

An exploratory study of the balance quality of CSR reports of ten Chinese organizations.

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.



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Abstract

The aim of this study is to explore whether ten selected Chinese organizations disclosed a balance quality information in their corporate social responsibility (CSR) reports. Previous studies have been done to assess the quality of CSR disclosure in western countries, but research is still lacking on the reporting quality of Chinese organizations. This study fills the gap and contributes to the existing literature by assessing the one of the quality principles suggested by GRI, balance quality, of CSR reports in China. This study is motivated by Boiral's study (2013) and decides to focus on the investigation of balance in Chinese CSR reports. The results show that most examined Chinese CSR reports did not exhibit good balance; 85% of significant negative events were not disclosed in the reports. Positive sentences accounted for more than half the overall content of most analyzed CSR reports. The result suggests that Chinese managers communicate CSR information in a biased way. This study introduces the Chinese concept of face to explain the unbalanced results observed. It also provides some useful recommendations for future research.

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Chapter 1: Introduction

Corporate social responsibility (CSR) suggests that organizations should have more responsibilities than merely making profits for their stakeholders (Carroll, 1979; Kilcullen & Kooistra, 1999; Van Marrewijk, 2003). Organizations need to run their business operations in a socially responsible way (Van Marrewijk, 2003). The public is demanding increased CSR information from businesses (Khan, Halabi & Samy, 2009). Therefore, it is important for organizations to communicate their CSR information to the public. A CSR report is a good communication tool for this purpose (Widiarto Sutantoputra, 2009). The quality of CSR reports is a hot topic for researchers in this field.

Many studies have found that the quality of CSR reports is low in practice (Mahoney, Thorne, Cecil and LaGore, 2013; Boiral, 2013; Cho, Michelon & Patten, 2012). The purpose of CSR reporting is to provide better transparency and accountability. However, researchers have realized that CSR reports are often used in an instrumental manner for managerial purposes (Boiral, 2013; Cho, Michelon and Patten, 2012).

This study is motivated by the findings of Boiral's (2013) study. He examined CSR reports across 14 different countries and found an imbalance in the information disclosed in the reports. His findings indicate that CSR reports are used to emphasise companies' positive achievements and avoid disclosing negative information. However, among the countries he studied, China was not represented. Thus, this study helps to fill this research gap by investigating whether similar results were found in the examined Chinese CSR reports.

For this study, data was collected from both the selected CSR reports and information released on the Internet. The researcher used the online counter-accounting approach Boiral (2013) introduced for critiquing the information disclosed in reports and assessing the quality of disclosures.

The theoretical framework of this study is based on the ideas of Boiral (2013). His findings indicate that there is an organizational narcissism, which encourages a symbolic management approach to the legitimacy theory suggested by Ashforth and Gibbs (1990). Boiral (2013) thinks managers exercise control over the reporting process in a biased way because of the voluntary basis of CSR reporting. Therefore, it is important to understand the behaviour of managers in order to understand the quality of CSR reports. This study extends Boiral's (2013) ideas by introducing the Chinese concept of face for understanding Chinese managers' behaviours in the CSR reporting context. Understanding the Chinese concept of face can help to explain the imbalanced reporting in Chinese CSR reports.

In the next sections, the existing literature in the CSR field is reviewed and Boiral's (2013) study is explained in details in terms of what he did, what he found, and how it motivated this study. The research questions are then presented, followed by the methods, findings, discussion and conclusion sections.

Chapter 2: Literature Review

2.1 CSR

CSR stands for Corporate Social Responsibility. There are many alternative terms for it, including sustainability, corporate conscience, and corporate citizenship (Wood, 1991). A wide variety of definitions have been developed since Bowen and Johnson (1953) stated in their landmark book *Social Responsibilities of the Businessman*, that businessmen have obligations to society. Definitions of CSR began to proliferate in the 1970s. Carroll (1979) defined CSR as follows: “The social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time” (Carroll, 1979, p. 500). Kilcullen and Kooistra (1999) defined CSR as a moral obligation beyond obeying laws, while Van Marrewijk (2003) described it as the inclusion of social and environmental concerns in business operations. Though there is no single universally accepted definition of CSR, a study by Dahlsrud (2008) analyzed 37 different definitions and found that they were predominantly congruent, referring to five dimensions: environmental, social, economic, stakeholder and voluntariness.

The introduction of the concept of CSR suggests organizations should extend their responsibility from merely profit maximization to a broader level. The coverage of CSR is wide and variable (Nielsen & Thomsen, 2009) and may include preventing the use of child labour, providing equal opportunity and diversity, being involved in the local community, and assessing the business’s environmental impact. Depending on the country, the industry, the size of the business and the type of property, businesses may have different interpretations and understandings of the concept of CSR (Moravcikova et al., 2015).

2.2 From West to the East

Since CSR’s origin was in the West, Wang and Juslin (2009) argue that the western concept of CSR may not fit well in Eastern countries such as China.

CSR adoption only began in China in the mid-1990s. Along with China's rapid economic growth in recent decades, there have been many negative effects, including environmental damage and intensified social conflict (Xu & Yang, 2010; Qian et al., 2015; Zhou, 2006). The country has now realized the importance of enterprises being responsible for both society and the environment. Thus, the adoption of CSR in China has changed from an initially passive process to more recent active engagement (Xu & Yang, 2010; Zhou, 2006; Wang & Juslin, 2009). CSR development and adoption is becoming a hot topic, drawing the attention of government, academia and organizations in China.

2.3 CSR reporting and CSR reports

The origin of CSR reporting can be traced back to the early 1970s. The Committee for Economic Development (CED, 1971) noticed that there was an increasing public demand for CSR-related information, and that public expectations for business responsibility were broader than ever before and changing over time. Managers' responses to the changing expectations could determine the survival of their businesses. Since then, there has been an ongoing increase in attempts by organizations to communicate their CSR information to the public (Khan, Halabi & Samy, 2009).

The reporting of CSR information is still voluntary in most countries in the world (Habek & Wolniak, 2016; Cho et al., 2012). What to report and the channels used to communicate CSR information are flexible and can be determined by a company's management (Habek & Wolniok, 2016). Some researchers have argued that the voluntary nature of CSR reporting may lead to biased reporting, which reduces the level of transparency and accountability (Hopwood, 2009; Habek & Wolniak, 2016).

The benefits of CSR reporting include better recruitment (Simms, 2002), improved operational efficiency (King, 2002; Simms, 2002), improved corporate image and relations with stakeholders (Adams, 2002; Bernhut, 2002, King, 2002), and long-term financial gains (Margolis & Walsh, 2003; Orlitzky et al., 2003). Organizations are motivated by these benefits and are increasingly reporting CSR information, despite its voluntary nature.

A variety of approaches are used by organizations to communicate their CSR information (Habek & Wolniak, 2016; Khan, Halabi & Samy, 2009; Chambers et al., 2003). Annual reports, corporate websites, and CSR reports are some commonly used channels. The annual report was the most popular medium in the early stages of CSR reporting and the amount of information disclosed was small (Khan, Halabi & Samy, 2009). Corporate websites were not widely favoured channels globally, due to the poor internet availability in some Asian countries in 2003 (Chambers et al., 2003). The CSR report is now the prevalent form and is considered the best channel for communicating CSR information, which can provide richer information about organizations' CSR performance (Widiarto Sutantoputra, 2009).

Though there is no regulated format for CSR reporting, Global Reporting Initiatives (GRI) has provided useful guidelines, which have received international acceptance (Gray, 2010; Mahoney et al., 2013; Michelon, Pilonato & Ricceri, 2015; Habek & Wolniak, 2016). Over 70% of reporting organizations are using the GRI guidelines (Habek & Wolniak, 2016). The flexibility of the framework is the core reason for its widespread adoption (Joseph, 2012). The framework provides both general and specific disclosure elements for different industries and leaves space for organizations themselves to make alterations and personalise their reports (Habek & Wolniak, 2016). In addition, the GRI guidelines set both content and quality assessment principles for CSR reports. Content principles include materiality, stakeholder inclusiveness, sustainability context and completeness, while quality principles include balance, comparability, accuracy, timeliness, clarity and reliability (GRI, 2016). Organizations follow the GRI standards to prepare their CSR reports in order to have good and comparable quality (Habek & Wolniak, 2016). However, the voluntary nature of CSR reporting may weaken the impact of the GRI (Nielsen & Thomsen, 2009).

The quality of CSR reports has been questioned by many researchers and has been found to be low in practice (Habek & Wolniak, 2016; Michelon, Pilonato and Ricceri, 2015; Boiral, 2013). The purpose of CSR reporting is to provide better transparency and

accountability (Cho et al., 2012). However, the voluntary nature of the reporting and the lack of a single format provide opportunities for organizations to report in a strategic and instrumental manner (Cho et al., 2012; Mahoney et al., 2013; Boiral, 2013). Mahoney et al. (2013) believe that firms use CSR reports as a green-washing initiative, while Boiral (2013) uses the term “simulacrum” to describe the unbalanced reporting of information. Similar to Boiral’s results, Cho et al. (2012) also suggest that CSR reports are often not providing meaningful information, but instead are focused on creating a positive image of the company’s sustainable performance. Some researchers have found that CSR reports are used as impression management tools (Michelon, Pilonato & Ricceri, 2015) or marketing tools (Cho et al., 2012) that aim to positively affect stakeholders’ perceptions rather than provide accountability and transparency. In addition, Boiral (2013) empirically finds an unbalanced quality in the CSR reports examined in his study.

Though many researchers have studied the quality of CSR disclosure in western countries (Hooks & Van Staden, 2011; Hasseldine et al., 2005; Hooks, Coy and Davey, 2002; Sethi et al., 2017; Habek & Wolniak, 2016; Boiral, 2013; Diouf & Boiral, 2017), there are few studies assessing the quality of CSR reports in China. Previous studies have focused on the drivers of and challenges to CSR adoption in China (Wang & Juslin, 2009); unique Chinese CSR disclosure dimensions (Xu & Yang, 2010); and Chinese culture and CSR value (Low & Ang, 2013; Wang & Juslin, 2009; Zhu & Yao, 2008). Most of them have investigated the motivations for and barriers to adoption and the extent of disclosure. In the existing literature, the quality of CSR reports in China has not been examined widely. Chan and Welford (2005) found that one third of Chinese listed companies had reported some CSR information, but the quality of the reporting was quite low. However, their data was quite old and did not represent the current situation. Therefore, more studies are required to better understand CSR reporting quality in China.

2.4 The Boiral’s study (2013)

Boiral’s (2013) study aimed to examine the quality of 23 A and A+ level GRI reports¹ in

¹ The application levels are not a rating of an organization’s sustainability performance or report quality. A level represents the largest number of GRI disclosure items that can be addressed in a report.

2007 in the energy and mining industries, which both face sustainability issues, from 14 different countries.

This study is inspired by the ideas and findings of Boiral's (2013) study in several ways.

Firstly, Boiral (2013) examined the quality of CSR reports in the UK, Brazil, Spain, Korea, Russia, Germany, Netherlands, Canada, South Africa, Australia, Chile, the US, Mexico and Indonesia. China was not included. The present study helps to fill this gap.

Secondly, Boiral's study produced some new and interesting ideas and findings.

Boiral's study shows a clearly unbalanced quality in the examined CSR reports.

Boiral (2013) found that 90% of significant negative events were not reported in the analyzed reports. Moreover, there was a clear overemphasis on achievements and positive disclosures, demonstrating an obvious imbalance in these A and A+ level CSR reports. Thus, he concluded that CSR reports are used as simulacra. He further used the term "corporate narcissism", suggested by Duchon and Drake (2009) to define the imbalanced reporting actions that included highlighting the positive achievements and camouflaging most of the negative information. Thus, Boiral (2013) refers to the principle of balance as an empty promise.

Boiral's findings bring the balance principle suggested by GRI to the fore.

The concept of balance is defined by GRI (2015) as follows: "the report should reflect positive and negative aspects of the organization's performance to enable a reasoned assessment of overall performance" (P.17). This means an organization should report both favourable and unfavourable information about its CSR performance in its report. If there is only positive disclosure, or the negative information is understated, then the report is not well balanced. The imbalanced reporting practices found by Boiral, demonstrated a clear failure to comply with the principle of balance and influenced the reliability of the reports. (Boiral, 2013; Diouf & Boiral, 2017). In addition, there are three tests that GRI prescribed in regard to the principle of balance: "1. The report covers both favourable and unfavourable results and topics; 2. The information in the report is presented in a format

that allows users to see positive and negative trends in performance on a year-to-year basis; and 3. The emphasis on the various topics in the report reflects their relative priority” (GRI, 2016, p. 13).

Boiral introduces a new counter-accounting approach for assessing the balance quality of the reporting information.

Boiral (2013) introduces a new counter-accounting approach, called online counter-accounting. He suggests that merely reading CSR reports cannot emancipate external users from the impressions managers try to create. The Internet, as an important channel for the latest, external information about sustainability issues, especially significant ones, can influence organizations. This online counter-accounting approach can criticize the information disclosed in CSR reports, as managers cannot exercise control over the information disclosed by external resources. Boiral (2013) thinks this new approach can be effective in evaluating the balance of the information reported. Boiral’s (2013) study revealed 116 significant problematic events using this new approach, and he further checked how organizations disclosed them in their reports in order to better understand the quality, especially the balance principle suggested by GRI. GRI states under the Balance principle that “The report is expected to avoid selections, omissions, or presentation formats that are reasonably likely to unduly or inappropriately influence a decision or judgment by the report reader” (GRI, 2016, p. 13). Therefore, in the present study, evidence found in external sources is used to establish that events occurred within the reporting period that attracted public attention, and is further used to check whether the organizations made disclosures about those events in their reports or not. This is particularly significant for organizations for which bad events are revealed by the external resources; whether they disclose both favourable and unfavourable information can reflect the balance quality of their reports.

Boiral’s (2013) study is based on legitimacy theory and the symbolic management approach.

Legitimacy theory is derived from the concept of organizational legitimacy. Dowling and Pfeffer (1975) suggest that there is a social contract between organizations and society.

This means that organizations need to operate according to society's expectations. Substantive and symbolic approaches are the two management approaches in legitimacy theory (Ashforth & Gibbs, 1990; Michelon et al. 2015). The substantive approach refers to a sense of accountability and transparency by taking a genuine interest in being accountable, while the symbolic approach suggests that managers exercise powerful control over information and aim to positively influence stakeholders' perceptions (Michelon et al. 2015). The objective of the symbolic approach is to portray the organization as socially responsible no matter what the organization actually does. Therefore, CSR reporting will be unbalanced if the symbolic management approach is applied (Wagner et al. 2009; Michelon et al. 2015)

Based on those theories, Boiral (2013) suggests that the voluntary nature of CSR reporting provides a good opportunity for managers to exercise their control and power in a biased way (using the symbolic approach). It increases the likelihood of biased information being disclosed in reports, reflecting management interests without taking others' (stakeholders) interests into consideration (Boiral, 2013, Owen, Swift, Humphrey, and Bowerman, 2000; Gray, 2010; Unerman, Bebbington and O'Dwyer, 2007). Boiral agrees with some previous researchers that corporate behaviour is mainly decided by the managers because of their significant control and hegemonic interests with regard to the information being disclosed (Owen et al. 2000; Gray, 2010). Thus, to understand the behaviour of organizations, one must understand the behaviour of the managers. The findings of his study indicate that managers' behaviours can influence the quality of CSR reports (Boiral, 2013).

