CORPORATE KANGAROOS' AND DRAGONS' SUSTAINABILITY DISCLOSURES: A COMPARATIVE ANALYSIS

Anna L. Rowe

Curtin University of Technology, Western Australia

Paper Accepted for Presentation at:

The 6th Asia Pacific Interdisciplinary Research in Accounting Conference

11 - 13 July 2010

The University of Sydney,
NSW, Australia

Dr Anna L. Rowe

Graduate School of Business

Curtin University of Technology
GPO Box U1987

Perth 6845

Western Australia

Email: a.rowe@curtin.edu.au

The author wishes to acknowledge the funding support of Curtin Graduate School of Business and CSR Asia Inc. Special thanks to: Professor Richard Welford, Hong Kong University; Erin Lyon, CSR Asia Inc. (Singapore), Professor Margaret Nowak; Professor Mohammed Quaddus; A/Prof. Marita Naude; and Moazzem Hossain, Curtin University. Without their kind support this research would not have eventuate. Thanks also to the anonymous reviewer for your comments.

CORPORATE KANGAROOS' AND DRAGONS' SUSTAINABILITY DISCLOSURES: A COMPARATIVE ANALYSIS

ABSTRACT

The purpose of this paper is to undertake a comparative analysis of the current state of *Corporate Sustainability Disclosures (CSD)* in Australia and China. Content analyses of CSD were undertaken according to six major criteria (Indicator Sections) with 51 indicators for the top 40 listed companies (by market capitalisation) on the Australian Stock Exchange (ASX) and Stock Exchanges of Shanghai and Shenzhen.

Companies particularly those in the banking and energy resource mining industry sectors, which are signatory to the UN Global Compact and have adapted some form of the GRI guidelines tend to score higher on CSD. Fifty percent of them used GRI guidelines in their CSD - 15 ASX companies and 5 Chinese listed companies. The aim and value added contribution of this paper is the potential to raise awareness among company boards and senior managers concerning reporting and communicating of sustainability issues, providing recommendations for further research.

Keywords: Australia, China, Corporate Sustainability Disclosure, Corporate Social Responsibility, Content Analysis, Ranking, Theoretical Concepts.

1. INTRODUCTION

Social and environmental responsibility issues in corporate sustainability are mounting sharply in the priorities of executives worldwide. In today's rapid global transformation with changing expectations and demands, companies must be accountable for the way they impact the communities and environments where they operate. Some of the most pressing issues include climate change, environment, health and safety, governance (Welford, Chan, and Man 2008; Kolk and Pinkse 2010), community health and education (Aspen CBE 2007; UNESCO 2005; Nowak, Rowe, and Thomas 2008).

One of the major aspects of sustainable development in business is *Corporate Social Responsibility (CSR)*. Initiatives in CSR such as the United Nations Global Compact and Principles for Responsible Investment, the International Finance Corporation's (IFC) Performance Standards, the Global Reporting Initiative (GRI) and the ISO26000, attest to the significance of social and environmental sustainability. As a responsible management strategy to communicate with stakeholders, the reporting of CSR is one channel by which an organisation discloses how it is addressing the social, environmental and economic issues (SustainAbility/UNEP 2002; Group 100 and KPMG 2008).

What was once the preserve of a social corporate fringe, *Corporate Sustainability Disclosure* (also known by various terminologies such as: CSR/Social/Community Impact/Responsibility Reporting), has become an eminent business trend. The last two decades have witnessed an escalation in research literature on how management tools such as social and environmental accounting, reporting, audits and standardized environmental management systems can enhance an organization's social responsibility and accountability (Mathews 1997; Parker 2005; Group 100 and KPMG 2008; Owen 2008).

The purpose of this paper is to undertake a comparative analysis of the current state of *Corporate Sustainability Disclosures (CSD)* in Australia and her major trading partner China. The aim and value added contributions of this paper are threefold. First, it can potentially raise awareness among company boards and senior managers concerning reporting and communicating of social, environmental and governance issues. Second, it provides insight into findings based on information from the largest Australian and Chinese listed companies (by market capitalisation). Third, based on the findings, this study provides recommendations for further research.

Drawing on the main aim of this study and based on this brief discussion, which will be expanded in the literature section, the following questions arose for the researcher:

- How the largest companies (by market capitalisation) listed on the Australian Stock Exchange (ASX), the Shanghai Stock Exchange and the Shenzhen Stock Exchange report on social, environmental and governance issues?
- How do these companies communicate social, environmental and governance issues?
- How do Australian companies' sustainability disclosures compare with Chinese enterprises' transparency in sustainable development?

To address these questions and gain insight into the state of *CSD* in Australia and China, this preliminary study in collaboration with *CSR Asia Inc.,* has conducted an innovative research project that assesses how the largest listed companies (by market capitalisation) report and communicate social, environmental and governance issues. *CSR Asia* is the leading provider of training and research services on sustainable business practices in Asia.

The organisation of the paper is arranged as follows. The next section provides a brief literature review of *CSD* and the widely adopted Sustainability Reporting frameworks and ranking of such disclosures. These will be followed by research method used, results and discussion of findings. The paper concludes with recommendations and directions for future research.

2. LITERATURE REVIEW

Corporate disclosure of social performance have been analysed for practically more than a generation, especially in the field of accounting (e.g., Dierkes and Preston 1977; Spicer 1978; Ernst and Ernst 1978; Guthrie and Mathews 1985; Gray, Kouhy, and Lavers 1995; Parker 2005). The burgeoning research on corporate environmental reporting gained prominence from the humble beginning of social disclosures in the last two decades (e.g., Owen, Gray, and Bebbington 1997; Burritt 2002; Deegan 2002; Adams 2004).

Corporate social and environmental disclosures relate to the broader form of reporting commonly known by various other terminologies; for example: Corporate Social Responsibility/Triple-bottom-line/Social/Sustainability reporting (Deegan 2005; Adams, Hill, and Roberts 1998; GRI 2006; Group 100 and KPMG 2008). A recent study examining the websites of the Global 100 Most Sustainable Corporations found that *'sustainability'* is the most frequent term used (Paul 2008).

