

University of Tampere
Department of Management Studies

Corporate Social Responsibility: Translation of the Concept and Practice in China

**-- Through a Study on Corporate Responsibility Reports Published in the Chinese
Electronics Sector**

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ABSTRACT

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With an increasing awareness to global climate change, social structural change and the consequences of the financial crisis, the continuous debate on Corporate Social Responsibility (CSR) has transformed it from a novel term to an essential item in every business practitioner's agenda. The CSR movement started in Europe and US in the early days of 20th Century, but the conduct of business ethics is way beyond the history of CSR development.

The penetration of globalization helped the spread of CSR concepts worldwide. China, as an important contributor to the global economy, learned the ideas from the well-developed countries and followed the trend of CSR disclosure. Since 2007, the number of responsibility reports has been growing at an accelerated pace in China. Companies in Chinese electronic sector are the leaders in CSR reporting.

From various perspectives, scholars and business practitioners in China view CSR as an "imported" idea. This study follows a line of global-local-industrial, to investigate how the concept is interpreted and has been developed in China. Among many of CSR issues that are reported by electronics companies, this study focuses on disclosures in economic, social and environmental dimensions. The primary research methodology is multiple-case studies with qualitative content analysis. A total number of 12 reports published in 2008-2010 by four companies is studied in this paper. The study revealed three commonly referred importance of CSR in China: carbon emission reduction, emphasis on honesty and integrity and significance of ISO standards.

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1. Introduction

1.1 Background for Choosing the Topic

In the beginning of 20th century, the concept of Corporate Social Responsibility (hereafter CSR) was highly probable a novel term for both business community and academic world. The landscape of the business environment had changed tremendously in the last century, and the transformation is at an even faster pace in the 21st century. Today, with an increasing awareness to global climate change, species extinction, growing of inequality, on-going regional conflicts and rapid social structure changes, there are more challenges faced by business practitioners and scholars than ever before. The impacts of business activities and products are far beyond a company's economic achievement.

Financial crisis has slowed down the global economy in the recent years. The irresponsible products and activities that were initially promoted by some financial institutions resulted in tens of millions of people in debt. 2010's Gulf of Mexico oil spill was catastrophic. The accident's negative impacts on the environment and local communities will last years or perhaps decades. Not to mention, the high price BP has paid and is still paying to the gulf spill restoration. Voluntarily or not, companies have to evaluate the possible consequences of their activities in the perspectives of economy, society and environment. In a survey conducted in 2010 by UN Global Compact and Accenture (Lacy, et al., 2010), 96% of the (766) participated CEOs from various countries believed, sustainability issues should be fully integrated into the strategy and operations of a company, whereas the rate of a similar survey in 2007 was 72%. In the jungle of CSR theories, discussions and performance measures, Corporate Responsibility Reporting has evolved to be a vital form of CSR practice. KPMG (2011)'s International Survey of Corporate Responsibility Reporting showed that, responsibility reports are commonly used to bridge a gap between companies and their stakeholders.

"People make something into local or global; they localize or globalize" (Czarniawska & Joerges, 1996, p21), there are no universals, only particulars, and that local knowledge is the

only knowledge there is. The concept of CSR originated from entrepreneurs and business managers that recognized the rights of employees, and later extended their attentions to other aspects of responsibility (Idowu and Towler, 2004). With differences in cultural background, business practice, legal system, social concern and philosophy between countries and regions, there is not a single concept or standard that can be used for all. Even with the case between US and UK—the two countries seem to share a lot in common—their interpretations of CSR are also differed (Aguilera et al., 2006). In November 1, 2010, International Standard Organization launched a new CSR standard, ISO 26000. The process of making such standard has taken over six years¹, involved 450 experts and 210 observers, from 99 ISO member countries and 42 public and private sector organizations². With so many stakeholders had taken in part, the standard aims at minimizing the gaps and building a global CSR standard. However, this is still relatively new. The actual acceptance and implementation of ISO 26000 will need time to approve. Furthermore, as companies are operating in various industries, the social, economical and environmental concerns are differed from one to another.

Since the economic reform took place in the late 1970s, China has made enormous achievements in many areas. The most observed is the fast GDP growth in the past two decades. As an important player in the global economy, Chinese companies are facing the same challenges as companies in the well-developed countries. It is particularly true when they are trying to enter foreign markets and to compete with local companies. Not only they need to follow the legislation in those countries; also they are scrutinized by other parties (for instance, consumer protection groups, human rights advocates and environment conservation organizations) than the regulators. Gradually Chinese companies have learned to conduct socially responsible business rather than solely profit-driven activities (Xu and Yang, 2007).

¹ Datuk Marimuthu Nadason, 8th meeting of the ISO WGSR on Social Responsibility , Copenhagen, Denmark, 17.05.2010 http://www.standardsusers.org/mysr/index.php?option=com_content&view=article&id=566:8th-meeting-of-the-iso-wgsr-on-social-responsibility-copenhagen-denmark&catid=34:about-iso-sr&Itemid=53

² Anonymous, 1 November launch of ISO 26000 guidance standard on social responsibility, 27.10.2010, <http://www.iso.org/iso/pressrelease.htm?refid=Ref1366>

China has been an attractive destination for foreign investment for over two decades. Those multinational companies brought their capital, management concepts, also their pressures from the stakeholders at their target markets to China (Chen, et al., 2009; Liu, 2005). As a common practice, in order to win the trust of foreign investors or buyers, the Chinese manufacturers have to be qualified with some form of non-financial measure metrics. Under the pressure and the demand of global business environment, the Chinese companies, scholars and the government had begun their journey to search for the concept and practice of CSR in a Chinese context.

Electronic products are an essential part of today's life. With a growing dependence on electronic hardware to improve productivity, the impact of the industry is also increasing. China, is the home to the world's most contract manufacturing services providers. The number of Chinese multinational (MNC) electronic companies that are trying to expand their markets abroad is also constantly increasing. Electronics manufacturing industry is now the largest contributor to Chinese economic growth. The industry's CSR practice is at the leading position in China, in terms of corporate social responsibility reporting (An, et al., 2011). From this point, the reports released by the electronics companies partly reflect how Chinese business practitioners perceive the idea of CSR.

1.2 Goals and Progress of the Research

In the light of "Travel of ideas" (Czarniawska & Joerges 1996), together with a basic understanding of CSR concept that was not originated in China. The major focus of this study is to build a basic understanding of how CSR concept and practice have travelled to and developed in China. How do the Chinese scholars and researchers interpret CSR in China? Are they translating the concepts literally to the Chinese language? Are they introducing and explaining the ideas with consideration of the Chinese business environment? How do they see the role of government in CSR promotion and development in China? How do Chinese business practitioners understand CSR concept? How well or how deep do they understand the concept? Where do they encounter the idea? How do they integrate the CSR concepts into their business activities? To gain a deeper understanding of these issues, this study

constitutes of two main sections. First, a review of relevant literatures on commonly accepted CSR concepts and standards (literatures published in English) and widely recognized CSR norms in China (in simplified Chinese). Second, empirical data on what activities were carried out by Chinese companies to interpret their understanding of CSR.

Among various tools to measure corporate social performance (hereafter CSP), corporate responsibility (hereafter CR) reporting is a common CSR practice worldwide. There has been a large amount of studies that are focused on CR reporting and disclosure. The believe in the what companies report reflecting more or less what the companies CSR practices are (Gray, et al., 1995), is the driving force for such activities. The accessibility to information of companies' CR practice can be limited for external parties, but companies' reports are easy to be obtained. With the fast growing number of CSR reports in recent years, more researchers are learning how corporations have performed their CSR through examining the reports. Even though the number of regulations that require companies to disclose information of their CSR practices is increasing, many CSR reports still are prepared on a voluntary basis (Haniffa & Cooke, 2005). It is necessary to note here, studying CSR reports do not necessarily imply the ignorance of realizing the gaps between corporations' actual CSP and the information they disclose in their reports (Adams, 2004).

Moreover, before introducing the main research question and sub sections, it is necessary to declare the exclusion of the literature review. As it has been mentioned at the beginning of the introduction, the concepts of CSR and sustainability have emerged in the recent years, and there is a large volume of literatures on the definition of Sustainability, but only a few definitions are going to be discussed in relation with CSR. Also, the term CSP is used in this study, but there are separate literatures for CSP. Since the focus of this study is CSR and CS Reporting, the examination on CSP is not included.

1.2.1 Research Questions

The major focus of this study is to understand how CSR concepts and practice are interpreted in China through CR reporting. However, in order to get a clearer picture, it is necessary to

narrow down the scope of empirical data collection. This study pays an attention to the CSR reports that are published by electronics companies³ in China. There are two key reasons laying here: First, contemporary live is becoming more and more convenient with all kinds of electronics around. Electronics companies and especially consumer electronics companies are often associated to innovations and break-through technologies. It would be interesting to see how they manage their CSR practice by examining their corporate responsibility reports. Second, the economic importance of electronics companies in China. According to Chinese Ministry of Information Industry, the electronics information industry's aggregated sales account for over 6 trillion yuan⁴ (roughly about € 0.6 trillion) in 2010, employs nearly 9 million people⁵. Often the manufacturing is labour intensive⁶, hence it is logically to expect the report on workers' well-being is included in a company's CSR strategy or information disclosure. Furthermore, the product life cycle may involve many environmental matters and products safety is vital for consumers. The operation of electronics companies possibly involves many more aspects that encounter social, legal and environmental issues.

There is a large amount of multinational electronics companies operating in China. Some of them have published separate CSR reports for their Chinese subsidiaries. Several Chinese electronics companies (for instance, the world's second largest PC manufacturer Lenovo) have been operating on an international level, or trying to expand their markets abroad. They have realized the importance of corporate social responsibilities from their global business practice. As a result, they have published CSR reports to follow certain of the international standards or industrial standards. Therefore, CSR reports released by the electronics

³ The territories for the terms consumer electronics industry or electronics information industry are seemed to be difficult to identify, as the majority companies in China operate in more than one field. Some companies have their own manufacturing sites, while others using subcontractors to manufacture their products. In this study, they are all referred as electronics companies.

⁴ According to the statistics of Chinese Ministry of Information Industry on 2010 electronics information industry, <http://www.miit.gov.cn/n11293472/n11293832/n11294132/n12858462/13579423.html> (Accessed 5 November, 2011)

⁵ According to the statistics of Chinese Ministry of Information Industry on 2010 Jan- Nov, electronics information industry, data collected before November, 2010
<http://www.miit.gov.cn/n11293472/n11293832/n11294132/n12858462/13565808.html> (Accessed 5 November, 2011)

⁶ China's Industrial Rise: East Asia's Challenge http://www.dfat.gov.au/publications/chinas_rise/summary.html (Accessed 6 November, 2011)

companies in China may be relatively easier to compare than the reports that are published in other industries. Regardless of the countless definitions to CSR, Sustainability and their relative fields, as well as the various reporting standards, this paper takes a mixed approach, which focuses on issues in economic, social and environmental dimensions. Legal issues are researched under the social and environmental topics.

Moreover, due to cultural difference, corporate social responsibilities concept and practice vary from country to country. The understanding to CSR for Chinese multinationals is rooted in China. While they are expanding abroad, they probably also spread their CSR concepts in their foreign subsidiaries.

Therefore, the main research question of this study is:

What are the CSR issues (CSR dimensions) that have been reported in China by electronics companies?

Hedrick et al., (1993) suggested five conditions to cover a research question: who, what, where, how and why. The limitation to electronics companies in China that answered who and where. To fulfill the other conditions to structure a research question, the specific sub research questions are:

- What CSR issues are reported by the companies in the dimensions of economic, social and environmental? How have they changed over years?
- What are the differences and similarities between the CSR reports that are published by MNC and Chinese companies in China?
- Is there any standard the companies declared to follow in producing their CSR reports? Is the report audited or assessed by a third party?
- Why is CSR important for MNC and Chinese companies in China?

As technology is developing faster and faster, the electronic products' life cycles are shortened. Often electronics products contain rare metals and hazardous materials. The huge amount of electronics trash causes serious environmental problems and natural resources

waste. As a user to many consumer electronics, besides enjoying the benefits of advanced technology, it is also appealing to find out what could companies do to improve electronics' energy efficiency in their products, recycles and reuses. What is more, often electronics manufacturing process involves massive labours. Workers' welfare should be weighted heavily in companies' social responsibility. Many countries and organizations have made regulations ban hazardous materials used in electronics production, as the materials can harm both the workers and users. Responsible electronics manufacturers must follow the regulations or even lead other companies in the industry to use non-harmful materials. All of those CSR issues will be intriguing to study. For consumer electronics, products are rarely made by one manufacturer in a single country, managing supply chain with consistent CSR policy is a challenge for multinationals. However, due to time limitation, studies on CSR of companies' supply chain are not included here.

1.2.2 Progress of the Research

In order to study how CSR is interpreted and practiced in a Chinese context, this research takes a step-by-step approach (Figure 1). The first chapter provides the basic information of the author's motivation to research on this topic; the goal of research and a list of research questions; an introduction to the research methodology.

Chapter two focuses on literature review and is constructed in two main sectors. The first sector intends to gather some understandings to the idea of CSR and the practice of CSR reporting. It starts from a broad look at the well-recognized CSR definition on a global scale; follows a brief review on the history and development of CSR concept in China; and then a quick look at the corporate responsibility reporting phenomenon and the use of third party assurance; after that, presents a picture of how CSR reporting has changed and grew in China. As Chinese government has a strong influence on corporate behaviour, this sector also includes a brief introduction on Chinese regulations to promote CSR practice and reporting. The second sector concentrates on the CSR practices in electronic manufacturing sector. This chapter follows the same way of thinking as the first sector. Begins with a research on what CSR topics in the electronic industry that have been studied and regulated

in an international arena, and mainly in three segments: economic, social and environmental. Continues an investigation in Chinese electronics industry and attempts to find any CSR practice that is unique in a Chinese context. Ends with a guideline that summarize the main metrics, which are found from previous research. It is used to assess the CSR reports that are published in the Chinese electronic industry.

The third chapter is built to analyze the empirical data - the CSR reports. Reports in simplified Chinese (the official language in China) that are released by selected Chinese domestic electronic companies and multinational electronic companies in the period of 2008-2010. All samples are selected from the reports database of SynTao⁷. Each sample company is introduced with a brief description on its main business areas, latest sales figures and number of employees (if the information is available). The content analysis bases on the guideline that has drawn from the previous chapter, to examine what and how those sample companies report their CSR practice. Likewise, any research method has its limitation. The chapter ends with a discussion on the reliability and validity of the research.

Chapter four is closely connected with chapter three. It summarizes and presents the essential results from the empirical data. It answers all the research questions that were raised in the first chapter, to reveal what CSR dimensions are emphasized by the electronic companies in China and their changes over time. The following chapter five is the concluding section, sums up and highlights all the essential findings from this research work.

⁷ SynTao.com is a Beijing-based CSR/SRI consulting company. It is the most comprehensive site for CSR info in China, also an official partner of GRI in mainland China.

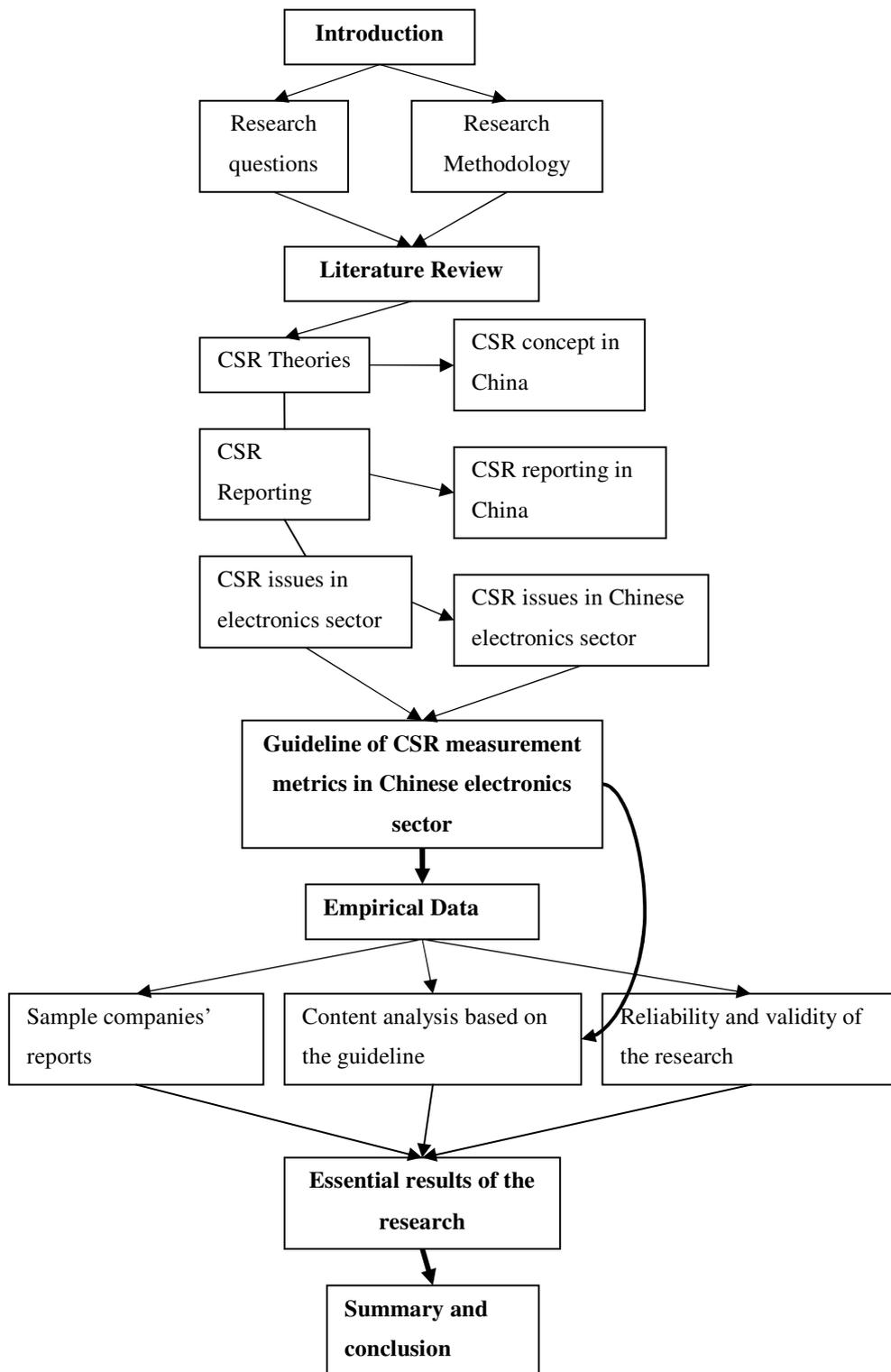


Figure 1 Progress of the research

1.3 Research Methodology and Methods

There are a few studies about CSR and sustainability in Chinese ICT sector or electronics manufacturing sector (for example, FIAS, 2007; Switch-Asia Project, 2009; Leong and Pandita, 2006; Eugster, et al., 2008), but their research methodologies are differed from each other (survey through interviews, literature review and summery on legislation and standards). Also, none of those studies have used CSR reports as their empirical data. Furthermore, the research data are at least over 5 years old. With the understanding, CSR practices and in particular the practice of CSR reporting, have changed fast in recent years, it is not worthy to follow any of the previous studies.

Follow the research wheel that was introduced by Rudestam and Newton (2001), this paper takes an inductive approach - "to relate the specific topic to broader context and begins with some hunches of the form" (Rudestam and Newton, 2001, p.5). The structures for both theoretical research and empirical study are organized to follow the line of CSR issues in economic, social and environmental aspects. As the target of this paper is to understand CSR practice in a Chinese context, qualitative analysis is more appropriate than quantitative analysis in interpreting the meanings. Sometimes the statistical numbers cannot explain well to a phenomenon or texts. The fundamental research methodology is hermeneutics, because it perfectly suits the need of this paper. Polkinghorne (1983) defined hermeneutics as:

"the science of correct Understanding⁸ or interpretation...a method of systematization of formal procedures which is designed to assist researchers in the task of Understanding and attaining a goal of correct interpretation."(pp218)

A single company's CSR reports can hardly represent the situation within the Chinese electronic sector, which contains thousands or perhaps tens of thousand companies. The target of this study is to answer the questions "what" (what the sample companies report), "how" (how they prepare their reports) and "why" (why do they report), which are the essential elements to constitute a case study (Yin, 2008, p.2). The research also focuses on

⁸ Capital letter as it was originally written

comparison between the reports of the selected companies', in other words, each of the cases and their unique contexts in a small longitudinal scale. Multiple-case studies are often undertaken for the purpose of comparing, which "allows the research to compare and contrast the findings deriving from each of the cases" (Bryman and Bell, 2007, p.64). The research method can be replicated to enrich the research outcomes. Therefore, multiple-case study method will be used as a specific research method to collect and analyze empirical data. This paper starts with a broad research in the existing literatures in CSR theories and practice in China, and later builds a strong foundation and a narrow domain of CSR dimensions in the electronic sector. Pauwels and Matthyssens (2004, p.129) argued that "multiple case study research is to create more theory-driven variance and divergence in the data, no to create more of the same". Furthermore, with the intention to include more qualified companies within a limited time, the biggest advantage of applying this method is that, it is benefited from multiple sources of evidence (Yin, 2008), or triangulation, the weaknesses in each single data source are compensated by the counterbalancing strengths of another source (Jick, 1979, as seen in Pauwels and Matthyssens, 2004). It provides more in-depth analysis of the phenomena than is provided by quantitative research types (for instance, surveys) (Shkedi, 2005, p.25). As there have been a few studies on CSR practice in Chinese electronic sector, this area is vastly undiscovered. As a result, no process typology was found.

