporate social performance, *Business and Society*, 39(4), pp. 397-418. <https://doi.org/10.1177/000765030003900404>
- SASAC. (2008) The Guidelines to Central State-owned Enterprises Directly under the Central Government on Fulfilling Corporate Social Responsibilities, available from <http://en.sasac.gov.cn/n1408035/c1477196/content.html> accessed 18 March 2018.
- SASAC. (2016) the Guiding Opinions on Better Fulfilling Social Responsibilities of State-owned Enterprises, available from

<http://www.sasac.gov.cn/n2588035/n2588320/n2588335/c4260666/content.html>

accessed 11 October 2018.

- Schick, A. G., Gordon, L. A. and Haka, S. (1990) Information overload: A temporal approach, *Accounting, Organizations and Society*, Vol.15 No.3, pp. 199-220.
[https://doi.org/10.1016/0361-3682\(90\)90005-F](https://doi.org/10.1016/0361-3682(90)90005-F)
- Schroder, H. M., Driver, M. J., and Streufert, S. (1967) Human information processing – Individuals and groups functioning in complex social situations. Holt, Rinehart and Winston: New York.
- Seele, P. and Gatti, L. (2015) Greenwashing revisited: In search of a typology and accusation-based definition incorporating legitimacy strategies, *Business Strategy and the Environment*, Vol. 26 No. 2, pp. 239-252. <https://doi.org/10.1002/bse.1912>
- Seele, P. and Knebel, S. (2015) Quo vadis GRI?A (critical) assessment of GRI 3.1 A+ non-financial reports and implications for credibility and standardization. *Corporate Communications: An International Journal*, 20 (2), pp. 196-212.
<https://doi.org/10.1108/CCIJ-11-2013-0101>
- Sheng, S., Zhou, K. Z., and Li, J. J. (2011) The effects of *business and political ties on firm performance: evidence from China*, *Journal of Marketing*, Vol. 75, No. 1, pp. 1-15.
<https://doi.org/10.1509/jm.75.1.1>
- Situ, H., and Tilt, C. (2018) Mandatory? Voluntary? A Discussion of Corporate Environmental Disclosure Requirements in China, *Social and Environmental Accountability Journal*, DOI: <https://doi.org/10.1080/0969160X.2018.1469423>
- Situ, H., C. Tilt, and P.S. Seet. (2015) Corporate Environmental Reporting (CER) in China: A Stakeholder Perspective. In *Australasian Centre on Social and Environmental Accounting Research Conference(A-CSEAR)*, edited by J. Dumay and J. Hazelton, 165–173. Sydney: Academic Publishers and Publishing International.
- Speier, C., Valacich, J.S., and Vessey, I. (1999) The Influence of Task Interruption on Individual Decision Making: An Information Overload Perspective, *Decision Sciences*, Volume 30, No. 2. <https://doi.org/10.1111/j.1540-5915.1999.tb01613.x>
- Stanley, A. J., and Clipsham, P. S. (1997) Information overload * myth or reality? IEE Colloquium Digest No. 97/340, London (pp. 1}4)
<https://doi.org/10.1049/ic:19971146>
- Strother, J. B., Ulijn, J. M. and Fazal, Z. (2012) *Information overload: An international challenge to professional engineers and technical communicators*, Wiley: New York.
<https://doi.org/10.1002/9781118360491>
- Swanson, D. L. (1995) Addressing a Theoretical Problem by Reorienting the Corporate Social Performance Model, *Academy of Management Review*, 20 (1), pp. 43-64.
<https://doi.org/10.5465/amr.1995.9503271990>
- Sweeney, L. (2007) Corporate social responsibility in Ireland: barriers and opportunities experienced by SMEs when undertaking CSR, *Corporate Governance: The international journal of business in society*, Vol. 7 Iss 4, pp.516-523.

<https://doi.org/10.1108/14720700710820597>

Tuttle, B. and Burton, G.F. (1999) The effects of a modest incentive on information overload in an investment analysis task, *Accounting, Organizations and Society*, 24, pp. 673-687.