However, there are those among us (e.g., Gray 2006; Schaltegger, Bennett, and Burritt 2006; Buhr 2007) who are not convinced that we have attained *'sustainability'* but rather, progress in *Sustainable Development (SD*) towards such an ideal. Hence, researchers should be alerted to changing terminology in conducting studies that seek to determine the incidence of corporate interest in sustainability or CSR.

In this study, the terms *CSR* reporting and s*ustainability* disclosures are used inter-changeably as reflected in the terminologies used by the top 40 listed companies in Australia and China. To understand the current state of CSD in both continents, it may be useful to briefly trace the evolving development of such disclosures. The literature review indicates an increased level of disclosures following disasters such as Bhopal and Exxon Valdez (Patten 1992), whereas harsh economic times and conservative politics (e.g., Thatcher and Reagan) are associated with a flagging interest in social and economic issues (SustainAbility, Ketchum, and UNEP 2002). However, the Global Financial Crisis (GFC) does not appear to have diminished the level of CSD. In fact, the latest edition of the annual Sustainable Investment Research Analyst Network (SIRAN) commissioned report - 'S&P 100 Sustainability Reporting Comparison' - shows a marked increase in the number of firms issuing GRI reports. Ninety-three of the Standard and Poors (S&P) 100 companies now provide at least some sustainability information on their websites, up from 58 companies in 2007.

This evolving focus on social and environmental issues is well noted by Gray, Owen, and Adams (p. 97, 1996) from the UK perspective:

> *…the early 1970s focused on social responsibility…..the 1980s saw…a redefinition of employee rights as the major theme; while in the 1990s attention shifted to environmental concern.*

The UK evolutionary epic is not pertinently dissimilar to what transpired in North America and Australia. The 1970s decade of social reporting in North America commenced with the annual survey of social responsibility disclosures of annual reports of Fortune 500 industries by Ernst and Ernst (1978). Although lagging slightly behind in Australia, the pioneering researchers (e.g., Guthrie and Mathews 1984; Guthrie and Parker 1989) in this era also conducted empirical studies on social reporting.

By the late 1980s and the early 1990s, environmental reporting emerged following several events, such as accidents (e.g., Chernobyl, Love Canal, Bhopal and Exxon Valdez), problems in the 'natural' environment (the Global Warming Debate, the 'Ozone Hole', water, desertification and soil degradation etc.), or simply the level of excessive material and energy consumption. Several surveys of corporate environmental reporting began to be published during this era (DTTI/IISD/Sustainability 1993; KPMG 1992, 1993, 1999; United Nations 1994).

Notwithstanding the 1987 Brundtland Report (UNWCED 1987) that extends beyond the notion of environment and introduced the concept of *Sustainable Development*, commencing from this period until these days there has been rapidly increasing level of corporate environmental reporting and its corresponding research in this arena (Owen 1992; Patten 1992; Gibson and Guthrie 1995; Belal 2000; Burritt 2002; CAER 2003; Rowe and Guthrie 2009).

The turn of the century has seen an increasing use of the term *CSD* or corporate social reporting in various surveys (e.g., PricewaterhouseCoopers 2002; SustainAbility/UNEP 2002; KPMG 2002, 2008). As mentioned earlier, the mushrooming research in *CSD* or social and environmental aspects of reporting are encouraging (Mathews 1997; Gray and Milne 2002; O'Dwyer and Owen 2005; Parker 2005; Gray 2006; Belal and Owen 2007).

There have been several initiatives by international and national institutions that promote Sustainability Reporting by providing guidance through reporting standards and or principles. Some of these major guidance include GRI, International Standards Organization (ISO), United Nations Global Compact, World Business Council for Sustainable Development (WBCSD) and AccountAbility's AA1000 Assurance Standard.

In a survey of 107 multinational organisations, senior executives revealed that their CSR practices were influenced by the following standards, guidelines or policies: ISO 14000 standards on Environmental Management (47%), GRI Guidelines (38%), WBCSD (37%) and the UN Global Compact (32%). Similarly, according to the recent KPMG's survey of over 2,200 companies from the Global Fortune 250 and 100 top companies in 22 countries, the GRI and G3 Guidelines were the most widely used guidance for *CSD* (KPMG 2008).

The Australian National Greenhouse and Energy Reporting (NGER) system introduced in 2008 and the Environment Australia (2000) provide a framework for public environmental reporting. The 'Group of 100' Australia's senior finance executives from the nation's business enterprises in collaboration with KPMG produced a guide for Sustainability Reporting in Australia (Group 100 and KPMG 2008).

In China, the *'Bulletin on Information Disclosure of Corporate Environmental Performance'* issued by the State Environmental Protection Administration (SEPA) (SEPA 2003) requires non-compliant companies to produce environmental reporting to the public allowing the Environmental Protection Bureau (EPB) to release the names of these non-compliant enterprises to the public through the media (e.g., newspapers, television and websites). In 2006, the Chinese Council for International Cooperation on Environment and Development (CCICED) released a report on environmental governance recommending "environmental audits and annual public environmental reporting" (Lan, Simonis, and Dudek 2007, p. 297).

Corporate environmental disclosure is still in its infancy in China (Xiao and Hu 2004; Guo 2005; Xiao 2006; Rowe and Guthrie 2009) and there is a paucity in empirical research on the comprehensive reporting of CSD in this region. In January 2008, a study of CSD amongst a select group of emerging markets companies, the SIRAN noted that China "has the greatest room for improvement". Whilst 87 per cent of 75 surveyed companies made some sustainability disclosures, just over half published stand-alone corporate responsibility reports. Only 27 per cent of companies referenced GRI guidelines in their reports (UNCTAD 2008a).

The Chinese Securities Regulatory Commission (CSRC) *Code of Corporate Governance for listed companies in China* (CSRC 2001) provides the requirements for corporate governance practices. All listed companies are required to disclose any deviation of their existing corporate governance practices from the Chinese Corporate Code, including reasons for any breach, and plans to close the gap. In spite of this, there is no penalty for failing to disclose the disparity or requirement that the company must do so.

Unlike most early studies that merely survey the increasing number of CSD, this research attempts to appraise and rank selected listed companies by their level of CSR/sustainability reporting. Globally, sustainability reporting has been increasingly subject to rankings and reporting competitions by rating organisations such as the Association of Chartered Certified Accountants (ACCA) awards, *Asian Sustainability Rating* (ASR 2009) and SustainAbility and UNEP (2004). Generally, the criteria for rankings and ratings of Sustainability Reporting are based on guidelines (e.g., GRI) and other sustainability disclosure activities and various standards such as Social Accountability 8000 (SA8000) and Accountability 1000 (AA1000).