The empirical data of this research is the corporate responsibility reports that are published by electronic companies in China. Study a company's CSR practice through its disclosed information has a long tradition (for example, Gray, et al., 1996; Guthrie and Mathews, 1985). Among many research methods were employed in analyzing the information, content analysis has been the mostly used (Parker, 2005). Follow the lead by the previous researchers in this field, this study applies a qualitative content analysis method. "Qualitative research designs are typically not intended to prove or test a theory, and it is more likely that theory will emerge once the data are collected." (Rudestam and Newton, 2001, p.37). Content analysis is defined as "a research technique for making replicable and valid inferences from data to their context" (Krippendorff, 1980, p.21). Even though, content analysis is often used as quantitative description to manifest the contents (Berelson,

1952, p.18), as it was discussed at the beginning of this sector, hermeneutics is the fundamental methodology of the research, quantitative results are to be used to aid the analyze on CSR practice.

2. Literature Review and Framework for the Research

2.1 CSR Definitions and Changes over Time

It is extremely difficult to trace the exact origin of the CSR concept, in spite of from time to time there has always been some researchers trying to find the root and summarize the definitions by categorizing scholars' various focuses (see, for example, Carroll, 1979, 2008; Wood, 1991; Gray, et al., 1996; van Marrevijk, 2003; Garriga & Melé, 2004). The modern CSR theories are commonly accepted as, from the US in the 1950s with the Howard R. Bowen (1953)'s milestone work *Social Responsibility of the Businessman* (see, for example, Gray et al., 1996; Carroll, 1999, 2008, 2010; Moir 2001; Valor, 2005). Limited researches have been carried out in this field before that era. One of the notable people in the pre 1950s time is Oliver Sheldon (1923), who had a contribution to the changing view of business's social responsibility (Xu & Yang, 2008). In his book, he raised the idea of "two social aspects of management; these were its relation to employees and to the community" (Hoffman, 2007). Sheldon defined CSR in broad terms:

"...a well-being not of individuals but of all the component parts of the community."

Nevertheless, the most influential theory to modern CSR definition is provided by Bowen (1953) to define social responsible businessmen:

"It refers to the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society"

Following, a more recognized and studied conceptual framework is Carroll (1979)'s three-dimensional model of corporate social performance (see, for example, Moir, 2001; Jamali & Mirshak, 2007; Visser, 2007), a definition of four categories of CSR: economic, legal, ethical and discretionary. He defined social responsibility as:

"The social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time"

In addition to the CSR management theories that are mentioned above, which focused on human needs and common good. The most well-known critic on those aspects is, Friedman's

(1962) work to contest the ultimate purpose of business activities is to make a profit, in other words, to maximize the benefits of shareholders:

"... there is one and only one social responsibility of business-to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception"

Over the second half of the last century, CSR awareness and practice have grown and spread worldwide. After entered the 21st century, the movement of CSR has taken off on a global scale (Elkington, 2006). With the increasing attentions from various types of interest groups such as business corporations, states, international organizations and civil society organizations, CSR has emerged as a global trend (Sahlin-Andersson, 2006). If it was an 'American idea' of its origin, CSR has grown to an umbrella concept to introduce a large number of ideas, concepts, and techniques (Valor, 2005) that apply both globally and locally (for example, corporate social responsibility, corporate social performance, corporate citizenship, corporate sustainability, corporate social accountability and social investment).

With the rising awareness to global climate change, environment concern has been considered as an important attribute to responsible business. In addition to the traditional CSR definitions that emphasis economic and social aspects, United Nations World Commission on Environment and Development released "Our Common Future" (1987, also known as the Brundtland Report), which set the ground for sustainable development:

"...meets the needs of the present without compromising the ability of future generations to meet their own needs."

Another prominent contributing work to the expansion of corporate sustainability is Elkington's (1997) "Triple Bottom Line" (People, Planet, Profit). It has been widely applied as a common guideline for the definition of Corporate Sustainability (van Marrevijk & Werre, 2003).

As early as in 2003, van Marrevijk (2003) attempted to put various definitions of CSR and Corporate Sustainability (CS) into one picture but "keep a small but essential distinction". In 2010, the idea of entering the era of CSR 2.0, the "new CSR (Corporate Sustainability &

Responsibility)” (see, for example, Visser, 2010, Carroll and Shabana, 2010) is possibly more comprehensive and perhaps more challenging for business practitioners than the classic definition of CSR. With the revolutions of ICT (information and communication technologies), particularly the rise of social networking, people have experienced in new ideas that traveled quickly from one point to the rest of the world. It would not be too surprised that there has also been the case with CSR development in the recent years, even though the debate on the topic is over six decades old. The growing number of business practices and academic researches in the field have emerged as global phenomena. Considering the definition proposed by Czarniawska (2005, p144), “fashion means that people do the same thing at the same time across space”, it is reasonable to call CSR as a ‘global fashion’. For business practitioners, the consideration of social perspectives, environmental issues and stakeholders would be the "vogue" (van Marrevijk & Werre, 2003). China, an important player in the process of globalization and a key contributor to global economic growth, is also taking a part of the CSR fashion.

2.1.1 CSR Development in China

Since the economic reform was taken place in the end of 1970s, the Chinese society has been experiencing the transition of a centrally planned economy to a more market orientated economy at an accelerated pace. To meet the demands of their foreign counterparts, regardless of a manufacturing management or a technology transfer, Chinese companies and mostly the manufacturers in coastal cities have been the fast learners in many areas. CSR as a global fashion in the business world, inevitably, through the supply chain of multinational companies, especially the ones from North America, Western Europe and Nordic Europe, CSR concepts and practices were brought into the Chinese business society (Yin, Cui, Wu, 2005a; Cui, 2007; Yin & Guan, 2009; Li, Gong, 2009).

When the economy has been growing rapidly, everything else in the Chinese society also has changed quickly. The management concept of CSR took the wind and blossomed in recent

years. It was until 1985, the first article mentioned the phrase CSR was published in China⁹. Following several years of little progress in the study of CSR concept and practice, 1993's fire in a toy factory located in Shenzhen that took 85 lives, had drawn attentions from NGOs, scholars and government to protect worker rights (CSRA, 2007). China is under the single-party regime. Government intervention plays a crucial role in the economy reform. After several laws came into force that aimed to give more autonomy to enterprises, protect consumers & workforce and regulated charitable donations, the researches in CSR theories and practice were then gradually started in China (Chen et al., 2009; Yin, 2009). Nevertheless, government still plays a pivotal role in encouraging CSR development in China (Chen et al., 2009; Wickerham and Zadek, 2009), while researches and studies on CSR are the least influential. The public also see the government as the most influential driving force for promoting CSR in China and media came as the second¹⁰ (Zhong, 2010). One should note that the researches carried out by the Chinese government think tank, Chinese Academy of Social Sciences, did not include NGO as an influential factor to the CSR development in China.

For many years, the Chinese scholars were mainly concentrating on studying the literatures and researches on CSR from US and Europe (Chen et al., 2009; Li & Gong, 2009). In 2002, in the First Plenum of the 16th CPC (Communist Party of China) Central Committee, the Chinese government emphasized the target of building a “harmonious and stable social climate”, “strengthening citizens, enterprises, various organizations’ social responsibilities”¹¹, which provided the ground for and encouraged more scholars and business practitioners to research CSR in a Chinese context. Following a strong growing trend, this development boomed from 2006 (in terms of the increasing number of academic research, more legislation to regulate business activities, growing of media attentions and the

⁹ Hua Huiyi (1985), CSR—A visit to Southern Chemicals Companies Catalyst Factory, Look-Out, 1985, No.38. This is not an academic journal article.

¹⁰ The survey samples are randomly selected in Beijing, the sample size is relatively small (1,004). Therefore, the reliability of this survey result is still questionable

¹¹ Quoted from CCP's 16th Party Congress Report, <http://english.cpc.people.com.cn/66739/4496615.html>

rise of the number of CSR reporting¹²). 2008, Chinese tainted milk scandal and several uncovered food scandals that shocked the Chinese people, also attracted international media attention to look into the Chinese enterprises' code of conduct. In November 2009, the Chinese President Hu Jintao noted at APEC that “Enterprises should become aware of global responsibility, voluntarily include social responsibility in their business strategy, optimize business model and seek harmony between economic and social benefits.” That notion had further showed the Chinese central government’s needs and willingness to accelerate the development of CSR issues.

The CSR education in China has been changing fast in recent years. In 2005, Yin, Yu and Wu (2005b) surveyed 1,500 enterprises to research how well the concept CSR was acknowledged in China. Many did not know what the concept exactly is, but they found the companies with export business knew better than the companies with domestic business. Until 2008, the situation did not improve much, the concept of CSR was unfamiliar and ambiguous for most MBA students at Renmin University of China (Liu, Li and Huang, 2008). Some of them were managers in companies and some would be the future business leaders. Chao and his colleagues (2008) further found out legal orientation is particularly low with their survey to 458 MBA and EMBA students across different regions in China. This represents a picture that Chinese managers generally do not have a strong legal awareness regards to CSR issues. Furthermore, Fortune¹³ China and AccountAbility¹⁴'s managerial survey on CSR also reflected the need for education (Wickerham and Zadek, 2009). 75% of the respondents recognized the importance of integrate CSR strategy into their business operations, but the biggest obstacle for them to achieve the target was a lack of knowledge. However, a dramatic increase in the number of academic research on CSR topics and the growing availability of trainings in CSR practice and reporting spread out in China since 2009. This phenomenon partly exhibits the changes are in progress, also

¹² See (2009) argued that the “harmonious society” is not the actual key factor to drive the CSR development in China, there also are other social and political factors to influence the changes.

¹³ A magazine

¹⁴ An CSR organization

provides an explanation to the remarkable increase in the number of CSR reports that are released in China.

Since the knowledge in CSR issues was insufficiently available to Chinese managers for many years, there are also misunderstandings to the idea of socially responsible business. Mistaken charity as social responsibility is common in China (Kolk, et al., 2010; Chen, et al. 2011). Alon et al. (2011) also discovered Chinese enterprises tend to highlight their sponsorships and supports to arts and culture activities. Considering Carroll (1979)'s four CSR categories, the latter belongs to discretionary responsibilities or philanthropic responsibilities, which are beyond the expected economic, legal and social responsibilities.

2.1.1.1 Basic Distinction between the Modern CSR Concept and the Enterprise Obligations

There have been numerous of philosophies in China that have influenced Chinese entrepreneurs' behaviours. One of the most well-known probably is Confucianism, which has been studied and promoted throughout thousands of years. One of the core values is "benevolence", requires leaders to be kind and modest to others (Jiang, 2006). The philosophy's dominance in Chinese culture is significant and often is referred as the ethic norm to Chinese entrepreneurs (Jiang, 2006; Zhao, 2007; Li & Gong, 2009; Hu, 2010).

However, the Communist Party of China (hereafter CPC) had adopted Marxist-Leninist philosophy as its dominating model from the beginning of the establishment of the People's Republic of China. No individual was allowed to hold private property. From 1940s to early 1980s, nearly all enterprises were either state owned or public owned¹⁵. They were required to take responsibilities for their employees. Many of them had built kindergartens, schools, housing facilities and hospitals, regardless of the size of the enterprises. People could enjoy the benefits "from cradle to grave" (Deng, 2006; Miao, 2007). Those enterprises at that time

¹⁵ The enterprises at the time were called "Dan Wei" in Chinese, literally means "a unit" in English, the phrase is still widely used in China nowadays.

had no control of its profit. This type of enterprise obligations is different from CSR that has been discussed nowadays. The responsibilities were posed by government rather than was genuinely taken by companies. Even though, a number of large state owned enterprises still have some of the service facilities in use at present, they are kept in places with different reasons as they were before the economic reform.

2.1.2 CSR Movement in China

CSR movement in China can be traced back in 1980s according the modern CSR concept (for instance, stakeholder theories, corporate citizenship, sustainable development, triple bottom lines and corporate social responsibility). Since the economic reform had gradually taken place after 1978 the 3rd Plenary Session of the 11th CPC Central Committee, there is a vast number of foreign companies that have invested in China. Besides their investments in monetary terms, the foreign companies have also brought their management concepts into the country. Many Chinese researchers and scholars consider the CSR concept is an imported idea from the well-developed countries (Tan, Liu, 2003; Li, 2004; Yin, Cui, Wu, 2005; Cui, 2007; Yin, Guan, 2009; Li, Gong, 2009).

Multinational companies (hereafter MNC) shifted their productions to developing countries, which are with low wage and weak unions to maximize their profits. They are often criticized for being a main source of many problems caused by globalization. Among others include global warming, human rights violation, deforestation, and corruption (Scherer and Palazzo, 2008). MNCs are scrutinized by regulators (such as, government, international organizations) and consumers (such as non-profit organizations (hereafter NGO) and civil society groups). To declare they are conducting responsible businesses, many MNCs required their Chinese manufacturers to be certified with different kinds of corporate responsibility certificates, inclusive not limited to: Social Accountability SA8000 International Standards, ISO 9000 series management standards, OHSAS1800 Health and Safety Standards, ISO 14000 environment management standards, Fair Labor Association (FLA), Ethical Trading Initiative (ETI), International Council of Toy Industries (ICTI), Worldwide Responsible Accredited Production (WRAP) (Yu, 2007; Chen, et al. 2009; Xu, 2008; Li, Gong, 2009).

Among all of the standards, SA8000 has a significant influence in shaping the concept of CSR in China in the early 2000s. Some exporting manufacturers even mistook SA8000 as the standard of CSR (Chen, et al. 2011, p176). The number of researches and journal articles that are focused on SA8000 topics, represented a quarter of all the CSR studies published in China during the period of 2003-2005 (Chen, et al. 2009). By June 30, 2010, there were 316 companies in mainland China certified with SA8000 by SAI (Social Accountability International), account for 14% of all SA8000 members (Li and Liu, 2011). However, argued by some Chinese scholars (for instance, Yu, 2007 and Li & Liu, 2011) that, there are a few companies in well-developed countries (for instance, the U.S., where the Social Accountability International headquartered) are certified with SA8000 standards. They tend to use SA8000 certification as an obstacle for Chinese companies to enter their markets and compete with their local manufacturers.

After becoming a member of World Trade Organization (WTO) from December 2000, Chinese companies are increasingly involved in global business. CSR development in China had taken off since then (Sarkis, et al., 2011). Government has been playing a key role in promoting the CSR movement in China, as different levels of government have put a lot of forces to improve legislation systems, which add more obligations for companies to act responsibly. Provincial governments and municipal governments in Shenzhen, Shanghai Pudong, Changzhou, Hebei Province and Zhejiang Province have issued guidelines or recommendations to CSR practice to their regional enterprises (WTO Tribute, 2008). However, the supervision of legislation enforcement is far from sufficient.

One of the indicators of the CSR development in China is, since 2006, there was a sharp increase in the number of companies that have disclosed their corporate social performance information, especially by MNC, State Owned Enterprises (hereafter SOE) and large enterprises (An, et al. 2010). Also, Chinese media have paid some attentions to CSR issues (for instance, in last few years. As a result, there has been an increasing awareness of this topic among managers and public) (Yin, Li & Wu, 2007).

2008 was a fruitful year for Chinese SOEs' CSP on the global stage. In September, China Mobile Limited becomes the first company from mainland China to be selected to Dow Jones Sustainability Index (DJSI) (China Mobile, 2008). It also appeared in the Dow Jones Sustainability Index (DJSI) World 80 Index, where China Mobile was one of the top ten world largest sustainability leaders (DJSI, 2008). Furthermore, there is an increasing trend among privately owned Chinese enterprises, which conducted CSR program in their management system. According to a survey conducted in 2008 by Grant Thornton International among 7,200 large/medium privately-held enterprises in 32 countries, companies in Shanghai, Beijing and Guangzhou areas in China ranked to be the highest percentage of incorporating CSR policies into a formal responsible business practice program worldwide (Grand Thornton, 2008). CSR awareness is rapidly growing among companies in China, regardless what type of enterprises they are.

2.1.2.1 The Brief Summary of CSR Development in China

CSR was unfamiliar for many before early 2000s, on the one hand, China is becoming increasingly influential in the global economy, on the other hand, the country also is impacted by other countries. The CSR development has diversified into many areas and is changing fast in China. In 2006, Yin (SynTao.com, 2006) for the first time summarized the CSR development in China in three stages in the GTZ CSR Roundtable meeting in 2006.

First stage: The emerge of CSR topic (1984-1999)

In 1984, CPC Central Committee made the decision on economic reform, which allowed the separation the duties of government from enterprises. Privatization gave enterprises the real control of their operations. Several new laws that tackled on environment, company rights, workers, consumers and charities were come into effect. Few academic researchers and journalists began to introduce the idea of CSR. The first journal article that included the wording CSR in its title, was published on magazine 'Look Forward' in 1985 with the title 'CSR - A visit to Southern Chemicals Companies Catalyst Factory'. Some notable publications include the one by Yuan (1990) and the other one by Liu (1999). The first charity project in China was established—Hope Project in 1989.

Second stage: Development of CSR focused on workers and debates on the content of the CSR Concept (1999-2005)

Labour issues were the focus in China. More laws were effective during the period. At the Fourth Plenary Session of 16th Central Committee of the CPC (2004), the Chinese central government proposed “building harmonized society”. Some academic researchers began to study the CSR development of multinational companies. By 2005, over 50 companies joined the UN Global Compact, and more than 100,000 companies were certified by some CSR organizations. Trade association started focusing on code of conduct, such as CSC9000T for textile industry. Some organizations were established to focus on CSR studies and investigations.

Third stage: Internalized CSR development within Chinese context (2006-)

In 2006, the new Chinese Company Law came into force, which required “companies to fulfil social responsibilities”. At the Sixth Plenary Session of 16th Central Committee of the CPC, the Chinese central government emphasized the target of “strengthening citizens, enterprises, various organizations’ social responsibilities” In the same year, first large Chinese State-Owned Enterprise State Grid Corporation of China published its first CSR Report. Many multinational companies issued CSR statements. More journal articles and books focused on this issue (Yin, Li & Wu, 2007) were published. Appendix 1 summarizes and highlights the key achievements of CSR development in China in government/legislation, enterprises world, academic fields and symbolic social responsibility movement events through out the three periods 1984-2006.

2.1.3 CSR Theoretical Studies in China

One of the important attributes of globalization is "the travel of ideas" (Czarniawska, 2005). Through practices, factories in coast cities in southern China, had gained some knowledge in CSR via various kinds of non-financial measure certifications, and scholars had begun to research in CSR theories and practices from the late 1980's. However, the overall situation was still behind the pioneers of this issue in some European countries and North American countries.

Early research on this topic mainly concentrated on the studies in the U.S. and Europe (Yin, Cui, Wu, 2005; Li, Xiao, 2008; Li, Gong, 2009). The theoretical studies on CSR concepts started in the mid 1980s with an extremely few Chinese scholars who took the effort to explore the new field. Until late 1990s, the understanding remained limited (Li, Xiao, 2008). The period is considered as the "introduction period" (Chen, et. al., 2009). Yuan is the pioneer in CSR theoretical study in China (Yin, Li & Wu, 2007). His milestone work "Corporate Social Responsibility" (Yuan, 1990, as cited in Yin, Li & Wu, 2007) made the first attempt of defining CSR as:

"While enterprises striving for survival and development, (they) must take responsibilities when facing the needs of community and various social problems, safeguarding the fundamental interests of the state, society and human"

In his book, he further interpreted the concept into specific elements as: paying taxes, employing of natural resources, energy consumption, environmental protection and responsibilities to the consumer.

