

**Influences behind the increasing trends of
Corporate Environmental Reporting in China**

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Abstract

Chinese companies have been increasingly practicing corporate environmental reporting (CER). However, most research investigating this phenomenon are empirical studies that focus on trends and determinants. What influences Chinese companies to practice CER is not clear. In particular, stakeholders of the reporting are under-explored. Therefore, this study aims to investigate the influences on Chinese CER using a stakeholder perspective.

Previous studies in developed countries have found that stakeholders of CER are diverse and are in many ways competitive in terms of the resources they demand from companies. However, as a state capitalist country, the government in China plays a very important role in Chinese economics. The country is now heading towards a more market economy and is becoming an important part of the global economy. As a result, this study attempts to investigate who are the important stakeholders of Chinese CER and, in particular, whether Chinese and/or Western influences are behind the increasing trends.

A mixed method approach, using Content Analysis and Discourse Analysis, is used in this study. Content Analysis is firstly performed to examine the direct influence of the Chinese government and evidence of Western influence. However, this study posits that the Chinese government's influence on CER is not only direct, but also indirect. This is difficult to examine using Content Analysis, therefore, Discourse Analysis is used as a supplementary method to examine the Chinese government's indirect influences and mechanisms for exerting their power.

The study contributes to the current literature in that it extends the understanding of stakeholder power on CER in a state capitalist country. In particular, it examines

how Stakeholder Theory is manifested in the context of a strong ideology-based political system. The findings of the research indicate that, compared to those in free market capitalist countries, the Chinese government's stakeholder power on CER is much stronger. Significantly, however, in contrast to previous research that has largely focused on the Chinese government's voting power (that is, they use state ownership as a proxy for state power), the results of this study show that the Chinese government uses three different powers (political power, voting power and economic power) in different ways to influence CER in China. This increases understanding of the nuances and complexities of the Chinese context and how it impacts on CER.

In addition, the findings indicate that, while the Chinese government's emphasis on the environment significantly increases the quantity of CER, it does not improve its quality. This raises the possibility that the Chinese government's power is so strong that CER ultimately becomes a legitimacy tool that corporate management uses in response to the government's requirements. However, it is shown that Western influence has become more noticeable in recent years, as the Chinese market becomes more open. Some of the more advanced companies examined in this study realise that protecting the environment is not just necessary to respond to the Chinese government's policy but, more importantly, it is a part of modern business. The prevailing government power is thus mitigated by the changing economic circumstances. To operate within the competitive global environment, companies must provide comprehensive CER. As the Chinese context continues to develop it will remain as a fruitful research ground to observe this phenomenon in the future and therefore this study also identifies some important areas for further research.

Declaration

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due referenced is made in the text.

Signature: _____

Hui SITU

Date: _____

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Chapter 1: Introduction

1.1 Introduction

In recent years, Chinese firms have been increasingly practicing environmental reporting (Gao 2011). However, the influences on this increasing trend are not clear. Therefore, this study investigates environmental reporting provided by Chinese listed companies, and examines what potentially influences these companies to disclose environmental information, using a stakeholder perspective. Previous studies in developed countries have found that stakeholders of Corporate Environmental Reporting (CER) are diverse and are in many ways competitive in terms of the resources they demand from companies. However, China is traditionally a highly centralized country and, as such, the Chinese government plays a very important role in Chinese economics. The country is now heading towards a more market-oriented economy and is becoming a very important part of the global economy. As a result, this study attempts to investigate the important stakeholders of CER in China, in particular, whether Chinese and/or Western influences are behind the increasing trends.

In this chapter, a brief background to environmental disclosure is introduced first, followed by the research problem, research questions and research objectives that arise from the research problem. Justification of the research is then discussed. The chapter concludes by outlining the structure of the thesis.

1.2 Background

In the face of a range of global environmental problems such as climate change, there is widespread agreement that changes must be made to combat or alleviate the

ongoing pressures on the global environment as it is clearly unsustainable (Deegan 2009a). It is also generally accepted that business organisations must change the way they do business and change the traditional business goals and principles of pursuing maximum profit (Deegan 2009a). As environmental protection continues to become part of most communities' expectations, the increasing pressures force corporate entities to provide more information about how they have performed to protect the environment and therefore, more and more corporate entities are now very keen on disclosing voluntary environmental information to show their concern about the environment. According to KPMG (2008a), environmental disclosure is now a common activity of corporations in developed countries. Interestingly however, unlike traditional financial accounting, environmental reporting is predominantly voluntarily (Deegan 2002; Dobbs and van Staden 2011). Therefore, the reasons why companies are willing to report voluntary environmental information have attracted many researchers' attention.

Previous studies conducted in developed countries show a variety of influences on providing corporate environmental disclosure (Deegan 2002). Some suggest accountability is the reason why companies report voluntary environmental information (Hasnas 1998), while others argue that there might be some economic advantages (Friedman 1962). Further, there is evidence that, in order to reduce the threat of further development of regulations, companies choose to sign up to particular codes of conduct and as a result disclose voluntary environmental information (Deegan and Blomquist 2001). Others consider that companies put their efforts into winning environmental, social and sustainable reporting awards, which might positively influence the reputation of the company (Deegan and Carroll 1993), and this is then disclosed as a form of reputation management.

By far, however, the largest body of research in this area has been conducted from either a stakeholder or legitimacy perspective. The former suggests that CER is a device that companies use to manage their particular stakeholder groups (Deegan 2008). For example, as environmental management becomes part of lending institutions' risk management policy, companies are willing to disclose environmental performance information to meet lending institutions' borrowing requirements. Also, as ethical investment increases in the capital market, companies provide environmental information to attract ethical investment funds (Mitchell et al. 1997; Parmar et al. 2010).

Alternatively, many studies reveal that companies disclose voluntary environmental information to legitimise their environmental activities or to deflect attention away from environmental concerns, rather than accept real accountability for their actions. Similar findings have been found across various countries (Patten 1992; Deegan et al. 2000; Dobbs and van Staden 2011; Guthrie and Parker 1989). These perspectives are discussed further in Chapter 3.

In addition to the predominance of these two theories, the majority of studies on social and environmental reporting, have been undertaken on companies operating in developed countries such as the UK, USA and Australia, while studies on environmental disclosure in developing countries is comparatively rare (Gao 2009, 2011; Hossain et al. 2006; Taylor and Shan 2007). Research that does exist shows that compared to the advanced environmental disclosure practices in developed countries, corporate social and environmental disclosure in developing countries is quite under developed and low (Gao 2011).

Moreover, a number of scholars claim that the unique characteristics of different countries may result in differences in the corporate environmental disclosure activities seen in each country (Gao 2011). In particular, developing countries are at a different stage of economic development from developed countries; therefore, to understand broader corporate environmental disclosure activities around the world, more studies on the context of developing countries are essential.

As a state capitalist country, Chinese culture, political system and economic system are very different from other countries, in particular those in free capitalist countries. As a state capitalist country, in China, the State (stands for the Chinese government in this study) plays an important role in the capitalist process. Moreover, the prevailing political ideology has been emphasised throughout the enactment of Chinese reform by the state leaders (Lieber 2013). It therefore provides a very valuable sample on which to undertake research on social and environmental reporting. China is the biggest developing country in the world and it is currently widely regarded as a new growth engine of the world's economy (Qu and Leung 2006); however, corporate social and environmental disclosure in China is in its very early stages. Before 2005, there were no corporate entities disclosing social and environmental information at all, however, this is beginning to change (KPMG 2008a, 2008b; Situ and Tilt 2012; Situ et al. 2013). Since 2005, when China's chairman Hu Jintao introduced a new political commitment of building up a "Harmonious Society", which was further developed as a "scientific view point of development", China's economic growth strategy has required the incorporation of energy saving and environmental protection. It can therefore be expected that there would be more Chinese firms that practice CER.

Research on corporate social and environmental disclosure in China is also at an emergent stage (Zhu and Xue 2007; Guan and Noronha 2013). That is, while growing attention has been paid to environmental disclosure in China, most of the studies undertaken to date have concentrated on trends or produce quantitative indexes, and therefore only provide a general picture of Chinese environmental disclosure practices (Gao 2009, 2011; KPMG 2008b; Situ and Tilt 2012; Situ et al. 2013). In order to understand the more complex nature of corporate environmental disclosure in China, it is important to undertake a more in-depth analysis that addresses these deficiencies.

As mentioned above, influences on CER in developed countries have been studied quite comprehensively. However, influences on the increasing trend of CER in China are still under-investigated (Guan and Noronha 2013). Therefore, there is an important research gap in investigating the drivers of CER in China given its significance in the global economy and continued economic growth.

Similarly, while the two dominant theories about the influences on environmental reporting have been considered to some extent in relation to developing countries, only a few consider their applicability in China. In one example of these, Taylor and Shan (2007), investigated Chinese Companies Listed in Hong Kong, and conclude that Stakeholder Theory is better than Legitimacy Theory in explaining Corporate Social and Environmental Reporting in China. Moreover, there is evidence of increasing demand by stakeholders for reliable and accurate information regarding corporate environmental performance (Dong et al. 2014). In light of this evidence, this study uses a stakeholder lens to examine the influences on CER in China.

1.3 Research problem

There has been an increase in the commitment of the government to addressing environmental concerns in China, which may be driven by both economic reform and a desire to trade with the West (Dong et al. 2014; Noronha et al. 2013; Situ and Tilt 2012; Situ et al. 2013). Previous studies have also found that the trend towards corporate environmental disclosure in China is increasing (Situ and Tilt 2012; Situ et al. 2013; van den Burg 2008; Xiao and Hu 2005); however, these empirical studies are mainly conducted on a quantitative basis. While their results show the trend is increasing, it is not clear what the influences on the increasing trend are, or how these disclosures manifest themselves in the Chinese context given the potential mix of ideological, political and economic influences, and this constitutes the research problem for this study. Therefore, this study aims to investigate whether and how the Chinese government significantly influences corporate environmental disclosure in China, and the competing influences of other stakeholders. This is analysed within the current social and political context of the country. The conceptual framework used to articulate the research problem is shown in Figure 1.1.

As a one-party led country, China has a unique political and economic system in that ideology has been emphasised throughout the recent period of economic reform. Moreover, although it has moved towards a more capitalist orientation, the Chinese government still plays an instrumental role in the economy. That is, it practices ‘State capitalism’, the concept of which will be discussed in detail in Chapter 3. Recently, the government has also been instrumental in encouraging environmental reforms, as the scale of environmental degradation that came with the rapid economic growth is significant. As such, the Chinese government is likely to be a very important driver in motivating Chinese companies to report their environmental information. While the

Chinese government holds the greatest power, there are some newer and additional stakeholders emerging, particularly in the form of pressures from the West and other local stakeholders. In particular, as the Chinese economy becomes more and more involved in globalisation, pressures from the West on Chinese companies are expected to become more significant. Therefore, the research pays special interest to these two groups of stakeholders. An increasing number of Chinese companies have started to use CER as a means to communicate with their stakeholders, which include local stakeholders (pressures are mainly from the State) and external stakeholders (pressures are mainly from the West). However, this assumption, and the complexities of the context in which the reporting occurs, has not been investigated to date.