The aim of the rating and ranking is to raise awareness of CSR and improve the quality of sustainability reporting, thereby, contributing to a certain degree of standardization (Herzig and Schaltegger 2006). Over time, increased standardization has the potential to provide comparability and benchmarking of corporate sustainable development performance (GRI 2002). Adapting *CSR Asia*'s ranking framework, and guided by the GRI and G3 guidelines this paper investigates the level of CSD of the top 20 listed companies (by market capitalisation as at June 2009) in each continent – Australia and China.

3. RESEARCH METHOD

Adapting the Global Reporting Initiatives (GRI) guidelines and utilising the research instrument designed by CSR Asia Inc., content analyses of CSDs were undertaken according to six major criteria (Indicator Sections) with 51 indicators. Content analysis is a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding (Krippendorf 1980). In addition, it provides researchers with a method to systematically examine large volumes of data to gain an understanding of the underlying concepts and to derive estimates of the depth of disclosure. Therefore, it has been widely adopted in studies of issues relating to sustainability reporting surveys (e.g., PricewaterhouseCoopers 2002; SustainAbility/UNEP 2002; KPMG 2002, 2008).

Only publicly available information were examined in this study, such as company annual reports issued in 2008-2009, stand-alone corporate responsibility or sustainability reports and various related disclosures on their web-sites. In addition, other websites from independent bodies were accessed (e.g., GRI, UN Global Compact, *Corporate Responsibility Index* (CRI 2008) and Dow Jones Sustainability Indexes).

In order to create the ranking for the depth of disclosures on sustainability issues, 51 indicators were used to score the Company Indicator Sections. Table 1 illustrates the Indicator Section headings and the number of indicators under each major criterion. Scoring of the level of disclosures is based on a point system for each of the indicators:

- 0 point for non-disclosure (or extremely difficult to find data)
- 1 point for partial disclosure
- 2 points for comprehensive disclosure

Table 1: Indicator Sections and number of indicators under each major criterion with maximum scores.

Indicator Sections	**Number of Indicators**	**Maximum Section Score**
Governance, Codes, and Policies	12	24
CSR Strategy and Communication	11	22
Marketplace and Supply Chain	5	10
Workplace/People	10	20
Environment	8	16
Community and Development	5	10
Total Indicators	**51**	**102**

(Source: CSR Asia 2008; ASR 2009)

A synopsis of the research rationale for each of the categories for the six Indicator Sections is enumerated below (CSR Asia 2008; ASR 2009):

Governance, Codes, and Policies

The indicators in this section assess the availability and communication of company policies and codes in relation to key CSR factors including: governance, risk management, environment, human resource, health and safety and anti-corruption issues.

CSR Strategy and Communication

The indicators in this section assess company strategy on CSR and how their activities are communicated to stakeholders through reporting initiatives such as the use of internationally recognised reporting guidelines, stakeholder engagement programmes, identified issues material to the company, CSR training and awareness and alignment with voluntary CSR standard in company operations.

Marketplace and Supply Chain

The indicators in this section assess the supply, delivery and distribution of products and services and customer focussed activities. This includes the areas of health and safety management, supply chain standards and supplier engagement.

Workplace/People

The indicators in this section assess how a company views its employees and how their actions are communicated both internally and externally. This includes health policies and human resource issues, training lifelong learning, diversity and freedom of association.

The Environment

The indicators in this section assess the level of environmental data and targets set by the company and how they reported to stakeholders. Indicators include availability of environmental management system, emission data, the use of renewable energy and employee and customer focussed environmental initiatives.

Community and Development

How Community initiatives are reported and if there is evidence of data collection and monitoring of impacts and longer term goals. The indicators in the section assess evidence of long term strategies and targets, monitoring system and quantifiable investment and related employee volunteering.

Due to the potential subjectivity of assessing and ranking of these 40 largest listed companies' CSD, several communications with CSR Asia were necessary to clarify the scope and definitions of selected indicators. The resulting critical analysis and scoring of companies' CSD in accordance with the above mentioned criteria were then subjected to crossed check by independent researchers internally as well as externally from CSR Asia.

4. RESULTS

The CSD ranking of each country's 20 largest companies (by market capitalisation) on the ASX and the stock exchanges in Shanghai and Shenzhen are stated in Table 2 and Table 3 respectively. For the purposes of the ranking table, company scores have been adjusted to a percentage score (rather than using the 102 points total).

In Australia, the banking and mining industry sectors are among the Top 20 companies that have taken the lead on the ranking and scored well against all the indicator sections. The ANZ Banking Group Ltd is a trailblazer scoring an outstanding 98% followed by BHP Billiton Ltd with 95%. The third place scoring 89% each goes to Westpac Banking Corporation and Telstra Corporation Limited. It is no coincident that ANZ Banking Group, BHP Billiton and Telstra have been recognised by the ACCA Australian and New Zealand Sustainability Reporting award (ACCA 2008, 2009).

Table 2 – Top 20 ASX Companies Scores

Rank (score)	Company	Total Score (%)
1	ANZ Banking Group Ltd	98
2	BHP Billiton Limited	95
3	Westpac Banking Corporation	89
3	Telstra Corporation Limited	89
5	National Australia Bank Limited	87
6	Rio Tinto Limited	84
7	Woolworths Limited	83
8	Origin Energy Limited	82
8	Wesfarmers	82
10	Alcoa Inc.	81
11	Newcrest Mining Ltd.	80
12	Commonwealth Bank of Australia	78
13	Woodside Petroleum Limited	76
14	Santos Limited	72
15	CSL Limited	63
16	Westfield Group	28
17	Macquarie Group Limited	27
18	AMP Limited	26
19	News Corporation	23
20	QBE Insurance Group	20

(Source: ASR 2009)

Whilst the quality of CSR/ Sustainability Reporting does not necessarily translate to good 'corporate citizens', it may be worth noting that the three top scoring companies have been recognised for their responsibility performance in the *Corporate Responsibility Index* (CRI 2008) and Dow Jones Sustainability Indexes (DJSI). The

CRI is part of the National Responsibility Practice Project funded by the Federal Government. Most of the top 20 ASX companies in this study have been included in the DJSI World 2008/2009 list (DJSI 2009).