[https://doi.org/10.1016/S0361-3682\(99\)00017-3](https://doi.org/10.1016/S0361-3682(99)00017-3)

Unerman, J. and Bennett, M. (2004) Increased stakeholder dialogue and the internet: towards greater corporate accountability or reinforcing capitalist hegemony? *Accounting, Organizations and Society*, Vol. 29 No. 7, pp. 685-707.

<https://doi.org/10.1016/j.aos.2003.10.009>

Unerman, J., Bebbington, J. and O'Dwyer, B. (2007) Introduction to sustainability accounting and accountability, in Unerman, J., Bebbington, J. and O'Dwyer, B. (Eds), *Sustainability Accounting and Accountability*, Routledge: Oxon, pp. 1-16.

Vollmann, T. E. (1991) Cutting the Gordian Knot of Misguided Performance Measurement. *Industrial Management & Data Systems*, 1, pp. 24-26.

<https://doi.org/10.1108/02635579110138126>

Wang, J. (2014) The political logic of corporate governance in China's state-owned enterprises, *Cornell International Law Journal*, Vol. 47 No. 3, pp. 631-669.

Wang, X., F. Cao, and K. Ye (2016) Mandatory Corporate Social Responsibility (CSR) Reporting and Financial Reporting Quality: Evidence from a Quasi-Natural Experiment, *Journal of Business Ethics*, pp. 1-22.

<https://doi.org/10.1007/s10551-016-3296-2>

Washington, M. and Patterson, K. D.W. (2011) Hostile takeover or joint venture: connections between institutional theory and sport management research, *Sport Management Review*, Vol.14 No.1, pp.1-12.

<https://doi.org/10.1016/j.smr.2010.06.003>

Weber, O. (2017) Corporate sustainability and financial performance of Chinese banks, *Sustainability Accounting, Management and Policy Journal*, 8(3), pp. 358-385.

<https://doi.org/10.1108/SAMPJ-09-2016-0066>

Wurman, R.S. (2001) *Information Anxiety*. Macmillan Publishing: Indiana.

Yu, Z., Jian, J. and He, P. (2011) The study on the correlation between environmental information disclosure and economic performance - with empirical data from the manufacturing industries at Shanghai Stock Exchange in China, *Energy Procedia*, Vol. 5, pp. 1218-1224. <https://doi.org/10.1016/j.egypro.2011.03.213>

Yu, S. and Rowe, A. L. (2017) Emerging phenomenon of corporate social and environmental reporting in China, *Sustainability Accounting, Management and Policy Journal*, 8(3), pp. 386-415. <https://doi.org/10.1108/SAMPJ-09-2016-0064>

Yuthas, K., Rogers, R., and Dillard, J. F. (2002) Communicative action and corporate annual reports, *Journal of Business Ethics*, 41, 141-157.

<https://doi.org/10.1023/A:1021314626311>

- Zeng, S. X., Xu, X. D., Dong, Z. Y. and Tam, V. W. Y. (2010) Towards corporate environmental information disclosure: an empirical study in China, *Journal of Cleaner Production*, Vol.18 No.12, pp.1142-1148. <https://doi.org/10.1016/j.jclepro.2010.04.005>
- Zhang T., Gao S.S. and Zhang J.J. (2007) Corporate environmental reporting on the web – an exploratory study of Chinese listed companies, *Issues in Social and Environmental Accounting*. Vol.1 No.1, pp.91-108. <https://doi.org/10.22164/isea.v1i1.10>
- Zhao, N. and Patten, D. M. (2016) An exploratory analysis of managerial perceptions of social and environmental reporting in China, *Sustainability Accounting, Management and Policy Journal*, 7(1), pp. 80-98. <https://doi.org/10.1108/SAMPJ-10-2014-0063>
- Zheng, L., Balsara, N. and Huang, H. (2014) Regulatory pressure, blockholders and corporate social responsibility (CSR) disclosures in China, *Social Responsibility Journal*, Vol. 10 No. 2, pp. 226-245. <https://doi.org/10.1108/SRJ-08-2012-0102>