To that end, this thesis aims to explore how CER is influenced by the major stakeholders in the Chinese system of 'state capitalism'.

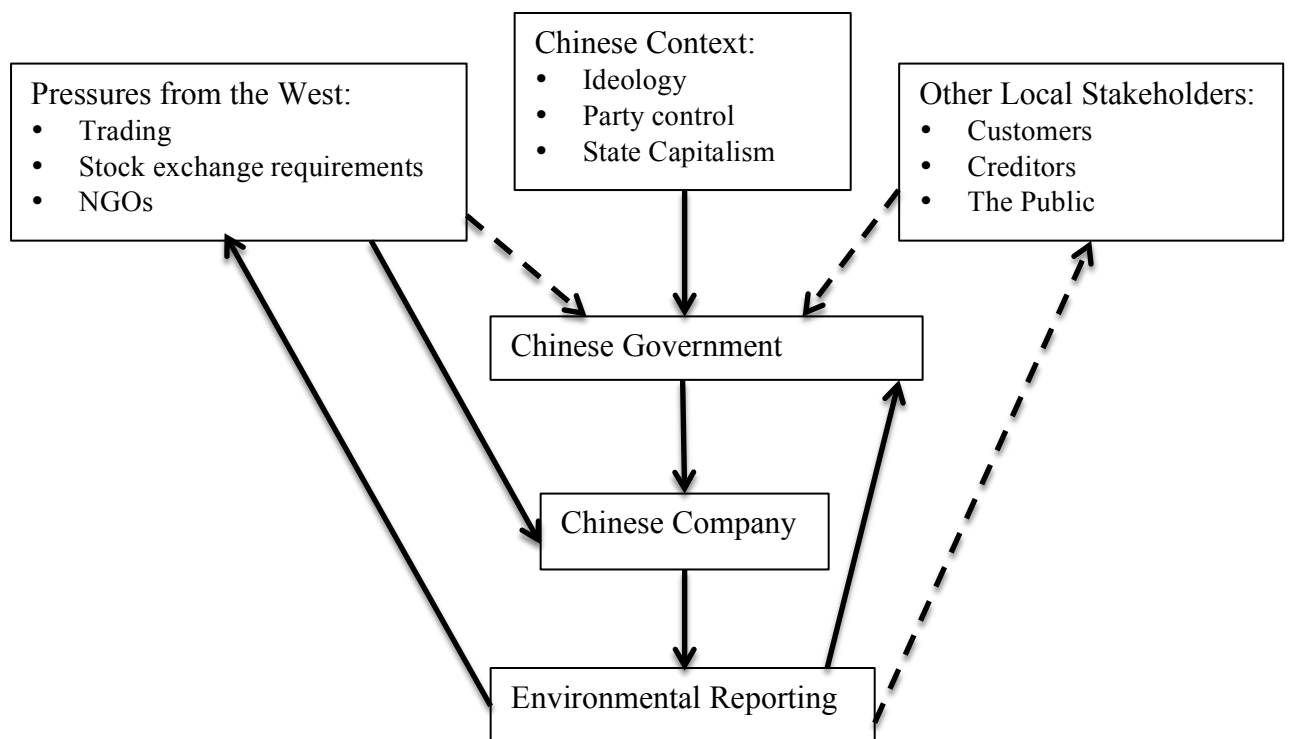


Figure 1.1: Conceptual framework outlining the research problem

1.4 Research questions

The following research questions are designed to address the research problem and aims of this study:

RQ1: What is the extent and nature of the Chinese government's commitment to improving environmental protection and reporting undertaken by corporations in China?

RQ2: What is the extent and nature of environmental reporting provided by Chinese listed corporations?

RQ3: What is the association, if any, between the increase in Chinese government commitment to environmental issues and environmental reporting by Chinese listed companies; do the commitments influence the reporting?

RQ4: What is the association, if any, between environmental reporting by Chinese listed companies and pressures faced by Chinese companies from Western stakeholders?

1.5 Research objectives

In order to investigate answers to the research questions, the following research objectives are addressed in this study:

- To examine the Chinese government's regulations and other forms of environment documents, such as policies, to determine the main themes that appear.
- To review the pressures faced by Chinese companies from Western stakeholders.
- To analyse, using content analysis, the environmental reporting of Chinese listed companies, and to determine the major themes that appear in those reports.

- To analyse, using discourse analysis, the influence of the Chinese government's initiatives on environmental reporting by Chinese listed companies.

1.6 Justification

This study has the potential to advance the academic understanding of this area for a number of reasons:

First, corporate social and environmental reporting and disclosure, compared to traditional financial reporting, is relatively new and continually evolving. Since the late 1980s, environmental accounting and, in particular, environmental reporting and disclosure has attracted growing interest (Tilt 1997). Some studies and surveys focus on measuring the incidence of corporate social and environmental disclosures (Ernst and Ernst 1979; ICAEW 2004; KPMG 2008a, 2011; Parker 1986); some studies explore the determinants or other company characteristics that affect corporate social and environmental disclosures (Cowen et al. 1987; Hackston and Milne 1996; Tilt 2001; Trotman and Bradley 1981); some papers study the relationship between corporate governance and social and corporate environmental disclosures (De Villiers et al. 2009; Gibson and O'Donovan 2007; Rao et al. 2012; Rao and Tilt 2015); and others discuss the media in which companies disclose their environmental information (Jose and Lee 2007). However, while frequent empirical analysis has been done on CER in developed countries, studies on CER in China are rare (Dong et al. 2014; KPMG 2008b; Noronha et al. 2013; Situ and Tilt 2012; Situ et al. 2013). Moreover, many studies of China or other developing countries that do exist tend to apply Western approaches and theory, without in-depth consideration of the different context. Therefore, a study of CER in China is important as it can enrich and expand the current literature on developing countries.

Second, previous studies have found that CER in developed countries is predominately voluntary and related to risk and reputation management, accountability and corporate governance (De Villiers et al. 2009; Hackston and Milne 1996; KPMG 2011; Parker 1986; Tilt 2001). However, due to the different cultural, political and economic system in China, it is likely that CER in China will be different from that in developed countries. According to the study by Situ and Tilt (2012), state ownership is a very important determinant of corporate environmental disclosure in China, which provides some indication that the Chinese government plays an important role in influencing corporate environmental reporting.

Further research on Chinese CER is essential in order to determine the validity of this result. Although many studies commonly cite the influence of the Chinese government on firms in China, few provide any empirical evidence of this and even fewer drill down into the nuances of the Chinese system, rather relying on generalised statements. This study is one of the first to specifically consider environmental reporting in the context of the competing pressures of a developing country dominated by the State, but operating in a globalised economy.

Third, the initiative of “scientific development” made by the Chinese leadership recently, indicates that the Chinese central government has realised the importance of sustainable development, and has made up their mind to pay more attention to environmental protection. However, while commitment is high, implementation is quite low (Bina 2010; Dong et al. 2014; Li et al. 2008; Noronha et al. 2013; Situ et al. 2013; van den Burg 2008; Zhang et al. 2010). In order to shift towards sustainable development, more and more expectations have been placed on the Chinese business sector. This study investigates these influences.

Therefore, the results of this study may provide some useful information for the Chinese government's decision-makers when establishing future environmental policies in China; it may also have some implications for the Chinese companies regarding their corporate governance and environmental reporting activities.

Finally, Stakeholder Theory in previous studies is used to explain the CER activities in free-market capitalist countries, where stakeholders of CER are diverse. In these countries the competitive interests of the various stakeholders improve the comprehensiveness and reliability of CER. However, Stakeholder Theory is seldom considered in state capitalist countries where there is a strong ideology-based political system, such as China. Examining stakeholder influence in a setting where there is one dominant stakeholder, but also some competing interests, provides an important contribution to understanding the complexities of stakeholder management, and how it manifests in this different context. Moreover, given that ideology and the State function at both the firm level and at a more societal and macroeconomic level, a multi-theoretical framework is adopted in this study. At the underlying, or macro, political economy level, this centres on the theory of State Capitalism; at the firm level, Stakeholder Theory is used to examine firm response. Therefore, this study also contributes to the literature in that it uses a multi-level theoretical framework and, in particular, it is the first time that State Capitalism has been applied in explaining CER activities.

1.7 Structure of the thesis

This thesis is structured in seven chapters. The following chapter introduces some background information about the Chinese context, including the Chinese political structure, political commitment about environmental protection announced by the

Chinese government, the environmental law system and the relationship between economic development and environmental reporting.

Chapter 3 discusses the theoretical framework, describing the multi-level application of both Stakeholder Theory and State Capitalism, which are used to explain the environmental reporting practices in China. The reasons that the Chinese government and Western stakeholders are considered in particular in this study are also presented.

Chapter 4 reviews the literature related to the research problem. Respectively, environmental reporting studied in developed countries, in developing countries and in China is explored.

Chapter 5 introduces the research design and methods used to answer the research questions. Content Analysis and Discourse Historical Analysis that are used in this study are discussed respectively.

Chapter 6 describes the results found in the data analysis, and then discusses and analyses the results for each research question and the research objectives.

Finally, Chapter 7 presents conclusions about each research question and the research problem. The thesis concludes with limitations and contributions of the study, and possible areas for further research.

1.8 Chapter summary

This chapter introduced the background to environmental reporting generally, and notes that influences on voluntary environmental reporting in developed countries have been studied frequently, while influences in China are still not clear. This leads to the research problem of this study, and the research questions and research

objectives were also outlined. The justifications for this study were identified, and the chapter closed with the structure of the thesis. The next chapter describes the background information on China and on CER in China, to provide the overall context in which the thesis is situated.

Chapter 2: The Chinese Context

2.1 Introduction

China is one of the largest transition economics in the world and its economy has to a large extent, been controlled by the Chinese government in what has been alluded to above and elaborated on further below as a form of “state capitalism”. Although China is now heading towards a market economy, as a one-party led country, China’s political system, economy and culture is very different from other countries in that the State dominates the market. Its intervention is a strategic long-term policy choice, and markets function primarily as a tool that serves national interests (Ma 2011). Moreover, the pivotal role of ideology has been emphasised throughout the enactment of Chinese reform by the state leaders (Lieber 2013). As such, to understand CER in China, it is important to first provide brief background information on the Chinese context.

This chapter opens with a description of the Chinese environmental crisis, followed by a brief discussion of how the government has responded to this crisis, the weaknesses of current efforts on environmental protection and the reasons for low levels of implementation. The recent efforts by China of promoting public participation, and the relationship between economic development and CER are also introduced. Finally, this chapter briefly reviews Chinese business culture that may have an influence on CER in China.