The top 10 ASX companies by market capitalisation scored highly in CSD, ranging from 76% to 98%. Beyond these top 10 companies; company size does not appear to be a major influencing factor on the results. For instance, the 11th and 12th largest ASX companies (i.e., Westfield Group and QBE Insurance) scored poorly compared to companies that are not as large, such as CSL Ltd (Pharmaceutical), Newcrest Mining Ltd and Santos Ltd (mining).

Table 3 – Top 20 Listed Chinese Companies Scores

Rank (score)	Company	Total Score (%)
1	PetroChina Company Limited	59
2	China Petroleum & Chemical Corporation	59
3	China Construction Bank Corporation	58
4	Industrial and Commercial Bank of China	57
5	China Minsheng Banking Corporation Ltd.	53
6	Bank of China Limited	51
6	China CITIC Bank Corporation Limited	51
8	China Shenhua Energy Company Limited	48
8	Ping An Insurance (Group) Company of China Limited	48
10	China Life Insurance Company Limited	45
10	Industrial Bank Co., Ltd.	45
12	Shanghai Pudong Development Bank Co. Ltd	37
13	Zijin Mining Group Co., Ltd.	36
14	Bank of Communications Co Ltd	35
14	China Merchants Bank Co., Ltd	35
14	China Railway Group Limited	35
17	CITIC Securities Company Limited	31
17	China Pacific Insurance (Group) Co., Ltd	31
19	Aluminium Corporation of China Limited	29
20	China Coal Energy Company Limited	25

(Source: ASR 2009)

Table 3 reveals the dominance of large listed Chinese enterprises from the energy resource, construction and banking finance industry sectors. Ranking top of the list are the two energy sector companies that produced the most comprehensive CSD in China, namely: PetroChina Company Limited and China Petroleum & Chemical Corporation having scored 59%. The next five best CSD scoring companies are from the finance industry. Even though CSD is being encouraged amongst large listed companies in particular, most of these enterprises are still shy in transparency compared to their Australian counterparts.

Nevertheless, it is worth noting that the bottom 20th ranked China Coal Energy Company Limited's CSD actually scored greater than the two 'bottom crawlers' ASX companies (i.e., News Corporation and QBE Insurance). In fact, Aluminium Corporation of China Limited (ranked 19th in China) with a score of 29% outperformed the last five ASX companies' CSD. Notwithstanding that CSD is still in its infancy in China, these Chinese enterprises are 'leap-frogging' ahead of these laggard ASX companies. In general, Chinese enterprises seeking global recognition through CSD accountability and transparency are scoring better than others who are listed on the stock exchanges of Shanghai and Shenzhen.

It would appear that the companies in the banking, mining and resource industries are disclosing better in accordance with the adapted GRI and CSR Asia's criteria. Companies that are signatory to the Global Compact and those adapting some forms of the GRI guidelines tend to score higher in their CSR/Sustainability reporting.

4.1 Results by Major Indicator Sections

The top 40 listed companies from both countries scored well in their CSD for 'Governance, Codes and Policies' – scoring 83% for Australian companies and 67% for Chinese companies on average across the 12 indicators. This impressive results are followed by 'Environment' and 'CSR Strategy and Communication' at 70% and 68% respectively for Australian companies. The next high scoring CSD by Chinese enterprises are 'Community and Development' (48%) and 'CSR Strategy and Communication' (42%). The ASX companies scored well on average above 50% in all remaining three indicator sections. This is not the case with the Chinese listed companies (see, Table 4).

Table 4 – Comparative Average Percentage Scores for the 6 Indicator Sections

Indicator Sections	Australia Average Scores %	China Average Scores %
Governance, Codes, and Policies	83	67
Environment	70	34
CSR Strategy and Communication	68	42
Workplace/People	62	34
Marketplace and Supply Chain	59	22
Community and Development	52	48

As one of the prominent issues of corporate responsibilities, it is not surprising that corporate governance has gained widespread requirements for transparency. Some of the contributing factors may include high profile ethics-related scandals causing the GFC, greater stakeholder expectations about company boundaries and responsibilities, and emerging national legislations and standards. This findings correlates with a recent study of Fortune Global 250 companies revealing "that more than half of them have a separate corporate governance section in their CSR report and/or explicitly link corporate governance and CSR issues" (Kolk and Pinkse 2010, p. 15).

Most ASX companies also scored well (70%) on the 'Environment' indicator section with the exception of two finance and insurance companies (i.e., QBE Insurance and

AMP) taking the ‘bottom crawlers’ award of a mere 13% and 6% respectively. Environmental issues dominated by climate change have been a key driver of the sustainability agenda along with the introduction of the Australian National Greenhouse and Energy Reporting (NGER) Act 2008 and the Carbon Pollution Reduction Scheme (CPRS). Internationally, “the 2007 United Nations Intergovernmental Panel on Climate Change, coupled with Al Gore’s statements on global warming and the Stern review, have propelled global environmental issues further to the forefront (Rowe 2008, p 125).

It is however, disappointing to find that the listed Chinese companies are lagging behind in their level of CSD on the ‘Environment’ indicator section given the grave environmental problems this nation is encountering. China is home to 20 of the 30 most polluted cities on earth (World Bank 2005). As the most populous nation on earth, with an insatiable appetite for natural resources to boost its economic growth, the Chinese State should take a prominent role in solving global environmental challenges (Diener and Rowe 2007; UNCTAD 2008b; Rowe and Guthrie 2010).

The reasonably comprehensive level of reporting on ‘CSR Strategy and Communication’ demonstrates that the top 20 ASX companies are placing corporate responsibility values at the core of their business strategy. Social, economic and environmental sustainability issues that are material to the respective companies have been identified and addressed by strategic policies. Fourteen (70%) of the ASX companies have their CSR/Sustainability reports quality assured. There are still 40% of these companies who do not have a Board committee for CSR issues. The 20 largest listed Chinese companies are beginning to disclose on ‘CSR Strategy and Communication’ but only partially.