This study agrees with the ideas suggested by Boiral (2013) and aimed to go beyond them and understand the motivations for Chinese managers' behaviour by taking Chinese cultural values into account.

2.5 Cultural values influence individuals' behaviour

Kim and Nam (1998) suggest that to study managers' behaviour, researchers must be aware of the influences of unique cultural values. Culture can determine an individual's

value system, affect behaviour and disseminate ideas about what is right and wrong and what individuals should or should not do (Kim & Nam, 1998; Kluckhohn & Strodtbeck, 1961). More specifically, culture can decide the way a person communicates with others in the same society. People with different cultural values tend to respond differently to the same issue. In the CSR reporting context, managers with different cultural values will make different decisions about what to say and how to say it (Kim & Nam, 1998). Hemingway and MacLagan (2004) discuss the connection between managers' cultural values and their influence on CSR. They suggest that managers' values affect their decisions about what to disclose in CSR reports. Boiral (2013) holds a similar idea and confirms the management influence on reporting quality. Thus, for the purposes of this study, to better understand the quality of Chinese CSR reports, the cultural values of Chinese managers need to be taken into account in the cultural context.

The Chinese concept of face plays an important role in Chinese managers' behaviour in business communication (Jian et al., 2017; Dong & Lee, 2007; Cardon & Scott, 2003). Chinese managers' values are strongly affected by the philosophy of Confucius (Dong & Lee, 2007; Wang & Juslin, 2009) and the importance of face for Chinese managers affects their decisions on what CSR information should be communicated in reports, and how (Cardon & Scott, 2003).

2.6 Western face and Eastern face

Though western countries also use the term 'face', Chinese people have a unique, deeper and more complex meaning for the concept, influenced by their culture (Kim & Nam, 1998). Kim and Nam (1998) analyze the different concepts of face in Western and Asian countries. They suggest that there are some surface similarities in the face concept. However, after a critical examination, they conclude that the source, motivation, goals and consequences are totally different. Therefore, the influences of the concept of face on values are also different.

Ignorance of the importance of face for Chinese people can result in strained business relationships and loss of business opportunities (Dong & Lee, 2007). Thus, it is necessary

to understand the effect the Chinese concept of face has on CSR reporting quality.

2.7 What is the Chinese concept of face?

The Chinese concept of face has been given many different definitions by researchers (Zhai, 2004; Huang & Hu, 2004; Wang & Tan, 2000; Ho, 1976; Coggin & Coggin, 2001). Zhai (2004) defines face as self-image recognized by external parties in the community. Leung and Chen (2001) consider face as the respect, pride, and dignity of an individual as a consequence of his social achievements, while Coggin and Coggin (2001) think face is a mixture of self-respect and confidence. Though there is no one perfect definition for the Chinese concept of face, some major characteristics of Chinese face have been agreed upon by most researchers (Cardon & Scott, 2003; Dong & Lee, 2007; Ho, 1976; Huang & Hu, 2004; Coggin & Coggin, 2001; Leung & Chen, 2001), which will be introduced in the following paragraphs.

Face is a term used at an individual level and many researchers have studied the Chinese concept of face (Ho, 1976; Huang & Hu, 2004; Coggin & Coggin, 2001; Leung & Chen, 2001; Lin, 1977; Stover, 1974). The Chinese saying that “a person needs face like a tree needs bark” displays the essential nature of face in Chinese society (Ho, 1976). In addition, face is essential in explaining many Chinese behaviours at the individual level (Hu, 1944; Ho, 1976; Redding & Ng, 1983; Cheng, 1986; Cardon & Scott, 2003; Dong & Lee, 2007).

Face is a cultural concept that has influenced Chinese life for thousands of years. The Chinese concept of face is rooted in Confucianism (Jie & Gong, 2015; Dong & Lee, 2007). Many unspoken rules in the Chinese culture are generated from Confucius' thoughts, which strongly and continuously influence Chinese people's values and behaviours (Dong & Lee, 2007). The main theme of Confucianism is to achieve social harmony by maintaining appropriate interpersonal relationships and networks (Wang & Juslin, 2009). The Chinese concept of face, as a derivative of Confucianism, has become one of the key components in determining how Chinese individuals behave, especially in the way they communicate and interact with others in society (Redding & Ng, 1983; Cardon & Scott, 2003; Dong & Lee, 2007).

Gaining and losing face are two important phrases in the Chinese concept of face (Dong & Lee, 2007; Jie et al., 2015; Liao & Wang, 2009; Cardon, 2006; Cardon & Scott, 2003; Redding & Ng, 1983). Losing face means something bad is done, which damages an individual's reputation or prestige, while gaining face means acting well to enhance one's reputation (Seligman, 1989). Praising, and giving gifts and concessions are some common face-gaining actions (Brunner & Wang, 1988; Seligman, 1989) whereas face-losing actions include directly addressing conflict, demonstrating public displays of anger and directly refusing requests (Hwang, 1987; Seligman, 1989).

Chinese people are very sensitive to face. Chinese people are concerned about their public image, social performance and others' evaluation (Hwang, 1987). They consider loss of face as a very serious matter (Dong & Lee, 2007). The consequences of loss of face are much more serious than feeling shame or embarrassment. Redding and Ng (1982) investigated the reactions of Chinese middle-level executives about gaining and losing face. Chinese have a strong feeling of satisfaction, pride and confidence by gaining face, while they feel worry, embarrassment, shame, anxiety and tension by losing face. Wilson (1970) pointed out that Chinese are more sensitive with regard to the concept of face than Westerners, and deviant individuals suffer loss of face and considerable tension.

2.8 How does face affect Chinese reporting quality?

Face is an inherent part of Chinese communication (Li & Sakai, 1996). As Redding and Ng (1982) suggested, the Chinese concept of face is important in Chinese business communication. Cardon and Scott (2003) recognize that Chinese managers use face-related strategies in business communication. In the CSR reporting context, face may motivate Chinese managers to communicate CSR information in an imbalanced way. Dong and Lee (2007) suggest that positive information about business performance is disclosed in order to gain face. Conversely, disclosure of negative information would lead to loss of face. This means that Chinese managers will tend to minimize the amount of negative information disclosed and use more space to report their organization's positive performance in the CSR reporting context.

2.9 Aim of the Study

Given the Chinese concept of face and its influence on CSR reporting, it seemed likely the Chinese concept of face would act as an implicit driver for Chinese managers to choose a symbolic rather than a substantive approach to achieving organizational legitimacy. Thus, this study anticipated a similar imbalance in reporting results in China as in Boiral's (2013) study.

Due to lack of empirical evidence on CSR report quality in China, this study was conducted to investigate the balance in Chinese organizations' CSR reports in practice. Therefore, the aim of this study was:

To find out whether the selected Chinese organizations provided balanced information in their CSR reports.

2.10 Research questions

As Boiral's (2013) study shows, merely assessing the information disclosed in the CSR report cannot reflect the actual balance of the report. The online counter-accounting approach introduced by Boiral (2013) is used to check the existence of any unfavorable events within the reporting period. Thus, for each of the selected ten Chinese organizations, three research questions were asked:

Research question 1:

To what extent do ten organizations present positive, negative or neutral information in their CSR reports?

Research question 2:

Is there any significant event² revealed in external sources about the organizations' CSR performance within the reporting period?

² Please refer to the methods section on page 21-22 for the main criteria of event selection.

Research question 3 (sub-question of Research question 2):

If so, to what extent, (not reported, partially reported or fully reported), do the selected organizations disclose these significant events in their CSR report?

Chapter 3: Methods

3.1 Sample selection

Ten Chinese organizations listed in the GRI reports list 2017 were chosen for the purposes of this study, from two industries: Energy and Construction (GRI, 2017).

The GRI reports list 2017 is available from the GRI official website. The limited version of the list was used because it is free of charge. It is an Excel file, which contains the organization name, report title, country, region, sector, size and report type (citing-GRI or non-GRI)³

Samples were selected from the list by initially filtering the organizations on the terms ‘Chinese’, ‘large’ and ‘citing-GRI’. This research only focused on large organizations because they have more information to disclose and they are more likely to prepare CSR reports under pressure from their stakeholders, especially from their foreign investors. Also, large organizations are regarded as the benchmarks for others in the same industry in China. This study focuses on the reporting principles suggested by GRI; therefore, the samples needed to cite GRI.

Energy and Construction were two industries with more than five organizations remaining after the first-stage filtration. They were chosen because they are comparatively high-level polluters, and their operating processes are quite risky. It is likely that these two industries will have more negative events disclosed both internally and externally, which can provide stronger results and conclusions.

Organizations that provided CSR reports in both English and Chinese versions were prioritized. The English version CSR reports provided by the sample organizations were

³ Citing-GRI indicates CSR reports make explicit reference to being based on the GRI guidelines;
Non-GRI indicates there is no reference to being based on the GRI guidelines.

translated directly from the original Chinese versions. I have a Chinese background and uses Chinese as my first language. Thus, the analysis was mainly based on CSR reports in Chinese in order to get a better and more direct understanding of the information disclosed by the organizations.

3.2 Data

Secondary data were the main sources collected. There were two types of data required to answer the research questions; information from selected organizations' CSR reports and information from external sources.

This study did not limit sample selection to the A and A+ level CSR reports⁴, in contrast with Boiral's (2013) study. This was due to the limited number of Chinese companies publishing CSR reports citing GRI. In addition, because of the language differences, some reports in the list only published in Chinese and were not ranked according to the GRI applications.

The content analysis focuses on the 2016 version CSR reports. Because this study was conducted at the beginning of 2018, the latest reports were mostly published in July 2017 for the reporting period from 1 January to 31 December 2016. There was a time lag when collecting the secondary data. CSR reports released publicly on the ten organizations' websites were searched, downloaded, analyzed and evaluated. I developed an index to assess the balance of the CSR reports. The index (see Appendix 1) was developed based on the G4 sustainability reporting principles (G4; P.9) which include five categories: environment, society, employees, human rights and products, as suggested by GRI. The themes selected in each category were based on the content of the CSR reports and incidents disclosed by external resources.

Information disclosed by external sources was searched online, collected, analyzed and evaluated (materiality). Baidu, the biggest search engine in China, was used for external evidence collection. Initially, both Google and Baidu were used for online searching.

⁴ The applications of A and A+ levels were introduced in G3, but are not used anymore in G4 guidelines.

However, not much information was found using Google, while Baidu had more resources. Thus, I decided to focus on using Baidu for data collection.

This study used one of three types of online information sources as Boiral (2013) suggested which is the articles published online, such as local and international newspapers published on the internet, online magazines, expert reports, websites of local government and websites of NGOs. The selected news articles need to meet the same three main criteria as Boiral (2013) did: 1. Addressed significant events that occurred during the reporting period in 2016; 2. Clearly involved a sustainable development issue covered by one or more of the GRI indicators; and 3. Were based on specific, well - documented facts.

Each event would be further classified under three categories: not reports, partially/poorly reported or rather clearly reported after comparing the relevant information disclosed in the CSR reports and external sources.

A table was created to summarize the findings, including the name of the organization, year, data, incidents, locations, numbers of sources reported, consequences, materiality and existence in the CSR reports, and sources (see Appendix 12). A total of 47 significant problematic events involving sustainable development issues were found using the online counter-accounting approach.

3.3 Design

Due to the scope limitations of this study as a dissertation, it was very difficult to carry out exactly the same study design used by Boiral (2013). He analyzed and examined a significant amount of diverse data, including 2,700 pages of information from reports and 116 significant news events from 23 companies across 14 countries, taking over two years to complete the analysis. Therefore, this study undertook a similar, but much simpler investigation of the balance quality of selected Chinese organizations' CSR reports.

This was an exploratory study that aimed to observe and explore the phenomena in the data. For the purpose of this study, secondary data from multiple sources are collected to reflect the balance quality of each organization's CSR report. Two steps were conducted to answer the three research questions. Firstly, a content analysis was conducted of the information disclosed in the CSR reports, using the index developed. Sentence count was the unit used in the analysis process for this study. The total number of sentences under each category were counted and further classified by their nature as positive, negative or neutral⁵. The existence of both positive and negative information disclosed was checked to understand the reports' balance in the preliminary stage. Secondly, the online counter-accounting approach proposed by Boiral (2013) for collecting external evidence about sustainability issues was applied to events that happened within the reporting period for the selected Chinese organizations. Only significant events were recorded and analyzed⁶. Then, I went back to the analyzed CSR reports and used the external evidence found to check the existence of relevant information disclosed in the reports and to what extent (as indicated by the sentence count). Conclusions about the overall balance of the reports were made after answering the three research questions. The results for the ten sample organizations were recorded and are further discussed in subsequent sections.

3.4 How is the information disclosed classified as positive, negative or neutral

Understanding the meaning of a sentence involves looking at the words used. A sentence using words like “strength” (提升), “reduced” (减少), “rewards”(获奖), “improvement” (提升) or “actively doing” (积极) is more likely to be classified as positive because of the meaning of the words. Sentences with words like “negatively”(负面的), “damage”(破坏), “breach (of laws or regulations)” (违纪、法) or “badly” (严重) are more likely to be classified as negative.

Understanding the meaning of a sentence also depends on the context. Sometimes there were no clear positive or negative words found. In such circumstances, the connotation

⁵ Please refers to section 3.4 for the Classification of positive, negative and neutral sentences

⁶ Please refers to section 3.5 for the Classification of significant event

of a sentence was the decisive factor. If it described some performance that was helpful to society or good for the environment, it was a clearly positive. If it only showed the facts or truth that already existed, such as the amount of energy produced, it was classified as neutral. Death or injuries of employees and customers, disregard of regulations or laws, being sued or incurring monetary fines, and accidents in the production process were classified as negative sentences.

For example, in Huaneng's Sustainability Report 2016, it stated that, "In 2016, the emission of sulfur dioxide, nitrogen oxide, and smoke and dust dropped by 29%, 22% and 42% respectively year on year, and the control level of pollutant emission further improved." (China Huaneng Group, 2017, p. 42). This is a positive sentence. The words "dropped" (降低) and "improved" (提升) tell a positive story of Huaneng's environmental protection performance compared with previous years.

In CRCC's Social Responsibility Report 2016, it stated that "In 2016, the total energy consumption of CRCC was equal to 5.6804 million tons of standard coal." (CRCC, 2017, p. 33). This is a neutral sentence. It tells the total amount of energy used within the reporting period, which is considered as a fact.

In CSCEC's Sustainability Report 2016, it stated that "In July 2016, one of the Company's projects caused casualties as the employees were hit by objects" (CSCEC, 2017, p. 55). This is a negative sentence because it shows poor performance of the organization in keeping its employees safe.