2.2 Chinese environmental crisis

The Chinese economy has grown rapidly since 1978 when, as will be elaborated on

later in this chapter, the economic reforms in the country began. In 2008, the Chinese economy was ranked 2nd in the world by GDP (World Bank 2008). The pace of economic growth in China surprised the world initially and, the scale of environmental degradation that came with this rapid economic growth is significant. As reported by the World Bank, China has overtaken the United States as the world's biggest Greenhouse Gas emitter since 2007. The growth has also come with land desertification and results in sandstorms, which affect China every spring. In 2010, a coal ash dust storm swept the whole of China; some of it was blown as far as Korea and Japan (Zhang et al. 2010). Even worse, these storms contain a number of pollutants that have a serious impact on human health and the environment. It is stated by Zhang et al. (2010, p2) that:

These storms travel through China's key coal-mining and thermal-power plant region, picking up coal ash, raw coal dust, flue gas and other pollutants on their way to eastern and southern China. Because many power plants do not dispose of coal ash properly, the strong winds in a sandstorm can easily transport ash particles over 150,000 kilometres. In this way, sandstorms greatly magnify the reach of coal pollution, bringing pollutants such as PAHs (carcinogens), arsenic, mercury and lead far beyond the coal regions to impact the health and environment of great expanses of China.

And the air pollution is getting worse recently. According to a recent report from a U.S.-based nonprofit group called Berkeley Earth (Rohde and Muller 2015), 92% of the population of China experienced over 120 hours of unhealthy air (US EPA standard), and 38% experienced average concentrations that were unhealthy.

China is also suffering from water shortages and water pollution; about one-third of China's population lacks clean drinkable water, and its per-capita water supply falls at around a quarter of the global average (Klaver and Mulkey 2006-2007). It is also reported by the State Environmental Protection Administration of China (SEPA 2006) that 59% of major rivers and 72% of lakes and reservoirs fell into or below the worst

two of China's five water quality classes. Under China's water quality standards, such water is classed as unfit for human contact or industrial use. In 2013, while water quality improved, there were still nearly 60% of overall groundwater are classified as somewhat poor or very poor (SEPA 2014). Even worse, the environmental crisis, in turn, takes a heavy toll on human health. Cancer in villages keeps appearing around the heavy industrial polluted areas. It is estimated by the Chinese health administration that, every year, over 50 thousand rural people die of cancer caused by the pollution (Bina 2010). And the air pollution in China kills about 4,000 people every day, about 17 percent of all deaths in China (Rohde and Muller 2015). In addition, as reported by the World Bank and State Environmental Protection Administration (2007), the combined economic and human health impact costs of outdoor air and water pollution for China's economy comes to around US\$100 billion a year, which is about 5.8% of the country's GDP. This significant environmental degradation brings more and more criticism and expectations from the world that China should respond to this issue. Inside China, the environmental crisis also raises questions of whether the government's policy of economic development taking priority is appropriate. Facing these pressures from inside and outside China, the Chinese government has paid more attention to environmental issues in recent times. This attention has manifested itself as a high commitment to environmental regulation, but to date can only be seen as having a low level of implementation.

2.3 High commitment to environmental regulation

Surprisingly, China introduced an environmental policy as early as 1972, as a result of its participation at the Stockholm Conference on the Human Environment (Harashima 2000). In addition, the first Environment Protection Law (trial implementation) was

enacted in 1979, only one year after the economic reforms began. The law introduced several principles, policies and governance measures. After 10 years of implementation, the new Environmental Protection Law was promulgated in 1989. The law has substantially changed compared to the trial version (Zhao 2009), and it is now the basic law of environmental protection in China.

During the 1980s and 1990s, a series of environmental and natural resource protection laws and provisions were enacted, such as the *Prevention and control of Solid Waste Law*, *Prevention and control of Water Pollution Law*, *Prevention and control of Air Pollution Law*, *Prevention and control of Noise Law*, *Prevention and control of Marine Environment Law*, *Forest Law*, *Grassland Law*, *Fisheries Law*, *Mineral Resource Law*, *Land Management Law*, *Wild Life Protection Law*, *Soil and Water Protection Law*, *Management Provision on Reporting and Registration on Pollutant Emissions* and *Environmental Management Provision for Construction*. All these laws and provisions together with the *Environmental Protection Law* comprise the Chinese environmental protection regulation system.

In the 2000s, the Chinese government released more rigorous regulations on environmental protection. In 2003, the *Environmental Impact Assessment Law* was formally enacted, more comprehensive legal requirements of environmental impact assessment were enforced on construction projects and government planning activities and public consultation as part of the environmental impact assessment procedure was formally institutionalized. Since then, further efforts have been made to regulate environmental information disclosure activities. In 2007 an important regulation, the *Measures for Disclosure of Environmental Information (Trial)* (enacted in May 2008), was issued, and this has been seen as new progress and a milestone of the

Chinese government's environmental governance, which should lead them towards better transparency, and more disclosure and participation (Bina 2010).

Meanwhile, the Chinese central government has been trying to shift China's economy to being more sustainable since 2005. A new political commitment of building up a "Harmonious Society" was introduced by China's chairman Hu Jintao at a Provincial Officer Symposium held in 2005. It states that the environment is a key element of a "Harmonious Society". Specifically, without sufficiently protecting the natural environment, it is not only that sustainable development cannot be realised, but it will also cause serious social problems (Hu 2005). This commitment was translated into targets of the Eleventh Five-year Plan (2006-2010), which maps strategies for the country's development. These targets required the reduction of energy consumption per unit of gross domestic product (GDP) by 20%, and reduced Sulphur Dioxide (SO₂) and Chemical Oxygen Demand (COD) emissions by 10% from 2005 levels by 2010 (Chinese Central Government 2006). Later, at the Sixth National Environmental Protection Meeting (April 2006), Premier Wen Jiabao announced three new policies: integrating environmental protection and economic decision-making on an equal footing, further decoupling pollutant emissions from economic growth, and applying a mix of instruments to resolve environmental problems (Bina 2010). These policies reflect the Chinese central government's determination to transfer the Chinese economy to one that embraces sustainable development. Thereafter, the commitment of building up a "Harmonious Society" was re-stated at the 17th National Communist Party of China (CPC) Congress, and was further developed as a "scientific view point of development". Hu (2007) pointed out that China's economic growth should

incorporate energy saving and environmental protection. He also defined sustainable development in China as an approach to coordinate economic development with population, resources and the environment, to harmonize humans and nature, to develop a circular economy, and to build up an energy saving and environmentally friendly country (Hu 2007).

Moreover, as a result of the Chinese economy moving towards a more market-based economy, a range of market based instruments, charges and incentives are now being used as tools to protect the environment in China. Since 2001, a tradable emissions permit system has been implemented in some industrial areas (van den Burg 2008). In 2002, a pollutant charge system was introduced (van den Burg 2008). Then new resource tax standards for mining products, tariffs on energy-intensive products, and taxation incentive policies for low pollution and low energy consumption were implemented one after another. The Chinese government also announced over 20 environmental protection sector standards, which built up the Environmental Protection Model City system (van den Burg 2008). In addition, energy taxes, carbon taxes and environmental taxes are now under consideration (Bina 2010). In June 2015, China's State Council released a draft on environmental protection tax law to combat pollutions.

The Chinese government has also expanded investment in clean energy. According to the report, *Who's Winning the Clean Energy Race* by Pew Charitable Trust (2010b), China was the largest clean energy investor in 2009, and overall clean energy investment in China reached US\$34 billion, more than any other country and almost double the United States' investment of US\$18 billion. In 2010, the overall clean energy investment in China reached US\$54.4 billion. It is reported that over 25% of

the world's clean energy power generation is generated by China (Pew Charitable Trust 2010b). As of March, 2011, the total market value of Chinese solar energy companies which are listed on the NASDAQ and NYSE came to around US\$10 billion (Pew Charitable Trust 2010b). Further, China has signed up to a series of international environmental agreements, such as the Protocol on Persistent Organic Pollutants, the Montreal Protocol and the Kyoto Protocol.

In 2011, when Xi Jinping was elected as the chairman of China, he promised that the government will not sacrifice the environment for temporary economic growth, but will carefully balance the economic growth with environmental protection (CCIC 2013). In November 2014, China signed the "U.S.-China Joint Announcement on Climate Change" with the United States, which plans to achieve peak CO₂ emissions by around 2030. The intention is to make every effort to increase the share of non-fossil fuels in primary energy consumption to around 20 percent by 2030 or earlier. Even more recently, Xi Jinping announced a new climate change policy that a nationwide carbon trading scheme would be launched in 2017, which should help to consolidate regional carbon markets in China. In particular, the cap-and-trade system will cover heavy polluting industries such as power generation, iron and steel, chemicals, and building materials. This is viewed as a significant step forward in combating climate change (Hsu 2015).

2.4 Low implementation

As showed in section 2.3, the Chinese central government has made a great effort in providing policies for environment improvement in the country. However, as discussed previously, the environmental crisis in China is still serious. Bina (2010) argues that despite the high commitment made by the Chinese central government,

implementation of the initiatives is poor. Before further discussing the discrepancy between the promise and performance, the Chinese political framework will be discussed briefly to provide the background and context for where environmental protection fits in the political and administrative structures in China.

The Communist Party of China is the only political party that rules the country. As shown in Figure 2.1, the National People's Congress (NPC) is the highest organ of state power. The NPC is empowered with the rights of legislation, decision-making, supervision, election and removal, including electing the President of China and approving the appointment of the Premier of the State Council. The Standing Committee of the NPC is the permanent organ of the NPC. The constitution of the National People's Congress provides for most of its power to be exercised on a day-to-day basis by its Standing Committee (Yang 2011).

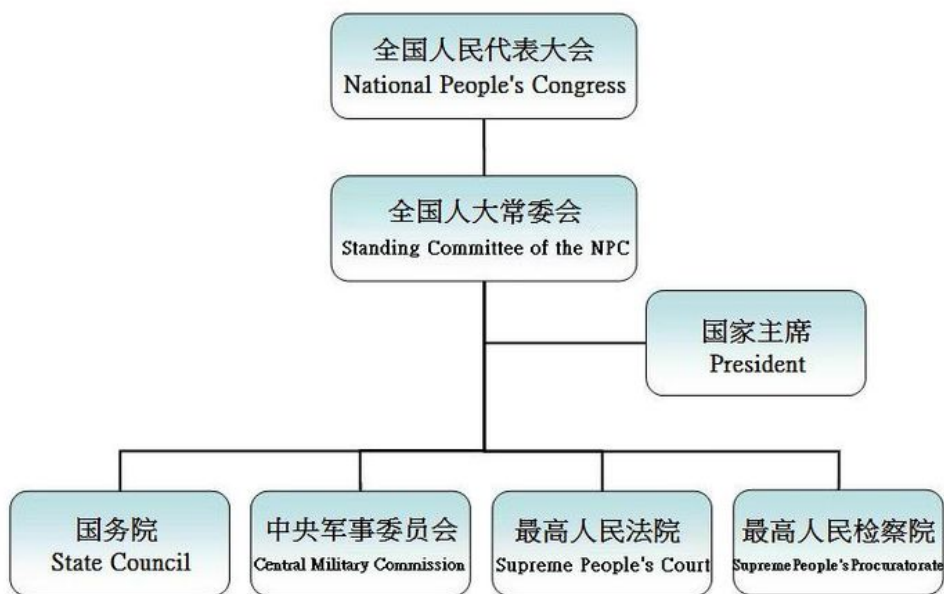


Figure 2.1: The Chinese political framework at the State level

The President of China is elected by the NPC, and he is the Paramount Leader in China. Also, he is an important national symbol serving as the nominal head of state. He exercises both domestic functions and powers and those in foreign affairs, including promulgating laws, appointing and removing the premier, vice premiers, and state councillors according to decisions of the NPC and its Standing Committee (Yang 2011).