The above average score of 62% by ASX companies for Workplace/Employee indicator section focused more on Formal complaints/ whistleblower scheme, Diversity policy/initiatives, and Health and Safety training/ prevention programmes. Whilst these companies scored practically twice as much as their Chinese counterparts (34%), most Australian companies failed to quantify Staff training hours/budget or disclose Diversity statistics. Under the current economic climate, it is likely that cost cutting on some of these investments such as staff training will prevail. There may also be a decline on Employee satisfaction surveys. For those of us who have witnessed first-hand, the working conditions in Chinese business premises, the scarce disclosure of Workplace/Employee issues is not surprising.

The top 20 ASX companies are taking note of supply chain risk - 59% of them presented data on the ‘Marketplace and Supply Chain’ indicator section. Health and Safety management systems within this category scored the highest at 73%. Companies are increasingly held responsible for actions taken in their value chain that they may own or control. It is therefore, disturbing to find such low scores by Chinese companies in disclosing information about supply chains especially when China is the major outsourced manufacturing sector.

In terms of the ‘Community and Development’ indicator section, the largest ASX companies managed to score only 52% with Chinese companies closing in at an average score of 48%. The Chinese enterprises comparatively sound level of CSD in ‘Community and Development’ compared with their Asian counterparts (ASR 2009), may well be attributable to their socialist legacy. In Australia, the leading indicator relates to the disclosure on type of resources (e.g. money, in-kind, volunteering). Companies appear to have shifted from the philanthropic approach to more value added contributions to the community as indicated in this study through developing long-term projects. High performers appear to have identified the community issues most relevant to their businesses and developed strategies, targets, internal systems, structures and partnerships to address these issues and monitor their effectiveness.

5. DISCUSSION

This comparative study of CSD from each country's top 20 listed companies highlights a few key findings. The first key finding is that the banking and energy resource mining industry sectors have taken the lead on the ranking and scored well against all the indicator sections. Ironically, the three ASX companies from the finance, insurance and securities sector (i.e., Macquarie Group, AMP and QBE Insurance) ranked poorly in their level of disclosure. It will be interesting to see if this sector will mimic their leading banking sector from both countries in improving their level of CSD in the aftermath of the GFC.

The Australian companies' results from this study mirror in part, recent KPMG (2008) survey of 100 largest Australian companies. The incidences of sustainability reporting are higher in the mining, oil and gas sectors. This is probably attributable to the fact that these sectors operate in a high impact environment with greater social and environmental 'footprints' that attracts greater stakeholder pressure. While the top 100 listed companies in Australia were dominated by the finance, insurance and securities sector, this sector was not well represented in their level of sustainability reporting.

Several of these companies that have been ranked highly in this study have also been recognised by the ACCA Australian and New Zealand Sustainability Reporting awards in the last couple of years; example: ANZ Banking Group, BHP Billiton, Telstra, Origin Energy and Woolworths (ACCA 2008, 2009).

Whilst the comprehensive quality of a company's CSR/ Sustainability Reporting does not necessarily assure good 'corporate citizenship' practices, it may be worth noting that the three top scoring ASX companies had also been recognised for their responsibility performance in the *Corporate Responsibility Index* (CRI 2008) and Dow Jones Sustainability Indexes (DJSI 2009). Although none of the listed Chinese enterprises in this study has yet to earn its place of recognition in the DJSI, it is a matter of time before they achieve this, given the encouraging results of the top few Chinese enterprises' CSD in this study.

The second key finding is that the CSD indicator section on corporate governance in this study received the most comprehensive disclosures by the largest listed companies from both countries. This is attributable to the fact that corporate governance includes factors that are more entrenched with regulatory disclosure requirements in both countries. For instance, companies on the ASX are required to disclose on corporate governance as they are subjected to mandatory requirements such as: Corporations Law - S.299(1)(f); Corporate Law Economics Reform Program (CLERP9) - S.99a(1); Australian Securities and Investments Commission

(S.1013DA) Disclosure Guidelines. Likewise in China, listed companies are governed by regulations such as the Chinese Securities Regulatory Commission (CSRC) *Code of Corporate Governance for listed companies in China* (CSRC 2001).

The third key finding is that companies which are signatory to the UN Global Compact and have adapted some form of the GRI guidelines tend to score higher on CSD. Eleven of the largest companies (7 ASX and 4 listed Chinese companies) have signed the UN Global Compact. Out of the 40 companies analysed, half of them used GRI guidelines in their CSD - 15 ASX companies and 5 Chinese listed companies. However, only 11 ASX companies (55% of ASX companies; 27.7% overall) disclose a GRI level ranging from A, B or C. None of the top 20 listed Chinese companies registered with GRI at the time of the study. Only 5 of these Chinese enterprises declared that they have based their reports on GRI standard.

An interesting observation is that the embracing of the UN Global Compact, UN Millennium Development Goals and GRI reporting guidelines are adopted on a voluntary basis. In spite of the weak enforcement of limited requirement for Chinese enterprises to disclose on governance, social and environmental issues, it is refreshing to find 7 of the 20 top Shanghai/Shenzhen companies scoring more than 50% on CSD. Notwithstanding the regulatory requirements for certain corporate social, environmental and governance disclosures (e.g., NGER, Corporations Law - S.299 (1) (f); Corporate Law Economics Reform Program (CLERP9) - S.99a (1); Australian Securities and Investments Commission (S.1013DA) Disclosure Guidelines), Sustainability Reporting in Australia is still predominantly voluntary.

Hence, why do these companies voluntarily disclose publicly on social, environmental and governance issues? What are the drivers behind the current state of CSD? Studies into the spread or diffusion of sustainability reporting have been approached from several notable theoretical concepts (e.g., political economy theory, stakeholder theory, legitimacy theory and institutional theory).

Political economy theory views reporting “as social, political and economic documents. They serve as a tool for constructing, sustaining, and legitimising economic and political arrangements, institutions, and ideological themes which contribute to the corporation’s private interests.” (Guthrie and Parker 1990 p. 166). Therefore, economic issues cannot be studied in isolation from political, social and institutional framework from which the economic activity takes place (Gray, Kouhy, and Lavers 1995; Deegan 2002).