3.5 How to classify the significance of events found

When classify the level of significance of an event, the number of media sources reporting on the event is considered as well as the severity of the environmental and social impact it has incurred. If there are more than 6 different media reporting on the same event, then it will be classified as "highly significant". However, if the event has the potential of causing severe environmental or social consequences, then the number of reporting sources is less relevant. The event will be classified as "significant".

For example, there was a collapse accident happened on 13rd April 2016 for CCCC (see Appendix 12), which was reported by 22 different channels. Moreover, it had caused the death of 18 employees, injured 19 employees as well as 18,610,000 RMB loss. Thus, it was classified as a “highly significant” event.

On 1st November 2016, CRCC had a high altitude falling incident happened (see Appendix 12). Even though there was only one channel disclosed the event, but it led to the death of its employees which was considered as a serious matter. So, it was classified as “significant”.

On 8th May 2015, CNPC had an oil spill incident happened (see Appendix 12). It was reported by three different sources. It had polluted a river which was the main source of water supply the nearby villages. Thousands of residents were affected by this event; thus, it was classified as “significant”.

3.6 Background information for the ten Sample organizations

For each organization, two types of background information are provided in panels A and B. Panel A provides the basic information about the organization itself while Panel B provides some information from the analysis of its CSR report.

Table 1. Background information of ten selected Chinese organizations

Panel A

| Name of organization | Assets value (Yuan) | Turnover (Yuan) | Employees | Ownership | Where it listed |
|----------------------|---------------------|-----------------|-----------|-------------|-------------------------------|
| Shenhua | 979.3 billion | 247.9 billion | 202,300 | State-owned | Hong Kong; Shanghai |
| CNNP | 250 billion | 34.2 billion | 10,000 | State-owned | Shanghai |
| SPIC | 1001.2 billion | 202.9 billion | 140,000 | State-owned | Hong Kong |
| Huaneng | 1002.9 billion | 43 billion | 102,569 | State-owned | New York; Hong Kong; Shanghai |

| | | | | | |
|-------|----------------|----------------|-----------|----------------------|-------------------------------|
| CNPC | 4034.1 billion | 2016.8 billion | 1,589,508 | State-owned | New York; Hong Kong; Shanghai |
| CCCC | 849.8 billion | 482.8 billion | 112,719 | State-owned | Hong Kong |
| CSCEC | 1629.8 billion | 1060.8 billion | 270,464 | State-owned | Shanghai |
| HNA | 97 billion | 9.93 billion | 10,000 | Government-sponsored | Shanghai |
| GDCEG | 61.2 billion | 44.1 billion | 31,700 | State-owned | Preparing |
| CRCC | 131.19 billion | 629.33 billion | 259,460 | State-owned | Hong Kong; Shanghai |

Panel B

| Name of organization | Sector of activity | Title of the 2016 CSR report | Pages of reports | Reporting period | Reporting sections |
|-----------------------------|---------------------------|-------------------------------------|-------------------------|-------------------------|---|
| Shenhua | Energy | CSR report 2016 | 99 | Jan 1 to Dec 31, 2016 | Innovative development, Safe development, Green development, People-oriented development and Social development |
| CNNP | Energy | Social responsibility report 2016 | 76 | Jan 1 to Dec 31, 2016 | Dedicated to safety for better development quality, Support the environment with more greenness, Powering boost economy for mutual prosperity and win-win results, Committed to humanity for a better life. |
| SPIC | Energy | Social responsibility report 2016 | 96 | Jan 1 to Dec 31, 2016 | Clean energy development, Industry development, Safety and environmental protection and People-oriented development |
| Huaneng | Energy | Sustainability report 2016 | 77 | Jan 1 to Dec 31, 2016 | Innovation development, Harmonious development, Green development, Open |

| | | | | | |
|---|--------------|---|----|------------------------|--|
| | | | | | development and Shared development. |
| CNPC | Energy | Corporate Social responsibilities report 2016 | 76 | Jan 1 to Dec 31, 2015* | Sustainable energy supply, Responsible operation, Employee development and Public welfare. |
| CCCC | Construction | Social responsibility report 2016 | 84 | Jan 1 to Dec 31, 2016 | Industrial development, Safety and environmental development and Social development |
| CSCEC | Construction | Sustainability report 2016 | 88 | Jan 1 to Dec 31, 2016 | Political responsibility, Social welfare responsibility and Global responsibility |
| HNA | Construction | Social responsibility report 2016 | 58 | Jan 1 to Dec 31, 2016 | Innovative development, Industrial development, Safety and environment-friendly development and Social development |
| GDCEG | Construction | Social responsibility report 2016 | 62 | Jan 1 to Dec 31, 2016 | Production development, Technology innovation, Green development and Social development |
| CRCC | Construction | Social responsibility report 2016 | 93 | Jan 1 to Dec 31, 2016 | Production and safety development, Environment protection, People-oriented development and Social harmony |
| *Footnote: Latest report available at the time, the title of the report is 2016 while the reporting period is 2015. | | | | | |

1. Shenhua

Panel A:

Shenhua Group Corporation Limited is a Chinese state-owned mining and energy organization. It was founded in 1995 under the sole directorship of the State Planning Committee. It was listed on the Hong Kong Stock Exchange and Shanghai Stock Exchange in June 2005 and October 2007 respectively. Since then, it has become the largest coal-producing organization in China. It engages in the production and sale of coal and electricity, railway, port and shipping transportation and coal-to-olefins businesses. In 2016, Shenhua's turnover was 247.9 billion Yuan, with total assets of 979.3 billion Yuan⁷ and 202,300 employees. It ranked 165 in the Fortune Global 500. It holds the leading position in the Chinese electricity market among the listed coal organizations.

Panel B:

This is the ninth CSR report published by Shenhua since 2008, and is 99 pages in length. The reporting period is from January 1 to December 31, 2016, and the report was published in May 2017. It was formulated in accordance with GRI guidelines. Both Chinese and English version reports were prepared and released on its official website.

The major sections in Shenhua's CSR report 2016 include innovative development, safe development, green development, people-oriented development and social development.

The innovative development section discloses information about its innovative governance system, increased investment in technical and scientific innovation, and its awards and achievements in the innovative development area. The safe development section talks about promoting a safe operational system, which protects the safety of its customers and employees. The green development section shows that business activities involve reducing emissions, reducing energy consumption, protecting the environment, and respecting biodiversity. Information disclosed under the people-oriented development section talks about how the business respects labour rights, describes the money and time spent on employee training and education and how it takes good care of

⁷ The exchange ratio is 1 US dollar=6.80 Yuan by 28 August 2018

its employees. Under the social development section, information is provided about contributions to local communities and targeted poverty alleviation.

2. CNNP

Panel A:

CNNP, China National Nuclear Power Co., Ltd was founded in 2008. It is a major state-owned nuclear power generation organization. In 2015, it became the first pure nuclear power organization to issue A-shares and go public. It trades on the Shanghai stock market and it is the core subsidiary of CNNC (China National Nuclear Corp), which is directly controlled by the Chinese government. It engages in the development, investment, construction, operation and management of nuclear power projects and supporting facilities. It is poised to accelerate overseas expansion, with the Xi Jinping leadership emphasizing infrastructure exports. It enjoys national support from the Asian Infrastructure Investment Bank, set up at the initiative of China. By the end of 2015, its total assets were about 250 billion Yuan, with turnover of 34.2 billion Yuan and it had nearly 10,000 employees.

Panel B:

This is the fifth CSR report published by CNNP since 2012, and is 76 pages in length. Its reporting period is from January 1 to December 31, 2016. The report was published in November 2017. It was formulated in accordance with GRI guidelines. Both Chinese and English version reports were prepared and released on its official website.

The major sections in CNNP's Social Responsibility Report 2016 include 'Dedicated to safety for better development quality' (safety), 'Support the environment with more greenness' (environmental), 'Boosting the economy for mutual prosperity and win-win results' (economic), and 'Committed to humanity for a better life' (social).

Under the safety section, it reports on the nuclear safety culture, management and practices. Information reported in the environmental section talks about its green and low-

carbon production as well as its biodiversity protection. The economic section discloses information about business cooperation, promoting industrial development and its anti-competition behaviour. In the social section, the information reported shows how CNNP protects labour rights, promotes occupational health, makes investments in training and educating its workers, facilitates local community development, and makes contributions to public welfare and charities.

3. SPIC

Panel A:

SPIC, the State Power Investment Corporation Limited, was established in May 2015 through the merger of the China Power Investment Corporation and the State Nuclear Power Technology Corporation. It is a newly formed state-owned integrated energy group with power as its core business. It has 9 listed companies including 2 Hong Kong red chip listed companies and 5 domestic A share listed companies. It can generate thermal power, hydropower, nuclear power, solar power and wind power, with clean energy accounting for 44% of the total, which demonstrates a distinctive clean development feature. By the end of 2016, its turnover was 202.9 billion Yuan, with total assets of 1001.2 billion Yuan and 140,000 employees. In 2016, it ranked 342nd in the Fortune Global 500.

Panel B:

This is the second CSR report published by SPIC since 2015 and is 96 pages in length. Its reporting period is from January 1 to December 31, 2016. It was published in August 2017. It was formulated in accordance with GRI guidelines. Both Chinese and English version reports were prepared and released on its official website.

The major sections in SPIC's Social Responsibility Report 2016 include clean energy development, industry development, safety and environmental protection, and people-oriented development.

Under the clean energy development section, it reports on nuclear power safety and efficiency, clean energy development and the reduction in non-renewable resource consumption. Information disclosed under industry development talks about the positive achievements and awards its projects received, its innovative strategy and system development, commitment to employee localization and contributions to local communities. The safety and environmental protection sections disclose information about production safety management, emergency response management, strengthening of hazard identification, protecting the safety of its customers and employees, reducing pollutant emissions and respecting biodiversity. Information disclosed in the people-oriented section talks about how the company protects employees' rights and interests, invests in employees' training and education and contributes to poverty alleviation.

4. Huaneng Group (CHNG)

Panel A:

China Huaneng Group Co. Ltd is also known as CHNG. It is a state-owned electric power organization in China, established in 1985. In 1995, it became a subsidiary of the State Power Corporation of China, which replaced the commercial function of the Ministry of Power Industries. It mainly engages in development, investment, construction, operation and management of power resources, and sale of power and heat, energy transportation and renewable energy. Huaneng Power International (HPI) and Shandong Huaneng Power Development are two subsidiaries that were initially listed on the New York Stock Exchange. HPI later listed on both the Stock Exchange of Hong Kong and the Shanghai Stock Exchange. In 2000, the two subsidiaries merged. In 2016, the China Huaneng Group had a turnover of 43 billion Yuan, with total assets of 1.0029 trillion Yuan and 102,569 employees. It ranked 217th in the Fortune Global 500.

Panel B:

This is the eleventh CSR report published by Huaneng since 2006 and is 77 pages in length. Its reporting period is from January 1 to December 31, 2016. It was published in June 2017. It was formulated in accordance with GRI guidelines. Both Chinese and English version reports were prepared and released on the corporate website.

The major sections in Huaneng's sustainability report for 2016 include innovation development, harmonious development, green development, open development and shared development.

Information disclosed under the innovation development section deals with both technical and scientific innovation and management innovation. Harmonious development includes information about how the business is developing its supply chain, improving production efficiency and ensuring production safety. Information under the Green development section focuses on clean energy implementation, saving energy and resources, protecting the environment and respecting biodiversity. The open development section is about carrying out strategic cooperation, using forward-looking analysis, controlling overseas security risks and strengthening management. In the shared development section, the information reported focuses on achieving win-win results with partners, sharing harmonious communities, carrying out targeted poverty alleviation and caring for employees.

5. CNPC

Panel A:

CNPC, the China National Petroleum Corporation, is a state oil organization established on September 17, 1988 by the Ministry of Petroleum Industries. On April 6, 2000, the American Depositary Shares (ADS) and H shares of CNPC were listed on the New York Stock Exchange (stock code: PTR). It is also listed on the Stock Exchange of Hong Kong Limited (stock code: 857) as well as the Shanghai Stock Exchange in China (stock code: 601857). CNPC is one of the largest integrated energy groups in the world, with

businesses covering many different aspects, such as oil and gas exploration and production, refining and chemicals, natural gas and pipelines, and marketing and trading. In 2016, it had total assets of 4.0341 trillion Yuan, turnover of 2.0168 trillion Yuan and 1,589,508 employees. It ranked third in the world's 50 largest oil organizations, and fourth in the Fortune Global 500.

Panel B:

This is the fifth CSR report published by CNPC since 2012, and is 76 pages in length. Its reporting period is from January 1 to December 31, 2015. It was published in August 2016. It is the only report with a different reporting period. It was formulated in accordance with GRI guidelines. Both Chinese and English version reports were prepared and released on its official website.

The major sections in CNPC's Corporate Social responsibilities report 2016 are sustainable energy supply, responsible operation, employee development and public welfare.

Information disclosed in the sustainable energy supply section reports on its technological and managerial innovation, the development of clean energy and its international energy cooperation. In the responsible operation section, it talks about safe operation management, promoting occupational health and safety, respecting biodiversity, reducing energy consumption and carbon emissions management. The employee development section includes information about employees' rights and interests, training and education for workers, respecting cultural diversity and awards won for taking good care of employees. In the public welfare section, it reports information on poverty alleviation, supporting education and contributing to local communities.

6. CCCC

Panel A:

CCCC, the China Communications Construction Company Limited, was incorporated in 2006. In the same year, its H shares were listed on the Main Board of the Hong Kong Stock Exchange. It was the first large state-owned transportation infrastructure group to enter the overseas capital market. It engages in the design and construction of transportation infrastructure; dredging and heavy machinery manufacturing; port, terminal, road, bridge, railway, tunnel, and civil work design; international project contracting; and import and export trading services. It had a registered capital of 4.5 billion Yuan. It is the largest port construction and design organization in China, and the second largest dredging organization (in terms of dredging capacity) in the world. By the end of 2017, CCCC had 112,719 employees, with turnover of 482.8 billion Yuan and total assets of 849.88 billion Yuan. In 2017, it ranked 103rd in the Fortune Global 500.

Panel B:

This is the tenth CSR report published by CCCC since 2008, and is 84 pages in length. Its reporting period is from January 1 to December 31, 2016. It was published in September 2017. It was formulated in accordance with GRI guidelines. Both Chinese and English version reports were prepared and released on its official website.

The major sections in CCCC's sustainability report 2016 were industrial development, safety and environmental development, and social development.

In the industrial development section, information disclosed talks about the significant achievements in several projects, technological innovations, international cooperation and contributions to economic growth. The safety and environmental development section provides information about customer privacy protection, occupational safety, energy consumption, emissions reduction and respecting biodiversity. In the social development section, it describes business actions in improving customer satisfaction, training and education of workers, respecting labour rights and contributing to local communities.