After entered 21st century and especially since 2006, an increasing number of scholars have expanded the CSR concept into various areas and focus on its context in China. Researchers in Chinese Social Science Institute (Chen, et al. 2009) used statistical figures (of journal articles, doctoral thesis, master thesis and articles published on key newspapers in China from 1985 to 2008) to demonstrate the phenomenon (Figure 1). However, Li and Gong (2009) argued that even with more scholars are trying to study CSR within the Chinese context, the majority is applying foreign theories with little modification to Chinese enterprises, generally lacked creativity and in-depth systematical studies. Furthermore, they also pointed out that Chinese researches are more focusing on CSR practice rather than CSR theory.

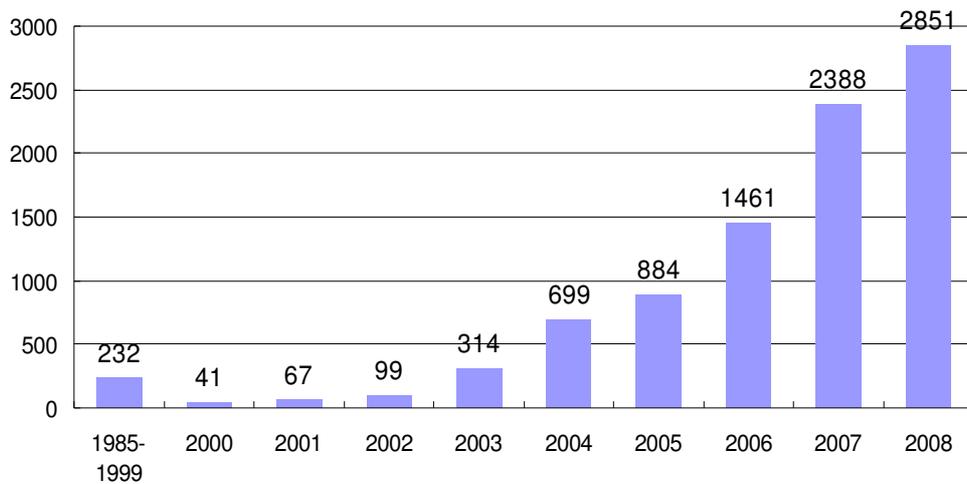


Figure 2 Numbers of Articles and Thesis on the CSR Topic 1985-2008

There is not a standard definition for CSR can be applied worldwide. From management to law, accounting to social science, researchers from all over the world have tried to elaborate the concept with a different focus. The Chinese scholars from various academic backgrounds have taken their effort to analyze what CSR is meant for China. Among many, Liu (1999) proposed a definition of CSR that implies the idea of stakeholders:

"Companies should maximize all other social benefits besides the promoting the benefits of stockholders" ... "This kind of social benefits includes employee interests, consumer interests, medium and small competitors' interests, local community interests, environmental interests, social minorities and the whole society public interests, including natural person and particularly the social, economic and cultural rights (referred to as social rights) that were specified in the International Convention on Economic, Social and Culture Rights, also including the legal persons and unincorporated organizations besides natural persons. Especially, the stakeholders that are in a close relation with business operations but not stockholders are the main target of corporate social responsibility " (pp2-7)

In coherence with Carroll (1979)'s three dimensional theories, Zhou (2005) provided another definition for CSR as:

"a complex responsibility that is assumed by enterprises, target at stakeholders, which includes economic responsibility, legal responsibility and ethical responsibility".

By reviewing the literatures in China and abroad, Li and Xiao (2008) presented a 3-dimensional model for CSR concept: content dimension -- to fulfill what responsibilities (what); form dimension -- how to fulfill the responsibilities (how); motivation dimension -- why to take the responsibilities (why). Their description suggest that corporate economic responsibilities are obligated, social responsibilities should be taken, and environmental responsibilities are fulfilled upon an enterprise' willingness. They defined the ultimate reason for an enterprise to fulfill responsibilities, is to pursue its own sustainable development. They stated CSR as:

"In order to achieve sustainable development of itself and society, enterprises follow the laws and regulations, social norms and business ethics; effectively manage the impacts of business operations on stakeholders and the natural environment; the behaviour of pursuing maximized value of economic, social and environmental"

In addition to the definitions that are provided by scholars, numerous organizations in China also made their statement for CSR. China Business Council for Sustainable Development defined CSR as:

"Corporations should not only are responsible for shareholders, but also to stakeholders that are contributing or affected by the corporation." (China Corporate Social Responsibility -- Recommended Standard and Best Practice, 2006, p.2)

In 2007, Shenzhen Stock Exchange published "Shenzhen Stock Exchange Social Responsibility Instructions to Listed Companies", which defined CSR in the following terms:

"Social responsibilities refer to the obligations listed companies should assume for the social development, for the natural environment and resources, and for the interested parties including their shareholders, creditors, employees, customers, consumers, suppliers and communities." (Shenzhen Stock Exchange Social Responsibility Instructions to Listed Companies, 2007, Article 2)

State-owned Assets Supervision and Administration Commission of the State Council defined CSR for Chinese State-owned enterprises in this way:

“CSR is defined as enterprises achieve the sustainable development of itself and society, follow laws, moral and business ethics, voluntarily take responsibility for stakeholders and environment while running the business, pursuing the behaviors that reflect the collective value of economic, social and environmental at its maximum.” (Research Division of State-owned Assets Supervision and Administration Commission of the State Council, 2008)

Xu and Yang (2008) made a similar conclusion with Li and Gong (2009). The CSR concepts and dimension used by Chinese scholars are mostly based upon the studies in the U.S. and Europe, although few Chinese scholars have tried to make empirical measurement of CSR “under China’s unique social and cultural background”. In Xu and Yang (2008)’s research, they also found most of the studies in China are still intended to validate the CSR theories from other countries. With the intention to understand how Chinese business leaders perceive CSR, they used a questionnaire to survey 630 corporate managers and business owners across China. They summed up 9 CSR dimensions, of which 6 dimensions (economic responsibility, legal responsibility, environment protection, employee benefits, consumer and charity) also can be found in foreign literatures, but another 3 dimensions (business ethics especially honesty and integrity, creating jobs and social stability & progress) are unique to China.

Beijing based Chinese Academy of Social Sciences (CASS) CSR Research Center (Chen, et al. 2009) built a CSR theoretical model that aimed at serving Chinese companies. The fundamental theories used to support the model are triple bottom line and stakeholder theories, which also reflect the popularity of those theories in Chinese academic world. The model consists of four aspects: responsibility management (responsible management, responsible progress, responsible communication, to comply with the law and regulation), market responsibility (client responsibility, stockholder responsibility, partner responsibility), social responsibility (government responsibility, employee responsibility and social involvement) and environmental responsibility (environment management, resources and energy saving, reduce pollution and carbon emission). In the same year, CASS published the first Chinese CSR reporting standard CASS-CSR1.0.

2.2 Corporate Social Reporting

If CSR as an umbrella concept is a global fashion, Corporate Social Disclosure (CSD), Corporate Social (CS) Reporting or Corporate Responsibility (CR) Reporting is the 'must-have' item for CSR practices. In 2011, there were over 6,000 (mostly were in English, the actual figure is probably much more) reports released and registered at corporateregister.com¹⁶ to approach the worldwide readers. Today there are 9,693 reports followed Global Reporting Initiatives (GRI) guidelines to report their CSR activities¹⁷. It is also a fashionable phenomenal for many corporations and especially the large corporations to take a part in Corporate Responsibility Reporting. There is a continuously increasing number of CR reports released globally. KPMG (2011) has carried out international survey on this phenomenon for several years, it concluded that "corporate responsibility reporting has become the *de facto* law for business", the reporting also enhances reputation that links to better financial return.

As early as in 1996, Gray, Owen and Adams pointed out in their book, *Accounting and Accountability*, corporate social reporting is not recent phenomena which is a result of increased concern over environmental issues in the late 1980s. They followed Mathews (1984, cited in Gray et al., 1996)'s concept about the importance of corporate social reporting, (is)

"...trying to present a comprehensive picture of the full extent of the organization's interactions with its external environment" (Gray et al, 1996, p101)

Although, CS reporting is not the only way to measure a corporation's Corporate Social Performance (CSP), the high international profile and influence of GRI (Adams, 2004; Brown et al, 2009) has evidenced the argument that, using CS reporting as an efficient tool for corporations to communicate with their stakeholders. This is also widely accepted by many scholars and business practitioners in the world.

¹⁶ According to the statistics available at <http://www.corporateregister.com/stats/> (accessed April 1, 2012)

¹⁷ Based on the statistics available on GRI's website, <http://database.globalreporting.org> (accessed May 10, 2012)

Likewise, the discussion on CSR definition has been going on for years. The CSR reporting standard also is not a worldwide unified concept. Adams and Whelan (2009) cited Parker (2005)'s work on CSD standards:

“Parker (2005) has described the scholarly literature concerned with corporate social disclosure (CSD) as “voluminous, disparate, eclectic”, and as existing “without commonly agreed philosophies or standpoints” ”.

Not only there is missing a commonly ground for the CS reporting metrics. Each nation or area has many elements that can influence the context. To understand a CSR practice or CS reporting well, one must recognize:

“...the specific cultural, economic, legal and political environments that helped to create and validate them and which they, in turn, helped to create and validate.” (Adams and Roberts, 1994, p.167)

These arguments have been further proved by Vurro and Perrini (2011), who concluded that “a unique common format or a universal reporting language, style, and practice” dose not exist, which makes the CSR reports are more difficult to compare.

China has been catching up fast with their leading European counterparts in the CR reporting phenomenon (KPMG, 2011). It was until 2006, there was an extremely few number of CR reports that were released in China (An, et al., 2009), but by 2011, nearly 60% of the largest Chinese companies have reported their CSP (KPMG, 2011). This rapid and dramatic change is often referred as the ‘booming development’ of CS reporting in China (see, for example, Chen et al, 2009; WTO Tribute, 2010; SZSE, 2011). Many MNCs, TNCs and large enterprises in China followed the global trend to report using the GRI guidelines. There are also companies reported under the CS reporting guidance issues by Chinese authorities, or just disclose the information they prefer to communicate with the external parties.

2.2.1 Third Party Assurance

CSR disclosure has been increasingly relying on the third party standards (for example, GRI), still most reports are produced and published on a voluntary base (Vurro and Perrini, 2011). The companies can selectively disclose information that is in favor to them, which the reports are sometimes seen as a promotional material (Frankental, 2001). Third party assurances or auditors have been used to increase confidence in the reliability and accuracy of the reports (Perego and Kolk, 2012; Grey, 2001). However, the practice remains limited across the world. Even the largest MNCs, who are often referred as the leaders in CSR issues, KPMG's 2011 survey showed that only 45% of the global largest companies used third party to verify or assess their reports, slightly increased from 40% in 2008 (KPMG, 2011).

Grey (2001) stated 'social audit' as

"...those public analyses of accountable entities undertaken (more or less systematically) by bodies independent of the entity, and typically without the approval of the entity concerned" (Grey, 2001, pp.9)

He also considers that "it is the job of the auditors to pronounce on the qualitative characteristics of any social report" (Grey, 2001, pp.12). Though, some scholars argued that audits or assurances do not necessarily add credibility to disclosed information, and the assessments' quality, content and methods vary much because of the auditors' expertise (for example, Perego and Kolk, 2012).

2.2.2 Corporate Social Reporting in China

2.2.2.1 Social Accounting Theoretical Study

Theoretical study of social accounting began much earlier than its practice in China. In 1985, the same year as the first Chinese article mentioned CSR was published, Li (1985, cited in Shen, Song and Xu, 2010)'s work "Imagine the implementation of social accounting in the special economic zone" was a stepping stone for Chinese scholars to the whole new area.

However, the progress stagnated for many years. Song (1993) is one of the researchers in early stage to attempt to define corporate social accounting as:

"Corporate social responsibility accounting is the organic integration of social responsibility and accounting. It applies the unique accounting methods and techniques to represent and control the social contribution and damages caused by an enterprise's business activities, its purpose is to improve the overall benefits of the enterprise"

In Li (2004)'s research on Chinese corporate social disclosure, he argued that there was an urgent need to the social accounting theories but the practice was remarkably few by that time. He also provided his statement to social accounting:

"Social responsibility accounting is to research how to better maintain sustainable development, for stakeholder group and person as enterprise management, investors, shareholders, government, general public, etc. To provide an accounting system that assists making the decision on corporate social responsibility performance."

2.2.2.2 Corporate Social Reporting Practice

Corporate social reporting practice in China started in 1999, in which Shell China released the first sustainability report (Sun, 2007). However, the overall CSR development was quite slow before 2006, of which the year is considered as the turning point for CSR movement in China. As the Company Law of the People's Republic of China amendment formally began to be into force from January 1, 2006; CSR became a crucial element for central government to achieve its "building harmonized society" target. Many organizations that have been focusing on the development of CSR in China received more support from government. State Grid Corporation of China published its first CSR report. Shenzhen Stock Exchange as the first organization in mainland China issued instructions on CSR reporting 'Shenzhen Stock Exchange Social Responsibility Instructions to Listed Companies' in September 2006. On December 12, 2006, the 2006 CSR annual report of China's textile and garment industry was issued, which is the first industrial CSR report (Yin, Wu, Cui, 2007). Following State Grid, many Chinese enterprises especially large SOEs and multinational companies, had published their first CSR reports in 2006 and 2007. According to China WTO Tribune, by 22 June 2007,

there were 34 Chinese enterprises had published corporate social report, sustainability report or corporate citizenship report, of which 80% are SOEs (Yin, Wu, Cui, 2007).

Although the global economy became gloomy in 2008, this did not affect the growing trend of CSR reports releasing in China. At the beginning of 2008, China's State-owned Assets Supervision and Administration Commission of the State Council (SASAC) enacted the 'Guidelines to the State-owned Enterprises Directly under the Central Government on Fulfilling Corporate Social Responsibilities'. The Guideline 18 requires that enterprises having experienced in CSR work, should establish an information releasing mechanism, providing update and regular information about CSR performance and sustainable development¹⁸. This is the first governmental body to guide enterprises to publish corporate social reporting, and give the definition for fulfilling CSR should also include corporate social reporting. According to SynTao (An, et al., 2011), by December 2011, there were 1,001 CR reports (regardless to the exact title of the reports: environmental reports, sustainability reports, corporate citizenship reports, corporate social reports) released in China, a 30% increase from a year earlier (Figure 2). Notably nearly 60% of the reports are released by SOEs (who are the 'direct agents' of governments' CSR policies; See, 2009) and over 40% of the reporting companies are based in Chinese economic hubs, Beijing, Shanghai and Guangdong province. Among various report titles, "Corporate Social Responsibility Report" is the mostly used.

¹⁸ Guidelines to the State-owned Enterprises Directly under the Central Government on Fulfilling Corporate Social Responsibilities, < <http://www.sasac.gov.cn/n2963340/n2964712/4891623.html>>

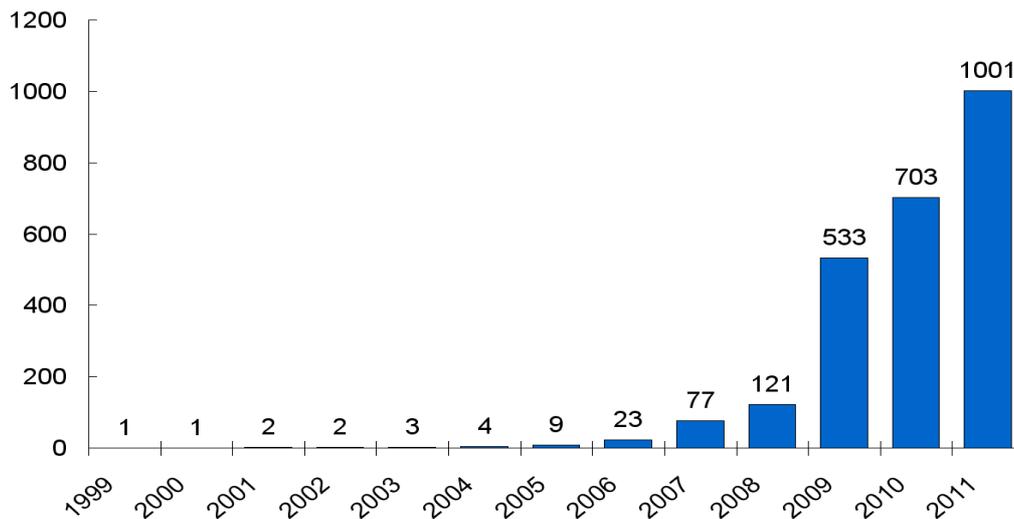


Figure 3 Number of Corporate Responsibility Reports Released in China 1999-2011

Shell China was the pioneer in producing CSR report in China, and many MNCs have published separated annual CSR report for their Chinese subsidiaries or branches from 2005, for instance, Shell, Alcoa, Fuji Xerox, SONY, Toshiba, Omron, HP, Coke Cola, Procter & Gamble, ABB, Bosch, Konica Minolta, Ford Motor, Hitachi, HSBC, Pfizer, etc. This list is still expanding. People tend to conclude that multinational companies in China have led the CSR reporting development. It is partly true. From a holistic view, these companies are not only holding leading positions in CR reporting in China, but also on a worldwide scale (KPMG, 2011).

Environmental responsibility is one crucial aspect of corporate social reporting. Chinese Ministry of Environmental Protection had issued “The Bulletin on Enterprise Environmental Disclosure” in 2003, which was the initial force that drove the development of environment accounting and reporting in China. It has made enormous impacts on the progress of environment disclosure in China (Wang and Sun, 2006). Wang and Sun (2006) also found electronics companies have been the out-performers in environment reports, in comparison with other industries. Nevertheless, the overall environmental reporting quality remains low in China.

Furthermore, the practice of third party assurance is at its very beginning stage in China. SynTao (2011) reported only 5% of all reports published in 2011 received third party audit. This trend has not changed for three consequent years. SynTao also reported another 5% of the reporting companies, invited third party to comment or evaluate their reports. However, the large majority acted on themselves.

2.2.3 Corporate Social Reporting Standards in China

The concept of CSR was brought to China over two decades ago. There were no any guideline for CS reporting in China until September 2006 - Shenzhen Stock Exchange issued the instructions on CS reporting 'Shenzhen Stock Exchange Social Responsibility Instructions to Listed Companies'. However, since some multinational companies had started the practice of CS reporting prior 2006, they either produced reports according to the CS standards that were established by the company, or followed the guidelines that are issued by international organizations (such as Global Reporting Initiatives and UN Global Compact). As there is not yet any regulation on mandatory CS reporting time and format in China, this behaviour is still on a voluntary base for Chinese companies and the report format are based on their own decisions. The landscape changed tremendously after 2006. A growing number of local governments, industrial committees, trade associations and stock exchange regulators have published their guidelines (Appendix 2 listed all regulations on CSR reporting) for CSR and some of the guidelines also encourage or require companies to disclose their CSP (An, et al., 2009, 2011). As companies are reported according different standards, so far the comparability of the Chinese CSR reports is low.

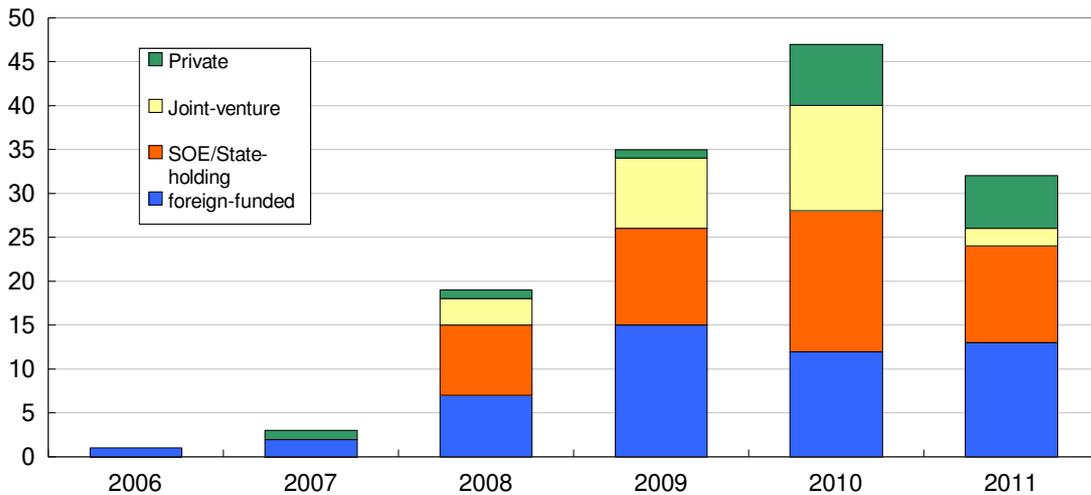
2.2.4 Corporate Responsibility Reporting in Chinese Electronics Sector

There is no clear definition for electronics sector. Software companies can have operations in hardware, and internet technology firms can also provide something is tangible and relative to their services. Furthermore, there is no guaranteed method to find all corporate responsibility reports by companies in Chinese electronic sector, therefore, SynTao, the Chinese largest CSR reports database, is used here to gather empirical data. The organization

follows the Industrial Classification & Codes of National Economy (GB/T 4754-2011) - published by National Bureau of Statistics of China. It defined Computer, Communication and Other Electrical Equipments manufacturing sector (hereafter referred as “electronic and ICT sector”) as the following (included but not limited to): computers, computer components, telecommunication equipments, TV and radio broadcasting equipments and products, radar products, TVs, radios, semi-conductors, electrical circuits and electrical components. SynTao has categorized 137 reports into the electronic manufacturing sector¹⁹.