Extending from the ‘bourgeois’ political economy approach is *stakeholder theory*. The continued success of a corporation depends on the support of the stakeholders, and the operations of the company must be adjusted to meet their approval (Ullmann 1985; Donaldson and Preston 1995). Stakeholder theoretical concept explains the increasing trend in CSD in response to escalating demand for CSR and accountability transparency. This is due in part to the implied ‘social contract’ organisations have with stakeholders at large.

Legitimacy Theory stems from the concept of a hypothetical social contract between organisations and society (Mathews 1994) and fulfilling such a contract legitimise the organisations and their actions. The public disclosure of information is one strategy that a company can undertake to establish or maintain its state of legitimacy (Guthrie and Parker 1989; Patten 1992; Brown and Deegan 1998), otherwise known as a ‘public license to operate’ (Deegan 2002).

Institutional Theory emphasises societal expectations of appropriate form and behaviour which develop over time and act as “a taken-for-granted belief system’ (Suchman 1995 p. 577). One distinguishing element provided by institutional theory is that we can expect a tendency for organisations within a particular field to assume similar structures and practices (Powell 1988) in CSD.

The CSD literature has been described by Parker (2005, p.844) as “voluminous, disparate, eclectic” that are “without commonly agreed philosophies or standpoints.” However, there has been an increasing acknowledgement that while diversity in theoretical concepts is often valuable, it is vital that researchers in this field also realised that these widely utilised theoretical framework in CSD are complementary rather than competing (Gray, Owen, and Adams 1996; Parker 2005).

Conformance to generally accepted reporting standards, such as GRI and ISO26000 Social Responsibility, may legitimise and enhance moral standing with external stakeholders and can thus be linked also with normative stakeholder theory. It can be argued that rapid adoption of certain voluntary standards may result from heightened awareness initiated by organisations who are ‘isomorphic’ (DiMaggio and Powell 1983; Rowe 2005).

6. LIMITATIONS OF THE STUDY

The reliance on publicly available information in this study, such as company annual reports (2008-2009), corporate responsibility or sustainability reports, various related web-sites, websites from independent bodies (e.g., GRI, UN Global Compact, *Corporate Responsibility Index* (CRI 2008) and Dow Jones Sustainability Indexes) created two major limitations.

First, only publicly available information could be accessed and used and therefore the study was bound by available information. Second, if any conflicting information was found the researcher was unable to clarify the information unless the same/similar information was available in another document and format, which could be used to clarify and validate information. Even when companies were sent questionnaires for further information, not all of them responded.

As a result of time and resource constraints the scope of the project focused only on the 40 largest companies (by market capitalisation) on the ASX and the Shanghai Stock Exchange and Shenzhen Stock Exchange. Although this sample provided valuable insights, more detailed and in-depth insights could be gained by examining a larger sample.

7. FUTURE RESEARCH AND CONCLUSION

The results of this study through the rating and ranking of each countries’ top 20 companies in Australia and China, has contributed in assisting users of Corporate

Sustainability Reports to determine the companies' level of CSR. The findings can potentially raise awareness among company boards and senior managers concerning reporting and communicating of social, environmental and governance issues. Future researchers in the CSR arena can utilise the results of this study to measure or gauge the 'barometer' of a company's sustainable development.

The leading companies' CSD analysed have made impressive strides in understanding their CSR and setting strategies accordingly. The evolving expectations and discussions underway at global and local levels about the roles of governments, businesses and citizens are constantly pushing for a more sustainable future.

There is however, scarcely any conclusively 'accepted' theory for the growing diffusion of CSD. Nevertheless, the ardent search for an innovative vision and better standardisation in reporting corporate sustainable development have enriched our understanding of a wide array of views and philosophies. Future research in this field will serve to enhance our understanding of the state of CSD and not only in knowing the underlying assumptions behind the trend line, but also raising the bar for improved sustainability performance and disclosure.

'Sustainability' as measured by the GRI, is a theme of growing importance in corporate reporting, but standards and norms for this disclosure are still evolving (Gray 2006). The mainstreaming of improved accountability through the rating and ranking of CSD that increase the level of consistency and comparability of information is useful for decision makers.

For instance, data from content analysis (such as the findings from this study) can be combined with structured interviewing of key personnel to not only understanding the underlying assumptions for voluntary sustainability disclosures but also investigate how to communicate more effectively with the relevant stakeholders.

An alternative approach for future research is to identify industry categories, or organisations with differing environmental and social performance ratings or environmental risk and test for statistically significant differences in voluntary disclosures (Cho and Patten 2007; Lightstone and Driscoll 2008). For CSR research, investors and rating organisations, CSD has become a vital source of information reflecting the increasing expectations of stakeholders for credible reporting and improved social responsibility.

REFERENCES

ACCA. 2008. *2008 ACCA Australia & New Zealand Sustainability Reporting Awards*. http://www.accaglobal.com/australia/publicinterest/sustainability/2008/ (accessed Sept 2008).

ACCA. 2009. *Vicsuper Wins Annual ACCA Sustainability Reporting Awards*. http://www.accaglobal.com/databases/pressandpolicy/australia/3236367 (accessed 16 August 2009).

Adams, C., W. Y. Hill, and C. Roberts. 1998. Corporate social reporting practices in Western Europe: Legitimating corporate behaviour? *British Accounting Review* 30 (1): 1-21.

Adams, C. A. 2004. The ethical, social and environmental reporting-performance portrayal gap. *Accounting, Auditing & Accountability Journal* 17 (5): 731.

Aspen CBE. 2007. *Beyond Grey Pinstripes 2007-2008: Preparing MBAs for Social and Environmental Stewardship*.

ASR. 2009. *Asian Sustainability Rating*. Singapore: CSR Asia. http://www.asiansr.com (accessed October 2009).

Belal, A. R. 2000. Environmental reporting in developing countries: Empirical evidence from Bangladesh. *Eco-Management and Auditing* 7: 114-121.

Belal, A. R., and D. L. Owen. 2007. The views of corporate managers on the current state of, and future prospects for, social reporting in Bangladesh. *Accounting, Auditing & Accountability Journal* 20 (3): 472-494.

Brown, N., and C. Deegan. 1998. The public disclosure of environmental performance information--a dual test of media agenda setting theory and legitimacy theory. *Accounting and Business Research* 29 (1): 21-41.