7. CSCEC

Panel A:

CSCEC, the China State Construction Engineering Co., Ltd, was established in 2007. It is a large state-owned construction organization. It was successfully listed on the Shanghai Stock Exchange in 2009. Its business covers house construction, international contracting, real estate development and investment, infrastructure construction, investment, prospecting and design. It is the largest international construction contractor and has completed many projects in a number of regions around the world. It is well known for undertaking super high-rise, grand scale, cutting-edge and novel projects and has constructed a large number of landmark projects around the world. By the end of 2017, it had 270,464 employees, with turnover of 1060.8 billion Yuan and total assets of 1629.8 billion Yuan. In 2017, it ranked 23rd in the Fortune Global 500.

Panel B:

This is the eighth CSR report published by CSCEC since 2009 and is 88 pages in length. Its reporting period is from January 1 to December 31, 2016. It was published in September 2017. It was formulated in accordance with GRI guidelines. Both Chinese and English version reports were prepared and released on its website.

The major sections in CSCEC's sustainability report 2016 include political responsibility, social welfare responsibility and global responsibility.

In the political responsibility section, information disclosed relates to its contributions to China's Great Ambition. Under the social welfare responsibility, information deals with the business's contributions to local communities, and how it promotes targeted poverty alleviation initiatives. The global responsibility section discusses many different responsibilities, including partnership responsibility, industry responsibility, employee-centered responsibility, environmental responsibility, quality responsibility and value responsibility. It discloses information about its anti-corruption and anti-competitive behaviours, protecting the safety of customers and employees, respecting customer

privacy, training and education for workers, reducing emissions and pollutants, saving energy and other resources, and respecting biodiversity.

8. HNA

Panel A:

HNA Infrastructure Investment Group Co., Ltd was incorporated in 1993 and listed on the Shanghai Stock Exchange in 2002. In 2006, it had total assets of 97 billion Yuan, with turnover of 9.93 billion Yuan and 10,000 employees. It is a subsidiary of a Fortune Global 500 organization, HNA Group, which is the first international joint venture with capital infusion from the state. It engages in construction, real estate, airport investment and renovation projects. It follows the national initiatives with PPP projects as the direction of development and is expanding its business in order to become a leading global infrastructure operator.

Panel B:

This is the first CSR report published by HNA and is 58 pages in length. Its reporting period is from January 1 to December 31, 2016. It was published in September 2017. It was formulated in accordance with GRI guidelines. It only provided the report in a Chinese version on its official website.

The major sections in HNA's Social Responsibility Report 2016 are innovative development, industrial development, safety and environment-friendly development and social development.

Information disclosed in the innovative development section relates to the implementation of innovative technology and investment in industrial innovation. In the industrial development section, it talks about quality control of products and services, cooperation and win-win relationships with business partners, respecting customer privacy and improving customer satisfaction. Under the safety and environment-friendly development section, it provides information on how it protects the safety of its customers

and employees, keeping business operations safe, levels of energy saving, the reduction of emissions, and the protection of biodiversity. In the social development section, information is reported about respecting human rights, training and education of employees, relieving poverty and developing social welfare for local communities.

9. GDCEG (Guangdong Construction Engineering Group Co., Ltd)

Panel A:

GDCEG was founded in 1953. It is a large state-owned enterprise which is now supervised by the SASAC of Guangdong Provincial People's Government. It engages in housing construction, urban rail transportation, and the construction of basic foundations, municipal utilities, roads and bridges and hydropower projects. It is a leading construction organization in Guangdong province with the widest operational scope, the highest professional structure, the highest technical qualifications and the strongest integrated capabilities in the province. It has ranked within the top 500 Chinese enterprises for twelve consecutive years. In 2016, driven by Guangdong SASAC, GCEGC pushed ahead with listing. In 2017, it had a turnover of 44.1 billion Yuan, total assets of 61.2 billion Yuan and 31,700 employees.

Panel B:

This is the fifth CSR report published by GDCEG since 2012 and is 62 pages in length. Its reporting period is from January 1 to December 31, 2016. It was published in November 2017. It was formulated in accordance with GRI guidelines. Only a Chinese version of the report was prepared and released on its official website.

The major sections in GDCEG's Social Responsibility Report 2016 include production development, technology innovation, green development and social development.

The production development section reports information about providing good quality service, keeping the operation process safe and listing the awards received for its production projects. In the technology innovation section, it talks about the investment in

developing new technology and the patents filed and technological awards received. Information reported in the green development focuses on saving energy, reducing emissions and protecting biodiversity. The social development section provides information about how the company respects labour rights, improves customer satisfaction, contributes to the development of local communities, and develops poverty reduction strategies.

10. CRCC

Panel A:

CRCC, the China Railway Construction Corporation Limited, was established in 2007. It was listed on both the Shanghai and Hong Kong Stock Exchanges in 2008. It is a State-owned organization under the administration of the State-owned Assets Supervision and Administration Commission of the State Council of China (SASAC). It covers project contracting, survey design consultation, industrial manufacturing and real estate development. It is one of the world's most powerful and largest integrated construction groups. By the end of 2016, it had a turnover of 629.33 billion Yuan, total equity of 131.19 billion Yuan and 259,460 employees. It ranked 58th in the Fortune Global 500 in 2017.

Panel B:

This is the ninth CSR report published by CRCC since 2008 and is 93 pages in length. Its reporting period is from January 1 to December 31, 2016. It was published in September 2017. It was formulated in accordance with GRI guidelines. Both Chinese and English version reports were prepared and released on its official website.

The major sections in CRCC's sustainability report 2016 are production and safety development, environmental protection, people-oriented development and social harmony.

The production and safety section talks about the company's cooperative business strategy, the management of its supply chain, improving customer satisfaction and

providing high quality service, and its safe production management process for ensuring the safety of its customers and employees. In the environmental protection section, it discloses information about promoting energy saving and reducing carbon emissions, protecting biodiversity and raising the resource coefficient of utilization. Information disclosed in the people-oriented section relates to employees' training and education, protecting employees' rights and interests, occupational health and the promotion of democratic management. The social harmony section describes how the business contributes to local community development and targets the alleviation of poverty.

Chapter 4: Findings

The detailed results of the analysis of the ten businesses' CSR reports are presented in the Appendix section (Appendices 2-11). The findings are summarized in the following tables. Table 2 and Table 3 show the results by organization while Table 4 and Table 5 show the results by theme. While Table 2 and Table 4 summarize the findings from the analyzed CSR reports, Table 3 and Table 5 summarize the findings using the online counter-accounting approach suggested by Boiral (2013). The overall balance of each examined CSR report is determined by looking at the findings from these tables combined.

In the next sections, I will show the analyzed results both by organization and by theme, and make comments on the figures first per sector, then the two sectors combined. After that, I will assess the balance quality of CSR report per organization.

4.1 Results by organization

Table 2. Analyzed results from CSR reports by organization

| Energy sector | | | | | | | |
|----------------------|------------------------|----------|------------|-----------|------------|---------|------------|
| Name of organization | Total Sentence s Count | positive | % of total | negativ e | % of total | neutral | % of total |
| Shenhua 神华 | 138 | 70 | 51% | 2 | 1% | 66 | 48% |
| CNNP 中国核能 | 94 | 50 | 53% | 1 | 1% | 43 | 46% |
| SPIC 国家电投 | 126 | 52 | 41% | 3 | 2% | 71 | 56% |
| Huaneng 华能 | 110 | 59 | 54% | 9 | 8% | 41 | 37% |
| CNPC 中石油 | 166 | 85 | 51% | 0 | 0% | 81 | 49% |
| Total | 634 | 316 | 50% | 15 | 3% | 302 | 47% |
| Construction sector | | | | | | | |

| Name of organization | Total Sentences Count | positive | % of total | negative | % of total | neutral | % of total |
|-------------------------|-----------------------|------------|------------|-----------|------------|------------|------------|
| CCC 中交建 | 120 | 72 | 60% | 4 | 3% | 44 | 37% |
| CSCEC 中国建筑 | 130 | 63 | 48% | 6 | 5% | 61 | 47% |
| HNA 海航 | 71 | 39 | 55% | 0 | 0% | 32 | 45% |
| GDCEG 广东建工 | 106 | 68 | 64% | 0 | 0% | 38 | 36% |
| CRCC 中国铁建 | 111 | 69 | 62% | 0 | 0% | 42 | 38% |
| Total | 538 | 311 | 58% | 10 | 2% | 217 | 40% |
| Combined results | 1172 | 627 | 54% | 25 | 2% | 519 | 44% |

Table 3. Analyzed results using the online counter-accounting approach by organization

| Energy sector | | | | |
|----------------------|-----------------------------|----------------------------|----------------------------------|--------------------------------|
| Name of organization | Number of events identified | Not reported in CSR report | Partially reported in CSR report | Clearly reported in CSR report |
| Shenhua | 2 | 2 | 0 | 0 |
| CNNP | 4 | 0 | 0 | 4 |
| SPIC | 3 | 3 | 0 | 0 |
| Huaneng | 3 | 2 | 0 | 1 |
| CNPC | 8 | 8 | 0 | 0 |
| Total | 20 | 15 | 0 | 5 |
| Construction sector | | | | |
| Name of organization | Number of events identified | Not reported in CSR report | Partially reported in CSR report | Clearly reported in CSR report |
| CCCC | 5 | 4 | 1 | 0 |
| CSCEC | 9 | 8 | 0 | 1 |
| HNA | 0 | 0 | 0 | 0 |
| GDCEG | 2 | 2 | 0 | 0 |
| CRCC | 11 | 11 | 0 | 0 |
| Total | 27 | 25 | 1 | 1 |

| | | | | |
|-------------------------|-------------|------------|-----------|------------|
| Combined results | 47 | 40 | 1 | 6 |
| Percentage | 100% | 85% | 2% | 13% |

Energy sector

Five organizations in the energy sector have a total of 634 sentences analyzed and 50% of them are positive, 3% are negative and the rest 47% are neutral. Huaneng has the highest percentage of positive sentences and negative sentences while SPIC has the highest percentage of neutral sentences.

Five organizations in the energy sector have a total of 20 significant negative events found using the online counter accounting approach introduced by Boiral (2013). Among these 20 events, 15 were not reported while only 5 were clearly reported. CNNP was the only organization which clearly disclosed all the events found. Huaneng only clearly disclosed 1 event found and left two other events unreported.

Construction sector

Five organization in the construction sector had a total of 538 sentences analyzed and 58% of them are positive, 2% are negative and the rest 40% are neutral. GDCEG has the highest percentage of positive sentences, CSCEC has the highest percentage of negative sentences and neutral ones.

Five organizations in the construction sector have a total of 27 significant negative events found. Among these 27 events, 25 were not reported, 1 was poorly reported and one was clearly reported. CSCEC clearly disclosed 1 event while 8 other events found were not reported. CCCC poorly disclosed 1 event and did not report any information for the rest of 4 events.

Combining two sectors

The combined results of two sectors have a total of 1172 sentences analyzed and 54% of them are positive, 2% are negative and 44% are neutral. GDCEG has the highest percentage of positive sentences, Huaneng has the highest percentage of negative sentences and SPIC has the highest percentage of neutral ones. Thus, there is high level of positive and neutral sentences and very low level of negative ones in all ten examined organizations.

There are 47 significant negative events in total identified using the online counter accounting approach. 85% of those events were not reported, 2% of them were poorly reported and 13% were clearly reported.

4.2 Results by theme

Table 4. Analyzed results from CSR reports by theme

Panel A

| Energy sector | | | | | | | |
|----------------------|---------------------------------|-----------------|-------------------|-----------------|-------------------|----------------|-------------------|
| Theme | Total sentences analyzed | positive | % of total | negative | % of total | neutral | % of total |
| environment | 135 | 77 | 57% | 2 | 1% | 56 | 41% |
| Society | 189 | 111 | 59% | 3 | 2% | 75 | 40% |
| Employees | 229 | 97 | 42% | 9 | 4% | 123 | 54% |
| Human rights | 46 | 13 | 28% | 0 | 0% | 33 | 72% |
| Products | 34 | 18 | 53% | 1 | 3% | 15 | 44% |
| Total | 633 | 316 | 50% | 15 | 2% | 302 | 48% |

In the energy sector, five examined organizations focused on disclosing environmental, social and employee-related information. Information concerned Human rights and Products was not much in the reports analyzed. Out of total 633 sentences analysed, 50% of them are positive sentences, 2% are negative sentences and 48% are neutral sentences.

Panel B

| Construction sector | | | | | | | |
|---------------------|--------------------------|------------|------------|----------|------------|------------|------------|
| Themes | Total sentences analyzed | positive | % of total | negative | % of total | neutral | % of total |
| environment | 89 | 64 | 72% | 2 | 2% | 23 | 26% |
| Society | 186 | 110 | 59% | 0 | 0% | 76 | 41% |
| Employees | 166 | 81 | 49% | 7 | 4% | 78 | 47% |
| Human rights | 28 | 16 | 57% | 0 | 0% | 12 | 43% |
| Products | 68 | 40 | 59% | 0 | 0% | 28 | 41% |
| Total | 537 | 311 | 58% | 9 | 2% | 217 | 40% |

In the construction sector, five examined organizations focused on disclosing social and employee-related information. Out of total 537 sentences analysed, 58% of them are positive sentences, 2% are negative sentences and 40% are neutral sentences.

Panel C

| Combined results | | | | | | | |
|------------------|--------------------------|------------|------------|-----------|------------|------------|------------|
| Themes | Total sentences analyzed | positive | % of total | negative | % of total | neutral | % of total |
| environment | 224 | 141 | 63% | 4 | 2% | 79 | 35% |
| Society | 375 | 221 | 59% | 3 | 1% | 151 | 40% |
| Employees | 395 | 178 | 45% | 16 | 4% | 201 | 51% |
| Human rights | 74 | 29 | 39% | 0 | 0% | 45 | 61% |
| Products | 102 | 58 | 57% | 1 | 1% | 43 | 42% |
| Total | 1170 | 627 | 54% | 24 | 2% | 519 | 44% |

The combined results show that ten examined organizations focused on reporting information about Society and Employees. Information about Human rights and Products were not disclosed much in the analyzed CSR reports. Out of total 1170 sentences analysed, 54% of them are positive sentences, 2% are negative sentences and 44% are neutral sentences. That means, in general, positive sentences account for more than half the overall content of most analyzed CSR reports.

Table 5. Analyzed results using the online counter-accounting approach by theme

Panel D

| Energy sector | | | | |
|---------------|-----------------------------|----------------------------|----------------------------------|--------------------------------|
| Themes | Number of events identified | Not reported in CSR report | Partially reported in CSR report | Clearly reported in CSR report |
| Environment | 4 | 4 | 0 | 0 |
| Society | 3 | 3 | 0 | 0 |
| Employees | 9 | 8 | 0 | 1 |
| Human rights | 0 | 0 | 0 | 0 |
| Products | 4 | 0 | 0 | 4 |
| Total | 20 | 15 | 0 | 5 |

For the five examined organizations in the energy sector, significant events are found relating to four themes: environment, Society, Employees and Products. No event is found relating to human rights. Only one employee-related event was clearly reported in CSR report.