The Central Military Commission is the Supreme military policy-making body in China; it exercises the command and control of the People's Liberation Army. The Supreme People's Court is the highest court in the judicial system, and it supervises the administration of justice by the people's courts at various levels. The Supreme People's Procuratorate is the highest organ for legal supervision (Yang 2011).

The State Council, which is also called the Central Government, is the chief administrative authority of China. As the chief administrative organ of government, its main functions are to formulate administrative measures, issue decisions and orders, and monitor their implementation; draft legislative bills for submission to the NPC or its Standing Committee; and prepare the economic plan and the state budget for deliberation and approval by the NPC. The State Council is the functional centre of state power and the clearinghouse for government initiatives at all levels. The State Council currently consists of the Premier, four Vice Premiers, five State Councillors, one Secretary-General, 29 Ministries and Commissions, several Offices, Bureaus and administrations, and other agencies. The premier chairs the State Council, each Vice Premier oversees certain areas of administration, and each State Councillor performs duties as designated by the Premier. The secretary-general heads the General Office that handles the day-to-day work of the State Council. Each ministry supervises one

sector. Commissions outrank ministries and set policies for and coordinate the related activities of different administrative organs. Offices deal with matters of ongoing concern. Bureaus and administrations rank below ministries (Yang 2011).

It is against this complex background that the difficulties in implementing environment protection policies are set. They stem from a number of areas, including: the position of environmental protection agencies in the political framework; conflict between central and local governments; supervision issues and the dominance of State Owned Enterprises (SOEs).

The environmental protection department was first set up in 1973, and at that time it was only a temporary office. As mentioned earlier, during the 1980s and 1990s, the legal system of environmental protection was being built. In order to better implement the law, in 1982, the Environmental Protection Bureau was set up as a formal department. However, due to its low power rank, it was hard for it to co-operate with other departments and local governments. Even though in 1988 it was directly under the State Council, and had a power rank at vice ministry level, the situation did not change very much as economic development was the priority at that time. In 1998, while the State Council cancelled a number of industry management departments, the Environmental Protection Bureau was upgraded to the Environmental Protection Administration. More power was appointed to it to better implement the environmental strategies, policies and laws. However, at that stage, the Environmental Protection Administration acted mainly as an enforcing agency and, while economic development was still the priority, the Environmental Protection Administration still could not do much with regard to environmental protection. As the Chinese leadership realised the importance of environmental protection and tried to balance economic

development and environmental protection, in 2008 the Environmental Protection Administration was finally upgraded to the Ministry of Environmental Protection which has the highest power rank in the State Council. The key progress is that the Ministry of Environmental Protection is now not just an enforcing agency, but can be involved in the country's policy making (sina 2008). This indicates that economic development is no longer considered a higher priority than environmental development.

The second barrier to successful implementation is that China is a large country with a huge population, and so the administrative divisions of China are complex and consist of several levels. The local governments are divided into three levels: the provincial level (23 provinces, 5 autonomous regions, 4 municipalities and 2 special administrative regions), the prefecture level (about 333 prefecture-level regions), and the combination of county and township level (about 2,862 county-level regions, and 41,636 township-level regions) (Chinese Central Government 2011). To realise the central government's strategies, the cooperation of local government is essential. China is a highly centralized country; all the power is from the central government, and local governments are the executive agencies. Under this political structure, all the laws, regulations and policies from the central government should be delivered at the local level as well. However, with decentralization, the authority of the central government weakens, and local government becomes not only an executive or enforcing agency, but a level of authority which has its own power (Zheng 2010). In the 1970s, in order to encourage local economic development, the central government implemented a decentralization policy. Although the economy has developed, the authority of the central government has reduced. As a result, when there is conflict

between something that provides local benefit and the central government's policy, the central government's policy is difficult to enforce at the local level. Environmental protection policy is one such case. As outlined above, most of the environmental protection laws, regulations and policies come from the central government, however, as most of the environmental protection policies conflict with immediate local economic benefits, it is difficult to ensure they are delivered at the local level sufficiently.

Relatively, non-linear supervision of the local environmental departments is another key problem (Bina 2010). When an environmental department is set up in the central government, corresponding environmental departments are set up in all levels of local governments. Ideally, these local environmental departments are the agencies of the central environmental department, and their main duties are to deliver the central environmental department's strategies, cooperate with other local departments and supervise the local environmental protection issues. However, in reality the local environmental departments are not directly overseen by the central environmental department; instead they are subservient to their local governments. All their financial support is from local government and all their staff appointments are made by local governments. Therefore, instead of supervising the local environmental protection issues and cooperating with other local departments, local environmental departments become 'rubber stamps' for the local governments (Zheng 2010).

It would appear that this 'command and control' method and the top-to-toe supervision model is not likely to efficiently enforce environmental laws, regulations and policies at the local level, thus leading to low or poor implementation of environmental protection.

Finally, despite the bureaucratic political system in China, SOEs have also been a barrier to implementing environmental regulations in the past. SOEs are a substantial contributor to the Chinese environmental problem, “as a relatively small number of large SOEs account for disproportionate amount of pollution” (Wang 2015, p254). The evidence is that the power generation sector accounts for one-half of China’s CO₂ emissions, while central SOEs represent 60 percent of China’s total installed power generation capacity (Wang 2015). In the past, Chinese SOEs have been treated as having vested interests with a particular ability to thwart the central government’s environmental objectives (Wang 2015). According to Bloomberg News (2015) the dominance of PetroChina Co., the country’s biggest oil and natural gas producer, and China Petroleum & Chemical Corp., Asia’s biggest refiner, was cited by a report by China’s National Bureau of Statistics as a key reason the country has been slow to produce more clean energy.

Wang (2015, p261) argues that “ideological support for state capitalism, institutional design and practice, and the informal benefits or rents that accrue to SOEs simply because regulators and civil society actors believe them to have ready access to levers of state power” are the major reasons that enable them not only to influence the process of regulation setting, but also the implementation of those regulations. However, Wang (2015) also points out that environmental protection was not the Chinese authorities’ priority in the past. As the Chinese authorities now include environmental protection and energy saving as one of the country’s priorities, the situation may start to change. Changes are also observed in the level of involvement of the general public in China, and this is therefore considered next.

2.5 Disclosure requirements and public participation

Prior studies argue that disclosing public environmental information is a useful tool to encourage the public to participate in environmental issues (Timothy and Cai 2009), and may be an effective mechanism to supervise Chinese companies and government agencies, forcing them to comply with environmental laws and policies (Du et al. 2010; Timothy and Cai 2009). “Especially in countries where state authorities have difficulties in controlling and enforcing environmental regulation, information disclosure could bring in extra hands of non-state actors in environmental governance” (Zhang et al. 2010, p1650). However, for quite a long time, China has been seen as a poor information disclosure country (Zhang et al. 2010).

Although China developed an environmental regulation system in the 1990s, mandatory requirements to disclose environmental information, in particular requirements to disclose environmental information to the public are rare.

The *Environmental Protection Law (trial)* was enacted in 1979, however, only Article 6 required that “environmental impact assessment reports must be submitted to the environmental protection department for examination and approval prior to the commencement of any new construction projects, redevelopment projects and extension projects” (Environmental Protection Law (trial) 1979). In 1989, the *Environmental Protection Law* was substantially improved, but information disclosure requirements are still limited. Two articles include relevant requirements; article 13 states:

Units constructing projects that cause pollution to the environment must comply with the state provisions concerning environmental protection for such construction projects. The environmental impact statement on a construction project must assess the pollution the project is likely to produce and its impact on the environment and must stipulate the preventive and curative measures; the statement shall, after initial examination by the

authorities in charge of the construction project, be submitted by specified procedure to the competent department of environmental protection administration for approval. The department of planning shall not ratify the design plan descriptions of the construction project until after the environmental impact statement on the construction project is approved.

Article 27 states:

Enterprises and institutions discharging pollutants must report to and register with the relevant authorities in accordance with the provisions of the competent department of environmental protection administration under the State Council.

Following this, a series of environmental regulations were issued, however, environmental information disclosure requirements remain focused on particular projects' environmental impact assessment. Only those enterprises and institutions that plan to develop construction projects or produce pollutants are required to provide an environmental impact assessment report to the government environmental department.

In 2002, the concept of environmental impact assessment was further institutionalized as the *Environmental Impact Assessment Law* (enacted in 2003). More comprehensive requirements, such as procedures for submitting and assessing the environmentally impacted project, environmental impact assessment report content and legal responsibilities of non-compliance, are specified. The environmental impact assessment requirement has been expanded to certain government planning activities. Moreover, an indication of progress of this law is that public participation was included. Article 21 requires:

Except where secrets need to be guarded, as required by State regulations, the unit of the construction project which may cause considerable effects on the environment and for which a written report on environmental effects is required to be prepared shall, before submitting for examination and approval the report on the environmental effects of the construction project, hold demonstration meetings or hearings, or solicit in other forms the comments and suggestions from relevant units, specialists and the public on the written report.

The construction unit shall attach its explanations on why it adopts or rejects the comments and suggestions put forward by the relevant units, specialists and the public to the written report submitted for approval.

In summary, information disclosure requirements that are stated in the *Environmental Impact Assessment Law* are still partial. In particular, environmental protection laws are focused on environmental impact assessment, with requirements for corporate accountability and corporate environmental disclosures lacking.

Corporate disclosure was first introduced into China's environmental governance in 1998 when Green Watch, an environmental performance rating and disclosure program for Chinese companies, was developed by Wang in cooperation with the Chinese State Environment Protection Administration and a group of academics and the media (this cooperation was funded by the World Bank's Development Program) (World Bank 2006). The program found a number of benefits of environmental disclosure; it is not only a useful tool for enterprises' management, but also can strengthen the Chinese regulators' environmental governance and discourage corruption in the regulatory regime (van den Burg 2008).