Buhr, N. 2007. Histories of and rationales for sustainability reporting. In *Sustainability accounting and accountability*, ed. J. Unerman, B. O'Dwyer and J. Bebbington, 57-69. London: Routledge.

Burritt, R. 2002. Environmental reporting in Australia: current practices and issues for the future. *Business Strategy and the Environment* 11 (6): 391-406.

CAER. 2003. *The state of public environmental reporting in corporate Australia*. Centre of Australian Ethical Research for Environment Australia.

Cho, H. C., and D. M. Patten. 2007. The role of environmental disclosures as tools of legitimacy: A research note. *Accounting, Organizations and Society* 32: 639-647.

CRI. 2008. *Corporate Responsibility Index Results*. http://www.corporate-responsibility.com.au/ (accessed July 2009).

CSR Asia. 2008. *CSR Asia Barometer 2008: The state of CSR disclosure in Asia 2008*. http://www.csr-asia.com/research.php#barometer (accessed Nov 2008).

CSRC. 2001. Code of Corporate Governance for Listed Companies in China, edited by C. S. R. Commission. Beijing.

Deegan, C. 2002. The legitimising effect of social and environmental disclosures - A theoretical foundation. *Accounting, Auditing & Accountability Journal* 15 (3): 282-311.

Deegan, C. 2005. Corporate social-responsibility reporting. In *Australian Financial Accounting*, 1097-1175. North Ryde: McGraw-Hill Australia.

Diener, B., and A. Rowe. 2007. China: The challenges of economic growth and environmental sustainability. *Greener Management International* (GMI Special Issue 50): 5-9.
Dierkes, M., and L. E. Preston. 1977. Corporate social accounting reporting for the physical environment: a critical review and implementation proposal. *Accounting, Organizations and Society* 2 (1): 3-22.
DiMaggio, P. J., and W. W. Powell. 1983. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review* 48: 147-160.
DJSI. 2009. *DJSI World 2008/2009, Dow Jones Sustainability Indexes*. http://www.sustainability-indexes.com/ (accessed 30 June 2009).
Donaldson, T., and L. E. Preston. 1995. The Stakeholder Theory of the Corporation: Concepts, Evidence and Implications. *Academy of Management Review* 20 (1): 65-91.
DTTI/IISD/Sustainability. 1993. *Coming Clean: Corporate environmental reporting: opening up for sustainable development*. London: Deloitte Touche Tohmatsu International (DTTI)/ International Institute for Sustainable Development/SustainAbility Ltd,.
Environment Australia. 2000. A framework for public environmental reporting: an Australian approach. Canberra.
Ernst and Ernst. 1978. *Social Responsibility Disclosures: Surveys for Fortune 500 Annual Reports*. Cleveland, Ohio
Gibson, R., and J. Guthrie. 1995. Recent Environmental Disclosures in Annual Reports of Australian Public and Private Sector Organizations. *Accounting Forum* 19 (2/3): 111-127.
Gray, R. 2006. Does sustainability reporting improve corporate behaviour?: Wrong question? Right time? *Accounting and Business Research* (Special Issue: International Accounting Policy): 65-88. Gray, R., R. Kouhy, and S. Lavers. 1995. Corporate social and environmental reporting: A review of the literature longitudinal study of UK disclosure. *Accounting, Auditing & Accountability Journal* 8 (2): 47-77.
Gray, R., and M. Milne. 2002. Sustainability reporting: Who's kidding whom? *Chartered Accountants Journal of New Zealand* 81 (6): 66-70.
Gray, R., D. Owen, and C. Adams. 1996. *Accounting and accountability: changes and challenges in corporate social and environmental reporting*. London: Prentice-Hall.
GRI. 2002. *Sustainability Reporting guidelines 2002*. Amsterdam: Global Reporting Initiative. http://www.globalreporting.org
GRI. 2006. *G3 Sustainability Reporting guidelines*. Amsterdam: Global Reporting Initiative. http://www.globalreporting.org (accessed Dec 2006).
Group 100, and KPMG. 2008. *Sustainability Reporting: A guide*. ISBN 09750 205-0-1. Melbourne: Group of 100 Inc. www.group100.com.au (accessed Oct 2008).
Guo, P. 2005. Corporate environmental reporting and disclosure in China. In *CSR Asia 2005, June 2005*, edited by R. Welford. Beijing. Tsinghua University.
Guthrie, J., and M. R. Mathews. 1984. *Current state of social accounting Australiasia*. USA: American Accounting Association.
Guthrie, J., and L. D. Parker. 1990. Corporate Social Disclosure Practice: A Comparative International Analysis. *Advances in Public Interest Accounting* 3: 159-176.

Guthrie, J. E., and M. R. Mathews. 1985. Corporate Social Accounting in Australiasia. *Research in Corporate Social Performance and Policy* 7: 251-277.

Guthrie, J. E., and L. D. Parker. 1989. Corporate Social Reporting: A Rebuttal of Legitimacy Theory. *Accounting and Business Research* 9 (76): 343-352.

Herzig, C., and S. Schaltegger. 2006. Corporate Sustainability Reporting: An Overview. In *Sustainability accounting and reporting*, ed. S. Schaltegger, M. Bennett and R. BurrittDelft, The Netherlands: Springe.

Kolk, A., and J. Pinkse. 2010. The integration of corporate governance in corporate social responsibility disclosures. *Corporate Social - Responsibility and Environmental Management* 17 (1): 15-26. KPMG. 1992. *Environment Reporting: A Survey of the Top 100 Companies in the US, Uk and Canada*. London: KPMG peat Marwick.

KPMG. 1993. *KPMG International Survey of Environment Reporting*. Thorne: KPMG Peat Marwick.

KPMG. 1999. *International Survey of Environmental Reporting 1999*. KPMG. http://www.kpmg.com.au/

KPMG. 2002. *International Survey of Corporate Sustainability Reporting*. KPMG. http://www.kpmg.com.au/

KPMG. 2008. *KPMG International Survey of Corporate Responsibility Reporting 2008*. Amsterdam, The Netherlands. Krippendorf, K. 1980. *Content Analysis: An Introduction to Its Methodology*. Beverly Hills, CA: Sage.