Panel E

| Construction sector | | | | |
|---------------------|-----------------------------|----------------------------|----------------------------------|--------------------------------|
| Themes | Number of events identified | Not reported in CSR report | Partially reported in CSR report | Clearly reported in CSR report |
| Environment | 0 | 0 | 0 | 0 |
| Society | 1 | 1 | 0 | 0 |
| Employees | 26 | 24 | 1 | 1 |
| Human rights | 0 | 0 | 0 | 0 |
| Products | 0 | 0 | 0 | 0 |
| Total | 27 | 25 | 1 | 1 |

For the five examined organizations in the construction sector, significant events are found relating to two themes: Society and Employees. Whereas, 26 out of 27 events found are about employees, only one event is about society. Only one employee-related event was clearly reported, and one was poorly reported. The rest 24 events relating to the theme of Employee were not reported at all.

Panel F

| Combined results | | | | |
|-------------------------|------------------------------------|-----------------------------------|---|---------------------------------------|
| Themes | Number of events identified | Not reported in CSR report | Partially reported in CSR report | Clearly reported in CSR report |
| Environment | 4 | 4 | 0 | 0 |
| Society | 4 | 4 | 0 | 0 |
| Employees | 35 | 32 | 1 | 2 |
| Human rights | 0 | 0 | 0 | 0 |
| Products | 4 | 0 | 0 | 4 |
| Total | 47 | 40 | 1 | 6 |
| Percentage | 100% | 85% | 2% | 13% |

Combining the results from two sectors, it shows that most identified significant events are related to the employees. No human rights related event is found. Organizations only reported a small number of employee-related and product-related events in their CSR reports. Overall, 87% of significant negative events were not disclosed in the reports, which is consistent with Boiral's (2013) findings.

4.3 Balance of each report

Each organization's result is presented and explained in the following paragraphs:

1. Shenhua

Of the total 138 sentences analyzed, only two referred to negative information (1%) while there were 70 positive sentences (51%). Thus, both positive and negative information were presented in this report. More detailed results are presented in the Appendix 2.

There were two significant events disclosed by external sources within the reporting period. However, neither of these two events was mentioned in the CSR reports. These events caused the deaths of two employees. The number of employees who died was stated in one sentence, but the details of each accident were not revealed in the report. More detailed results are presented in the Appendix 12.

2. CNNP

Analysis showed 50 positive sentences, 1 negative sentence and 43 neutral sentences. Negative information only accounted for 1% of the total while positive information was a much larger section (53%) of the total. Thus, CNNP reported both positive and negative information, but it focused on positive information reporting. More detailed results are presented in the Appendix 3.

There were four significant events that had drawn external attention within the reporting period with regard to CNNP's CSR performance. Two events were caused by faulty operation while the other two were accidents. All of them led to shutdown of NPPs, which were identified as level 0 on the INES (international nuclear event scale). In its CSR report, one sentence was used to report the total number of shutdowns that occurred:

"In 2016, there were 5 unplanned shutdown incidents, equipment reliability was generally improved, twelve of NPPs operated smoothly without any shutdown happened." (CNNP, 2017, p. 34).

The consequences of those events were not significant. It is understandable that a detailed description of them was not provided. More detailed results are presented in the Appendix 12.

3. SPIC

SPIC allotted 3 sentences to reporting negative information, which accounted for 2% of the total sentences analyzed. Two sentences were about anti-corruption events that had been discovered within the reporting period. The third sentence described bad influences on biodiversity in the organization's operating area caused by the weather. It reported 52 positive sentences. Thus, both positive and negative information were disclosed in its report. More detailed results are presented in the Appendix 4.

Three significant events were reported externally within the reporting period. All of them were classified as work accidents, which caused the death of three employees in total.

However, SPIC did not provide any information about these events in its report. More detailed results are presented in the Appendix 12.

4. Huaneng

Huaneng included the most negative sentences (9) as well as the highest percentage (8%) of negative information among the five Energy organizations. One sentence each was spent in describing bad performance on anti-corruption, biodiversity and customer health and safety aspects. The remaining six sentences were used to describe one very significant event also revealed by external resources. In total, 59 positive sentences were found. Therefore, Huaneng reported both positive and negative information. More detailed results are presented in the Appendix 5.

There were three events that had attracted external attention. Two of them were very significant and the third event was of a less significant nature. Among the two very significant events, one was clearly stated in Huaneng's 2016 CSR report:

“In March 2016, in the No. 1 material roadway chamber in the 250207 heading of Yanbei Coal Mine of Huating Coal Company, a worker was crushed when unloading motors from the trailer and died. In violation of the rules, the worker stood between the trailer and the motor car, which was the direct cause of the accident. Beside, mechanical and electrical equipment was not loaded, transported or unloaded in a compliant way; the site safety management and inspection was not done properly; the management system and operation processes were not robust; safety training was not handled in a correct way; and the mine failed in relevant appraisal – all these were the indirect causes of the accident. Huating Coal Company was subject to relevant assessment in the annual performance appraisal; A fine of RMB2.436 million was imposed on Yanbei Coal Mine; The notice of criticism of relevant leaders of Huating Coal Company was circulated; Administrative and economic penalties like demerit and fine were imposed on personnel responsible for the accident.” (p. 34).

However, the other two events were not mentioned in the report at all, despite causing the deaths of two employees in total. More detailed results are presented in the Appendix 12.

5. CNPC

CNPC did not disclose any negative information (0 sentences) in its report. The 85 positive sentences accounted for slightly more than half (51.2%) of the total analyzed information. There was a clear imbalance between positive and negative reporting. More detailed results are presented in the Appendix 6.

This outcome raised questions as to whether there no bad events happened that required disclosure. However, according to the external evidence found, there were eight events that had been reported externally. Those events caused significant effects on the environment and in society. In particular, there was an explosion accident in July, which resulted in three people being killed and four injured. A total of eight different external channels reported on this event with photos and figures that made the seriousness of the matter apparent. Nevertheless, this event was not mentioned in the CSR report. More detailed results are presented in the Appendix 12.

6. CCCC

For CCCC, there were 72 positive sentences and only 3 negative sentences. Two sentences explained bad effects caused by its operations with regard to biodiversity. One sentence was about occupational health and safety. Both positive and negative information was disclosed in the report. More detailed results are presented in the Appendix 7.

There were five events discovered and reported externally within the reporting period. Only one event was mentioned in the report:

“On April 13, 2016, a gantry crane of CCCC Fourth Harbor Engineering Company Ltd. collapsed as for the squall wind at the Dongjiangkou fabrication yard of Mayong Township, Dongguan City of Guangdong Province, leaving 10 people dead and 18 people injured, 15 of them suffered minor injuries and recovered after medical treatment.” (CCCC, 2017, p. 48).

The seriousness of the event was very significant as 22 different channels reported it. It caused the deaths of 18 employees. Another 19 were injured, and losses amounted to 18,610,000RMB. However, CCCC only used one sentence to disclose this event, which may be considered inadequate considering its materiality. In addition, the other four

events reported externally were not mentioned in the report. More detailed results are presented in the Appendix 12.

7. CSCEC

CSCEC disclosed 6 negative sentences, representing the highest percentage (4.5%) among the five construction organizations. It reported 63 positive sentences, which indicated the presentation of both positive and negative information. More detailed results are presented in the Appendix 8.

There were nine significant events discovered externally. Only one event was stated, consuming all six negative sentences in the report. This event was clearly reported:

“In July 2016, the Company's one project caused casualties as the employees were hit by objects. After the accident, the project leadership team immediately started contingency plans, and organized rescue work. The Company leaders immediately arrived at the scene and provided guidance on the rescue and rehabilitation work. The project leadership team stopped the construction process and carried out an overall investigation into safety risks, and reinforced training and education for our on-site employees. At the same time we also assisted the accident investigation team to collect evidence, probe the issues and analyze the causes. Afterwards, based on the results of the investigation and analysis, we severely punished the relevant responsible units and responsible persons.” (CSCEC, 2017, p. 55).

However, among the other eight events that were not disclosed by CSCEC, there was one very significant explosion which was reported by 16 different channels and caused the death of one resident, injured two others and damaged the properties of 36 residents. The other seven events were also significant. Six of them were high altitude falls, which caused the death of one non-employee and five employees as well as substantial financial losses. One event was about noise pollution cause by night-time construction work. Complaints from local residents led to the company being fined 20,000RMB. However, none of these eight events were disclosed in the report. More detailed results are presented in the Appendix 12.

8. HNA

HNA did not disclose any negative information in its report. It reported 39 positive sentences, which accounted for 54.9% of the total sentences analyzed. There was a clear imbalance at this stage. More detailed results are presented in the Appendix 9.

However, it was the only one of the ten selected organizations for which no external evidence was found for any bad or good CSR performance. That means there was no significant event attracting public attention within the reporting period.

9. GDCEG

GDCEG disclosed 68 positive sentences (64.1% of the total analyzed) while no negative sentences were found among the total content analyzed. There was an imbalance between positive and negative disclosure at this stage of the analysis. More detailed results are presented in the Appendix 10.

According to the external evidence located, there were two bad events that had captured the public's attention. One was a crane injury accident, and the other was an object beating accident. Those two events caused the deaths of two employees, but GDCEG did not disclose any information about them in the occupational health and safety sections of its report. More detailed results are presented in the Appendix 12.

10. CRCC

CRCC made no negative statements and there were 69 positive sentences out of the total sentences analyzed using the index developed. An imbalanced result was indicated at this stage. More detailed results are presented in the Appendix 11.

In accordance with the external evidence found, CRCC was the one among the five construction organizations, and indeed among all ten selected samples, with the greatest number of external reported events (11 events). There were two high altitude falls, two collapse accidents, three production safety accidents, two object beating accidents, one

crane injury and one machine injury accident, which caused a total of 15 employee deaths, 3 employee injuries and 5 employees listed as missing, along with millions of Yuan in losses. One of the three production safety accidents attracted significant attention from the public and was reported by 14 different channels. However, neither this event nor the other ten events were disclosed in the report. More detailed results are presented in the Appendix 12.

4.4 Important findings

In general, four important findings are summarized:

Firstly, most examined Chinese CSR reports did not exhibit good balance.

CNNP and HNA were the only two out of ten sample organizations with an acceptably balanced report quality. Eight out of ten organizations produced unbalanced reports (Shenhua, SPIC, Huaneng, CNPC, CCCC, CSCEC, GDCEG & CRCC).

Secondly, 85% of the significant negative events were not disclosed in the reports, which is consistent with the Borial's (2013) findings. By using the online counter-accounting approach, a total of 47 significant negative events were found. Of these, 85% (40 out of 47) were not disclosed at all in the selected sample reports; 2% (1 out of 47) was poorly disclosed; and 13% (6 out of 47) were clearly disclosed.

Thirdly, positive sentences accounted for more than half the overall analyzed CSR reports in most cases. In the energy sector, on average, positive sentences accounted for 50% of the overall analyzed reports. In the construction sector, on average, positive sentences accounted for 58% of the overall analyzed reports.

Lastly, society and employees are two themes that examined Chinese organizations had reported a great number of sentences in their CSR reports. Most significant events found were about the employees.

Use these findings to answer three research questions:

RQ1: According to the combined results in Table 2, it shows that for ten selected organizations, on average, they disclosed 54% positive, 2% negative and 44% neutral information in their CSR reports.

RQ2: The results in Table 3 indicate that except HNA, the rest **nine** selected organizations all have some significant events revealed in external sources about their CSR performance within the reporting period.

RQ3: **Nine** organizations are classified into three categories by the extent to which they disclose the significant events in their CSR reports as following:

1) Not reported in the CSR report

Shenhua, SPIC, CNPC, GDCEG, CRCC

2) Partially reported in the CSR report

Huaneng, CCCC, CSCEC

3) Clearly reported in the CSR report

CNNP

Chapter 5: Discussion

In relation to Face

Unbalanced CSR reports were produced by most of the ten selected businesses, as I expected. Boiral (2013) suggests that managers' behaviour can influence the quality of CSR reporting. This study has showed a significant influence of the Chinese concept of face on Chinese managers in the CSR reporting context. Thus, it was not surprising to see the unbalanced results. This finding confirms Boiral's (2013) statement that the principle of balance suggested by GRI remains an empty promise.

Boiral (2013) found that 90% of significant negative events were not disclosed in CSR reports. This study found a similar but slightly lower percentage (85%) of non-disclosure. The findings suggest that unfavourable information is unlikely to be found in Chinese CSR reports. The avoidance of negative disclosure can be understood at the management level using the Chinese concept of face. Chinese managers may lose face as decision-makers if they report any bad information about corporate CSR performance. For example, CSCEC experienced an explosion event on 10 April 2016. It was reported by 16 different channels online, but there was not one sentence about this event in the company's CSR report. If CSCEC disclosed about this event, its managers would be blamed by stakeholders for their failure to establish a safe operating environment, and this would make managers lose face. Because Chinese managers are sensitive to loss of face, they decided to not report this negative event in the CSR report. Therefore, it is understandable that negative disclosures are omitted from Chinese CSR reports.

This study also revealed an emphasis on positive statements in all examined reports, as Boiral (2013) did. This finding supports the idea proposed by many previous researchers that CSR reports are used in a biased way rather than as accountability tools (Cho, Michelon & Patten, 2012; Boiral, 2013; Michelon, Pilonato & Ricceri, 2015). It also

indicates Chinese managers' preference for using a symbolic management approach to achieve organizational legitimacy. The motivation for Chinese managers to disclose a great deal of positive information can also be explained using the Chinese concept of face. In this study, most examined organizations disclosed their positive achievements and awards for being socially responsible. By reporting this positive information, stakeholders would attribute the success to the managers because it seems that the managers have responded to public expectations and run the business in a sustainable way. As a result, Chinese managers gain face by providing positive information in their reports. Due to the sensitivity of face-gaining, Chinese managers may want to disclose as much positive information as they can in order to gain more face. Thus, it is not surprising to see an emphasis on disclosure of positive information in Chinese CSR reports.

In relation to the legitimacy theory

The overemphasis on positive information are consistent with the legitimacy theory. It indicates that Chinese organizations use their CSR reports to create positive image about their CSR performance in order to improve their social legitimacy and generate greater confidence among stakeholders (Adams, 2002; Cho et al., 2012; Boiral, 2013). As a result, it motivates a symbolic approach which intended to showcase the organization's social responsibility.

In relation to the symbolic approach

The answer to research question 3 indicates that five out of ten organizations did not report any information about the significant events found while three other organizations only reported them partially. These figures confirm that Chinese organizations are using a symbolic approach as there was a disconnection between what has been reported and what reality is. The omission or partial disclosure of negative information can positively influence the stakeholders' knowledge about organizations' legitimacy.

Overall, the application of Chinese concept of face seems to be consistent and supportive to the symbolic approach and legitimacy theory. All of them could be used to explain the findings of this study.

Chapter 6: Conclusions and Recommendations

6.1 Conclusions

CSR is still in its infancy for Chinese organizations. The quality of Chinese CSR reporting has not been well researched. This study focused on assessing the balance in the CSR reports of ten selected sample organizations in China. It obtained similar results to Boiral (2013). Most of the sample organizations did not produce balanced reports. Ninety-four percent of the significant negative events were not disclosed in the reports. There was an emphasis on positive statements in all examined reports. CSR reports are used as instrumental communication tools. However, the unbalanced reporting practices may be understood using the Chinese concept of face in this particular study.