In 2003, the issuing of the *Cleaner Production Law* released a strong signal that the Chinese government would like to see Chinese companies become more cognisant of their environmental responsibilities more seriously. In the same year, the State Environmental Protection Administration decided to carry out a strategy of encouraging corporate environmental disclosure. In response to the strategy, a series of guidelines for companies to disclose social and environmental information have been issued since 2006. These include the *Guidelines of state-owned enterprises performing social responsibilities*, the *Guidelines about enhancing supervision of listed companies' social responsibilities*, the *Guidelines about China's industrial*

enterprises and industrial associations' social responsibilities and the *Guidelines about social responsibilities of listed companies in Shanghai Stock Exchange*. Although the authority of guidelines is not as strong as that of laws, the guidelines are meaningful to influence Chinese companies to improve their social and environmental behaviours (Situ and Tilt 2012; Situ et al. 2013)

This strategy has been further strengthened. In 2007, the Chinese State Environmental Protection Administration released the *Measures for Disclosure of Environmental Information (Trial)* (Enacted in May 2008). This symbolized the Chinese government's acceptance of environmental disclosure as a new environmental governance mechanism. The *Measures for Disclosure of Environmental Information* (MDEI) has two environmental disclosure requirements; namely, government environmental disclosure and corporate environmental disclosure. By analysing the provision, it can be seen that the mandatory disclosure requirements only apply to government environmental disclosure and enterprises that had been put on the non-compliance list by the local environmental protection bureaus. As for corporate environmental disclosure, it is voluntary but encouraged by the central government. Evidently, the main role of this provision is to regulate the environmental disclosure practices of government environment departments, especially those at the local level.

2.6 Definition of voluntary disclosure

In the discussion in the previous section, it is clear that Chinese government has released a series of guidelines and regulations related to environmental disclosure in recent years. However, the distinction between mandatory and voluntary disclosure, when considering China, is problematic as a clear definition of what is required by law and what is purely voluntary does not exist. While many researchers apply a

simplistic classification, this leads to confusion and contradictions between studies. For example, Noronha et al. (2013) review the laws, regulations and guidelines on Corporate Social Responsibility (where environmental responsibility is an important part) (CSR) practices for Chinese enterprises. They first argue that the two guidelines issued by the Shanghai Stock Exchange in May 2008 “encourage listed companies to disclose non-financial information in CSR reports” and that “in order to encourage the listed companies to *voluntarily* disclose social responsibility information, the SSE offers incentives to listed companies such as giving priority to be selected into the SSE Corporate Governance Sector¹...” (Noronha et al. 2013, p32). However, they then come to a conclusion that “systematic rules and regulations on CSR reporting in China do exist” (Noronha et al. 2013, p32, emphasis added), and summarize these in their Table 1. This summary of key mandatory and voluntary standards/guidelines on corporate social responsibility issues in China subsequently states that the guideline issued by the Shanghai Stock Exchange is mandatory. This contradiction indicates the difficulty researchers find in classifying the various guidelines and rules.

In addition, many ‘mandatory’ requirements are broad and leave the discloser with significant discretion in terms of what, and how much, disclosure to make. Therefore, this section outlines these complexities of the regulatory system, and provides a definition of how the term voluntary disclosure is defined in this study.

The Chinese Legislation system falls under the civil law system. According to the White Paper on the Socialism with Chinese Characteristics Legal System (SCIOC

¹ The SSE Corporate Governance Sector was introduced in 2007, to perfect China's listed companies' governance mechanism and promote the long-term healthy development of the capital market. It is formed through voluntary application of listed companies, public opinion solicitation, comments by consultancies, primary selection, and examination by the expert consultative committee.

2011), China implements a centralized but hierarchical legislative system. The Chinese legislative system can also be broken down into three levels in terms of the level of enforcement empowered unto it.

The Constitution of the People's Republic of China and laws (法律) which are legislated by the national people's congress (NPC) and its standing committee are at the highest level of the legal system, followed by Administrative Regulations (行政法规) which are promulgated by the State Council. Local Regulations (地方性法规) are promulgated by local NPC and its standing committees; these are at the lowest level. In addition, Administrative Rules (行政规章) are part of the Chinese legislation system, but these do not sit at any particular level. They include Local Rules (地方政府规章), which are promulgated by local governments and Departmental Rules (部门规章) promulgated by the ministries and commissions under the State Council, the People's Bank of China, the Auditing Office and other departments with administrative responsibilities directly under the State Council (SCIOC 2011). Only those above Legislative bodies have the right to issue laws or regulations.

As discussed previously, in recent years the Chinese government has regarded saving resources and protecting the environment as a priority for national policy and, in response to the policy, the Environmental legal system has been built. By 2008, China had enacted nine laws concerning protection of the environment, and 17 laws with regard to saving and protecting resources. The state has also promulgated over 50 administrative regulations, and more than 660 local regulations and administrative Rules (SCIOC 2008). In addition, by the end of 2010, there were over 1300 national

standards related to environmental protection and resource conservation (SCIOC 2011).

Regarding the disclosure of environmental information, different departments, agencies and industrial associations have issued a growing number of requirements. A list of key Guidelines and regulations is provided in Table 2.1.

Table 2.1: Key guidelines and regulations relevant to CSR reporting in China

No.	Year	Name	Legislative bodies or other organisations	Requirements
1	2007	Advice on strengthening corporate social responsibility among banking and financial industry	China Banking Regulatory Commission (CBRC)	Encourage banking and financial enterprises to publish a CSR report. Key enterprises should publish a regular report.
2	2008	Measures for the Disclosure of Environmental Information (MDEI)	Ministry of Environmental Protection (MEP)	Nine information items that should be disclosed by enterprise.
3	2008	Guidelines of Central state-owned enterprises fulfilling corporate social responsibilities	The State-owned Assets Supervision and Administration Commission of the State Council (SASAC)	Building the CSR information release system. Enterprises having experience in CSR work should establish an information release mechanism, providing updates and regular information about CSR performance and sustainable development, plans and measures in carrying out CSR. A regular communication and dialogue mechanism concerning CSR should be established, so that the enterprise can have feedback from its stakeholders and provide its response quickly. All information and feedback should be publicized to receive supervision from stakeholders and society.

4	2008	Guidelines about China's industrial enterprises and industrial associations' social responsibilities	11 national industrial federations and associations	Encourage industrial enterprises to establish a CSR information release system.
5	2008	Guidelines on Environmental Information Disclosure by Companies Listed on the Shanghai Stock Exchange	Shanghai Stock Exchange	A reproduction of the MDEI (presented above in no.2)
6	2008	Notice Concerning Listed Companies' Preparation for 2008 Annual Reports	Shanghai Stock Exchange	Requires the corporate governance sector, overseas listed and financial companies to disclose CSR.
7	2009	Chinese CSR Report Preparation Guide 1.0	Chinese Academy of Social Sciences (CASS)	Provides a basic framework for companies to write their CSR reports.
8	2011	Chinese CSR Report Preparation Guide 2.0	Chinese Academy of Social Sciences	Provides a basic framework for companies to write their CSR reports.

The criteria to differentiate mandatory disclosure and voluntary disclosure are normally based on whether or not the disclosure is required by laws, regulations or rules (EU-China Environmental Governance Programme 2013). By looking at Table 2.1, it can be seen that guidelines No. 4 to 8 are issued by non-legislative bodies, therefore, in this study, they are not considered to be mandatory requirements. Guidelines No. 1 and No. 3, although issued by legislative bodies, are advice and guidelines rather than laws, regulations or rules. In addition, CBRC uses the word “encourage”, and the SASAC uses the word “should” in their requirements, indicating that they are not mandatory requirements in its true sense. Finally, in considering the MDEI, this document was issued by the MEP, which is a legislative body, and is therefore a regulation. However, as discussed in section 2.5, the MDEI has two environmental disclosure requirements; namely, government environmental

disclosure and corporate environmental disclosure. By analysing the provision, it can be seen that the mandatory disclosure requirements only apply to government environmental disclosure (see Article 11). As for corporate environmental disclosure, enterprises are “encouraged” to “voluntarily disclose” a series of environmental information (See Article 19). Therefore, in this study it is argued that there are currently no mandatory requirements for listed companies to disclose environmental information; and corporate environmental disclosure in China is still voluntary (van den Burg 2008, p14).

To conclude, the release of the *MDEI* shows that the Chinese central government has realised the importance of public supervision, and has determined to govern environmental protection in a more democratic way. However, as mentioned above, a number of weaknesses exist, such as the discrepancy between commitments and implementation, and that insufficient regulations are significant (Bina 2010; Li et al. 2008; van den Burg 2008; Zhang et al. 2010). It is evident that environmental information governance is still in the emergent stages of development, in particular in the scope of corporate environmental disclosure. Meanwhile, it is apparent that even though corporate environmental disclosure is voluntary in China, in a highly centralized country, the Chinese government still has significant influence on corporate environmental disclosure practices even without any mandatory requirements (Situ and Tilt 2012; Situ et al. 2013). This contention will be further examined in this study.

2.7 Economic development and environmental disclosure

Before the recent economic reforms, China experienced a long period of economic disorder. In the 1970s, food supplies and production had become so deficient the

whole country was suffering poverty. Therefore, developing the economy has been the principal national policy since the economic reforms started in the late 1970s. These reforms boosted the Chinese economy, and improved the people's living standards; however, the speed of economic development also brought a series of environmental problems.

The extensive growth model is believed to be one of the main causes of increased environmental degradation (Xinhua News 2005). Extensive economic growth is based on the expansion of the quantity of inputs in order to increase the quantity of outputs (Lázaro and José 1995). According to Energybulletin.net (2011), Xu Dingming, a leading official with the Energy Bureau of the State Development and Reform Commission, claims that China's growing energy supply needs will place ongoing pressure on the environment and lead to an energy shortage. In China, coal is the main resource for the country's energy supply. In 2002, China discharged 19.27 million tons of sulphur dioxides, 90 per cent of which came from burning coal. This resulted in acid rain pollution in one third of the country. Moreover, China's energy demand in 2020 is projected to be 3 billion tons of standard coal, almost double that of its output for 2003, which means pollution arising from coal-burning will worsen accordingly (Energy Bulletin.net 2011). Low efficiency also worsens the environmental crisis and energy shortage. As of 2003, while China's GDP was 4 per cent of the world's GDP, the percentage of resource consumption was relatively high; oil usage is 7.4 per cent of world usage, coal was 31 per cent, and iron 27 per cent. China's water consumption is similar to the United States; however, their GDP is only 1/8 of that of the United States (Xinhua News 2005). Obviously, this high input, high consumption, high emissions and the low efficiency resulting from the extensive growth model

means that China's economic development has a high resource and environmental cost.