Hewlett-Packard (HP)’s Chinese subsidiary was the first company in the sector that published CSR report. Rather than a Chinese translation to the corporate global report, the report was genuinely produced to disclose their CSR practice in China alone. However, the pioneer discontinued reporting after 2009. Nevertheless, there are more electronic manufacturers published their corporate responsibility reports (names varied as CSR report, sustainability report, environment report, environment & social responsibility report) since 2007 and especially after 2008, almost 6 times more compare with only 3 in 2007 (Figure 4). The leading role has been mostly played by foreign companies (with the majority of Japanese companies) except in 2010, but those companies are not listed on Chinese stock markets. The joint-ventures are representing another significant portion of the reports and also they are not listed on markets. State owned enterprises (SOE) have also been active in reporting (the second biggest majority), and all of them are publicly listed in China. The number of reporting private enterprises has been increasing. In 2011, those companies became the third largest contributor to the reports in electronic manufacturing sector. 2010 was the most fruitful year since 2006. However, the number of reports declined by over 30% in 2011. One possible explanation is that many companies have not yet published their 2011 reports.

¹⁹ According to this definition, many global and domestic well-known consumer electronics brands (SONY, Cannon, SANYO, Haier, Gree and Hisense) are not included in the electronic manufacturing sector.



Source: China Sustainability Reporting Resource Centre (<http://www.sustainabilityreport.cn>)

Figure 4 Corporate Responsibility Reports in Chinese Electronics Manufacturing Sector
2006-2011

2.3 CSR in Global Electronics Industry and ICT Sector

2.3.1 Economic Dimension

Thanks to the rapid development of electronics and information and communication technology (hereafter ICT) industries in the past 30 years, work efficiency and connectivity are boosted globally. The electronics industry is now the world's most prominent manufacturing sector as it employs more workers and generates greater revenue than any other industry (Mann, et al., 2006; Sun, 2008; Sturgeon, et al., 2010). The estimated market size of the global electronics hardware industry was over \$US 2 trillion in 2010²⁰. However, because of the rapid development and expansion, clear definitions for the terms "electronics" and "ICT" are difficult to keep up to date. As such, there is also no accurate way to measure the size and growth of the often named "electronics industry"²¹. Nevertheless, without a doubt, the use of electronics has become an essential part of the modern life. The old school's

²⁰ Government of India, Electronics and Computer Software Export Promotion Council, Department of Commerce, 2003, cited in "Working Party on the Information Economy", Organisation for Economic Co-operation and Development, 2010

²¹ It is very difficult to draw a clear line on what *electronics* are really meant by today's application of the term. According to the basic definition from an electrical engineering point of view, anything that used electrons can be classified as electronics (, Pviii; , P1)

classification to electronics such as electric telegraph, vacuum tubes, radio or even television are almost obsolete, but semiconductor, “the fundamental input of both computer and communication equipments” (Mann, et al., 2006). Its global sales increased by nearly 50% in the past decade from \$US 204 billion in 2000 to over (estimated) \$US 300 billion in 2011, and the projected market size would reach \$US 328 billion by 2013²². The rapid expansion in ICT sector not only drove the development of electronic hardware, the services created within this industry also skyrocketed. Accumulated global ICT spending (includes hardware, software, services and communication) surpassed \$US 3.5 trillion in 2009, represented 6.3% of the world GDP (Gross Domestic Product)²³. Already in 2008 (the latest data available), there were nearly 16 million people worked in ICT sector worldwide²⁴. With a bright outlook for the growth, companies within ICT businesses will make even greater influence and impacts to the world than they have today.

When the electronic and ICT sectors are generating enormous values in monetary terms, as well as creating massive job opportunities, the economic contributions are often under the spotlight. The development of electronic products, ICT services and infrastructure has turned to be the essential foundation for the growth of the other industries. Whether it is necessary or not, the dependency on electronic devices for many individuals has also gone up. Countless praise and expectation have been putting to electronic industry. Critics on the same phenomenon also have followed. As the fighting against climate change is already a global trend and CSR awareness is on the rise, more assessment on carbon footprint, material consumption, supply chain management, electronic waste management and impacts on social structure change are increasingly required by various stakeholder groups.

²² Source: Mann, Catherine, and Kirkegaard, Jacob. (2006), P12; *WSTS Semiconductor Market Forecast Autumn 2011*, World Semiconductor Trade Statistics, <http://www.wsts.org/PRESS/Recent-News-Release> (Accessed 10 January, 2012)

²³ Source: *Digital Planet 2010, Executive Summary*, The World Information Technology and Services Alliance (WITSA), http://www.witsa.org/v2/media_center/pdf/DP2010_ExecSumm_Final_LoRes.pdf (Accessed 19 January, 2012)

²⁴ OECD (2010), *OECD Information Technology Outlook 2010*, OECD Publishing.

2.3.2 Social Dimension

Likewise in any other labor intensive industry, the electronic hardware manufacturing sector has drawn lots of attention to the working conditions and well-being of the massive workforce involved. The challenges are especially faced by multinational corporations, who enjoyed the cost advantages in developing countries but also being scrutinized by governments and non-profit organizations (hereafter NGO), who require the enforcement of their labor policy through out supply chains. Despite of the issues regarding employees can be devoted to a single dimension (for instance, GRI made separate guidelines for company's disclosure on its employees), in this paper, study on employees is under the social dimension.

The industry has long been criticized at the issue of damaging health of the labor force. Occupational illnesses are found common among electronic workers (LaDou, 2006), exposure to toxins is one of the main causes, and another one is the long working hours (Ferus-Comelo, 2006; LaDou, 2006; Theobald, 2002). Migrant workers are the main workforce in global electronics manufacturing factories. They are often characterized as “low-skilled”, limited mobility (as many of them lack of permanent status or official identity, they cannot easily move from one place to another) and unsecured (migrant workers are mostly come from poor rural areas, to seek better earnings; they cannot afford losing their jobs even when they are unfairly treated), which placed them in a vulnerable position, such as forced labor and unfair hiring (Ferus-Comelo, 2006, van Liemt, 2007; Carmen, 2005; van Marrewijk and Were, 2003; Veenstra, et al., 2010; Verité, 2010). Throughout the global network of supply chains that are led by large multinational corporations, who practice outsource to maintain low cost. In order to win contracts from those corporations, the key for subcontractors is to minimize the labor costs. Workers in electronics manufacturing industry and especially migrant workers are being squeezed at the end tail of the supply chains. CAFOD (2003) - a pioneer in electronic manufacturing labour rights - started the campaign for better working conditions and empowering employees in ICT hardware manufacturing. Set off by the “wake up call” (van Liemt, 2007), many organizations and scholars have entered the field of study to disclose more information on the labor force (e.g. Schipper and de Haan, 2005; Smith et al., 2006; Frost

and Burnett, 2007). In 2004, the first industrial sector CSR guideline Electronic Industry Code of Conduct was created by eight founding members (three OEMs and five contract manufacturers) of the Electronic Industry Citizenship Coalition (EICC)²⁵. After seven years expansion, 66 global leading electronic manufacturers have joined the organization²⁶. According to the Code of Conduct, an electronic manufacturing employee should not work more than 60 hours per week, but the actual situation is far from optimal. There have been improvements in the industry (Lindsay, 2005), still the most common practice - “compulsory overtime with no extra pay” (Ferus-Comelo, 2006) - has not actually changed (China Labor Watch, 2011).

In addition to the guidelines on working hours, EICC also covers a wide range of issues from fair labor treatment to the management systems to environment concerns. Among many programs and initiatives that EICC runs, in December 2010, the Conflict-Free Smelter (CFS) Program was launched together with EICC’s long-time partners Global e-sustainability Initiative (GeSI)²⁷. The program targets at several essential minerals used in electronics manufacturing that are possibly involved in illegal mining—tantalum, tin, tungsten, and gold, of which the assessment on tantalum suppliers is the first and most complete up to date. It has a strong grounding. Tantalum is almost found in all capacitors that are used to buffer power in electronic products, and the troubling country Democratic Republic of Congo has the largest tantalum reserve in the world²⁸. Many workers have been exploited by the armed forces in that nation. Even though, the program is set on a voluntary base for companies to participate, it yet provided a channel to avoid more forced mining workers involved in electronics industry supply chains.

²⁵ Source: “Electronic Industry Citizenship Coalition 2008 Annual Report” (2008), EICC, pp.6, <http://eicc.info/documents/2008AnnualReport.pdf> (Accessed February 2, 2012)

²⁶ Members numbers are counted by February 14, 2012, http://www.eicc.info/about_us05.shtml (Assessed February 14, 2012)

²⁷ Source: “GeSI and EICC Complete First Tantalum Assessment Focused on Responsible Sourcing of Minerals”, Global e-Sustainability Initiatives, December 10, 2010 <http://www.gesi.org/LinkClick.aspx?fileticket=XtT%2FGTFMhg%3D&tabid=130> (Accessed February 9, 2012)

²⁸ Source: EICC-GeSI Conflict-Free Smelter (CFS) Assessment Program Frequently Asked Questions, <http://eicc.info/documents/Conflict-FreeSmelterFAQ.pdf> (Accessed February 9, 2012)

Perhaps the biggest contribution and challenge to social changes is the ICT software sector. In 2011, the “Arab Spring” in Middle East was a good show case. The strong but informal collective force connected through ICTs eventually threw some dictators away. In the same year with the same set of technologies, the riots also took place so quickly in many cities through out England. Unfortunately, due to time limit, this is beyond the scope of this study.

2.3.3 Environmental Dimension

Production efficiency has been growing at an accelerated speed, as electronics companies have been working hard to constantly come up with new ideas. In order to sustain high efficiencies and competitiveness, many companies update their electronic devices and ICT infrastructure regularly. As end consumers, it is neither difficult to realize how quick many electronic products become outdated. Electronic products varied much from one to the other, the compatibility between them are low (for instance, the batteries and AC adapters of computers are not interchangeable between different brands or even various models with a same brand). In 2009, GSM Association’s 17 mobile operator and manufacturer members decided that they all would use Micro-USB interfaced charger as an industrial standard for new mobile phones²⁹. This action reflected a common environmental consensus among the global leaders, still there is a large space for improvement in other electronic product sectors.

While globally electronics output keeps increasing, the resource consumption and electronic waste also grow. The establishment of efficient recycling systems for Waste Electrical and Electronic Equipment (hereafter WEEE) and the change of relative regulations are not at the same pace with the growth of new products. For instance, computer, one of the mostly used electronic products around the world, its average lifespan

²⁹ GSMA, “Mobile Industry Unites to Drive Universal Charging Solution for Mobile Phones”, 17 February 2009, Barcelona, Spain,
<http://www.gsma.com/articles/mobile-industry-unites-to-drive-universal-charging-solution-for-mobile-phones/17752/>,
(Accessed December 10, 2011)

is three years (Betts, 2008, cited in Robinson, 2009), but there are many countries not yet have laws or regulations on WEEE recycling and disposal.

“Modern electronics can contain up to 60 different elements, many are valuable, some are hazardous and some are both” (Schluep, et al, 2009). While the whole world is endlessly seeking metals everywhere, the treasures in WEEE are often mishandled or neglected. According to ABI Research, a technology market research firm, only about 13 percent of roughly 53 million tons of WEEE that was generated on the planet in 2009 was recycled³⁰. The abandoned WEEE not only waste a large amount of precious natural resources, also threat the environment, for instance, when WEEE contain toxic heavy metals (such as lead) that are landfilled, the underground water will be contaminated. However, the landfilled WEEE only represents a small proportion of the total. The rest has been illegally exported to developing countries in Asia and Africa. Among the all, China is the biggest receiver of all exported WEEE (Schluep, et al, 2009). With tightening policies and legislation from EU, US and other developed countries, as well as the actions taken by governments in the developing countries, there will be fewer e-waste dumping cases.

Possibly the best way to prevent pollution from electronic products is to start from the design stage of new products. The damages caused by toxic elements to manufacturing workers and end users will be minimized, if the materials are carefully selected from the very beginning. Electronic manufacturing normally involve a large amount of chemicals, “including chlorinated and brominated substances, photoactive chemicals, toxic gases, acids, solvents, heavy metals, plastics, and plastic additives, many of which impose a heavy burden on the environment and worker health” (Byster and Smith, 2006, p206). To link the occupational illnesses with each toxic chemical substance is impractical and unrealistic (Harrison, 1992). However, there have been many studies with the intention to discover the connections between electronic workers’ exposures to toxins and diseases such as brain tumors,

³⁰ ABI Research, e-Waste Recovery and Recycling—Waste Electrical and Electronic Equipment, Sustainable Product Development, Extended Producer Responsibility, and Toxic Exports, 2010, cited in Tom Zeller Jr., A Program to Certify Electronic Waste Recycling Rivals an Industry-U.S. Plan, The New York Times, <http://www.nytimes.com/2010/04/15/business/energy-environment/15ewaste.html> (Accessed in 18 December, 2011)

non-Hodgkin's lymphomas, testicular cancer, and advanced uterine and cervical cancers (Hawes and Pellow, 2006; LaDou, 2006). More researches carried out in the 1980s and 1990s to understand the high miscarriage rate among female workers in electronic industry (e.g., Huel et al., 1990; Schenker et al., 1995; Eskenazi et al., 1995). With the assistance of those studies, governments in many nations have issued legislation to ban or limit the use of hazard chemical substances in electronic and electrical equipments (hereafter EEE) manufacturing. In July 2006, the European Union's Restriction of Hazardous Substances Directive (2002/95/EC) (hereafter RoHS) was become effective. The directive banned the use of six highly toxic chemical substances that include Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent chromium (Cr6+), Polybrominated biphenyls (PBB) and Polybrominated diphenyl ether (PBDE)³¹. To many, that was a good movement towards a cleaner and a healthier electronic industry.

In another attempt to fight against climate change, the European Union's Ecodesign Directive (2009/125/EC) was in force from October 21, 2009, which provided a more comprehensive guideline on energy saving of many electronics and related products³². Nonetheless, electronics industry especially ICT sector are often seen as "a key enabler of 'green growth' in all sectors of the economy", the sector itself contributes around 2-3% of global CO₂ emissions (Coroama and Hilty, 2009, p204), which is also the globally fastest growing emission sector. As a result of increasingly deployment of ICT products, it is reasonable to expect the share will rise further. However, due to the lack of a comprehensive tool to evaluate the actual energy impacts of ICT (Coroama and Hilty, 2009), this remains a mixed picture.

³¹ DIRECTIVE 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment, Official Journal of European Union, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:037:0019:0023:EN:PDF> (Accessed November 12, 2011)

³² Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (Text with EEA relevance), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32009L0125:EN:NOT> (Accessed February 24, 2012)

2.4 Chinese Electronics Industry and ICT Sector

2.4.1 Economic Dimension

China is widely recognized as the “world’s factory” (by measuring the quantity of exported goods³³), provide everything from plastic bags to solar power panels to foreign consumers. With vast labor available through out the country, countless places are working almost round the clock. Many industries born and grow quickly in this rapidly developing country.

According to GB/T 4754-2011 definition to Computer, Communication and Other Electrical Equipments manufacturing sector, the industrial level hardly existed before the Chinese economic reform in late 1970s. Even before early 1990s, China was a very small player in global electronic manufacturing supply chains (OECD, 2000), but this situation changed quickly. Already in 2002, electronics manufacturing sector was the largest industrial contributor to Chinese economy³⁴. A decade later, China has become the world’s largest electronics manufacturing services provider. Take two examples from consumer electronic products: computer and mobile phone. More than 90% of the computers available on the global market are made in China, and over 70% of mobile phones are also from China. The large sums not only imply the Chinese electronics sector’s importance to the global economy, it also represents its weight in the national economy. In 2011, electronic and ICT products contributed 31% of China’s total exports, underlies the fact that China is still heavily dependent on exports. This is a vital industry for national future growth. Also, the sector provides vast opportunities for foreign companies. Nearly 27% of China’s imports in 2011 were accounted from the electronic and ICT sector. Furthermore, this is a rapid expanding sector in both financial values and employee numbers. According to the latest statistics available, there are about 9.4 million people working in this industry in China by the end of

³³ Based on the statistics of World Trade Organization, country statistics,

<http://stat.wto.org/CountryProfile/WSDBCountryPFView.aspx?Language=E&Country=CN> (Accessed June 7, 2011)

³⁴ Source: Ministry of Industry and Information Technology of the People’s Republic of China, “2002 Annual Achievement of the Electronic and ICT sector” (in Chinese),

<http://www.miit.gov.cn/n11293472/n11293832/n11294132/n12858462/12865479.html> (Accessed February 8, 2012)

2011³⁵, almost tripled the number (3.2 million) in 2002³⁶. With a growing number of people using mobile phones, computers and the constant need for ICT infrastructure upgrades, the Chinese market is lucrative for both domestic and foreign players.

The global electronics manufacturing industry has long been practicing outsourcing. Multinational companies have poured an enormous amount of investment in developing countries. China is the largest FDI recipient in developing countries and the second largest world wide³⁷. Foreign investment plays a crucial role in the Chinese electronics manufacturing sector development. Over 66% of the total exported electronic products were manufactured by foreign-funded companies in 2008, and the foreign joint-ventures with Chinese companies made up another 16%³⁸. With the high expectation at global electronics industry growth and positive projection for Chinese economic development, China remains as a popular destination for foreign investors. In 2010, electronic and ICT sector received the most of foreign investment inflows among all Chinese manufacturing industrial sectors³⁹. By many measures, the electronics industry in China is largely influenced by global standards and also is affecting new international industrial norms development.

2.4.2 Social Dimension

2.4.2.1 Electronics Companies in the Progress of Informatization

³⁵ Source: Ministry of Industry and Information Technology of the People's Republic of China, "2011 Annual Report on Statistics of the Electronic and ICT sector" (in Chinese),

<http://www.miit.gov.cn/n11293472/n11293832/n11294132/n12858462/14475184.html> (Accessed February 25, 2012)

³⁶ As indicated in footnote 34

³⁷ Source: Statistics from United Nations Conference on Trade and Development, World Investment Report 2010, http://www.unctad.org/en/docs/wir2010_embargo22_en.pdf (Accessed June 7, 2011)

³⁸ Source: Ministry of Industry and Information Technology of the People's Republic of China, Review on Imports and Exports of Electronic and ICT products in 2008 and Forecast of 2009 (in Chinese),

<http://www.miit.gov.cn/n11293472/n11295057/n11298508/11990360.html> (Accessed February 5, 2012)

³⁹ Source: Investment Promotion Agency of Ministry of Commerce (CIPA), "Improved structure of Foreign Investment among Industries" (in Chinese),

http://www.fdi.gov.cn/pub/FDI/tzdt/zt/zmmc/wz10hgy11zw/2010chinafdi/t20110519_133610.htm (Accessed February 8, 2012)

The level of ICT utilization and penetration is used as a variable by World Economic Forum to evaluate national competitiveness for long⁴⁰. Chinese government has also been pursuing a growth strategy based on informatization since 1993. Emphasis on the development of ICT infrastructure, utilization, innovation and e-enabled public services was part of the China's 10th Five Year Plan (covering 2000-2005). Again, it was highlighted in the 11th (2006-2011) and 12th Five Year Plan (2012-2017) (Zadek et al., 2010). The growth in ICT penetration has been mainly in urban areas. Assisting the development in rural regions and especially in the agriculture sector is prioritized in information strategy, but the actual progress is challenged by many obstacles (Table 2), due to the lack of sufficient cooperation between various stakeholders and coherent strategy (Qiang et al., 2009). Although the number of migrant workers who seek job opportunities in cities is always rising, nearly half of the population is still living in rural areas⁴¹. Qiang et al., (2009) summarized five models (government-led, telecommunication provider, professional association/cooperative, franchise/entrepreneurial and private sector) that have been used in informatization process. They used the examples of Intel, Microsoft, Lenovo, TCL and China Telecom, who have taken part in several pilot projects to provide internet access, SMS services and related trainings to the rural population. Companies are developing the rural ICT market “while fulfilling corporate and social responsibility requirements”.