6.2 Implications

The findings of this study may have several practical implications. The GRI principles are all broadly defined, and organizations have not taken them seriously into account. GRI may need to strengthen and clarify the requirements in the principle of balance. For example, it could prepare a check-list of significant negative issues that should be disclosed in CSR reports. Given the number of undisclosed events found in this study, Chinese managers need to disclose enough negative information in their CSR reports to maintain a balanced reporting quality. A better solution for resolving this low balance quality is to have regulations on CSR reporting setting by the government. Chinese government can make some specific rules for CSR disclosure by considering both its unique culture values and the GRI standards and make those rules mandatory. An auditing department may be formed by the government to assess the balance of Chinese CSR reports. It can either develop a reward system or set some punishments, such as fines, for any information omission of significant events in the CSR report to make Chinese managers disclose enough negative information. Moreover, Chinese managers may need to be aware of the influences Chinese concept of face has in their business communication. The managers' actions of saving-face and gaining-face may affect the quality of the CSR

reports they prepared. External auditors, who prepare the assurance reports, can use the online counter-accounting approach in their assessment process, which may help them make better conclusions. Researchers who study the quality of CSR reporting in China may gain an initial understanding of the imbalance in reporting quality in China. In addition, the implications of the Chinese concept of face in business communication should be acknowledged.

6.3 Contributions

This study has four main contributions to the literature.

Firstly, it fills the gap in Boiral's (2013) study by assessing Chinese CSR reporting quality. Boiral (2013) studied 14 different countries excluding China. However, China, as the biggest developing country, is worth studying. This study focuses on Chinese organizations. The research design is mostly following the Boiral's (2013) study and it has got quite similar results which can be used to compare with Boiral's findings and be supportive to some of his ideas.

Secondly, it provides some empirical evidence. The data collected and analyzed the secondary data of selected Chinese organizations using the content analysis and online counter-accounting approach introduced by Boiral (2013). The results of this study provide information that verifies the truth.

Thirdly, it is the first study that has tried to understand the imbalance in CSR reports using the Chinese concept of face at the managerial level. Legitimacy theory is popularly used to understand the emphasis on positive information in the CSR report. However, to better understand the behavior of Chinese managers, culture values need to be considered. This study tends to suggest that the Chinese concept of face is consistent with legitimacy theory which may positively influence the balance of CSR reports. The difference between them is that Chinese concept of face is used to understand at the individual (manager's) level within Chinese context while the legitimacy theory is used at the organizational level globally.

Lastly, it provides some good directions for future researchers who are interested in CSR development in China in the next sections.

6.4 Limitations and Future research opportunities

Generalizability is the biggest limitation of this study. It only examined Chinese organizations in two industries, Energy and Construction. Only large organizations were studied, and the sample size was quite small. The selected sample organizations were either government-owned or state-sponsored. Organizations that are privately funded in the same industries may show totally different outcomes. Thus, results obtained are not readily generalizable. More studies are required in the future to provide a comprehensive picture of Chinese CSR reporting, examining different industries and businesses of different sizes (including SMEs).

It was also impossible, despite considerable effort, to be perfectly objective in the classifying process during analysis of the reports. Some judgements in terms of understanding and classifying the nature of sentences are inevitably subjective, and future researchers who follow the method and procedure used in this study may not achieve exactly the same outcomes.

Sentence counts were used as the analyzing unit in this study; thus the graphs and photos in the reports were not included. However, a picture can be worth a thousand words! Future researchers may choose to include visual information in their quality assessments of CSR reports.

In addition, future research may use other methods, such as interviews or questionnaires, to investigate the perceptions of Chinese managers, to gain an in-depth understanding of how the Chinese concept of face affects reporting quality and whether there are any other cultural values that could have an impact on CSR reporting quality.

It would be interesting to carry out a similar study to investigate the balance in CSR

reports in other countries that have not previously been examined and compare the results with those of Boiral (2013) and this study.

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Appendices

1. Index developed for content analyzing

| Theme | Items | GRI sections |
|--------------|---------------------------------|--------------|
| Environment | Energy | EN3-7 |
| | Biodiversity | EN11-14 |
| | Emissions | EN15-21 |
| | | |
| Society | Local communities | SO1-2 |
| | anti-corruption | SO3-5 |
| | anti-competitive behaviour | SO7 |
| | | |
| Employees | Occupational health and safety | LA5-8 |
| | Training and Education | LA9-11 |
| | Diversity and Equal opportunity | LA12 |
| | | |
| Human rights | Investment | HR1-2 |
| | Child labour | HR5 |
| | Forced and compulsory labour | HR6 |
| | | |
| Products | Customer health and safety | PR1-2 |
| | Products and services labeling | PR3-5 |
| | Customer privacy | PR8 |

2. Table for Shenhua

| Themes | Items | Total Sentences Count | positive | % of total | negative | % of total | neutral | % of total | Reference in the report |
|--------------|---------------------------------|-----------------------|-----------|------------|----------|------------|-----------|------------|-------------------------|
| Environment | Energy | 24 | 14 | 58% | 0 | 0% | 10 | 42% | P.44-46 |
| | Biodiversity | 13 | 6 | 46% | 0 | 0% | 7 | 54% | P.48-49 |
| | Emissions | 7 | 3 | 43% | 0 | 0% | 4 | 57% | P.51 |
| | | | | | | | | | |
| Society | Local communities | 25 | 17 | 68% | 0 | 0% | 8 | 32% | P.66 |
| | Anti-corruption | 5 | 2 | 40% | 0 | 0% | 3 | 60% | P.23 |
| | Anti-competitive behavior | 0 | 0 | 0% | 0 | 0% | 0 | 0% | P.14 |
| | | | | | | | | | |
| Employees | Occupational health and safety | 33 | 16 | 48% | 2 | 6% | 15 | 45% | P.38.58 |
| | Training and Education | 11 | 4 | 36% | 0 | 0% | 7 | 64% | P.40. 60 |
| | Diversity and Equal opportunity | 5 | 3 | 60% | 0 | 0% | 2 | 40% | P.56, |
| | | | | | | | | | |
| Human rights | Investment | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | Child labor | 1 | 0 | 0% | 0 | 0% | 1 | 100% | P56 |
| | Forced or compulsory labor | 1 | 0 | 0% | 0 | 0% | 1 | 100% | P56 |
| | | | | | | | | | |
| Products | Customer health and safety | 7 | 2 | 29% | 0 | 0% | 5 | 71% | P.27 |
| | Products and services labeling | 3 | 1 | 33% | 0 | 0% | 2 | 67% | P.27 |
| | Customer privacy | 3 | 2 | 67% | 0 | 0% | 1 | 33% | P.27 |
| Total | | 138 | 70 | 51% | 2 | 1% | 66 | 48% | |

3. Table for CNNP

| Themes | Items | Total Sentences Count | positive | % of total | negative | % of total | neutral | % of total | Reference in the report |
|--------------|---------------------------------|-----------------------|-----------|------------|----------|------------|-----------|------------|-------------------------|
| Environment | Energy | 4 | 1 | 25% | 0 | 0% | 3 | 75% | P.38 |
| | Biodiversity | 7 | 5 | 71% | 0 | 0% | 2 | 29% | P.42,45 |
| | Emissions | 2 | 2 | 100% | 0 | 0% | 0 | 0% | P.38-39 |
| | | | | | | | | | |
| Society | Local communities | 15 | 8 | 53% | 0 | 0% | 7 | 47% | P.62, 55 |
| | Anti-corruption | 4 | 2 | 50% | 0 | 0% | 2 | 50% | P.7 |
| | Anti-competitive behavior | 4 | 3 | 75% | 0 | 0% | 1 | 25% | P.54 |
| | | | | | | | | | |
| Employees | Occupational health and safety | 30 | 15 | 50% | 1 | 3% | 14 | 47% | P.33, 59 |
| | Training and Education | 6 | 2 | 33% | 0 | 0% | 4 | 67% | P.60 |
| | Diversity and Equal opportunity | 2 | 1 | 50% | 0 | 0% | 1 | 50% | P.59 |
| | | | | | | | | | |
| Human rights | Investment | 13 | 5 | 38% | 0 | 0% | 8 | 62% | P.54 |
| | Child labor | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | Forced or compulsory labor | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | | | | | | | | | |
| Products | Customer health and safety | 7 | 6 | 0% | 0 | 0% | 1 | 0% | P.41 |
| | Products and services labeling | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | Customer privacy | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| Total | | 94 | 50 | 53% | 1 | 1% | 43 | 46% | |

4. Table for SPIC

| Themes | Items | Total Sentences Count | positive | % of total | negative | % of total | neutral | % of total | Reference in the report |
|--------------|---------------------------------|-----------------------|----------|------------|----------|------------|---------|------------|-------------------------|
| Environment | Energy | 12 | 7 | 58% | 0 | 0% | 5 | 42% | P.30 |
| | Biodiversity | 13 | 5 | 38% | 1 | 8% | 7 | 54% | P.51, 67 |
| | Emissions | 7 | 3 | 43% | 0 | 0% | 4 | 57% | p.65 |
| | | | | | | | | | |
| Society | Local communities | 34 | 21 | 62% | 0 | 0% | 13 | 38% | P.46-50, 87 |
| | Anti-corruption | 6 | 0 | 0% | 2 | 33% | 4 | 67% | P.11; P.91 |
| | Anti-competitive behavior | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | | | | | | | | | |
| Employees | Occupational health and safety | 14 | 2 | 14% | 0 | 0% | 12 | 86% | P.54, 63 |
| | Training and Education | 8 | 6 | 75% | 0 | 0% | 2 | 25% | P.72-74 |
| | Diversity and Equal opportunity | 1 | 0 | 0% | 0 | 0% | 1 | | P.71 |
| | | | | | | | | | |
| Human rights | Investment | 20 | 7 | 35% | 0 | 0% | 13 | 65% | P.70-71 |
| | Child labor | 3 | 0 | 0% | 0 | 0% | 3 | 100% | P.71,91 |
| | Forced or compulsory labor | 3 | 0 | 0% | 0 | 0% | 3 | 100% | P.71,91 |
| | | | | | | | | | |
| Products | Customer health and safety | 5 | 1 | 20% | 0 | 0% | 4 | 80% | P.59 |
| | Products and services labeling | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | Customer privacy | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| Total | | 126 | 52 | 41% | 3 | 2% | 71 | 56% | |

5. Table for Huaneng

| Themes | Items | Total Sentences Count | positive | % of total | negative | % of total | neutral | % of total | Reference in the report |
|--------------|---------------------------------|-----------------------|----------|------------|----------|------------|---------|------------|-------------------------|
| Environment | Energy | 8 | 5 | 63% | 0 | 0% | 3 | 38% | P.43 |
| | Biodiversity | 10 | 6 | 60% | 1 | 10% | 2 | 20% | P.45 |
| | Emissions | 9 | 7 | 78% | 0 | 0% | 2 | 22% | P.10,42,46 |
| | | | | | | | | | |
| Society | Local communities | 19 | 14 | 74% | 0 | 0% | 5 | 26% | P.60-62 |
| | Anti-corruption | 4 | 3 | 75% | 1 | 25% | 0 | 0% | P.11 |
| | Anti-competitive behavior | 15 | 6 | 40% | 0 | 0% | 9 | 60% | P.50-51, 58 |
| | | | | | | | | | |
| Employees | Occupational health and safety | 27 | 9 | 33% | 6 | 22% | 12 | 44% | P.63,33-35 |
| | Training and Education | 10 | 6 | 60% | 0 | 0% | 4 | 40% | P52-53, 64 |
| | Diversity and Equal opportunity | 1 | 0 | 0% | 0 | 0% | 1 | 100% | P.63 |
| | | | | | | | | | |
| Human rights | Investment | 3 | 1 | 33% | 0 | 0% | 2 | 67% | P.63 |
| | Child labor | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | Forced or compulsory labor | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | | | | | | | | | |
| Products | Customer health and safety | 4 | 2 | 50% | 1 | 25% | 1 | 25% | P.45 |
| | Products and services labeling | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | Customer privacy | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| Total | | 110 | 59 | 54% | 9 | 8% | 41 | 37% | |

6. Table for CNPC

| Themes | Items | Total Sentences Count | positive | % of total | negative | % of total | neutral | % of total | Reference in the report |
|--------------|---------------------------------|-----------------------|----------|------------|----------|------------|---------|------------|-------------------------|
| Environment | Energy | 3 | 2 | 67% | 0 | 0% | 1 | 33% | P.35 |
| | Biodiversity | 13 | 8 | 62% | 0 | 0% | 5 | 38% | P.36-37 |
| | Emissions | 4 | 3 | 75% | 0 | 0% | 1 | 25% | P.35 |
| | | | | | | | | | |
| Society | Local communities | 36 | 26 | 72% | 0 | 0% | 10 | 28% | p.62-71 |
| | Anti-corruption | 2 | 0 | 0% | 0 | 0% | 2 | 100% | P.9 |
| | Anti-competitive behavior | 20 | 9 | 45% | 0 | 0% | 11 | 55% | P.25-27 |
| | | | | | | | | | |
| Employees | Occupational health and safety | 52 | 27 | 52% | 0 | 0% | 25 | 48% | P.53-54 |
| | Training and Education | 24 | 3 | 13% | 0 | 0% | 21 | 88% | P.48-49 |
| | Diversity and Equal opportunity | 5 | 3 | 60% | 0 | 0% | 2 | 40% | P.47 |
| | | | | | | | | | |
| Human rights | Investment | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | Child labor | 1 | 0 | 0% | 0 | 0% | 1 | 100% | P.47 |
| | Forced or compulsory labor | 1 | 0 | 0% | 0 | 0% | 1 | 100% | P.47 |
| | | | | | | | | | |
| Products | Customer health and safety | 5 | 4 | 80% | 0 | 0% | 1 | 20% | P.43-44 |
| | Products and services labeling | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | Customer privacy | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | | | | | | | | | |
| Total | | 166 | 85 | 51% | 0 | 0% | 81 | 49% | |