Lan, X., U. E. Simonis, and D. J. Dudek. 2007. Environmental Governance in China Recommendations of a Task Force. *International Asian Forum. International Quarterly for Asian Studies* 38 (3/4): 293-438.

Lightstone, K., and C. Driscoll. 2008. Disclosing Elements of Disclosure: A Test of Legitimacy Theory and Company Ethics. *Canadian Journal of Administrative Sciences* 25 (1): 7-21.

Mathews, M. R. 1994. Recent Developments in Social and Environmental Accounting. *Accounting Forum* 18 (1): 5-22.

Mathews, M. R. 1997. Twenty-five years of social and environmental accounting research Is there a silver jubilee to celebrate? *Accounting, Auditing & Accountability Journal* 10 (4): 481.

Nowak, M., A. L. Rowe, and G. Thomas. 2008. Weaving sustainability into business education. *Journal of the Asia-Pacific Centre for Environmental Accountability* 14 (2): 20-34.

O'Dwyer, B., and D. L. Owen. 2005. Assurance statement practice in environmental, social and sustainability reporting: a critical evaluation. *The British Accounting Review* 37 (2): 205-229.

Owen, D. 1992. *Green Reporting: Accountancy and the Challenge of the Nineties*. London: Chapman & Hall.

Owen, D. 2008. Chronicles of wasted time? *Accounting, Auditing & Accountability Journal* 21 (2): 240-267.

Owen, D., R. Gray, and K. J. Bebbington. 1997. Green accounting: cosmetic irrelevance or radical agenda for change. *Asia-Pacific Journal of Accounting* 42: 175–198.

Parker, L. D. 2005. Social and environmental accountability research: A view from the commentary box. *Accounting, Auditing & Accountability Journal* 18 (6): 842-860.

Patten, D. M. 1992. Intra-industry environmental disclosures in response to the Alaskan oil spill: a note on legitimacy theory. *Accounting, Organizations and Society* 17 (5): 471–475.

Paul, K. 2008. Corporate Sustainability, Citizenship and Social Responsibility Reporting: A Website Study of 100 Model Corporations. *The Journal of Corporate Citizenship* Winter 2008 (32): 63-78.

Powell, W. 1988. Institutional Effects on Organizational Structure and Performance. In *Institutional Patterns and Organizations: Culture and Environment*, ed. L. Zucker, 115-138. Cambridge, MA: Ballinger.

PricewaterhouseCoopers. 2002. *2002 Sustainability survey report*. PricewaterhouseCoopers. www.pwcglobal.com/eas

Rowe, A. 2008. Evolutionary epic of 'greening' Chinese dragons' management institutions. *International Journal of Business Research* 8 (1): 125-132.

Rowe, A., and J. Guthrie. 2010. Chinese Government's Formal Institutional Influence On Corporate Environmental Management. *Public Management Review Journal* In Press: Routledge.

Rowe, A. L. 2005. Greening Corporate Reporting: An Institutional Theoretical Approach. In *17th Asian-Pacific Conference on International Accounting Issues*. Wellington NZ.

Rowe, A. L., and J. Guthrie. 2009. Institutional Cultural Norms of Chinese Corporate Environmental Reporting In *Interdisciplinary Perspectives on Accounting Conference* University Innsbruck, Austria.

Schaltegger, S., M. Bennett, and R. Burritt, eds. 2006. *Sustainability accounting and reporting*. Edited by A. Tukker. Vol. 21, *Eco-efficiency in industry and science*. Delft, The Netherlands: Springer.

SEPA. 2003. *Bulletin on Information Disclosure of Corporate Environmental Performance*

Spicer, B. H. 1978. Investors, Corporate Social Performance and Information Disclosure: An empirical Study. *The Accounting Review* 53 (1): 94-111.

Suchman, M. C. 1995. Managing legitimacy: Strategic and institutional approaches. *The Academy of Management Review* 20 (3): 571-610.

SustainAbility, Ketchum, and UNEP. 2002. Good News & Bad: The Media, Corporate Social Responsibility and Sustainable Development http://www.sustainability.com/insight/mediaspotlight-article.asp?id=140.

SustainAbility, and UNEP. 2004. *The Global Reporters 2004 Survey of Corporate Sustainability Reporting. Risk and opportunity. Best practice in non-financial reporting*. London: SustainAbility.

SustainAbility/UNEP. 2002. *Trust Us. The Global Reporters 2002 Survey of Corporate Sustainability Reporting*. London: SustainAbility and UNEP.

Ullmann, A. 1985. Data in Search Theory: A critical examination of the relationships among social disclosure, and economic performance of US firms. *Academy of Management Review* 10 (3): 540-557.

UNCTAD. 2008a. *2008 Review of the reporting status of corporate responsibility indicators*. http://www.unctad.org/Templates/Search.asp?intItemID=3617&lang=1&frmSearchStr=china&frmCategory=doc&section=whole (accessed 21/03/2009).

UNCTAD. 2008b. *Country fact sheet: China*. http://www.unctad.org/sections/dite_dir/docs/wir08_fs_cn_en.pdf (accessed 22/03/09).

UNESCO. 2005. *United Nations Decade of Education for Sustainable Development (2005-2014): International Implementation Scheme*December 2008).

United Nations. 1994. *Environmental Disclosures: International Survey of Corporate Reporting Practices*. New York: United Nations Economic and Social Council.

UNWCED. 1987. *Our Common Future*. The Brundtland Report. New York: United Nations World Commission on Environment and Development, Oxford University Press.

Welford, R., C. Chan, and M. Man. 2008. Priorities for corporate social responsibility: a survey of businesses and their stakeholders. *Corporate Social - Responsibility and Environmental Management* 15 (1): 52-62.

World Bank. 2005. *China Quick Facts*. http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/EASTASIAPACIFICEXT/CHINAEXTN/,contentMDK:20680895~pagePK:1497618~piPK:217854~theSitePK:318950,00.html. (accessed Jan 2006).

Xiao, H. 2006. Corporate Environmental Accounting and Reporting in China. In *Sustainability Accounting and Reporting*, ed. S. Schaltegger, M. Bennett and R. Burritt, 457-471. Dordrecht, The Netherlands: Springer.

Xiao, S., and W. Hu. 2004. The environmental information released of Chinese on-market companies. *Journal of Beijing Institute of Technology* 5 (5): 69-72.