Problem	Attempted Solutions
Poor residents and limited affordability of ICT access	Shared usage and service access points such as telecentres—for example, information stations that serve large numbers of potential users at low or no access cost
Limited sustainability of funding and excess reliance on government support	Diversified funding, with a mix of government, private sector, telecom carrier, and other sources
Low ICT penetration	Varied connectivity options to address last mile needs and user preferences
Unmet local information needs (such as agricultural information for farmers, education for youth, and health care guidance)	Efforts to develop and integrate domestic and international information resources, improve information gathering channels, and increase timely

⁴⁰ World Economic Forum, Composition of the Global Competitiveness Index, https://members.weforum.org/pdf/Global_Competitiveness_Reports/Reports/gcr_2006/composition.pdf (Accessed March 1, 2012)

⁴¹ National Bureau of Statistics of China shows: For the first time urban population surpassed rural population (in Chinese), 17-01-2012, <http://politics.people.com.cn/GB/1026/16899038.html> (Accessed March 1, 2012)

	content supply
Poor maintenance of ICT initiatives, limiting their sustainability	Better operation, management and maintenance
Limited ICT skills, experience or awareness	Public awareness initiatives and efforts to generate community acceptance—for example, through information agents and training of information service teams to form rural information service networks and extend coverage of information services to grassroots levels
Inadequate efforts to tailor initiatives to user needs, often top-down in nature	Efforts to collect user feedback and evaluations of initiatives to make offerings more relevant

Adopted from Qiang et al. 2009, pp. 15

Table 1 Rural Informatization Problems and Attempted Solutions

2.4.2.2 Employees in Chinese Electronics Manufacturing Sector

The rapid development in electronic and ICT sector not only brought challenges to the environment and social structure change, but also required more labor force to contribute to the growth. China is the home to the world's largest number of Original Equipment Manufacturers (OEMs); Original Design Manufacturers (ODMs) and Contract Manufacturers or providers of Electronic Manufacturing Services (CM/EMS providers) (van Liemt, 2007; Eugster et al., 2008). Along with, there are thousands more smaller suppliers of cables, switches, batteries etc. China's electronic and ICT sector has been continuously attracting people to join the industry, at an average annual growth rate of 15.6% from 2001-2010. The total employee number in electronic and ICT manufacturing sector is estimated around 11.5 million⁴². On the one hand, the sector created vast job opportunities; on the other hand, the fierce competition on price within the sector doomed it is highly cost sensitive.

Chinese Labor Law defined the legal working hour limit is 44 hours per week and not to exceed 8 hours per day⁴³, but not only it is a huge challenge to manufacturing sectors (FIAS,

⁴² Xin Xuan, "China's established position in electronic manufacturing industry after 10 years of joining WTO" (in Chinese), http://www.cnii.com.cn/zz/content/2011-12/14/content_941879.htm (Accessed March 2, 2012)

⁴³ Labor Law of the People's Republic of China, Article 36.

2007), it is also becoming difficult to comply for companies that are off the assembly lines⁴⁴. One fact is that government provides exemptions to the labour law, also the enforcement on working hours is insufficient. Some large CMs have joint EICC, which requires 60 maximum working hours in a week. This seems to be an acceptable standard for those companies (FIAS, 2007). Nevertheless, in China, very long, compulsory overtime is the norm (Leong and Pandita, 2006). China Labor Watch (2011)'s research revealed workers were required to work between 36 and 160 hours of overtime per month. This study was carried out after a cluster of suicides that happened in the one of the world largest CMs, Foxconn/Hon Hai in 2010. Those tragic incidents attracted a lot of attention from global and local media, NGOs, consumers and regulators to examine the wellbeing of workers in electronics manufacturing sector, but the improvement has been limited.

There are two worlds for the people working in electronics sector: some of the well-educated and talented engineers and managers enjoy high salaries, good working conditions and other benefits, whereas the manufacturing workers - the majority workforce - are working under lots of pressure, with low wages and limited rights (Leong and Pandita, 2006). EICC requires its members not to use mental or physical punishment and not permit deducting wage as a way to discipline workers. Chinese Labor Law Article 96 and Article 50 also forbid these behaviors. However, China Labor Watch (2011) found those practices are still existed in their case study. Furthermore, age and gender discriminations are also common among electronic manufacturing companies (Leong and Pandita, 2006; China Labor Watch, 2011; FIAS, 2007; Zhang and Dong, 2006), but should be banned according to Chinese Labour Law (Article 12 on gender discrimination) and industrial standard EICC (Labor Section 6 on both gender and age discriminations). The situation with occupational health & safety is far from satisfactory: handling of toxic materials; prolonged exposure to vapours; long standing or sitting; lack of proper training; and not applying or using obsolete personal protection equipments (LaDou, 2006; Leong and Pandita, 2006; China Labor Watch, 2011; Eugster, et al., 2008).

⁴⁴ Luo, Ge, Hu (2012), "A survey to Chinese workforce work-life balance index: 70% people do overtime work at home", http://life.gmw.cn/2012-06/25/content_4408150.htm (Accessed June 25, 2012)

2.4.2.3 Product Safety

Product safety was considered as an important element in CSR dimensions that was proposed by Carroll (1979), it also widely recognized by Chinese business practitioners (Xu and Yang, 2007; Chang, et al., 2008). With many food scandals have been exposed in recent years, Chinese consumers value product quality and safety most, comparing with other CSR issues (Chang, et al., 2008). Electronics and especially consumer electronics sector has been doing well since 2007 (Chen, et al., 2009, p152-153). Unfortunately, there have not been studies on product safety that is focused on electronics industry under the CSR scope.

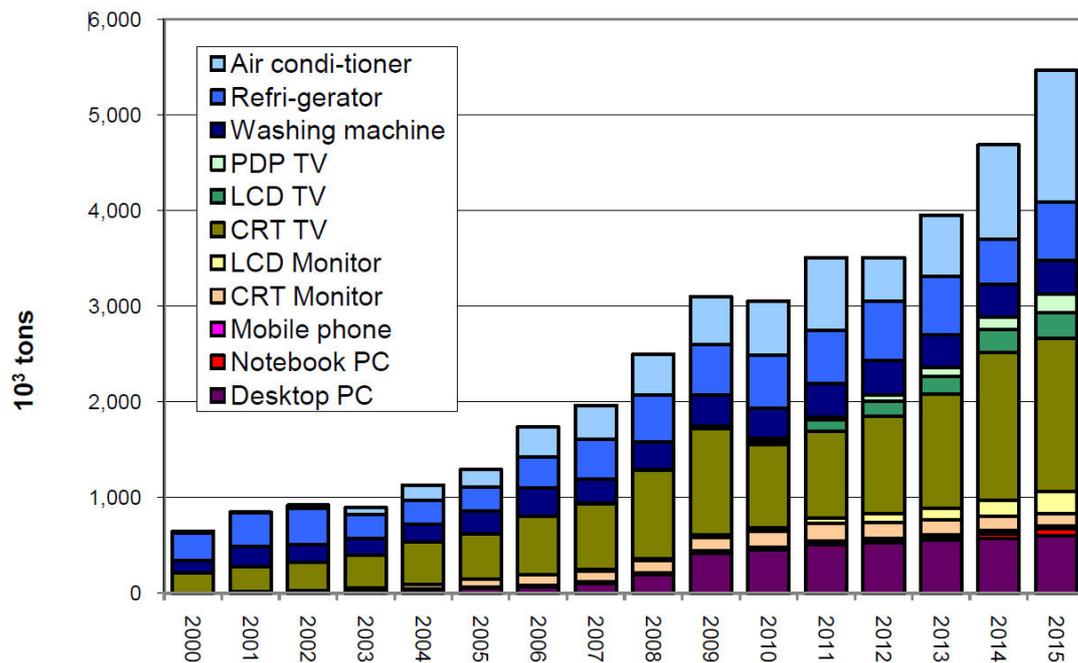
2.4.3 Environmental Dimension

2.4.3.1 WEEE in China

After three decades of being the provider for all kinds of merchandise to the world at low prices, for many companies in China, the highest priority of their business activities is to pursue maximum profits. On the one hand, the economic development has lifted millions of Chinese people out of poverty, but on the other hand, the achievement reached with a big cost to the environment. As one of the fastest growing industrial sectors, inevitably the electronic and ICT sector is also a contributor to pollution in China, especially to the WEEE related sources.

The electronic products output and consumption have been constantly growing. When the products are manufactured at massive quantity and new products come out at an accelerated speed, prices drop fast as well, which allow companies to reach more customers. China produces a lot less of e-waste than the developed world (Schluep, et al., 2009; Robinson, 2009). However, with the electronics consumption goes up every year, the quantity still is significant. Post-consumer e-products are the main source of WEEE flows in China (Yang, Lu & Xu, 2008), hence the WEEE quantity are often calculated base on consumption figures. However, there is no accurate way to measure or predict the real volume of WEEE, since the assumptions on electronics' lifespan can vary much (Schluep, et al., 2009; Yang, Lu & Xu,

2008; Veenstra et al., 2010). Nonetheless, Eugster, et al. (2009) made another attempt to forecast the quantity of 11 major consumer electronic products waste in China from 2000 to 2015 (Table 1). With a different opinion on the biggest contribution to Chinese domestic e-waste, He, et al. (2010) estimated that computers (notebooks and desktops) will be replaced more often because of its rapid development. Its quantity expected to be 10 times more in 2016 than the volume in 2006.



Adopted from Eugster, et al. (2009), p14.

Figure 5 Estimates for domestically-generated e-waste: China 2000–2015

Besides being the world’s largest electronic products manufacturer and exporter, China also is the largest WEEE importer (Ni, et al., 2010; Eugster, et al., 2009, Figure 5), of which the goods are imported through legal and illegal channels (Yang, Lu & Xu, 2008). According to Liu, Tanaka and Matsui (2006)’s estimation, about 70 % of the global e-waste exports ended up in China, with most of them were dismantled by workers (who use “crude and unsafe” methods to handle e-waste) in small towns Guiyu and Taizhou at southeast China. Those activities caused severe pollutions in local air, soil and water which link to DNA damage and respiratory diseases are found from local residents (Ni, et al., 2010; Chi, et al., 2011). In

contrast to developed countries, WEEE recycling activities in China are mostly carried out by informal sectors (hawkers, peddlers and individual vendors repair, refurbish and then resell the WEEE), as they have well-established networks and they are more profitable than the formal sector (Yang, Lu & Xu, 2008).



Adopted from Eugster, et al. (2009), p.16; Source: Silicon Valley Toxic Coalition, 2007

Figure 6 Global e-waste trade routes

In spite of Chinese government has been developing WEEE regulations in the past 10 years, but the legislative system is still weak (Veenstra et al., 2010; Yu, et al., 2010). Before the first Regulation on Management of the Recycling and Disposal of Waste Electronics and Electrical Equipments became effective as of January 1, 2011⁴⁵, there were a few laws and regulations targeted at this problem⁴⁶ (Yu, et al., 2010; Chi, et al., 2011). The latest regulation requires the enterprises must apply qualification to perform e-waste management

⁴⁵ The Central People's Government of the People's Republic of China, "Regulation on Management of the Recycling and Disposal of Waste Electronics and Electrical Equipments" (in Chinese), http://www.gov.cn/zwqk/2009-03/04/content_1250419.htm (Accessed February 9, 2012)

⁴⁶ Recommend reading: a complete list of laws and regulations that effecting electronics industry in China can be found from SWITCH-Asia Project (2009), Guidelines on Eco-Efficiency, Occupational Health & Safety and Corporate Social Responsibility, www.switch-china-sme.eu/ccount/click.php?id=8 (Accessed January 31, 2012)

activities and resell recycled electronics. However, since most active WEEE handlers lack of official qualifications, the government will have to use strong supervisory force to implement the regulation. The new regulation also covers a number of topics: an e-waste treatment fund would be set by the central government; encouragement to EEE manufacturers on setting up take-back channels by cooperating with electronics service providers. Still, the regulation does not offer concrete plans for how to set up an efficient WEEE recycling and disposal system.

Aiming at achieving carbon emission reduction target and promoting WEEE recycling, from June 1, 2009 to December 31, 2011, Chinese government subsidized tens of millions of new home appliances (television, refrigerator, washing machine, air conditioner and computer) purchases under the scheme “trade old in for new”^{47,48}. By the end of March 2011 (the latest data available), there were over 41 million old home appliances were collected via this channel⁴⁹. In addition to the government’s effort, many electronics manufacturers (Sony, HP, Electrolux, Brant, Dell, Lenovo, Siemens, Motorola and Nokia) have also launched their campaigns in China to collect WEEE, but the results were inefficient compare to their similar activities in other countries (Yu, et al., 2010; Chi, et al., 2011). Furthermore, in order to set up efficient WEEE collection and recycling system with qualified companies, China has kicked-off several pilot projects in Beijing, Tianjin, Qingdao, Shanghai and Hangzhou to boost the formal channel⁵⁰, but so far no successful results have delivered (Yu, et al., 2010). The huge amount of WEEE in China is still an unsolved puzzle.

⁴⁷ The Central People’s Government of the People’s Republic of China,, “Implementations for trade old home appliances in for new” (in Chinese), http://www.gov.cn/zwgk/2009-07/02/content_1355598.htm (Accessed 10, 2012)

⁴⁸ “Implementations for trade old home appliances in for new [modified]” (in Chinese), http://www.china.com.cn/policy/txt/2010-06/23/content_20330536.htm (Accessed 10, 2012)

⁴⁹ Wang Zhi, Basic analysis on the current trends in Chinese consumption and consumer products market (in Chinese), National Bureau of Statistics of China, http://www.stats.gov.cn/was40/gjtjj_detail.jsp?searchword=%D2%D4%BE%C9%BB%BB%D0%C2&channelid=6697&record=1 (Accessed 10, 2012)

⁵⁰ Electrical Appliance Recycling technology Centre, Explanation to WEEE Utilization Industry Entry Requirements (in Chinese), http://www.cheari.org/recycling/news_detitle6.html (Accessed 11, 2012)

2.4.3.2 Eco-design

EU's RoHS Directive and Ecodesign Directive set a high bar on future electronic products development. After EU's RoHS directives were into force in July 2006, many electronics manufacturers in China had to face the challenge from the new law's enforcement. As the biggest supplier of electronic products to EU countries, Chinese government reacted quickly. Even before EU's RoHS Directive was in force, the Administrative Measure of Prevention and Control of Pollution from Electronic Information Products (often referred as China RoHS) was issued collectively by seven ministries on February 28, 2006, a year later, the legislation was effective⁵¹. Irrespective of the products are to be sold in the domestic market or international market, Chinese electronics manufacturers have to plan and design their products with more consideration to the impacts on the environment. In compliance with EU's standard, China also banned the use of six highly toxic substances: Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent chromium (Cr6+), Polybrominated biphenyls (PBB) and Polybrominated diphenyl ether (PBDE). Moreover, Chinese government encourages enterprises to develop eco-design products that are mentioned in Article 6, 9 and 10 of the Administrative Measure.

2.4.3.3 Energy Consumption

The rapid development in ICT sector has brought lots of expectation on economic growth as well as concerns over its increasing energy consumption. Many organizations have made their attempt for compare ICT growth and its environmental impact, but there is no accurate estimation. Innovations in this field come out remarkably fast, as a result, assumptions can possibly turn to be invalid. By summarizing calculations from various sources, Zadek et al. (2010) provided their research result in the relationship between ICT sector and China's carbon intensity reduction target. As ICT could serve as the enabler for energy use efficiency, its contribution to the amount of other sectors' emission reduction might be 3.5 to 4 times more than the direct emissions released by ICT sector between 2007 and 2020.

⁵¹ Administrative Measure of Prevention and Control of Pollution from Electronic Information Products (in Chinese), <http://www.miit.gov.cn/n11293472/n11294912/n11296542/12165064.html> (Accessed February 24, 2012)

2.5 Guideline for CSR Reporting Evaluation within Chinese Electronics Sector

There is a full range of CSR issues can be investigated in the Chinese electronics sector. However, based on the research results from the previous paragraphs, and my interests in the field, the following issues in economic, social and environmental dimensions will be paying attentions while study the CSR reports in empirical data (Table 3). It is necessary to note here, the guideline is only a lighthouse in the possibly a sea of information, with no intention to exclude the CSR issues that are not listed. Also need to be taken into account, some of the information can be allocated in more than one CSR dimension, for example, the use of rear metal sourced in conflicted areas can be both a social and environmental issue.

CSR Dimensions	Area of disclosure	Information to disclose
Economic	Financially-related Data	Turnover, sales, income statement, stock value, market, number of employees or government subsidy etc.
	Organizational Data	Company information, employees gender and age structure, product, service or organizational structure, etc.
	Supply China Management	Inspection on contracting manufacturers or service providers
Social	Employees' Health and Safety	Working hour, working condition, toxic material handling, training, protection at work, discipline to worker or health care for employees, etc.
	Community Contribution	Informatization project, charity, donation, arts activity sponsorship, or support to education or health, etc.
	Sourcing	Explanation to place of origin and name of the metals used in product, use of recycled materials
	Consumer	Product quality and safety

Environmental	WEEE	Program to recycle WEEE, participate in Chinese home appliances "trade old in for new" scheme, support to WEEE activities or in compliance with legislation, etc.
	Eco-design	Planning and use of toxic material in products or at production, energy efficiency design or long product life cycle design, etc.
	Energy Consumption	Information on carbon foot print, emission or change over years, etc.

Are reports in compliance of any standard or regulation?

Table 2 Guideline for CSR Reporting Evaluation within Chinese Electronics Sector

3. Empirical Research

3.1 Research Methods and Data Gathering

Multiple case study research aims at closing the gap between the objective of the study and the object of the study. Each case can be linked to an interpretation process (Pauwels and Matthyssens, 2004). Qualitative content analysis can serve as a medium to achieve that target. The first step is to take samples from the defined field. As it was discussed in sector 2.2.1 and 2.2.3, 2006 was a turning point for Chinese CSR reporting development, the number of reports has increased dramatically, and the quality of reports has improved, whereas 2007 was the breakthrough point for CSR reporting in Chinese electronic manufacturing sector. The aim is to discover the CSR issues addressed in electronic companies' reports and to trace a possible pattern of change. Therefore, it is necessary to find companies that have continuously published CSR reports from 2008 to 2011. From the SynTao's reports database (China Sustainability Reporting Source Centre), there are 16 companies have published annual/biennial CSR reports since 2008, but nearly half of the companies have not yet published reports that concerning their CSP in 2011 (by July 2011). As no sampling process typology was found in the electronic sector, a random selection of 4 out of the 16 companies are being studied in this paper. Only CSR reporting on each company's fiscal year 2008-2010 are to be included in the empirical data (Table 3, the order below is at no significance). Except for the reports of Beijing CW Technology Co.,Ltd., which have been published as attachments to its parent company's (Beijing Electronic Zone Investment and Development Co.,Ltd.) annual reports. The other selected companies have disclosed their CSR information in stand-alone CSR reports.

Company	Ownership	Stock Exchange	Title of the Reports			Page Numbers		
			2008	2009	2010	2008	2009	2010
Beijing CW Technology Co.,Ltd.	SOE	SSE	CSR	SR	SR	6	6	9
Toshiba Dalian Co., Ltd.	Foreign-funded (Japan)	Not listed	SusR	SusR	SusR	34	35	30
Lenovo Group Ltd.	State-holding ⁵²	HKSE, Not listed in mainland China	CSR	SR	CSR	66	70	78
Canon Dalian Office Equipment Co., Ltd.	Foreign-funded (Japan)	Not listed	SusR	SusR	SusR	23	31	31

SOE: State-Owned Enterprise, SSE: Shanghai Stock Exchange, SZSE: Shenzhen Stock Exchange, HKSE: Hong Kong Stock Exchange

CSR: Corporate Social Responsibility Report, SR: Social Responsibility Report, SusR: Sustainability Report

Table 3 Selected Companies and Their Reports' Titles and Page Numbers

Content analysis is a scientific method that summarizes and makes quantitative analysis of messages (Neuendorf, 2002, p.10). Since there is no intention to quantify the CSR topics that are covered in companies' reports, but rather the information itself, follow the inductive approach, I try to list all the disclosed CSR issues from each report. Guthrie and Abeysekera (2006) suggested using paragraph as a unit of analysis. "As meaning is commonly established with paragraphs rather than through the reporting of a word or sentence", more references can be drawn from narrative statements. Some of the selected companies' reports are less than 6 pages. A paragraph can possibly contain more than one CSR issue. Three companies included pictures and tables in their reports. I will acknowledge the existence of them with limited description and excluding details, due to the complication on determine the exact amount of disclosure that is represented by a picture, chart or table (Wilmshurst and Frost, 2000; Unerman, 2000). In order to avoid the bias or misinterpretation caused by translation, all sample reports are in simplified Chinese.