7. Table for CCCC

| Themes | Items | Total Sentences Count | positive | % of total | negative | % of total | neutral | % of total | Reference in the report |
|--------------|---------------------------------|-----------------------|----------|------------|----------|------------|---------|------------|-------------------------|
| Environment | Energy | 9 | 6 | 67% | 0 | 0% | 3 | 33% | P.49-51 |
| | Biodiversity | 23 | 17 | 74% | 2 | 9% | 4 | 17% | P.37, P52-53, P55,69 |
| | Emissions | 3 | 2 | 67% | 0 | 0% | 1 | 33% | P.49,51 |
| | | | | | | | | | |
| Society | Local communities | 14 | 10 | 71% | 0 | 0% | 4 | 29% | P.7,10,35-36, |
| | Anti-corruption | 8 | 4 | 50% | 0 | 0% | 4 | 50% | P.20 |
| | Anti-competitive behavior | 6 | 4 | 67% | 0 | 0% | 2 | 33% | P.35, 66 |
| | | | | | | | | | |
| Employees | Occupational health and safety | 15 | 12 | 80% | 1 | 7% | 2 | 13% | P.45-46, 63-64 |
| | Training and Education | 27 | 12 | 44% | 0 | 0% | 15 | 56% | P.22, 46-47, |
| | Diversity and Equal opportunity | 1 | 0 | 0% | 0 | 0% | 1 | 100% | P.60 |
| | | | | | | | | | |
| Human rights | Investment | 4 | 3 | 75% | 0 | 0% | 1 | 25% | P.62 |
| | Child labor | 2 | 1 | 50% | 0 | 0% | 1 | 50% | P.60 |
| | Forced or compulsory labor | 1 | 0 | 0% | 0 | 0% | 1 | 100% | P.60 |
| | | | | | | | | | |
| Products | Customer health and safety | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | Products and services labeling | 4 | 1 | 25% | 0 | 0% | 3 | 75% | P.45 |
| | Customer privacy | 2 | 0 | 0% | 0 | 0% | 2 | 100% | P.45 |
| | | | | | | | | | |
| Total | | 119 | 72 | 61% | 3 | 3% | 44 | 37% | |

8. Table for CSCEC

| Themes | Items | Total Sentences Count | positive | % of total | negative | % of total | neutral | % of total | Reference in the report |
|--------------|---------------------------------|-----------------------|----------|------------|----------|------------|---------|------------|-------------------------|
| Environment | Energy | 10 | 8 | 80% | 0 | 0% | 2 | 20% | P.46-47 |
| | Biodiversity | 6 | 4 | 67% | 0 | 0% | 2 | 33% | P.51 |
| | Emissions | 3 | 1 | 33% | 0 | 0% | 2 | 67% | P.46-47 |
| Society | Local communities | 33 | 19 | 58% | 0 | 0% | 14 | 42% | P.26, 30-31, 73-74, 77 |
| | Anti-corruption | 7 | 3 | 43% | 0 | 0% | 4 | 57% | P.36 |
| | Anti-competitive behavior | 6 | 1 | 17% | 0 | 0% | 5 | 83% | P.66, 71 |
| Employees | Occupational health and safety | 29 | 9 | 31% | 6 | 21% | 14 | 48% | P.54-56 |
| | Training and Education | 16 | 8 | 50% | 0 | 0% | 8 | 50% | P.45, 54,57 |
| | Diversity and Equal opportunity | 5 | 2 | 40% | 0 | 0% | 3 | 60% | P.53 |
| Human rights | Investment | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | Child labor | 1 | 0 | 0% | 0 | 0% | 1 | 100% | P.53 |
| | Forced or compulsory labor | 1 | 0 | 0% | 0 | 0% | 1 | 100% | P.53 |
| Products | Customer health and safety | 6 | 5 | 83% | 0 | 0% | 1 | 17% | P.39 |
| | Products and services labeling | 4 | 2 | 0% | 0 | 0% | 2 | 0% | P.42-43 |
| | Customer privacy | 3 | 1 | 0% | 0 | 0% | 2 | 0% | P.42 |
| Total | | 130 | 63 | 48% | 6 | 5% | 61 | 47% | |

9. Table for HNA

| Themes | Items | Total Sentences Count | positive | % of total | negative | % of total | neutral | % of total | Reference in the report |
|--------------|---------------------------------|-----------------------|----------|------------|----------|------------|---------|------------|-------------------------|
| Environment | Energy | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | Biodiversity | 5 | 4 | 80% | 0 | 0% | 1 | 20% | P.40 |
| | Emissions | 9 | 7 | 78% | 0 | 0% | 2 | 22% | P.38-39, 41 |
| Society | Local communities | 20 | 8 | 40% | 0 | 0% | 12 | 60% | P.48-51 |
| | Anti-corruption | 1 | 1 | 100% | 0 | 0% | 0 | 0% | P.6 |
| | Anti-competitive behavior | 4 | 3 | 75% | | 0% | 1 | 25% | p.29, 31 |
| Employees | Occupational health and safety | 7 | 5 | 71% | 0 | 0% | 2 | 29% | P.36-37 |
| | Training and Education | 6 | 4 | 67% | 0 | 0% | 2 | 33% | P.36, 45 |
| | Diversity and Equal opportunity | 1 | 0 | 0% | 0 | 0% | 1 | 100% | P.45 |
| Human rights | Investment | 7 | 3 | 43% | 0 | 0% | 4 | 57% | P.44-45 |
| | Child labor | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | Forced or compulsory labor | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| Products | Customer health and safety | 2 | 2 | 100% | 0 | 0% | 0 | 0% | P.34-35 |
| | Products and services labeling | 8 | 1 | 13% | 0 | 0% | 7 | 88% | P.27 |
| | Customer privacy | 1 | 1 | 100% | 0 | 0% | 0 | 0% | P.26 |
| Total | | 71 | 39 | 55% | 0 | 0% | 32 | 45% | |

10. Table for GDCEG

| Themes | Items | Total Sentences Count | positive | % of total | negative | % of total | neutral | % of total | Reference in the report |
|--------------|---------------------------------|-----------------------|-----------|------------|----------|------------|-----------|------------|-------------------------|
| Environment | Energy | 1 | 1 | 100% | 0 | 0% | 0 | 0% | P.49 |
| | Biodiversity | 7 | 6 | 86% | 0 | 0% | 1 | 14% | P.50 |
| | Emissions | 1 | 1 | 100% | 0 | 0% | 0 | 0% | P.49 |
| | | | | | | | | | |
| Society | Local communities | 29 | 20 | 69% | 0 | 0% | 9 | 31% | P.58-60 |
| | Anti-corruption | 11 | 4 | 36% | 0 | 0% | 7 | 64% | P.14-15 |
| | Anti-competitive behavior | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | | | | | | | | | |
| Employees | Occupational health and safety | 25 | 16 | 64% | 0 | 0% | 9 | 36% | P.31-34,53 |
| | Training and Education | 8 | 2 | 25% | 0 | 0% | 6 | 75% | P.33,53 |
| | Diversity and Equal opportunity | 2 | 2 | 100% | 0 | 0% | 0 | 0% | P.53-54 |
| | | | | | | | | | |
| Human rights | Investment | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | Child labor | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | Forced or compulsory labor | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| | | | | | | | | | |
| Products | Customer health and safety | 21 | 15 | 71% | 0 | 0% | 6 | 29% | P.31-34 |
| | Products and services labeling | 1 | 1 | 0% | 0 | 0% | 0 | 0% | P.27 |
| | Customer privacy | 0 | 0 | 0% | 0 | 0% | 0 | 0% | |
| Total | | 106 | 68 | 64% | 0 | 0% | 38 | 36% | |

11. Table for CRCC

| Themes | Items | Total Sentences Count | positive | % of total | negative | % of total | neutral | % of total | Reference in the report |
|--------------|---------------------------------|-----------------------|-----------|------------|----------|------------|-----------|------------|-------------------------|
| Environment | Energy | 5 | 3 | 60% | 0 | 0% | 2 | 40% | P.33-35 |
| | Biodiversity | 4 | 3 | 75% | 0 | 0% | 1 | 25% | P.43 |
| | Emissions | 3 | 1 | 33% | 0 | 0% | 2 | 67% | P.36 |
| | | | | | | | | | |
| Society | Local communities | 32 | 22 | 69% | 0 | 0% | 10 | 31% | P.77-78, 81-82, 86-88 |
| | Anti-corruption | 4 | 2 | 50% | 0 | 0% | 2 | 50% | P.29 |
| | Anti-competitive behavior | 11 | 9 | 82% | 0 | 0% | 2 | 18% | P.15-16, 26-27 |
| | | | | | | | | | |
| Employees | Occupational health and safety | 7 | 2 | 29% | 0 | 0% | 5 | 71% | P.63-64 |
| | Training and Education | 9 | 4 | 44% | 0 | 0% | 5 | 56% | P.54, 65-66 |
| | Diversity and Equal opportunity | 8 | 3 | 38% | 0 | 0% | 5 | 63% | P.61-62, 71-72 |
| | | | | | | | | | |
| Human rights | Investment | 10 | 9 | 0% | 0 | 0% | 1 | 0% | P.61, 67-68 |
| | Child labor | 1 | 0 | 0% | 0 | 0% | 1 | 100% | P.61 |
| | Forced or compulsory labor | 1 | 0 | 0% | 0 | 0% | 1 | 100% | P.61 |
| | | | | | | | | | |
| Products | Customer health and safety | 14 | 9 | 0% | 0 | 0% | 5 | 0% | P.52-53, 55-56 |
| | Products and services labeling | 1 | 1 | 0% | 0 | 0% | 0 | 0% | P.52 |
| | Customer privacy | 1 | 1 | 0% | 0 | 0% | 0 | 0% | P.52 |
| Total | | 111 | 69 | 62% | 0 | 0% | 42 | 38% | |

12. Table for analyzed evidences from external resources

| Company | YEAR | DATE | Incidents | Location | No. of sources reported | Consequences | Materiality | Existence in CSR report | Resources |
|-----------|------|------|--------------------|------------------------------|-------------------------|---|------------------|-------------------------|---|
| CNPC中石油 | 2015 | 8.31 | Oil spill | Changqing No.4 factory | 4 | negative-woodland,environmental influences | significant | no | http://news.ifeng.com/a/20160831/49870912_0.shtml 凤凰 http://news.china.com/domesticgd/10000159/20160831/23437256.html 中国新闻 www.sohu.com/a/112982234_336212 搜狐 http://xian.qq.com/a/20160831/031383.htm 腾讯 |
| | | 8.16 | Oil spill | Changqing No.6 factory | 5 | negative-farmland,crops,loss of farmers | significant | no | http://news.ifeng.com/a/20160831/49870912_0.shtml 凤凰 http://news.china.com/domesticgd/10000159/20160831/23437256.html 中国新闻 www.sohu.com/a/112982234_336212 搜狐 http://xian.qq.com/a/20160831/031383.htm 腾讯 "The oil spill has polluted some of the farmland" -negative http://bbs.hsw.cn/read-hm-tid-8859465-fpage-14.html (图) |
| | | 8.2 | Oil spill | Changqing No.3 factory | 3 | negative-environmental effect | significant | no | http://news.cctv.com/2016/08/03/ARTISB31H65hN4ZmUPW0RNV160803.shtml 央视 http://www.sohu.com/a/108894989_123753 搜狐 http://www.chinanews.com/sh/2016/08-03/7960623.shtml 中国新闻 |
| | | 7.26 | Deflagration | Qingyang petroleum chemical | 8 | negative-3 died, 4 injured | very significant | no | http://news.163.com/15/0727/06/AVGSDFP00014AEE.html 网易 http://www.szmsn.com/detail-454.html http://news.sina.com.cn/c/p/2015-07-26/112132148481.shtml http://news.sina.com.cn/c/2015-07-26/134532148616.shtml 新浪 http://news.ifeng.com/a/20150726/44253600_0.shtml 凤凰 http://www.xinhuanet.com/2015-07/26/c_1116043700.htm 新华 http://news.sohu.com/20150726/n417549419.shtml 搜狐 http://news.china.com/domesticgd/10000159/20150727/20080339.html 中国新闻 |
| | | 6.10 | Oil spill | Changqing No.3 factory | 3 | negative-environmental effect | significant | no | http://news.163.com/15/0612/08/ART86RV800014AEE.html 网易 http://sn.people.com.cn/nv/2015/0612/c356419-25213636.html 人民 http://sx.sina.com.cn/news/g/2015-06-12/detail-1fxczyze9438191.shtml 新浪 |
| | | 5.8 | Oil spill | Changqing No.4 factory | 3 | negative-drinking water | significant | no | http://xian.qq.com/a/20150512/017573.htm#p=1 腾讯 http://sx.sina.com.cn/yulin/focus/2015-05-13/102525809.html 新浪 http://info.js.hc360.com/2015/05/12151684203-all.shtml 净水网 |
| | | 5.1 | Oil spill | Changqing No.4 factory | 5 | negative-environmental effect (Yanhe river-a tributary of the Yellow River) | significant | no | http://news.ifeng.com/a/20160831/49870912_0.shtml 凤凰 http://news.china.com/domesticgd/10000159/20160831/23437256.html 中国新闻 www.sohu.com/a/112982234_336212 搜狐 http://xian.qq.com/a/20160831/031383.htm 腾讯 http://xian.qq.com/a/20150502/007158.htm |
| | | 3.26 | Oil spill | Changqing No.9 factory | 5 | negative-environmental effect & drinking water | significant | no | http://news.sohu.com/20150327/n410389153.shtml 搜狐 (图) http://news.ifeng.com/a/20150326/43423552_0.shtml 凤凰 http://news.163.com/15/0326/16/ALL81F6P00011229.html 网易 http://news.cpd.com.cn/n3557/c28113716/content.html 中国警察 http://www.chinanews.com/tp/hd2011/2015/03-26/498290.shtml 百度 |
| Huaneng华能 | 2016 | 6.14 | Work accident | Gansu Shanzhai coal mine | 5 | negative-1 employee dead | very significant | no | http://www.cngold.com.cn/20170214d1970n122149273.html 中金网 http://k.sina.com.cn/article_6409208331_17e04c20b001003eup.html 新浪 http://www.aqxx.org/Item/154633.aspx 安全信息网 https://www.qichacha.com/postnews_8ce4d5329cd8894399740a516ca91d50.html 企查查 http://www.cwestc.com/newshtml/2018-3-14/498765.shtml 中国煤炭新闻网 |
| | | 4.13 | Transport accident | Neimenggu Lingquan coal mine | 7 | negative-1 employee dead | significant | no | https://www.xianjichina.com/news/details_23735.html 贤集网 http://www.cngold.com.cn/20170214d1970n122149273.html 中金网 http://www.sohu.com/a/124648410_505851 搜狐 http://k.sina.com.cn/article_6409208331_17e04c20b001003eup.html 新浪 http://www.aqxx.org/Item/154633.aspx 安全信息网 https://www.qichacha.com/postnews_8ce4d5329cd8894399740a516ca91d50.html 企查查 http://www.cwestc.com/newshtml/2018-3-14/498765.shtml 中国煤炭新闻网 |
| | | 3.27 | Work Accident | Gansu Yanbei coal mine | 11 | negative-one employee dead and financial loss 1,116,900 RMB | very significant | yes | http://www.gscms.chinasafety.gov.cn/plus/view.php?aid=713 甘肃煤矿安全监察局 http://topic.gansudaily.com.cn/system/2016/07/25/016263229.shtml 甘肃日报 https://www.xianjichina.com/news/details_23735.html 贤集网 http://k.sina.com.cn/article_6409208331_17e04c20b001003eup.html 新浪 http://www.sohu.com/a/124648410_505851 搜狐 https://www.qichacha.com/postnews_8ce4d5329cd8894399740a516ca91d50.html 企查查 http://www.gssafety.gov.cn/ch/artideview-12716-1.html 甘肃省安全生产监督管理局 http://www.aqxx.org/Item/154633.aspx 安全信息网 http://www.gs.chinanews.com/news/2016/07-22/275889.shtml 中国新闻网 http://www.cwestc.com/newshtml/2018-3-14/498765.shtml 中国煤炭新闻网 http://www.cngold.com.cn/20170214d1970n122149273.html 中金网 |