The blind pursuit of growth in GDP also causes of environmental degradation in other ways (Zheng 2010). Since the economic reforms, GDP has grown rapidly, from USD148.18 billion in 1978 to USD4, 326.19 billion in 2008, and the average annual GDP growth rate is around 10% (World Bank 2008). Rapid growth requires quickly growing aggregate demand, which can be derived from various sources. Rising consumer demand can be an active source of economic growth, for example, household spending increases due to a change in the distribution of income in favour of households with a high spending propensity, or due to a rise in the propensity to consume resulting from policy or institutional changes (Kotz and Zhu 2008). Increased consumerism is a leading causal factor putting pressure on the environment.

GDP growth also heavily depends on fixed investment². Kotz & Zhu (2008) note that, fixed investment contributed about one-third of GDP growth in the 1980s. Thereafter, in January 1992, during a tour of South China, Deng Xiaoping (the leader of China's economic reforms) called for the establishment of a market economy and faster GDP growth. As a result, the government promoted more fixed investment. During the period from 1999 to 2005, the contribution of fixed investment rose from 33.5 per cent to 41.0 per cent of GDP (Kotz and Zhu 2008). However, fixed investments, such as infrastructure investment and real estate development, are highly environmentally sensitive and this again contributes to increased environmental problems as a result of the pursuit of growth. As discussed previously, although a series of environmental protection laws require that an environmental impact assessment must be done before

² Fixed investment is investment in physical assets such as machinery, land, buildings, installations, vehicles, or technology

fixed investment projects start, the implementation is likely to be very poor when pitted against the national policy of promoting faster GDP growth. For example, government officers are assessed by the rate of GDP growth attained so, in order to gain more political credit, environmental degradation is usually overlooked. As a result, rapid economic development comes with serious environmental costs and crises, and in turn, the serious environmental crises mean that economic development is now facing a bottleneck, where the economic gain has been reduced by the increasing environmental impact cost.

As already discussed above, the Chinese central government has begun to realise the importance of balancing economic development and environmental protection, and is trying to shift China's growth model from pure pursuit of rapid GDP growth to one of more sustainable development. This shift however, will need to improve the state's capacity to enforce environmental laws and policies, and to reform China's institutional and legal framework for environmental protection, but these reforms need significant resources and time. Therefore, a number of scholars (such as: Nelson 2008; Xue et al. 2006; Zhang et al. 2007) argue that, to improve the environmental situation in China, something must be done beyond the State. The business sector, as the biggest polluter of the Chinese environment, should play its role in improving the environmental situation in China, independent of pollution and environmental regulatory enforcement by the State. Encouraging Chinese companies to disclose more environmental information is likely to be one useful approach. This approach would take advantage of the influence that supply chain and community pressure have on Chinese companies, in addition to the influence of regulatory pressures on environmental performance. This may then may help to reduce the strain on

environmental enforcement agencies, ultimately, improving the environmental situation in China (Nelson 2008).

As China is a state capitalist country, the government plays a very important role in the capitalist process. Even though China is now moving towards a more market driven economy, the Chinese government still has considerable control over the economy. It not only designs the long-term development strategies for the country, but also uses shareholdings in SOEs to achieve its political aims. As environmental protection and energy saving have now been set as the country's priority, it can be expected that the business sector will actively respond to this call from the Chinese government.

2.8 Business culture and environmental disclosure in China

Culture is interpreted as “the collective programming of the minds which distinguishes the members of one group from another” (KPMG 2011, p5). Hofstede (1994) categorizes culture into four aspects (Power Distance; Individualism/Collectivism; Uncertainty Avoidance; Masculinity/Femininity) in explaining the differences in behaviour from country to country³.

- Power Distance measures the degree to which unequal distribution of power and wealth is tolerated. China measures relatively high on Hofstede's scale, showing that the level of hierarchy in Chinese society or a Chinese organisation is high, and communications are likely to be through the command chain rather than direct.

³ Although Hofstede's work culture has been criticised by some academics in part or whole, his observations and analysis on culture is the most widely cited in existence, and provide scholars and practitioners with a highly valuable insight into the dynamics of cross-cultural relationships (Lieber 2013).

- Individualism/Collectivism refers to the extent of social integration, that is, whether people prefer to work singly or in a group. Hofstede found China has a relatively high score on this scale, therefore Chinese people prefer to work in groups and ascribe performance as a cooperative achievement.
- Uncertainty Avoidance is the situation where people feel threatened by unknown situations. People with strong Uncertainty Avoidance will require structure and order with clear rules and guidelines. On this scale China gets a relatively low score, which means people in China prefer structured work routines.
- A society characterized by Masculinity prefers authority, assertiveness, performance and success. On the other hand, a Feminine society emphasises relationships, modesty, caring for the weak and the quality of life. As China ranks relatively low, people in China are likely to show less empathy for their fellow workers, but they are likely to spend time on relationships and personal ties.

It is believed that culture significantly influences companies' disclosure attitude (Guenther et al. 2006; Xiao and Yuan 2007). That is, the research indicates that different cultures result in differences in the corporate reporting (including Environmental reporting) of countries throughout the world. Based on Hofstede's work, Gray and Vint (1995) developed four accounting values that specifically relate to corporate reporting practices. They are professionalism versus statutory control, uniformity versus flexibility, conservatism versus optimism and secrecy versus transparency. A country described as having statutory control, uniformity, conservatism and secrecy is unlikely to provide more voluntary information to the

public. Relating this to Hofstede's framework, such a country would have a high level of power distance and uncertainty avoidance. China, as discussed above, is a country with a relatively high level of power distance and strong uncertainty avoidance. Hence, Xiao and Yuan (2007, p604) argue that the "Chinese culture in itself does not promote voluntary disclosure of corporate information."

However, in recent times, studies have found that the number of Chinese companies that disclose environmental information keeps growing. For example, Situ and Tilt (2012) examined 20 large listed Chinese companies from 2005 to 2009. The results show that the average amount of environmental words in annual reports increased from 302 in 2005 to 553 in 2009, and the number of disclosing companies increased from 8 (47%) to 16 (84%). Many other recent studies (Dong et al. 2014; Gao 2009, 2011; Li and Zhang 2010; Zhang et al. 2009) confirm the increasing trend of corporate social and environmental reporting in China, and therefore indicate that Chinese companies may be becoming less secretive about their environmental performance, but there is gap in the literature on the nature of this discrepancy. There is no study looking at the content of the disclosure, rather than simply the amount. Therefore, this study investigates what influences Chinese companies to engage in CER by using Historical Discourse Approach and thus add to understanding in this area.

2.9 Ideology in China

Ideology is a set of common beliefs that are shared by a group of people, it is "the fundamental social beliefs that organize and control the social representations of groups and their members" (Van Dijk 2009, p78). As a one-party led socialist country, China's political system, economy and culture is very different from other

countries in that the state still dominates the market. Although China is now heading towards a market economy, the Chinese government's intervention is a strategic long-term policy choice, and markets function primarily as a tool that serves national interests (Zhao 2011). Especially, the pivotal role of ideology has been emphasised throughout the enactment of Chinese reform by the state leaders (Lieber 2013). As such, to investigate the influence on the Chinese CER, it is important to understand ideology in China.

Historically, ideology played a very important role in the whole process of the Chinese communist revolution (Bo 2004).

The Chinese Communists have always stressed the importance of ideological homogeneity as a means of control... They consider the control of thought even more fundamental than the control of overt behaviour. All errors in action, they maintain, are traceable to errors in thinking, or, in other words, to ideological deviations (Chen & Chiu 1995, p177).

Even after 1978, when economic reform started, ideology was still pervasive (Lieber 2013). Lieber (2013) argues that ideology is widely used in China to signal loyalty. The Chinese government is able to enhance their reform creditability through the public adherence to the ideology that is promoted by the leader. He (Lieber 2013, p346) also pointed out that the Chinese government is good at using ideology to “control and direct key vocabularies... (and) vague ideological language can create a climate of uncertainty thus increasing the range of a control regime”.

However, the prevailing ideological themes are dynamic, especially, along with the economic reform, new ideological themes are developed to response to the changing social stratification order. At the beginning of the economic reform, “building up a socialist market economy with specific Chinese characteristics” was the guiding ideology (Zhang 2012, p25). As such, economic growth was the country's priority.

Economic priority boosted Chinese economic development. However, as discussed in section 2.2, the scale of environmental degradation that came with this rapid economic growth is significant. Therefore, brings more and more criticism and expectations from the world that China should respond to this issue. Inside China, the environmental crisis also raises questions of whether the government's economic development priority policy is appropriate. Facing these pressures inside and outside China, the Chinese government has paid more attention to environmental issues in recent times. As a result, a new political commitment of building up a "Harmonious Society" was introduced by China's Chairman Hu Jintao, which has become a new leading ideology for this period. This ideology influences Chinese politics and society, as well as the economy (which is elaborated in chapter 3). Although China's economy is now moving towards being more market orientated, economic development concepts are continuously shaped by the central state (Ten Brink 2013). Fundamentally, the Chinese leadership seeks to continuously re-structure and improve central state control over economic decision-making (McNally et al. 2013).

The Chinese government wields power over Chinese organisations, as it implements the ideology of building up a harmonious society via Chinese companies. In this study, an argument is posited that the ideology ultimately influences the companies' strategy of disclosing environmental information.

2.10 Chapter summary

This Chapter reviewed the Chinese context, including providing a background to the environmental crisis, political commitment, political structure, legal system, economic development and business culture. In addition, the weaknesses of the current effort and trends towards environmental information governance in China

were outlined. Finally, the overview of the country's background provides some information about the factors that may influence Chinese CER. The next Chapter discusses the theoretical framework used in this thesis to frame the investigation of the CER and the influences on the Chinese companies examined in the study.

Chapter 3: Theoretical Framework

3.1 Introduction

This chapter opens with a brief review of the major theories used in prior literature, followed by a description of State Capitalism Theory and Stakeholder Theory. The reasons why the State and the West are the specific stakeholders that are examined in this study are discussed, and hypotheses are then developed.

3.2 Overview of major theories used in CER

A number of theories are used to explain why increasingly companies provide voluntary disclosure to the public (Deegan 2009b). As shown in Figure 3.1, these arguments are grounded within Positive Accounting Theory and Political Economy Theory.