⁵² The biggest shareholder of State-holding Enterprises is Chinese government

3.2 Data Processing and Analysis

3.2.1 Brief Introduction to the Sample Companies

Company	Main Business Areas ¹	Total Sales (in Euro) ³	No. of Employees ⁴
Beijing Electronic Zone Investment and Development Co.,Ltd.	ATMs, cash processing automation ²	105.47 million	
Toshiba Dalian Co., Ltd.	Motors, pumps, high-frequency tuner for digital products, digital base plates, decoding products, X ray equipments, CT equipments and ultra-sound equipments		2,286
Lenovo Group Ltd.	World's second-largest PC vendor, smart phones, intelligent TVs	17.44 billion ³	15,111
Canon Dalian Office Equipment Co., Ltd.	Laser printers, toners, toners' recycling and reproducing		9,478

Notes: **1.** All the information about each company's business areas is based upon the descriptions in their responsibility reports; **2.** Only represents one of the company's subsidiary, Beijing C&W Technology Development Co. Ltd., which is the reason the company's reports are categorized in electronic sector; **3.** Lenovo Groups's global sales; **4.** with latest data available from companies' reports or official websites.

Table 4 Sample Company's Business Areas, Total Sales and Number of Employees

Despite in terms of the sample companies' business activities or their companies' sizes, it is not easy to find similarities between them. Some are globally recognized brands as Toshiba, Lenovo and Canon, some are only distinguished within their fields as CW Technology. All of the publicly listed companies do not include financial information in their corporate responsibility reports. The data is available in those companies' financial annual reports or official websites. Non-listed companies disclosed the information voluntarily.

Canon China and Toshiba China publish CSR reports in Chinese, still their subsidiaries in Dalian made their own separate reports since 2007. They are among the early contributors in CSR reporting in China. Neither of the two multinational companies' subsidiaries has its own official website to communicate with their stakeholders, but their responsibility reports can be found on Dalian Environment Protection Bureau's site. This phenomenon proved the conclusion of Chen and his colleagues (2009), government is the most important driving force of CSR development in China. In contrast to the publicly listed companies and especially the Chinese domestic companies, who typically started their reports with a list of

laws and legislation that they comply with to produce their CSR reports; the non-listed companies' reports do not include much of this type of information.

3.3 Reliability and Validity of the Research

There are several limitations in the use of content analysis (Gray et al., 1995; Milne and Adler, 1999; Unerman, 2000). The first is the recognition that it captures quantity of disclosure (in terms of frequency and volume of reporting) rather than quality characteristics. The second is that it is subjective, in that it is capturing various narratives as a representation of social environmental reports.

Despite triangulation increases the internal validity of a multiple case study (Pauwels and Matthyssens, 2004), the reliability still has its limitation. As there is no estimate of the population (CSR reports published from 2008 to 2010 in Chinese electronic sector) variability in qualitative research, the outcome of an analytical generalisation may indicate incompatibility with the theoretical findings. In such case, additional researches or sources may be required. The sample companies' situation cannot represent a full picture of CSR status in the entire Chinese electronic sector.

Moreover, some of the available data are not highly reliable. CSR reports are published under the name of a company that contains a list of subsidiaries in various business areas, e.g. Beijing Electronic Zone Investment and Development Co. Ltd., which also operates finance or even real estate business, the report contents may not well represent the practice of CSR in the electronic manufacturing sector.

4. Description and Analysis of the Research

4.1 Description and Comparison of the Data

Cannon Dalian Business Machines Inc.

For fiscal years 2008-2010, all the reports are stand-alone reports under the title of 'annual sustainability report'. All of them included a large amount of pictures, diagrams and charts, which are connected to the texts around. The reports are not audited by a third party, but with opinion from an invited reviewer. All three of the reports are ended with a feedback form.

2008

The 2008 report includes 26 topics, which is divided into three main sections, introduction to Canon Dalian (4 topics); the pursuit of sustainable development (8 topics); commitment to environmental protection (14 topics).

In the messages from Chairman of Canon Dalian, he provided Canon Group's definition to "sustainable development"- kyosei / "coexistence" with different cultures, custom, languages and ethics. Cannon Dalian disclosed its purpose of the company as: establishing a truly global enterprise; the responsibilities to be a pioneer that are to provide the best products and services; pursuing the happiness of everyone in Cannon Group. The company also presented its five guidelines to action, which emphasized self-disciplines, competitiveness and mutual respect between employees. In its strategy to sustainable development, it mentioned its operation should be in compliance with the law, product excellence, environment protection, employees' welfare and contribution to the local community.

Economic

Cannon Dalian disclosed its location and size, year of establishment, amount of registered capital, total amount of investment, name of investors and number of employees. It also

briefly introduced its businesses in laser printers, toners and toner recycling. The company reported three programs that used to improve its productivity.

Social

Cannon Dalian mentioned a gradual improvement to employees' welfare status without detail. It reported that it organized physical examination for employees. It offered a number of training courses. The company organized various cultural and sports events for its employee. With many pictures to disclose the quality of its facilities, Cannon Dalian reported four events on its contribution to the local community: Japanese speech competition in Dalian, donations to Hope Project, scholarship to Dalian University of Technology and donations to Sichuan province earthquake victims.

Environmental

The report included Cannon Group Environmental Charter, which emphasizes the maximization of resources utilization. The group is against actions that are threatening to human health and safety and damaging environment. The environmental policy at Canon Dalian, stressed on avoiding pollution from handling the recycled printer toners, green sourcing and raising employees' environment awareness through training and education. Canon Dalian disclosed its 2008 environmental targets and actual results. The objectives covered a range of measures: carbon emissions; usage of electricity, steam, water and office paper; waste from production; PRTR (Pollutant Release and Transfer Register) substances release amount; chemical substances release amount and accidents caused by hazardous chemical substances. Only the actual usage of steam was 1% lower than its target. Cannon Dalian reported that it was the first enterprise received ISO 14001 environmental management certificate in Northern-Eastern China. It also received a number of titles from local government that to award on its performance in energy saving, environment protection and environmental performance disclosure.

Cannon Dalian explained its own environment management system (EMS) in the report. Under a central committee, there were two environment management executive committees, which were responsible for implementing environmental policy, monitoring and reporting

environmental performance to the central committee at product unit and production unit respectively. The company also presented its plan to manage and prevent environmental risks, it reported it followed the highest standards that were issued by the state, local government and Cannon Group. With numbers, charts and graphs, it disclosed its environmental performance during the financial period 2008, of which were lower than the 2007's or within the legal standards. In order to track its environmental inputs and outputs, it disclosed how the company used material flow cost accounting (MFCA) to calculate its influence to the environment.

Aided by more pictures and texts, Cannon Dalian disclosed its facilities that were used to save energy and water, to recycle water and waste, and to prevent the release of hazardous chemical substances. It also mentioned that it followed the Cannon Group's green sourcing standard, examined the qualification of its suppliers in every two years. As printer toners recycling activity is a major business sector at Cannon Dalian, it reported how the toners were recycled and how many were recycled from 1990 to 2008.

In addition to the environmental protection activities inside Cannon Dalian, the company organized its employees to participate in two local regional clean-up activities.

2009

The structure of 2009 report is similar to the 2008 report. It includes 28 topics, which also is divided into three main sections. Introduction to Canon Dalian (5 topics); the pursuit of sustainable development (8 topics); strongly promoting environment management (15 topics).

There are many identical contents in the introduction to Cannon Dalian between the 2009 and 2008 reports. However, the company disclosed its parent company - Cannon Group's medium to long term business plan for achieving its goal as, Phase III of 'Excellent Global Corporation Plan' – all of its economic indicators should be the world's top100. The plan targeted at eliminating all waste, strengthening the management of supply chain and

managing cash flows. This report included a list of Cannon's stakeholders and their concerns, which covered 21 topics ranging from climate change to basic education.

Economic and Social

The disclosures to Cannon Dalian's economic and social performances were similar as they were in 2008. The company reported more of employees' welfare. It set up a rescue regime to help employees with economic difficulties, in case of illness, accidents and disasters. Influenced by global financial crisis, Cannon Dalian used flexible working hours to avoid layoffs. The report also mentioned job opportunities for persons with disabilities.

Environmental

Cannon Dalian did not report any change to its environment policy and management system. The company achieved all of its environmental targets in 2009, with all measures were lower than 2008's. It recycled more toners in 2009. The company reported its investment to update the facilities that are used to save energy and water, and investment to a better water recycling system. Cannon Dalian used reverse logistics to take back some of the packing materials. It installed equipments with the latest technology for preventing pollutions at its new factory. Cannon Group's green sourcing standard was updated in 2009, thus Cannon Dalian re-examined its suppliers' qualifications.

In order to increase environment awareness among employees, Cannon Dalian set October 2009 as "environment activity month". Employees were supplied with more information on the environment, and were encouraged to provide more ideas about environment protection to the company. Some Cannon Dalian's employees participated in tree planting event and promotion to environment conservation on World Environment Day.

2010

The layout of 2010 report follows the previous two years' reports. The report includes 29 topics, which also is divided into three main sections: introduction to Canon Dalian (6 topics);

the pursuit of sustainable development (8 topics); strongly promoting environment management (15 topics).

Economic

Cannon Dalian disclosed Cannon Group's Phase IV of 'Excellent Global Corporation Plan', of which the slogan is 'Aiming for the Summit: Speed & Sound Growth', as well as the group's economic target by 2015. In this report, Cannon Dalian disclosed its own 3 year business plan under the slogan 'Energetic, Efficient, Satisfying'. The plan aimed at improving the company's efficiency through motivating the employees.

Social

2010 report mentioned Cannon Dalian's labor union and its function as, protecting the employees' rights and bridging between employer and employee. Cannon Dalian upgraded furniture at employees' dormitory, built rest rooms at every production plant. It also organized some activities for both employees and their families, and speed dating event for single female employees. On its contribution to local communities, Cannon Dalian reported its donations to landslide victims at Gansu Province and to Dalian orphanage. The company also used recycled plastics to build a pedestrian path at Cannon Hope primary school.

Environmental

Cannon Dalian reported its environmental performance ranked at the third place within Cannon Group, but most of its 2010 environmental targets were not reached. The measures followed a downward trend from 2008 and 2009. It reported an increase in toner recycling activities.

To strengthening the company's ability to handle risks, it formed a fire guard team with selected employees. Cannon Dalian reported that it replaced old lightings with solar-powered and LED lights, installed regenerative thermal oxidizer (RTO)⁵³ at its new factory. It continued its activities of waste water treatment, monitoring the environment around

⁵³ A regenerative thermal oxidizer (RTO) is an industrial process for the treatment of exhaust air.

factories and examinations on suppliers. It provided more training to its internal environment inspectors. Same as in 2009, the company run an environment activity month in October. Cannon Dalian organized its employees to participate in the same local environmental events as the previous year, took part in Earth Hour, and promoted low-carbon life to local residents. At the end of the report, the company disclosed that it followed eco-design standards in Japan and “Energy Star”, involved in the development of Chinese standard for certifying eco-product, the result of its annual environmental accounting, local sourcing and zero compliance from stakeholders.

Toshiba Dalian Co., Ltd.

Toshiba Dalian’s 2008-2010 reports are three stand-alone reports under the title of ‘annual sustainability report’. Pictures, charts, diagrams and tables made up a large percentage of the reports contents. Text is randomly placed around those visual aids. TDL’s reports are not audited or reviewed by a third party, but there is a feedback form at the end of each report to invite a reader to give his/her opinion.

2008

In addition to the message from general manager, TDL’s 2008 report devoted 10 sectors to disclose its CSR activities and achievements. In spite of the report was published under the title ‘sustainability report’, the general manager defined it as an ‘environmental report’ in his message to readers. He elaborated about Toshiba Group’s philosophy – being ‘a corporation in the earth’ ‘for the future of mankind and earth’ as, extending products life cycles to decrease the burden to environment; respecting difference and act locally. TDL received an award as the outstanding environmental reporting company from Dalian Environment Protection Bureau in 2008.

Economic

The report disclosed TDL’s location with text and maps, as well as the date of establishment, starting date for production, name of investors, size of building area, chairman of the board,

general manager, number of employees and registered capital amount. The company reported its business areas and a list of major events at an annual basis from 1991 to 2008. It reported that it was certified with ISO9001 management system and ISO14001 environmental management system in 1998 and 1999 respectively. In October 2007, the company received OHSAS18001 Occupation Health and Safety Management System certificate.

Social

All of TDL's social activities are related to its works in environmental management. The company reported 7 events, which it regarded them as communication on the environment with local communities. TDL invited 20 local residents, who lived close to the company, to visit and inspect its recycling and purifying facilities, also asked their feedbacks on TDL's performance. It also invited some students from Toshiba Hope Primary School to visit its factory. The company organized a tree planting event in May 2008, and reported that over 1,200 trees were planted in one day. The report included 3 pictures to show TDL's participation in the World Environment Day, but it did not include any text to explain what activity that was. On 28th of June 2008, it organized some of its employees to pick up garbage at a local tourist attraction. TDL also reported on its visits to local Environmental Protection Bureau and waste handling company.

Environmental

As it was defined by TDL's general manager, this report's content is mostly about its activities on environment protection. It disclosed its environmental policy, which is based on ISO14001, highlights its management and monitoring activities, stressed on its continuous efforts to improve environment protection. Associated to its production, TDL's policy included the compliance with EU RoHS Directive and its targets to decrease carbon emission, chemical substances release, noise, energy and water consumptions. The policy also mentioned the importance of environmental information disclosure. Furthermore, as a subsidiary of Toshiba Group, TDL's report integrated a brief introduction to Toshiba Group Environmental Vision 2050. The ultimate sustainability purpose is to be achieved through better use of energy and creation of eco products.

TDL used a chart to demonstrate its Environmental Management Promotion System with 6 layers, of which a planning team and a promotion commission are allocated at each of the production units. The company also reported on its Environment Action Plan with targets from 2003-2012 and its actual performances till 2008. Its main targets were: reduce carbon emission; lessen waste and recycle; water consumption and reuse; cut discharge amount of chemical substances. The data was reported in percentages: To help reader understand its actual achievements, TDL also disclosed its carbon emission and chemical substances discharge in tones. With separate charts, TDL further detailed its consumptions of electricity, water and natural gas and usage of steam. It even reported its consumptions of major types of chemicals and raw materials in production. With pictures and chart, latter of the report disclosed in details on how its facilities processed exhaust gas, chemical substances waste, wastewater and noise. TDL declared its compliance with which national and local standards in each of the emission types. It also compared its actual performances with company's own or legal standards, with all the results were better than expected.

The report contains 18 pictures of TDL's products, which were used to present its efforts on creating eco products and green sourcing. TDL used pictures and building floor plan to disclose its high-energy-consumption facilities. It also reported on replacement to a few more energy efficient equipments and installation of monitoring equipment to its energy consumption. However, it is intriguing to see the replaced equipments were not among the identified high-energy-consumption facilities. Even though, TDL attempted to explain its efforts to fight against climate change through better managed logistics, the charts were all in Japanese and Chinese interpretations were limited. Japanese language was again showed in its presentation of the company's environmental accounting. In addition to TDL's own monitoring and supervising system, it reported on the inspections that were carried out by China Quality Certification Centre (hereafter CQC) and Toshiba Group, but it did not provide detail on what needed to be improved.

The report disclosed on TDL's environmental education and training system, which was aimed at covering every employee of the company. The highest priority of the education is to

explain laws and standards that the company needed to comply, after that is Toshiba Group's environmental standards and company's own management system. TDL reported on its activities in "environment activity month" and it distributed free environmental education materials to its employees. It also reported its exercises to react in simulated environmental hazardous accidents. There are 4 small pictures of the feedbacks on TDL's 2007 Sustainability report. However, the contents are not to be identified. The report ended with an attachment of TDL's 2009 environmental policy, which is identical to its 2008 policy.

2009

TDL's 2009 report followed the same structure of its 2008 report, which also devoted 10 sectors to disclose its activities and achievements in environmental protection. The report was prized as "the most innovative report" by Dalian Environment Protection Bureau. The text content was highly similar with the previous year's, but there was not any Japanese language used in the report. All the data and most pictures were updated. Its disclosure to economic information was not changed, except the mention of a new business line.

Social

TDL again invited over 20 local residents to visit its company and collected their feedbacks. It organized its employees to participate in local coastal clean-up activity and local low carbon promotion event and to pick-up garbage around its factory. It particularly reported on its communication with Dalian Environmental Protection Volunteers Association, who gave educational materials and local environment damage reports to TDL.

Environmental

The 2009 report disclosed more on Toshiba Group Environmental Vision 2050 in China. The vision was interpreted with specifications on a national level, for instance the highlight of law compliance to Chinese RoHS, WEEE and REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals). Its eco products supply in Chinese market and the total reduced CO2 amount in 2008 by Toshiba's companies in China. TDL's 2009 environmental policy was same as 2008's. Its Environmental Management Promotion System was not

changed. In TDL's disclosure to its eco products, it emphasized the enforcement of its green sourcing policy. It regularly examined its suppliers' compliance with RoHS.

It disclosed 3 tables on its environmental accounting, but the contents were not readable. It again compared its targets and actual results in its Environment Action Plan 2003-2012. It also explained the details of its consumptions of electricity, water and natural gas, usage of steam, carbon emission, discharge of chemical substances and wastewater, as well as consumption of chemicals and raw materials. With modified pictures, TDL intended to well explain the locations of its high-energy-consumption facilities. It reported 3 examples on how it performed energy saving: added new switches to control of consumption of natural gas; set a higher temperature of air conditioners in summer; replace old street lamps with LED lightings. In addition to the detailed disclosure on the procedures of handling exhausted gas, chemical substances, wastewater and noise, TDL also disclosed its reduced CO₂ amount from its logistic activities.

TDL also received inspections from Toshiba Group and CQC. The Toshiba Group inspectors found the pollution concentration of TDL's sewage did not meet the legal standard. It reported that it was working on the solution but did not provide any further information.

On the disclosure of environmental education and training, the company reported more interactive activities - questionnaires, exchange sessions and drawing competition on environment protection theme - to raise awareness among its employees and their families. In 2009, TDL also carried out exercises to train its employees handle emergent environmental accidents.

2010

TDL changed its report structure in 2010. The report contains 6 topics in the company environment policy, green products, eco production, environmental management, environmental communication and contribution to local sustainability. It claimed the report was prepared with a reference to Global Reporting Initiatives G3. Once again, the report was

awarded "the best report" by Dalian Environment Protection Bureau. Followed the tradition of a message from general manager at the beginning of the report, 2010 report also included the message from President of Toshiba Group, who explained the group's "eco style" - green of process, green of product and green by technology, and integrity of environment management - highlighted the importance of disclosure on environmental performance. The new environmental policy of Toshiba Group repositioned itself as a conservationist to biodiversity. In spite of the change to group's policy, TDL's 2010 environmental policy was same as previous years, except they reported on in compliance with latest standards. It eliminated a list of annual events in its disclosure on its economic information.

Social

TDL reported that the new topic - contribution to local sustainability - was added to better-inform its stakeholders, but the activities were report in the forms of pictures with quite few explanation text. It disclosed its donation to China Hope Project, its titles of an outstanding company in production safety and its contribution to local taxation. More social activities are found under the topic of environmental communication, which included the visit by local residents, environment conservation themed drawing competition, coastal clean-up, participation in Earth Hour, visit by students from Toshiba Hope Primary School, garbage pick-up and tree planting. Most of the activities are routinely carried out every year. For the first time, TDL listed its stakeholders and reported on how the company related to them in the report.

Environmental

Besides the disclosure of TDL's comparison between its targets and actual results in the Environmental Action Plan 2003-2012, the report also disclosed the company's plan for 2010-2015, which it aimed at a continuously decreasing in emissions and energy consumption. Without unreadable tables in the environmental accounting sector, TDL clearly reported its investment and expenditures on its environmental activities during fiscal year 2010, but the currency is in Japanese Yen. Its environmental promotion system was changed to 7 layers, of which the last layer is consisted of external parties - subcontractors

and suppliers. TDL used an example of communication with one waste management company, to illustrate how it interacted with its entrusted parties.

TDL reported on energy efficient, environmental friendly and low noise features of its latest motor product. It also used the inspecting procedures on its consumer electronics to show case that how it managed hazardous substances in its products. The procedure required two steps of internal examination and one external examination. TDL disclosed more on its green sourcing system in its 2010 report. It held meetings with its suppliers to explain its green sourcing policy and selected qualified suppliers. It carried out investigations among the source that contained hazardous substances.