| Company | YEAR | DATE | Incidents | Location | No. of sources reported | Consequences | Materiality | Existence in CSR report | Resources |
|------------|------|-------|-------------------------|---|-------------------------|---|------------------|-------------------------|---|
| Shenhua 神华 | 2016 | 12.15 | Electrical accident | Neimenggu Haibowan coal mine | 5 | negative-1 dead (unknown) | very significant | no | http://www.sohu.com/a/124648410_505851 搜狐 http://k.sina.com.cn/article_6409208331_17e04c20b001003eup.html?from=新浪 http://www.aqxx.org/Item/154633.aspx 安全信息网 https://www.qichacha.com/postnews_8ce4d5329cd38894399740a516ca91d50.html 企查查 http://www.cwestc.com/newshtml/2018-3-14/498765.shtml 中国煤炭新闻网 |
| | | 8.8 | Transport accident | Ningxia Lingxin coal mine | 6 | negative-1 dead (unknown) | significant | no | www.cngold.com.cn/20170214d1970n122149273.html 中金网 http://www.sohu.com/a/124648410_505851 搜狐 http://k.sina.com.cn/article_6409208331_17e04c20b001003eup.html?from=新浪 http://www.aqxx.org/Item/154633.aspx 安全信息网 https://www.qichacha.com/postnews_8ce4d5329cd38894399740a516ca91d50.html 企查查 http://www.cwestc.com/newshtml/2018-3-14/498765.shtml 中国煤炭新闻网 |
| SPIC 国家电网 | 2016 | 10.27 | Work accident | Chongqing | 5 | negative-1 employee dead | significant | no | http://news.bjx.com.cn/html/20170123/805330.shtml 北极星电力网 http://power.in-en.com/html/power-2270163.shtml 国际电力网 https://mp.weixin.qq.com/s?__biz=MzI4NDIwMTkwNA==&mid=2652414414&idx=3&sn=ba37b952aa4d48054050cd0c23a82f8&chksm=f0130711c7648e0732ff4310832e046b9ac1bc73e493d23ddfedf704817246a5be90fe73bc0&scene=0 风电头条 http://www.findzd.com/industry/123224.html 中国振动机械网 http://www.sohu.com/a/120758976_131990 搜狐 |
| | | 8.10 | Electric shock accident | Gansu | 5 | negative-1 employee dead | very significant | no | http://news.bjx.com.cn/html/20170123/805330.shtml 北极星电力网 http://power.in-en.com/html/power-2270163.shtml 国际电力网 https://mp.weixin.qq.com/s?__biz=MzI4NDIwMTkwNA==&mid=2652414414&idx=3&sn=ba37b952aa4d48054050cd0c23a82f8&chksm=f0130711c7648e0732ff4310832e046b9ac1bc73e493d23ddfedf704817246a5be90fe73bc0&scene=0 风电头条 http://www.findzd.com/industry/123224.html 中国振动机械网 http://www.sohu.com/a/120758976_131990 搜狐 |
| | | 3.15 | Work accident | Tonghua | 5 | negative-1 employee dead | significant | no | http://news.bjx.com.cn/html/20170123/805330.shtml 北极星电力网 http://power.in-en.com/html/power-2270163.shtml 国际电力网 https://mp.weixin.qq.com/s?__biz=MzI4NDIwMTkwNA==&mid=2652414414&idx=3&sn=ba37b952aa4d48054050cd0c23a82f8&chksm=f0130711c7648e0732ff4310832e046b9ac1bc73e493d23ddfedf704817246a5be90fe73bc0&scene=0 风电头条 http://www.findzd.com/industry/123224.html 中国振动机械网 http://www.sohu.com/a/120758976_131990 搜狐 |
| CNNP 中核电 | 2016 | 9.11 | Faulty operation | Jiangsu Tianwan Nuclear power station | 5 | Deviation-0 level INES (international nuclear event scale)-Shutdown | average | no | http://news.hexun.com/2016-10-29/186653983.html 和讯网 http://finance.sina.com.cn/changjing/gyxw/2016-10-28/doc-xfoduff7024760.shtml?cre=sinacp&mod=g 新浪 http://www.sohu.com/a/117545638_499084 搜狐 https://military.china.com/important/11132797/20161027/30023458_all.html 中华网 http://www.guancha.cn/industry/2016_10_27_378534.shtml 观察家 |
| | | 8.23 | Operating accident | Fujian Fuqing Nuclear power station | 3 | Deviation-0 level INES (international nuclear event scale)-Shutdown | average | no | http://news.hexun.com/2016-10-29/186653983.html 和讯网 http://finance.sina.com.cn/changjing/gyxw/2016-10-28/doc-xfoduff7024760.shtml?cre=sinacp&mod=g 新浪 http://www.sohu.com/a/117545638_499084 搜狐 |
| | | 7.29 | Faulty operation | Hainan Changjiang Nuclear power station | 4 | Deviation-0 level INES (international nuclear event scale)-Shutdown | average | no | http://news.hexun.com/2016-10-29/186653983.html 和讯网 http://finance.sina.com.cn/changjing/gyxw/2016-10-28/doc-xfoduff7024760.shtml?cre=sinacp&mod=g 新浪 http://sao.mep.gov.cn/ywzq/yjfk/201612/t20161209_368852.htm 中国核能网 http://www.sohu.com/a/117545638_499084 搜狐 http://www.mep.gov.cn/ywzq/yjfk/201606/t20160629_356465.htm 国家核安全局 |
| | | 6.24 | Operating accident | Hainan Changjiang Nuclear power station | 4 | Deviation-0 level INES (international nuclear event scale)-Shutdown | average | no | http://news.hexun.com/2016-10-29/186653983.html 和讯网 http://finance.sina.com.cn/changjing/gyxw/2016-10-28/doc-xfoduff7024760.shtml?cre=sinacp&mod=g 新浪 http://www.sohu.com/a/117545638_499084 搜狐 http://www.mep.gov.cn/ywzq/yjfk/201606/t20160629_356465.htm 国家核安全局 |
| CCCC 中国交建 | 2016 | 4.13 | Collapse accident | Dongguan CCCC Fourth Harbor Engineering Co. | 22 | negative-18dead, 19injured, (all employees) 18,610,000RMB losses | very significant | yes | http://www.360doc.com/content/16/1205/21/26447790_612265978.shtml 360网 http://mini.eastday.com/mobile/160416154711888.html 豆丁施工 http://money.163.com/16/0413/16/BKHUSDOU00252605.html 网易 http://www.mnw.cn/news/shehui/1150893.html#p=713858 闽南网 http://www.sohu.com/a/229104034_100154114 搜狐 http://gd.sina.com.cn/dg/2016-10-14/city-dg-fxwpaq1225036.shtml 新浪 http://www.gdsafety.gov.cn/gdsajogk/0301/201703/b7b53bc94204be0a334cd0aa33706.shtml 广东安全生产监督管理局 http://bbs.tietue.net/post2_11428391_1.html 铁路网 http://www.sun0769.com/subject/2015/chinalief/news/201604/t20160414_6475667.shtml http://news.ifeng.com/a/20160416/48477377_0.shtml 凤凰网 http://www.chinacranes.net/news/201604/18/103490.html 中国起重机械网 http://xuewen.cnki.net/CCND-GDJS201610250040.html 学问 http://www.chinanews.com/sh/shipin/2016/04-13/news640885.shtml 中国新闻网 http://www.guancha.cn/local/2016_04_13_356935.shtml 观察家 http://gd.people.com.cn/n2/2016/04/13/c123932-28139001.html 人民网 http://www.dzwww.com/xinwen/shehuixinwen/201604/t20160413_14141414.htm 大众网 http://jz.docin.com/buildingwechat/index.do?buildwechatid=2710 豆丁建筑 https://4g.dahe.cn/mip/news/20160413106706657 大河网 https://www.gdodoc.com/5Ut5Lqk5Zub6liq6Zm5L_d5bqVMjDkUl1N24MzUJAZ7ZtODEXNDQzMWI4MGRkODg50/ 果集 http://www.szmj.gov.cn/mjyw/201610/t20161020_4999217.htm 深圳明镜 http://news.timedg.com/2016-10/14/20487370.shtml 东莞时间网 http://www.oeeee.com/nis/201604/16/432948.html 奥一网 |

| Company | YEAR | DATE | Incidents | Location | No. of sources reported | Consequences | Materiality | Existence in CSR report | Resources |
|------------|------|-------|------------------------------------|--|-------------------------|--|------------------|-------------------------|---|
| | | 7.26 | Electric shock accident | Hainan CCCC Fourth Harbor Engineering Co. | 1 | negative-1 employee dead, 1,100,000RMB losses | significant | no | http://xxgk.hainan.gov.cn/wzxxgk/ajj/201609/t20160909_2113796.htm 安全生产监督管理局 |
| | | 6.5 | Highway collapse accident | Guangzhou No.2 Highway Engineering Bureau | 1 | negative-1 employee dead, 1,510,000RMB losses | significant | no | http://www.gzns.gov.cn/xxgk/ns15/201612/t20161202_335658.htm 广州南沙区人民政府 |
| | | 9.15 | roof fall accident | Ningde No.2 Highway Engineering Bureau | 1 | negative-1 employee dead | significant | no | http://www.pingnan.gov.cn/bmxcwzq/pnxbmdw/ajj/bmdr/201702/t20170216_71753.htm 福建屏南政府网 |
| | | 9.16 | high altitude falling | Chizhou CCCC Second Harbour Engineering Co. | 1 | negative-2 employees dead, about 1,000,000RMB losses | significant | no | http://www.chenyaohu.com/49302.html 陈瑶湖网 |
| CSCEC 中国建筑 | 2016 | 7.8 | high altitude falling | Shanghai China Construction Eighth Engineering Bureau | 1 | negative-1 injured | significant | yes | http://www.pudong.gov.cn/shpd/InfoOpen/InfoDetail.aspx?Id=836057 上海浦东 |
| | | 4.10 | Deflagration | Beijing China Construction Second Engineering Bureau | 16 | negative-1 dead, 2 injured, damaged 36 residents' properties | very significant | no | http://www.360doc.com/content/17/0323/09/179598_639384499.shtml 360网 http://www.bj.chinanews.com/news/2016/0514/51928.html 中国新闻网 http://info.fire.hc360.com/2016/04/120856900962.shtml 慧聪消防网 http://jiangsu.china.com.cn/html/jsnews/society/5205341_1.html 江苏·中国网 http://www.sohu.com/a/68792409_119705 搜狐网 http://bj.people.com.cn/n2/2016/0411/c82840-28122005.html 人民网 http://news.163.com/16/0411/16/BKCSU4JT00014Q4P_.mobile.html 网易 http://mini.eastday.com/a/160412022207054.html 东方头条 http://beijing.qianlong.com/2016/0412/530123.shtml 中国首都网 http://www.takefoto.cn/viewnews-740844.html 北晚新视觉 http://www.xinhuanet.com/local/2016-04/11/c_128883611.htm 新华网 http://bjcb.morningpost.com.cn/html/2016-04/12/content_394475.htm 北京晨报 http://news.cnr.cn/native/gd/20160412/t20160412_521853141.shtml 央广网 http://news.ifeng.com/48420174/news.shtml?&back=手机凤凰 http://news.qq.com/cmsn/20160412002653.html 腾讯网 http://www.dzwww.com/xinwen/shehuixinwen/201604/t20160412_14134356.htm 大众网 |
| | | 3.5 | high altitude falling | Shenzhen China Construction Communications Engineering Group | 1 | negative-1 non-employee dead | significant | no | https://max.book118.com/html/2017/0129/87445758.shtm 文档 |
| | | 5.5 | high altitude falling | Shenzhen China Construction Second Engineering Bureau | 1 | negative-1 employee dead | significant | no | https://max.book118.com/html/2017/0129/87445758.shtm 文档 |
| | | 6.26 | high altitude falling | Shenzhen China Construction First Engineering Bureau | 3 | negative-1 employee dead, 1,600,000RMB losses | significant | no | http://www.hnqgis.cn/shiqu/5453.html 河南工程建设信息网 http://www.szft.gov.cn/bmxcwzq/pnxbmdw/ajj/bmdr/201608/t20160830_9022975.htm 福田区安全生产监督管理局 https://max.book118.com/html/2017/0129/87445758.shtm |
| | | 10.23 | high altitude falling | Zhuhai China Construction First Engineering Bureau | 3 | negative-1 employee dead | significant | no | http://www.guannews.com/xinwen/78779.html 盖闻网 http://www.sohu.com/a/121338791_434911 搜狐 https://max.book118.com/html/2017/0129/87445758.shtm |
| | | 8.22 | high altitude falling | Anqing China Construction First Engineering Bureau | 1 | negative-1 employee dead | significant | no | http://ajj.anqing.gov.cn/17410962/19622362.html 安庆市安全生产监督管理局 |
| | | 8.10 | high altitude falling | Kunming China Construction Eighth Engineering Bureau | 1 | negative-1 employee dead, 838,000RMB losses | significant | no | http://cq.km.gov.cn/c/2017-11-06/1955846.shtml 昆明市政府门户网站 |
| | | 9.24 | Night construction-noise pollution | Chongqing China Construction Second Engineering Bureau | 1 | negative-noise pollution, 20,000RMB losses | significant | no | http://www.cq.gov.cn/publicinfo/web/Views/ShowDetail.action?sid=4159728 重庆市环保局 |
| CRCC 中国铁建 | 2016 | 11.1 | high altitude falling | Zhangjiagang | 1 | negative-1 employee dead, 940,000RMB losses | significant | no | http://www.sohu.com/a/230213006_683111 搜狐 |
| | | 3.17 | Production safety accident | Zhangjiagang China Railway Major Engineering Group | 14 | negative-1 employee dead, 5missing | very significant | no | http://news.chengdu.cn/2016/0323/1774814.shtml 成都全搜索网 http://www.kannews.com/a/2016-03-23/0037435774.shtml 看看新闻 http://js.qq.com/a/20160325/012717.htm 腾讯 http://www.yzsk.com/xsk/7754-1.html 新时空 http://news.sohu.com/20160324/n441941728.shtml 搜狐 http://guba.eastmoney.com/news/601390.278466092.html 股吧网 http://app.myzaker.com/news/article.php?pk=56f28bfa9490cb386e00006c 财新网 http://stock.stockstar.com/JC2016032300004992.shtml 证券之星 https://www.thepaper.cn/newsDetail_forward_1448150 澎湃网 http://news.c2001.com.cn/2016-03/25/content_3213061.htm 中国常州网 http://www.dailyqd.com/news/2016-03/23/content_319273.htm 青岛日报 http://www.myzaker.com/article/56f28bfa9490cb386e00006c/zaker http://news.makepolo.com/4919155.html 马可资讯 http://www.suzhou.gov.cn/xxgk/aqsdjcaj/sqdcclbg/201702/t20170213_843619.shtml 苏州市政府信息公开网 |