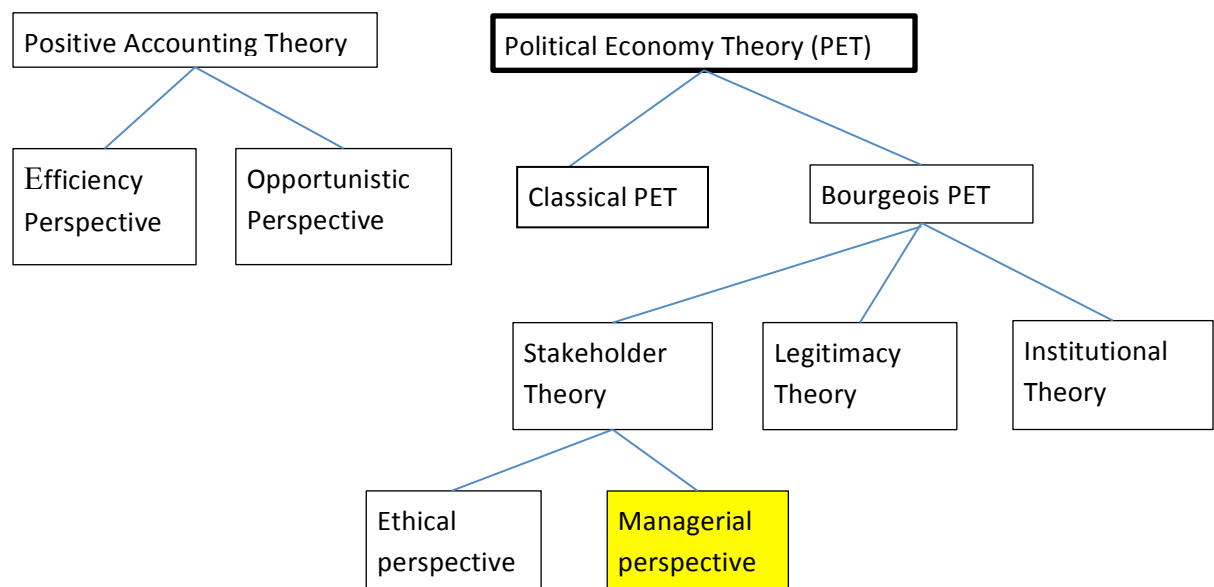


Figure 3.1: Theories used in explaining voluntary reporting

Positive Accounting Theory was developed around the mid-1970s. Three key hypotheses are frequently used in the Positive Accounting Theory literature in explaining and predicting why an organisation would chose a particular accounting method. They are the Bonus Plan Hypothesis (managers of firms with bonus plans are more likely to use accounting methods that increase current period reported income), the Debt/Equity Hypothesis (the higher the firms' debt/equity ratio, the more likely managers will use accounting methods that increase income) and the Political Cost Hypothesis (large firms rather than small firms are more likely to use accounting choices that reduce reported profits). It can be seen that Positive Accounting Theory emphasises the role of accounting in reducing the agency costs⁴ of an organisation (Deegan 2009b). The efficiency perspective and the opportunistic perspective are the two perspectives that are typically adopted by Positive Accounting Theorists. The efficiency perspective considers "what mechanisms are put in place up front, with the objective of minimising future agency and contracting costs", while the opportunistic perspective considers "opportunistic actions that could be undertaken once various contractual arrangements have been put in place" (Deegan 2009b). However, Positive Accounting Theory has been criticised for its assumption that all individual action is driven by self-interest. Social accounting researchers believe that to move towards sustainable development, organisations should take on their own social responsibility, and should not put wealth creation above all else. Therefore, while Positive Accounting Theory has been used to explain financial disclosure, Political Economy Theory is more widely used in explaining voluntary corporate social and environmental reporting (Deegan 2009a).

⁴ Agency cost refers to the cost produced by the conflicts between owners and managers.

Political Economy Theory is an appropriate theory in explaining corporate social and environmental disclosure activity, as Gray et al. (1996) argue, economic activities take place within the political and social framework; society, politics and economics are inseparable. Economic issues should be investigated including considerations of politics and society. It is perceived that CER comprises social, political and economic documents, and is a medium that enables companies to acknowledge to the public how their daily operations impact the environment (Guthrie and Parker 1990). Hence, it can be meaningful to use Political Economy Theory in explaining CER activity.

According to Gray et al. (1996), Political Economy Theory has been divided into two streams, “classical” and “bourgeois”. While Classical Political Economy Theory considers society in terms of class, and places class struggles, inequity and the role of the State at the heart of the analysis (Gray et al. 1996), Bourgeois Political Economy Theory ignores the struggles and inequity within society, and assumes that the world is pluralistic (Deegan 2009b). Legitimacy Theory, Stakeholder Theory and Institutional Theory, which are derived from Bourgeois Political Economy Theory, have been adopted by a number of researchers to examine social and environmental reporting (Deegan 2009a, 2009b; Mathews 1997; Taylor and Shan 2007). Institutional Theory provides an explanation for why companies in a particular field or industry tend to undertake similar practices, including providing social and environmental information (Deegan 2009b). It assumes that once influential companies adopt environmental reporting, through imitation more and more companies will begin to follow. Therefore, it becomes institutional pressures that will force managers to adopt this new practice, and if you refuse to emulate, you will risk losing the support of powerful stakeholders (Scapens 1994; Modell et al. 2007; Sharma et al. 2010; Modell 2012; Burns and Scapens 2000; Scapens 2006; Burns 2000).

Legitimacy Theory argues that there is a social contract between companies and society, and that companies attempt to establish congruence between companies' actual behaviour and the public's expectation, in order to maintain the companies' continuous survival (Van der Laan 2009). When the company's legitimacy is threatened, the management will attempt to defend it. According to Lindblom (1994), there are four strategies that a company can use to defend its legitimacy. They are: 1) change itself, 2) change the Public, 3) manipulation and 4) misrepresentation. In terms of environmental reporting, in order to be perceived by outside parties as being legitimate, companies are willing to undertake voluntary social responsibility reporting. Stakeholder Theory is similar to legitimacy theory. It analyses how different stakeholders' requirements affect companies' decisions to undertake social responsibility reporting voluntarily, and legitimising strategies are also used to legitimise to stakeholders, hence Stakeholder Theory is used in this thesis while recognising that consideration of reporting to stakeholders also includes a legitimacy aspect.

This study specifically considers whether the Chinese central government, and the increasing presence of the West, can be considered as important stakeholders influencing CER in China. Therefore Stakeholder Theory is used to examine and explain the influences on the increasing trend observed over the past few years.

It is important to note that previous studies on developed countries (mainly under free-market capitalism) often use Legitimacy Theory, Stakeholder Theory and Institutional Theory, but the core assumption of free-market capitalism is that the private sector, not the state, is the primary engine of economic expansion if growth is to be strong and sustainable (Ian, 2010). Therefore, Bourgeois Political Economy

Theory is appropriate in explaining CER under free-market capitalism. However, to the extent that the state is bureaucratic and uses the market to achieve its political goals, Bourgeois Political Economy Theory is limited as the state could be the only stakeholder that a company perceives as being legitimate. China is one of the world's most influential state capitalist economies (The Economist 2012). Therefore, the theory of State Capitalism is also used to frame the explanation of how the Chinese government uses a combination of its political power and capitalist power to affect CER in China. The term State Capitalism is used in a non-pejorative sense, in that it is not meant as a criticism but rather as a term to describe the nature of political influence in China. This influence can be in a positive, negative or neutral light. In order to demonstrate how the two theories are used in this thesis, State Capitalism is discussed next, followed by Stakeholder Theory.

3.3 State Capitalism

The involvement of the government in the market is not a new political economic model and can be traced back to the seventeenth century Netherlands whereby the government established stock markets, global firms and banking systems which were adopted by the British and then the US over the next two centuries (Lin 2011). This state involvement has varied among different countries and in different stages of industrialization (Hall and Soskice 2001) and the phenomenon has therefore been called different names, for example, 'state capitalism' (Bremmer 2008), 'dedicated capitalism', (Porter 1996), 'crony capitalism' (Krugman 1999), 'politicised capitalism' (Nee et al. 2007) and 'incorporated capitalism' (Buhr and Frankenberger 2014). Regardless of the different terms used, there appears to be consensus among

most scholars that it represents a situation where the state plays an important role in the capitalist process.

While some researchers have attempted to avoid classification by referring to state involvement in China as simply ‘Chinese capitalism’ (Fligstein and Zhang 2011), the two dominant perspectives are that of ‘socialism with Chinese characteristics’ (Deng 1985), which is the official term used by the Chinese government, and ‘state capitalism’ (Lin and Milhaupt 2013), which is the term more commonly used by Chinese management researchers (Lin and Milhaupt 2013; Li et al. 2014b) and mainstream media (The Economist 2012). In addition, state capitalism has wider academic application and a longer tradition (Petras 1977; Musacchio and Lazzarini 2014; Musacchio et al. 2015) and as such, this paper uses the latter to describe the Chinese model as ‘state capitalism’.

3.3.1 The State’s use of the market

State capitalism is not a new political economic model, and it has been embraced by more and more emerging markets recently, especially after China led the world out of recession after the 2008 financial crisis (Du and Wang 2013). According to (Bremmer 2010, p250), state capitalism is “a form of bureaucratically engineered capitalism particular to each government that practices it. It’s a system in which the state dominates markets primarily for political gain.” Under a state capitalist system, government intervention is strategic in nature and markets are used for the benefit of the nation (Ma 2011). State capitalism tries to meld the power of the state with the power of capitalism. Instead of eliminating markets, governments try to harness them for their own purposes (The Economist 2012). It depends on the government to pick winners and promote economic growth. It also uses capitalist tools such as listing

state-owned companies on the stock market and embracing globalisation (The Economist 2012). Although a state capitalist economy is different from a command economy where the government directly exerts day-to-day control, the government still has considerable direct influence over the economy and companies' strategy (Bremmer 2010).

It is argued that a number of governments, particularly in emerging economies, are learning to use the market to promote political ends, and that China is one of the world's most influential practitioners of state capitalism (Bremmer 2010).

3.3.2 State owned enterprises

One of the most important characteristics of the state capitalism model is that state-owned enterprises (SOEs) play an instrumental role in society (Du and Wang 2013). For example, Norwegian national oil champion, Statoil, is the largest company in the region. The Norwegian state owns large stakes in Telenor, the country's biggest telephone operator, Norsk Hydro, its biggest aluminium producer, Yara, its biggest fertiliser-maker, and DnBNor, its biggest bank. It holds 37% of the Oslo stock market, but it also controls some non-listed giants such as Statkraft, a power-generator, which if listed would be the third-biggest company on the stock market (The Economist 2013). In the Singapore's model of state capitalism, Singapore's government also owns controlling shares in many government-linked companies and directs investment through sovereign wealth funds (Shatkin 2012). Similar to other countries like Singapore, Brazil and Norway (Musacchio and Lazzarini 2014). In China, the state exerts shareholder power over state-owned enterprises (SOEs) through the State-Owned Assets Supervision and Administration Commission (SASAC). State companies make up 80% of the stock market capitalisation value

(The Economist 2012). Among the 57 Chinese firms on the list of Global Fortune 500 in 2011, almost all of them were SOEs (Li et al. 2012). Moreover, “among the top 500 firms in China, 81.9% of the total profits are made by SOEs. The ten most profitable firms in China are all state companies, among which the five state-owned commercial banks and the three state-owned oil companies earn profits twice as (much) as those of the 184 private companies in China’s top 500 firms list” (Du and Wang 2013, p2). This indicates that SOEs are still the backbone of the Chinese economy. As the biggest shareholder of SOEs, the Chinese government can use SOEs as a tool to achieve its political and social goals. In China, the role of SOEs is more than just business; SOEs play a key role in helping the Chinese government to implement its policies.