Along with the yearly disclosure on its consumptions of energy, water, chemicals, raw materials, usage of steam, emissions and the amount of waste, this report included two diagrams to explain how TDL's production affected environment and what the company planned to lower its impacts. It reported that it replaced some old lightings with LED lights and solar powered lights in its factory. It also installed more switches to cut the consumption of natural gas. Furthermore, TDL devoted one page of its report to explain how its wastewater treatment functioned. Aside from its works on saving energy, it installed new machines to collect and reuse the edgings of its raw materials. Instead of listing the laws and regulations that TDL had complied with, the 2010 report only disclosed quantitative data of the levels of its waste and emissions through out the year.

TDL put lots of attention on its environmental auditing. It received inspections from Toshiba Group (which it regarded as the highest standard), CQC, internal auditors, company managers and internal environmental promotion committee members. By organizing seminars and tests, TDL ensured high penetration of environmental knowledge among it employees. It designed different educational programs for employees at various positions. TDL's 2010 environment activity month contained more events to get employees' families and local residents to get involved.

Lenovo (China) Limited

In 2009, 2010 and 2011, Lenovo China published three stand-alone reports under the title "Corporate Social Responsibility Report" to disclose its CSR activities and performances for fiscal year 2008, 2009 and 2010 respectively. All three reports were edited with references to Global Reporting Initiatives (G3). The 2009 and 2010 reports were prepared also under the guidelines of CASS-CSR1.0. Each of the reports included a self-checklist of its GRI application levels and reviews from third parties.

2008

Lenovo China devoted 6 chapters to disclose its CSR activities during the period from 1st of April 2008 to 31st of March 2009. In general, the report used more qualitative data (descriptions and explanations) than quantitative data (numbers) to disclose its performances. At the beginning of the report, Lenovo Group's Chairman of the Board defined CSR with two layers. First, providing good products and services, paying taxes according to regulations and creating job opportunities; second, getting more involved in charities. Lenovo's CEO simply described CSR as "a better world because the existence of Lenovo", and he pointed out the importance of benefits to everyone within Lenovo's value chain. In the introduction to the report, Lenovo's Senior Vice President emphasized on the company's donations to victims of natural disasters in China, contributions to Beijing Olympic, supports to start-up charities, volunteer activities, increased sales, improved employees' welfare, eco product management and reduction of carbon emission.

Lenovo put its contribution to China Informatization Project at the first place in its year CSR highlights. Its R&D teams developed over 300 products at affordable prices to suit the needs of rural users. Its employees helped more than 20 million people in Chinese rural areas to learn computer. It disclosed a list of its activities in the project from calendar year 2003 to 2009. The second highlight is its works in carbon emission reduction. It reported on its eco product design, changes in the use of logistics service, reduced traveling within company, application of EICC's carbon emission reports on its suppliers and participation in the

building of Chinese Institute of Electronics Energy Saving Committee (CEESC)'s Chinese ICT product energy efficiency measures framework. The third highlight of the annual CSR report is Lenovo's supports to start-up charities. It provided financial supports and IT and management expertise to new charities. The report listed 16 charities that it helped in 2008, as well as those charities' organizational structure, field of work and main activities.

The report offered another interpretation of CSR by Lenovo Group: integrity and in compliance with laws; involvement of every employee; cooperation and mutual development; focus on global. It further elaborated on its responsibilities to various stakeholder groups. The CSR activities in China were carried out under the supervision of a 4-layers responsibility management system. In addition to this system, Lenovo Group built a mechanism to audit and monitor compliance with laws within the company.

Economic

In the chapter of About Lenovo, it disclosed its key business areas, number of global subsidiaries, number of markets worldwide, number of global employees, annual sales, its main two main divisions of global market, its products and market position in China and a brief introduction to its organizational management structure. In its highlights to its participation in China Informatization Project, it also reported on its leading market position and high brand recognition rate among Chinese rural consumers.

Lenovo disclosed more data in the chapter of Creating Commercial Values, which includes sales in Great China market, rate of PC sales growth, increase in market share, global sales distribution, its greatest awards from 2005 to 2008 and customer satisfactory rate. This chapter also reported on its safe R&D and production environments, the qualification of ISO9001, 24/7 customer service, customized services to business clients, enforcement of its CSR policy through out its supply chain, its sourcing policy and supports to suppliers, communication with distributors and trainings offered to distributors in rural markets.

The report included a record of the exact amount of donations to various charities and organizations. Under the chapter title of Employees, Lenovo China disclosed its employee

numbers, women and men ratio among senior managers, employee age structure, employee education levels and its salary levels in comparison with industrial average. A list of awards that Lenovo China received in 2008 was included in the report as an appendix.

Social

The report devoted a chapter to disclose Lenovo China's CSR activities on its employees. Aside from the quantitative data, it also disclosed on the following topics: its compliance with Chinese regulations on employee's welfare; the company's additional holiday bonus; the function and performances of labor unions; support to departing employees due to company's lay-offs; attention to employees' occupational health; its qualification of OHSAS18001; organized physical examinations to employees; programs, to care employees' and their families' mental health; career planning and development; various trainings for employees at different positions; and team building within the organization.

Lenovo highlighted its Lenovo China Volunteers Association (LCVA) and the activities carried out by the association, which included donation to the low in employees, donation to victims of natural disasters, blood donation to Red Cross, book donation to charity, tree planting, sponsorship to Paralympics and technical support to charity. It reported that over 1,600 people were participated in LCVA's activities. Along with its participation in the Informatization Project, Lenovo also donated money and computers to the project execution organization. It reported on its cooperation with technical schools that aimed at nurturing technical expertise. The company provided some trainee positions for university graduates. Lenovo proudly presented its supports and donations to the Sichuan earthquake victims in the report, especially its help to rebuild a high school in Guangyuan, Sichuan Province.

Environmental

Lenovo China disclosed a table that contains environmental targets and its progresses with each target. In a summary table, it reported that it used more recycled plastics in its products, its changes to recycled and recyclable materials in packaging, and it did not meet the target to eliminate the use of PVC and BFR (brominated flame retardant) in its products. It also reported its recycling activities to take back the used electronics. Eco product design,

auditing on environmental impacts of suppliers (it actually meant its contracted hazardous waste management companies) and activities to cut carbon emission were also a part of the table. Lenovo provided details for each item that was listed in the summary table. It claimed that all of its computer monitors reached "Energy Star 5.0" standard. In the disclosure of its environmental management system, it emphasized the compliance with its ISO14001 certificate. The table of the amount of WEEE and the pie chart of how it handled WEEE illustrated Lenovo's continuous efforts in this field. At the end of the CSR reports, it disclosed the quantitative data on its consumption of fuel, electricity and water, wastewater emission, carbon emission, non-hazardous waste and hazardous waste in Lenovo China's 2008 annual key performance indicators.

2009

Lenovo structured its 2009 CSR report similarly to its 2008 report, but with more details and examples to many of the topics. The report is consisted of 7 chapters: highlights of its CSR activities, about Lenovo, responsible competitiveness, creating commercial values (shareholders), employees, environment and philanthropy. Each chapter is displayed with a theme color, which helps a reader to distinguish the contents. In the letters from Lenovo Group's Chairman and CEO, they both stressed on the company's strategy to fight against climate change. The Chairman emphasized on business ethics, whereas the CEO valued the relationship with its stakeholders. Lenovo's Senior Vice President also highlighted the company's efforts to cut carbon emission. In addition to the highlights of its works in the Informatization Project and supports to charity start-ups, he also mentioned its excellent products and services. Lenovo was selected as one of Universum "top global employers".

The report disclosed more details of Lenovo's works in the Informatization Project, which it provided solutions for four typical problems in the rural markets. Besides presenting its carbon emission reduction targets, Lenovo reported on its plans and actions to cut emission. The targets are similar with the 2008's, except it mentioned new procedures to track carbon footprint. However, Lenovo disclosed more qualitative data and quantitative data on eco product design, carbon footprint management and green operations. The presentation of its

supports to charity start-ups included a flow chart, which illustrated how it selected organizations or projects to provide help. Again, it disclosed a list of charities that it facilitated in 2009.

Economic

Comparing with the 2008 report, the chapter of About Lenovo did not report more on the company's basic information, but it expanded its disclosures on its organizational management structure. It also devoted more pages to report its products and the awards on some of the products. It reported on the enforcement of high safety standard, which began with risk evaluation at product design stage, assessment on its suppliers and all the way through its production with inspection under Chinese Electronics Standard Institute (CESI). Lenovo used the examples of experiments in four of its laboratories and ergonomic design in products to demonstrate its attention to end users. During fiscal year 2009, Lenovo shifted its focus from big business clients to providing customized IT solutions to SMEs. It also displayed its improved customer services with an introduction to its new customer support service and mention of several awards on customer satisfaction. Furthermore, Lenovo managed its supply chain by following the standards that were issued by EICC. It invited EICC certified auditors to check CSR performance of its suppliers. To build a strong sales network, it reported on several programs that it created to train its distributors and sales persons. The disclosure of a growing sales figure highlighted its contribution to its shareholders. Again, in this report Lenovo disclosed its statistical data on its donations and employees.

Social

Lenovo's human resources management policies were not changed in 2009, but it disclosed more information for each topic that was covered in the chapter of Employee. For instance, it provided additional physical examination items for female employees, its prevention to H1N1 pandemic, various activities and hobby clubs for employees, special attention to the needs of female employees, and financial support to an employee's emergent medical care requests.

Lenovo continued its social practices by its LCVA in the fields of supports to Informatization Project, cooperation with technical schools, providing job opportunities to university graduates, tree planting and donations to Sichuan earthquake victims. As Lenovo shifted its responsibility focus to climate change, the report included a list of tree planting events.

Environmental

Lenovo improved the disclosure on its environmental activities in 2009 report. It explained its environmental policy as in compliance with laws and regulations; pollution prevention; lowering its products' environmental impacts; and continuously improvement. The report contains a table of a long list of Lenovo's environmental protection targets and results (whether the targets had been achieved). The targets are similar with the 2008's, but the table was relocated to the chapter of Environment, which is easy for report reader to understand. Lenovo disclosed a 3-layer structure of its global environment management. It reported that it issued Lenovo Employee Environmental Protection Guidelines to raise environmental awareness among its employees.

In addition to its eco product design, Lenovo claimed that it strictly followed the requirements of EU RoHS and REACH. It provided information on its products environmental impacts to consumers. Lenovo did not meet its target to stop using PVC and BFR in its products. However, it disclosed more information on the usage that complied with laws. It reported on its increased consumption of recycled plastics, as a part of its effort to cut carbon emissions. It also reported on its facilities for reducing energy consumption and recycling wastewater. It disclosed three accidents due to the failure of its air conditioning system. Moreover, Lenovo presented its works on improved packing designs that require smaller space, more shipment by sea transport, and recycle its packaging materials. Again in 2009 report, it disclosed on the situation of recycling used computers. Lenovo announced its memberships in various industrial association or committee to proof its leading position in eco product design.

2010

There are 8 chapters in Lenovo's 2010 CSR report. The basic structure is similar with previous years, except it devoted two chapters to disclose its products and services for their consumers and networks of its partners and distributors. In the letter from Lenovo's Chairman and CEO Yang Yuanqing, he first highlighted the company's achievement as the second largest PC manufacturer in the world and awards on its outstanding CSR performances. He announced a Senior Vice President to be the chief CSR development executive. Next, Yang presented the company's accomplishments to reduce its carbon emissions, which included purchase of renewable energy credits, carbon trade, eco product design, use of recycled plastics, low carbon logistics and enforcement of EICC with its suppliers. The President of Lenovo China also highlighted the products and services, along with he stressed on the company's success in building networks with distributors, creating values for shareholders, improved human resources management, carbon emission reduction and philanthropy works.

Economic

In addition to the disclosure of sales figures, sales division by regions, sales division by product types, market share, geographical locations, employee number, staff ratio of women and men, number of new patents and customer satisfactory rate, Lenovo also disclosed its marketing strategies for fiscal year 2010. It reported on the employee structures based on occupation groups and ethnicity. Furthermore, it disclosed its opportunities and threats in market, redefined customers, partners, investors, employees, environment and society as its stakeholders. The report contains a table of Lenovo's stakeholders, communication channels with various stakeholders and responsibilities to respective stakeholders.

Lenovo created an internal supervision framework to monitor the code of conduct and to prevent corruption. To improve the enforcement on protection to intellectual property rights, it reported its cooperation between one of the largest electronics retail chain in China and Microsoft.

In the chapter of For Customers, with more pictures and charts, Lenovo increased the amount of its presentation to its services and products. In the newly added chapter of For Partners, Lenovo disclosed on its responsible sourcing management. Its suppliers were required to fulfill the requirements of EICC, to provide self assessment and to be inspected by a third-party auditor. Lenovo also regarded its distributors as partners. It further expanded its training system for sales persons and distributors.

Social

Lenovo devoted 2 pages on its participation in Shanghai Expo as an annual CSR highlight in the beginning of the report. Its biggest contribution to the event was its IT infrastructure support. LCVA organized three groups of children of migrant workers to visit Expo.

Based on its existed HR policies, Lenovo disclosed its improvements in occupational safety management, activities regarding cultural diversity, introduction to flexible working hours, and support to work-life balance. For the first time, Lenovo disclosed statistical data on how its mental health program worked and presented its welfare to female employees under the title "Women in Lenovo Leadership".

Lenovo clearly defined its philanthropy works in four areas: informatization, environmental protection, education and donations to natural disasters victims. However, the actual activities did not change much from previous years. 2010 was not an easy year, Lenovo reported with pictures and text details on its various donations to China and Japan.

Environmental

Lenovo relocated its disclosures on the amount carbon emission, carbon emission reduction targets and plans and detailed information its environmental protection activities, from the chapter of Environment to the beginning its 2010 report, under the chapter of Highlights of 2010 CSR activities. This change reflected that managing carbon emission is among the highest priorities of Lenovo's CSR targets. Besides the environmental activities that had been performed through out 2008 and 2009, Lenovo reported on its improvements in quantifying the measures on its carbon emission. It also disclosed its participation in Earth Hour.

Beijing CW Technology Co., Ltd.

For the fiscal years 2008-2010, each of the Beijing CW Technology's CSR reports was published as an attachment to its parent company's annual reports.

2008

Beijing CW Technology's 2008 CSR report of 6 pages was divided into five sections, namely, preface (4 paragraphs), introduction to the company (6 paragraphs and 1 table), the practice to fulfill corporate social responsibilities (19 paragraphs), self evaluation on the fulfillment of CSR (1 paragraph) and CSR fulfillment plan for fiscal year 2009 (3 paragraphs). It named its responsibilities as compliance with business ethics, production safety, occupational health, protection of employee's rights and resources conservation. CW Technology mentioned that its development should be harmonized with employees, society and nature. The company identified the report as a practice to take part in building Chinese government aimed "harmonized society". The report also serves as a tool to improve its communication with the communities. The last paragraph in preface section pointed out that CW Technology's report is a summary to its fulfillment to China's Company Law No. 5 (company's activities must comply with laws and regulations, abide by social morality and business ethics, honest and trustworthy, accept supervisions of government and public, commitment to social responsibility). The section of practice to fulfill CSR was further divided into 5 areas covering protection of shareholders and creditors' rights and interests, protection of employee's rights and interests, protection of other stakeholders' rights and interests, environment protection and participation in public welfare projects. CW Technology had devoted more than half of this section to disclose its practices to protect the shareholders and creditors' legitimate rights and interests.

Economic

The company provided its definition to CSR in the preface section: While making profits and being responsible to shareholders, company is also responsible for stakeholder and the whole society, to pursue the target of harmonized economic and sustainable development.

In the introduction to the company, CW Technology listed its date of establishment and the date to be listed in Shanghai Stock Exchange. Its transfer of ownership in 2000, business license numbers, registered capital amount, the name of the company's legal representative and the company's business areas. This section included a table to explain CW Technology's capital structure.

It established a shareholder protection system and revised a number of company rules to comply with Company Law, Securities Law, Code of Corporate Governance for Listed Companies, Guidelines for Articles of Association of Chinese Listed Companies and Rules Governing the Listing of Stocks on Shanghai Stock Exchange. It also revised its company CSR disclosure mechanism to ensure shareholders' rights of information of the company, which was in compliance with China Securities Regulatory Commission's Administrative Measures for the Disclosure of Information of Listed Companies, and CW Technology's Articles of Association.

CW Technology reported an awarding title that was given by local government, to prize its outstanding performance on intellectual property rights protection. The report disclosed that CW Technology was the contractor for many state infrastructure projects, and some of its technical innovations outperformed its foreign competitors. The company also proudly reported it had participated in and presided over the development of four national and industry standards on ATMs and automatic vending machines.

Social

CW Technology regarded its effort to train and maintain employees as activities to improve its competitiveness. On its practices to protect the employee's rights, CW Technology disclosed that it has built a comprehensive remuneration and incentives system to motivate

employees; offered regular physical examinations for employees' occupational health; supported various trainings for employees; structured the company's supervisory committee with 2 employee supervisors out of 5 members. The report noted that a strong corporate culture and high staff quality are the key for CW Technology to meet the expectations of investors and stakeholders (namely, suppliers, distributors and customers).

On contribution to community, the company disclosed that its donations and volunteer team to support the victims of earthquake in Sichuan Province, its organization to help employees with low income.

Environmental

The company reported that it followed ISO 9000 and ISO 14000 series standards on its environmental policy, tried out energy saving materials. In the section of self-evaluation, CW Technology affirmed its efforts and practice to fulfill CSR, and noticed the room for improvement to meet the expectation of its stakeholders.

CW Technology set its CSR target for 2009 in three areas: taking more responsibilities to its shareholders, improve the protection to employees and participation in public welfare projects. The plan repeated what the company had practiced in 2008.

2009

Beijing CW Technology's 2010 report followed the same structure as its 2008 report. The 6 page report divided into 4 sections: preface (4 paragraphs), introduction to the company (5 paragraphs), the practice to fulfill corporate social responsibilities (17 paragraphs) and self evaluation on the fulfillment of CSR (1 paragraph). The report was issued by Beijing Electronic Zone Investment and Development Co., Ltd, which owns Beijing CW Technology, some of its disclosed information is relevant to electronic industry.

Economic

The first section reported the same information that was disclosed in 2008, with additional information on shareholder dividends, payment of tax, salaries, wages and interests. The company reported more managerial and capital structural changes in 2009. At the end of the report, the company announced its ultimate target as continuously development to reward its shareholders. Its policy and practice on protection to shareholders and employees' rights remained the same as the previous year.

Social

The company disclosed its donation amount of 1 million RMB to local charities.

Environmental

It disclosed further information on its environmental protection activities, namely, recycling water, using rainwater for plants, solar powered street lamps and geothermal heating.

2010

Beijing CW Technology's 2010 report followed the same structure as its previous two years report. The 9 page report divided into 4 sections: preface (4 paragraphs), introduction to the company (5 paragraphs), the practice to fulfill corporate social responsibilities (26 paragraphs) and self evaluation on the fulfillment of CSR (2 paragraphs). Again, the report was issued by Beijing Electronic Zone Investment and Development Co., Ltd. Despite of the number of pages increased for 2010 report, the actual disclosures on its CSR activities in the economic, social and environmental dimensions stayed the same.

4.2 Comparative Analysis and Summary of Key Findings

There are remarkably few similarities in business areas between the sample companies. Toshiba Dalian and Canon Dalian are comparable due to their sizes. CW Technology and Lenovo China are far different in almost every account, except the location of their

headquarters - Beijing. Each of the four companies provided its own interpretation to CSR. Regardless of the differences in definitions, they all mentioned responsibilities to stakeholders, consumers and environment, at which environment is the mostly addressed. All of the four selected companies are qualified with ISO 9001, ISO 14001 management systems. TDL and Lenovo are also qualified with OHSAS 18001 to ensure the safety and health of their employees. Lenovo is the only company mentioned the membership and enforcement of EICC. All of the sample companies have reported on the renewal of their certificates, except CW Technology. Besides their emphasizes on law compliance, Lenovo and Canon Dalian were both participated in the development of regulations that are to standardize the measures on electronics' environmental impacts. CW Technology oversaw the formulation of several standards related to automation technology. Table summarizes the CSR issues that were disclosed in each of the sample companies' reports. It is crucial to note that, with the differences between reports volumes (in pages), the reporting detail on each of the issues may be varied significantly.

TDL and Canon Dalian followed the concepts of their parent companies. Both emphasized on the importance of environmental conservation. Their reports are similar, in terms of the structure and contents of disclosures. The reports' layouts might not be the best, but these two companies attempted to quantify all the measures on their environmental impacts. Reader can easily track and compare their performances from one year to another. However, they both disclosed extremely limited information on its contributions to local communities and care of employees. This is particularly true with TDL. One cannot tell whether they did not have other CSR activities than environmental protection or they did not disclose those activities. Nevertheless, this is in consistence with Qiao, et al., (2009, p45)'s research results - most companies' CSR reports in Northern-Eastern China are merely environmental reports.

CW Technology did not make a significant change to its CSR policies and activities through out the years. It declared a number of laws and regulations that it complied to produce the reports. Instead of a genuine interest in CSR management and reporting, it provided the image that the reports were prepared for fulfill its obligation. Some of its disclosures are consistent through out the three years, for instance, it mentioned its qualification of ISO9000

and ISO14001 in 2008 report, but never reported on its progress again in later years. Its CSR reports are the shortest and most generalized among the four companies. However, it is still possible to discover an increase in the environmental disclosures, one paragraph in 2008 report to two paragraphs in 2010. Comparing between the disclosures on CW Technology's CSR, the contribution of its philanthropy activities is significant. This proved philosophy is often referred as the ethic norm to Chinese entrepreneurs (Jiang, 2006; Zhao, 2007; Li & Gong, 2009; Hu, 2010).

Lenovo produced best reports among the samples. The reports represented a comprehensive view on its CSR performance with detailed descriptions and quantitative measures. As the global second largest PC manufacturer, Lenovo is expected to be a leader in many perspectives. Lenovo shifted its CSR focus from social issues to environmental issues under the theme "carbon emission reduction". As a multinational company, it has more experience in eco-product design, measure on environmental impact, RoHS control and safe production. Therefore, it helped the Chinese government to develop many regulations on those issues. Nevertheless, with an increasing amount of disclosure on its products and services from year to year, reader can get the impression that Lenovo's CSR reports are used more as promotional materials. The phenomenon reflects that it considers consumers as the most prominent stakeholders. Furthermore, as an influential consumer brand, Lenovo diversified its CSR strategy to community contribution in four main areas: participation in China Informatization Project, cooperation with education institute, environmental protection and poverty alleviation and disaster relief.

	Canon Dalian	Toshiba Dalian	Lenovo China	CW Technology
Reports				
Stand-alone	✓	✓	✓	✗
CSR Strategy or Target Statement	✓	✓	✓	✓
Set Annual Targets for CSR	✓	✗	✓	✗
Guidelines to Prepare Reports	-	GRI	GRI; CASS-CSR	CSRC's Administrative Measures for the Disclosure of Information of Listed Companies

Legal and Regulatory				
In Compliance with Laws and Regulations	✓	✓	✓	✓
Participation in Law or Regulation Making	✓	✗	✓	✓
Pay Taxes	✓	✗	✓	✓
Economic				
Sales Figure	✗	✗	✓	✗
Market Share	✗	✗	✓	✗
Sales Contribution	✗	✗	✓	✗
Main Business Areas	✓	✓	✓	✓
Business Strategy	✓	✓	✓	✓
New Product or Technology	✓	✓	✓	✓
Company Value Statement	✓	✓	✓	✓
Organizational Structure	✗	✗	✓	✗
Capital Structure	✗	✗	✗	✓
Registered Capital Amount	✓	✓	✗	✓
Date or Year of Establishment	✓	✓	✓	✓
Total Amount of Investment	✓	✓	✗	✗
Name of Investors	✓	✓	✗	✓
CSR Management and Supervision Committee	✓	✓	✓	✓
Employee Number	✓	✓	✓	✗
Employee Age Structure	✗	✗	✓	✗
Employee Women and Men Ratio	✗	✗	✓	✗
Employee Education Level	✗	✗	✓	✗
ISO9000 Series Management System Certificate	✓	✓	✓	✓
Social				
Support to Education	✓	✓	✓	✗
Disaster Relief	✓	✗	✓	✓
Support to Named Charities	✓	✗	✓	✓
Participation in Local Environmental Protection Events	✓	✓	✓	✗
Employee Training and Promotion	✓	✗	✓	✓
Labor Union and Its Function	✓	✗	✓	✓
Occupational Health and Safety for Employees	✓	✗	✓	✓
Facilities for Employees	✓	✗	✓	✗
OHSAS18001 Occupational Health and Safety System Certificate	✗	✓	✓	✗
Safety Drills	✓	✓	✓	✗
Hobby Clubs or Organize Activities for Employees	✓	✓	✓	✗

Supports to Employees with Economic Difficulties	✓	✗	✓	✓
Participation in Informatization Project	✗	✗	✓	✗
Environmental				
Carbon Emission Reduction Plan	✓	✓	✓	✗
Key Indicators for Emissions and Waste	✓	✓	✓	✗
Eco-Product Design	✓	✓	✓	✗
Energy Saving Products	✓	✓	✓	✗
Control of Hazardous Substances	✓	✓	✓	✗
Use of Recycled Materials	✓	✓	✓	✗
Green Sourcing	✓	✓	✓	✓
Eco-Production	✓	✓	✓	✗
Low Carbon Logistics	✓	✓	✓	✗
Waste Management and Recycling	✓	✓	✓	✓
WEEE Recycling	✓	✓	✓	✗
ISO14000 Series Environment Management System Certificate	✓	✓	✓	✓
New or Replacement to More Environmental-friendly Equipments or Facilities	✓	✓	✓	✓
Environmental Education for Employees	✓	✓	✓	✓
Supervision on Environment Management	✓	✓	✓	✗
EICC Compliance	✗	✗	✓	✗

Table 5 Summary of Sample Companies' CSR Disclosure

5. Synthesis of Theoretical Research and Empirical Research

Ten years ago, the concept of corporate social responsibility was an unfamiliar idea for most business practitioners in China and many in other countries. However, with a growing awareness to the social and environmental issues that are associated to globalization, the importance on CSR has become an essential concern of business leaders. China's impact on the global economy has been continuously increasing, Chinese companies are also raising their consciousness to their impacts on society and environment. This study paid a special attention to the CSR issues that are addressed in Chinese electronic sector, due to its economic importance and the leading position in corporate social reporting. However, the presumption on similar reporting frames or industrial standards between electronic companies are not found from the empirical data.

The theoretical research indicated that government is the driving force for CSR development in China. This can be partially supported from the empirical data. Two of the sample companies' reports - Canon Dalian and TDL - are published on local Environmental Protection Bureau' official site instead of other channels of their own. CW Technology's reports referred to numerous laws and regulations in preparing the contents. However, there is no evidence for the second most influential factor that was found in theoretical research - media. Many academic researches pointed out that the government target to build harmonious and stable society, provided the ground for CSR boom in China. Due to ownership difference, only the SOE CW Technology mentioned this issue in its reports.

Yin, Yu and Wu (2005b) found that companies with export business are better informed in CSR than the companies with domestic business. This point is well-reflected in the sample reports. CW Technology's main market is in China. Its reports quality and quantity are the lowest among the four selected companies. Because of the lack of knowledge in CSR, researches showed that some Chinese companies mistaken charity as a most critical issue in social responsibility. With both detail information and quantitative data available,

disclosures on philanthropy works contributed a significant portion of CW Technology's reports.

Theoretical research indicated a high recognition on ISO management systems standards among Chinese companies, such as ISO 9000, ISO 14000 and OHSAS 18000. The selected companies' reports proved that arguments. All of the sample companies are qualified with ISO 9000 and ISO 14000 standards. Furthermore, law compliance has been mentioned in every company's reports. One should notice that industrial leaders such as Canon and Lenovo were the pioneers in environmental management in electronic products development and eco-design. They participated in the development of regulations in those areas with Chinese government. Therefore, their practices are beyond the scope of existing legislation.

The discussions on worker's rights and welfare contribute a significant part to CSR researches in electronic manufacturing. It is also emphasized by the sample companies, CW Technology, Canon Dalian and Lenovo disclosed on their employee welfare and development programs, but TDL only reported on its environmental education and trainings to its employees. Furthermore, academic researchers showed that electronic companies are the leaders in environment reports, except for the case of CW Technology. Canon Dalian, Lenovo and TDL all made good disclosures on their environmental impacts, green sourcing, eco-design and emissions amount. Canon Dalian and Lenovo also stressed on their efforts in WEEE recycling. In addition to the concern on the labor, product safety for consumers is also highly important. Canon Dalian, TDL and Lenovo reported on their design, inspection and testing procedures to detect possible threats to their customers.

From the empirical data, one can realize that the selection of CSR disclosure is subjected to the expected readers. For instance, Canon Dalian and TDL are subsidiaries of Canon Group and Toshiba Group respectively. Their CSR targets and strategy are in line with their parent companies. CW Technology's reports were published as attachments to their annual reports. They have devoted many paragraphs to disclose their responsibilities to their shareholders. Lenovo is a globally recognized consumer brand. Its Chinese division reported many

developments and achievements on its products and services. Regardless to each company's definition to CSR, they all applied stakeholder theory to address different interest groups.

In general, CSR disclosures can partly reflect how companies view and act on their responsibilities. As a conclusion derives from the CSR reports comparison, multinational companies in China perform better than the Chinese domestic companies. Because of their larger business scope - more stakeholders are involved, more experiences in management and better knowledge in the laws and regulations. In the combination of the findings from the theoretical research and the evidence from the empirical data, there are three CSR issues are to be highlighted in this study:

1. **Carbon Emission Reduction.** Even though, the classic definition for CSR does not cover the aspect of environmental concern, the rise of sustainability thinking and the increase awareness to severe natural disasters have made the environmental responsibility as a priority issue of today's companies. In spite of a global trend in environment conservation or Chinese government's target to cut carbon emission, fighting against global climate change with a special focus on CO₂ is the common theme among the electronic companies in China. Each of the selected company has disclosed its strategies or action to reduce the energy consumption. As a part of the effort, companies have paid significant attention to recycling activities.
2. **Emphasis on the basic norm of business ethics - honesty and integrity.** Chinese scholars found honesty and integrity as a unique dimension from Chinese business leaders' view on CSR, but in every sample company's CSR statement, conducting business honestly with integrity was mentioned, regardless of its ownership, business domain or company size. Nevertheless, it is not clear how companies can ensure such conduct, as no disclosure on details is found from the empirical data, except Lenovo China reported on its internal policies on fair competition and anti-corruption.
3. **In compliance with ISO standards or similar globally recognized standards.** ISO 9000 series management system standards and ISO 14000 series environment

management system standards are widely applied in China. Initially, the certifications were required by foreign purchasers in the purpose of guarantee a similar management standard through out their supply chains. Later, due to the high popularity and recognition of these standards in China, a large number of companies have acquired qualifications from International Standard Organization or industrial associations, whether their target consumers are in China or abroad. As the legislation enforcements are insufficient in China, companies regard by complying with these standards, they represent a higher quality of management. Hence, conducting a more responsible business than the companies that are not certified with international standards.

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Appendix 1 Key Indicators of CSR Development in China

First stage: The emerge of CSR topic (1984-1999)

Government / Legislation	<p>Mile stone: 1984 "The Decision of CPC Central Committee on Economic Reform": Separation of politics and business</p> <p>1989 Environmental Protection Law of the People's Republic of China</p> <p>1992 Trade Union Law of the People's Republic of China</p> <p>"The People's Republic of China Company Law" effective as July 1, 1994</p> <p>"The People's Republic of China Consumer Rights Protection Law" effective as January 1, 1994</p> <p>"The People's Republic of China Labour Law" effective as January 1, 1995</p> <p>Donation Law of the People's Republic of China effective as September 1, 1999</p>
Enterprises	Companies had become independent manufacturers and operators, and gradually the forms of ownership diversified into: SOEs, private enterprises and foreign enterprises
Academic	<p>1985 'Look Forward' published the article "CSR—A visit to Southern Chemicals Companies Catalyst Factory"</p> <p>In 1990, scholar Yuan Jiafang edited the first Chinese CSR theory study "Corporate Social Responsibility"</p> <p>1999, Liu Junhai published "Company's Social Responsibility"</p>
CSR Movement	<p>Project Hope began in 1989</p> <p>1994 China Society for Promotion of the Guangcai Program (CSPGP) was established to promote anti-poverty Guangcai Program</p> <p>1994 China Charity Foundation was established for charity activities</p>

Second stage: Development of CSR focused on workers and debates on the content of the CSR Concept (1999-2005)

Government / Legislation	<p>The People's Republic of China "Foreign Funded Enterprises Law", "Foreign and Chinese Enterprises Joint Ventures Law" effective as October 30, 2000</p> <p>December 11, 2001, China became a member of WTO.</p> <p>"The People's Republic of China Prevention and Control of Occupational Diseases Act" effective May 1, 2002</p> <p>"The People's Republic of China Production Safety Law" effective November 1, 2002</p> <p>"The People's Republic of China Cleaner Production Promotion Law" effective as January 30, 2003</p> <p>On November 15, 2002 16th Central Committee of the CPC: set "a more harmonious society" as one of the goals of building a moderately prosperous society</p> <p>October 10-14, 2003 The 3rd Plenum of 16th Central Committee of the CPC: Establish a comprehensive, coordinated and sustainable scientific development concept that with a consistent focus on people, to promote a comprehensive development of economic, social and</p>
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	<p>human</p> <p>"The People's Republic of China Administrative Licensing Law "effective as July 1, 2004, September 16-19, 2004, The 4th Plenum of 16th Central Committee of the CPC: Proposed to build a harmonious socialist society; emphasis "Raise ability of building a harmonious society" as one important aspect as CPC's ability</p>
Enterprises	<p>Participated in UN Global Compact: more than 50 Chinese companies have joined the initiative by 2005</p> <p>Export enterprises: Shenzhen Institute of Contemporary Social Observation is estimated that by 2005, over 100,000 Chinese exporting companies were audited or certified by some form of CSR standards</p> <p>Corporate Social Responsibility Declaration: 2005 Corporate Social Responsibility of the Beijing Declaration</p>
Academic	<p>Symbolic event: 1999, "Research on Transnational Corporations' CSR" by Tsinghua University Centre for Contemporary China</p> <p>Symbolic event: SA8000 was widely disseminated by media, caused a broad participation and debates among the parties concerned</p> <p>Symbolic event: "China CSR Conference"</p>
CSR Movement	<p>CSR organizations: The Employer Work Department of the China Enterprise Confederation (CEC) Global Compact Promotion Work, China Committee of Corporate Citizenship (CCCC), China Business Council for Sustainable Development, Chinese Confederation for Corporate Social Responsibility, Global Village, CSR MAP, Guangdong International Corporate Social Responsibility, Shenzhen Institute of Contemporary Observation</p> <p>CSR conferences and forums: 2002, "21st Century China Corporate Social Responsibility Forum (Xi'an); Labor relations in the context of globalization and corporate social responsibility seminar (Renmin University of China); 2003, Sino-UK "Sino-UK CSR Year over corporate development of high-levels seminar (Chengdu); Philanthropy Times: 2004 Chinese philanthropist list; 2005 Sino-EU Corporate Social Responsibility International Forum; Global Compact Summit 2005 first held in China (Shanghai); 2004 Corporate Social Responsibility Series Roundtable (GTZ); 2005: China's first corporate social responsibility management standards and systems CSC9000T released (China Textile Industry Association)</p>

Third stage: Internalized CSR development within Chinese context (2006-)

Government / Legislation	<p>Important symbol 1: January 1, 2006, the amendment "People's Republic of China Company Law" as effective, of which required companies should "committed to social responsibilities".</p> <p>Important symbol 2: March 2006: Premier Wen Jiabao praised the State Grid Corporation of China on its released of Corporate Social Responsibility Report: "It was very well done, enterprises should be socially responsible, and consciously accept the social supervision."</p>
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	Important symbol 3: October 2006, 6th Plenum of 16th Central Committee of the CPC, adopted the decision of the "CPC Central Committee on several major issues of building a socialist harmonious society", clearly pointed out "to improve social responsibility"
Enterprises	Milestone: Large SOE State Grid Corporation of China released the first Chinese SOE CSR report Foreign-funded enterprises: Declaration on Corporate Social Responsibility by China Association of Enterprises with Foreign Investment (CAEFI)
Academic	January 2006, "Stakeholder and Business Ethic"; March 2006, "CSR action guide"; April 2006, "Corporate Social Responsibility and its mechanism for promoting" May 2006, "Chinese Social Responsibility Report"; June 2006, "A must-read for Global Citizens"; July 2006, "Corporate Ethical Responsibility theory: Harmonious coexistence between corporations and stakeholders"; October 2006, "Report on Chinese Labor Relations"
CSR Movement	February 2006, China Corporate Social Responsibility International Forum; March 2006: The International Exhibition of Excellent Examples of CSR and the China Corporate Social Responsibility (Shanghai) International Forum; July 2006: China-EU High-Level Forum of Corporate Social Responsibility; November 2006, 2006 Building a harmonious society and corporate social responsibility (Shenzhen) Forum, with National People's Congress Vice Chairman Jiang Zhenhua attended the forum; Future 500 2006 annual meeting; the first Innovation Award for public welfare; survey of corporate social responsibility; Shenzhen published "The guidelines for promoting corporate social responsibility"; Shenzhen Stock Exchange released the "Guidelines on social responsibility of listed companies"

Adopted from Yin, Li & Wu (2007), Stages of CSR development in China

Appendix 2 Chinese Regulations on CSR Reporting

Time	Guideline	Organization	Important Issue
Sep-06	Shenzhen Stock Exchange Social Responsibility Instructions to Listed Companies	Shenzhen Stock Exchange	Article 5: Companies shall, as required by these Instructions, perform their social responsibilities, make regular evaluation and issue voluntary disclosure on the performance. Article 20: Banking institutions should submit annual CSR report to regulatory organization by end of June each year. Encourage banking institutions disclose CSR reports on website
Apr-07	Instruction Opinion on CSR for Shanghai Banking and Financial Corporations	Shanghai Division of the China Banking Regulatory Commission	Article 22. Enterprises that voluntarily disclose environmental information in accordance with Article 19 of these Measures may release to the public their environmental information on the media, internet or by other means or in the form of disclosure of their annual environmental reports.
Apr-07	Measures for the Disclosure of Environmental Information (for Trial Implementation)	State Administration of Environmental Protection (dissolved)	6 enterprises were granted the title of Dalian "Environmental Protection Model Enterprise". At the beginning of 2008, another 7 enterprises joined the testing
Jun-07	Dalian started to promote "Corporate Environmental Social Reporting System"	Dalian Environment Protection Bureau	Encourages enterprises producing annual CSR report, make the basic documents for enterprise CSR system evaluation
Jul-07	Corporate Social Responsibility Guidelines	Shanghai Quality and Technical Supervision	The corporate representatives' main responsibilities are CSR activities, as required, act on behalf of corporations to report annual CSR report to all employees through worker union congress
Jul-07	Instruction Opinion on Establishment of CSR Reporting System	Changzhou Municipal Worker Union	

Dec-07	CSR Guidelines for Banking Financial Institutions	China Banking Regulatory Commission	Each banking financial institution is required according to its situation, to choose appropriate manner to release CSR report Banking financial institutions, as required, regularly submit CSR fulfillment report and customer satisfaction evaluation report to regulatory organization, by each year
Dec-07	CSR Guidelines for Shanxi Banking Financial Institutions	Shanxi Division of the China Banking Regulatory Commission	June 30 submit last year's CSR fulfillment report to regulatory organization Guideline 18 requires enterprises having experienced in CSR work, should establish an information releasing mechanism, providing update and regular information about CSR performance and sustainable development
Jan-08	Guidelines to the State-owned Enterprises Directly under the Central Government on Fulfilling Corporate Social Responsibilities	State-owned Assets Supervision and Administration Commission of the State Council	
Mar-08	CSR Guidelines to Fujian Listed Companies, Securities Trading Institutions and Securities Service Institutions	Fujian Division of Securities Regulatory Commission	Listed Companies are required to regularly release CSR report or sustainable development report
Apr-08	Set 2008 as 'The Year of Fujian Banking Industry Corporate Social Responsibility'	Fujian Division of Banking Regulatory Commission	Encourages the representative banks of each region to release CSR report as soon as possible, other branches should also promote and disclose CSR fulfillment
May-08	Notification on Improving Listed Companies' CSR Fulfillment', 'Guidelines to Shanghai Stock Exchange Listed Companies Environmental Information Disclosure'	Shanghai Stock Exchange	Encourages listed companies to publish annual CSR reports on Shanghai Stock Exchange's website at the same time of publishing annual reports
Jun-08	China Sustainability Reporting-Guidelines for Apparel and Textile Enterprises	National Textile and Apparel Council	National Textile and Apparel Council encourages all apparel and textile enterprises to produce CSR report by following the guidelines

May-10	Administrative Measures on Insurance Companies Information Disclosure	China Insurance Regulatory Commission	Details of what to disclose, requires companies to report the changes of the companies on their websites, if they fail to report under the required period, they need to provide the reasons for stakeholders
December-11	Environment, Social and Governance Reporting Guide	Hong Kong Exchanges and Clearing Limited	Companies can report on a voluntary base to select what to report within the guided sectors