Through shareholdings in SOEs, the Chinese government can influence not only the decision making of SOEs, but also those of the private sector. As a result of economic liberalization and SOE reforms in the 1990s, SOEs have largely retreated from most of the downstream sectors (such as manufacturing and many services including hotel and restaurants), and private enterprises now dominate these sectors. However, SOEs still monopolize the upstream industries such as electricity, telecommunications, petroleum and petroleum chemicals, coal and gases, overseas transportation, steel and metal production, railways and railway construction, ship-building, and civil aviation (Du and Wang 2013). The upstream industries provide intermediate goods or services that the downstream sectors need as necessary inputs for their business operations. This enables the Chinese government to shape the overall market by allocating resources to their favoured industries. Therefore, in order to survive, the private sector is likely to want to adhere to the government’s policies when making decisions.

The Chinese government can also influence companies by directing money to favoured industries. It is argued, “the monetary policy in China mainly relies on the state-owned banks. The debt market and stock market are underdeveloped in China, and thus banks are the dominating form of financial intermediaries and the major avenue for firms to mobilize external finance” (Du and Wang 2013, p17). As a result, both the public and private sectors in China are likely to try to fulfil the Chinese government’s objectives when making decisions, even without any mandatory requirements.

3.3.3 Party control

The party exercises power over the appointment of the senior leadership of all SOEs through the party’s Organisation Department, which determines all senior executive positions in SOEs (Landry 2008). This has resulted in control over the leaders of China’s SOEs in that they are “cadres first and company men second. They care more about pleasing their party bosses than about the global market” (The Economist 2012, p6). While less common than the first method, it is similar to the appointment process within Singapore’s “government-industrial bureaucratic network” (Seet 2009, p266). This includes important positions being given to a ‘new bureaucratic elite’ (Chen 1978), or technocratic elite, who are selected because they have been seen to have a sufficient national, transnational and scientific knowledge useful for Singapore’s development model that is driven by MNCs (Heyser 1983).

Moreover, the party has cells in most large firms – private and state-owned – with their own offices and files on employees. These cells hold meetings that influence business decisions made at formal board meetings and sometimes even override them, especially in the aspect of workers’ pay and benefits. Given that China considers the

Marxist-Leninist-Maoist ideology as crucial (which will be elaborated on further in the thesis), this distinguishes it most significantly from other varieties of state capitalism that have a more liberal-democratic flavour. While state capitalism research's focus has been on using institutions as 'tools', in certain contexts, like that of Singapore and China, ideology plays a significant role as an additional lever in managing these 'tools' or 'agencies' (Petras 1977). For example, in Singapore's context, the use of 'Asian Values', which builds on certain elements of Confucianism (Low 2006; Tan 1989), combined with a high degree of rule-based governance (Li 2003), facilitates the mutual dependency of the authorities in the state and private-sector capitalist entities (Sim 2001). This is similar in China's context, and the Chinese have been studying the Singapore model intensely (Lin and Milhaupt 2013), resulting in a sophisticated two-step adaptation of both Marxist ideology with Confucian ideology in what (Lin 2011) has termed 'Xiaokang – moderate prosperity or well-off society' (The Chinese exercise of ideological power and control has been discussed in section 2.9).

In addition, according to state capitalism theory, it depends on the government to 'pick winners' and promote national champions. This will result in political rent-seeking (Aligica and Tarko 2012). Krueger (1974) argued that government intervention in the economy will create massive rent-seeking opportunities. Rent-seeking can help companies win the necessary resources and ultimately gain economic benefit. Thus, in order to win the rent-seeking competition, again companies will likely make decisions that comply with the government's political and social objectives.

The special report of The Economist further argues that the Chinese Communist Party exercises a degree of control over the economy. It states that (The Economist 2012, p6):

The party has cells in most big companies - in the private as well as the state-owned sector – complete with their own offices and files on employees. It controls the appointment of captains of industry and, in the SOEs, even corporate dogsbodies. It holds meetings that shadow formal board meetings and often trump their decisions, particularly on staff appointments. It often gets involved in business planning and works with management to control workers' pay...There are currently 17 prominent Chinese political leaders who have held senior positions in large SOEs. Conversely, 27 prominent business leaders are serving on the party's Central Committee.

As the government has cells in companies, it can influence the companies' decision making, and therefore is able to shape companies' actions without regulation.

More recently, Ten Brink (2013) provided an extended concept of state capitalism that is more appropriate for China. He argues “the Chinese political economy can be understood as a variegated form of state-permeated capitalism that is at the same time deeply integrated into world economic processes” (Ten Brink 2013, p18).

In recent years, a remarkable effort has been put into economic liberalization in China, for example, strengthening the regulatory powers of the central state, local-central fiscal reforms and recouping dividend income from the largest state concerns for the Ministry of Finance (World Bank and Development Research Centre of the Chinese State Council 2012, cited by Ten Brink 2013). However, economic development concepts are continuously shaped by the State and Party bodies; the Five-year Plan which maps the whole of Chinese economic developments is a particular example. As such, McNally et al. (2013) argue that, fundamentally, the leadership seeks to continuously re-structure and improve central state control over economic decision-making.

However, it is noted that much of the focus of state capitalism research to date has been on trying to classify the varieties of capitalism with Chinese characteristics at the macro political-economy level (Peck and Zhang 2013; Lim 2014; Mulvad 2014; Fligstein and Zhang 2011) and at the industry and firm level. That is, most research has been conducted on the role SOEs play in China's economy (Huang 2012; Zhang and Freestone 2013) with relatively fewer studies looking at the 'black box' of what influences decision-making in SOEs (Lin and Milhaupt 2013). There remains important gaps in unpacking this 'black box' especially in terms of how the party influences decision-making in major Chinese firms (Lin 2011).

In China's recent history, with the deepening of reforms and the intensifying of market competition, non-state firms or non-SOEs have been contributing disproportionately more to China's economic development (Sachs and Woo 2001). While there is evidence to show that non-SOEs have been performing relatively better than SOEs (Chen et al. 2011; Dekle and Vandenbroucke 2012), with a significant amount of research focused on the Chinese government's response to this through the privatization of SOEs (Liu et al. 2006; Liu et al. 2007; Tong 2009), there is limited research as to how non-SOEs function generally under the particular political and economic institutional constraints of the Chinese context. Resources are still largely controlled and in general under-allocated to non-SOEs by the government so examination of non-SOEs separately is warranted (Li and Xia 2008).

Hence, this thesis aims to address some of these research gaps and contribute to a better understanding of the corporate governance of Chinese firms by exploring how party ideology, working with other mechanisms, influences not only SOEs but other major Chinese firms in their corporate reporting processes.

In summary, this study argues that even though China's economy is now moving towards being more market orientated, companies' decision making is still largely driven by the Chinese government. As a part of corporate governance strategy, CER is therefore also substantially affected. This is consistent with the view of State Capitalism that, in a state capitalist economy, the government leads the market, and tries to use capitalist tools to achieve their political aims. China is one of the largest state capitalist countries in the world. Therefore, in this study State Capitalism will be drawn upon to examine the role of the State in China, and its influence on CER.

3.4 Stakeholder Theory

In previous studies, Stakeholder Theory is one of the most popular explanations for increasing environmental disclosure (Azzone et al. 1997; Freeman 1984; Jose and Lee 2007; Roberts 1992; Taylor and Shan 2007; Unerman and Bennett 2004). Stakeholders are the central unit of analysis of Stakeholder Theory. A notable definition of stakeholders provided by Freeman (1984, p46) states that a stakeholder is, "any identifiable group or individual who can affect the achievement of an organisation's objectives, or is affected by the achievement of an organisation's objectives." Different from traditional accounting theory, stakeholders of the corporation are not only shareholders, but also customers, employees, creditors, local communities, governments and many others. Stakeholder Theory argues that a corporation is part of society; and within society there are different stakeholder groups who will have different expectations about how an organisation should conduct its operations. Therefore, there will be various social contracts 'negotiated' by the corporation with different stakeholder groups, and environmental disclosure is one of the products of these 'negotiations' (Deegan 2009b). Stakeholder Theory is an

‘umbrella’ term that includes both the ethical perspective and the managerial perspective.

3.4.1 Ethical Stakeholder Theory

Ethical Stakeholder Theory argues that all the stakeholders of a corporation should be treated fairly, regardless of their power in controlling the resources of the corporation (Deegan 2009b). Therefore, to maximize returns to shareholders is not the ultimate task of corporate management, but all stakeholders’ interests should be considered and balanced when making decisions. The role of corporate social and environmental reporting is to inform the public how the corporation is affecting them, and all stakeholders have the right to be provided with information about to what extent the corporation has met its accountability, even if they do not have a direct impact on company’s survival (Deegan 2009b; Gray et al. 1996).

Ethical Stakeholder Theory promotes a perspective that corporations should take their social responsibilities seriously, and provide information to satisfy all their stakeholders. As a normative theory, Ethical Stakeholder Theory only attempts to offer guidance about how companies should operate on a moral basis, and it is seldom used to test and interpret the observed facts. Therefore, rather than Ethical Stakeholder Theory, most researchers use Managerial Stakeholder Theory.

3.4.2 Managerial Stakeholder Theory

While Ethical Stakeholder Theory considers “the rights of stakeholders”, Managerial Stakeholder Theory considers “the power of stakeholders or the effective management of stakeholders” (Deegan 2009b, p345). Managerial Stakeholder Theory considers that different stakeholder groups will not be treated equally; the

expectations or demands from the more powerful stakeholder groups will be addressed first. According to Clarkson (1995), stakeholders can be divided into primary stakeholders and secondary stakeholders. Primary stakeholders are those who have direct impacts on the corporation's survival, while secondary stakeholders are those "who are not engaged in transactions with the corporate and are not essential for the corporate's survival" (Clarkson 1995, p106). From the view of corporate governance, "the behaviour of various stakeholder groups is considered a constraint on the strategy that is developed by management to match corporate resources as best it can with its environment" (Deegan 2009b, p351), and "a major role of the corporate management is to assess the importance of meeting stakeholder demands in order to achieve the strategic objectives of the firm" (Roberts 1992, p598). As primary stakeholders are more powerful in controlling the corporation's resources, their requirements are the priorities of corporate management. Thus, power is the central theme in arguing firms' strategy choice.

Elijido-Ten et al. (2010) further argue that when a stakeholder's power is weak, that is when the firm has a low level of dependence on the stakeholder, the firm need not be as responsive to stakeholder demands. Conversely, when a stakeholder's power is strong, that is when the firm depends heavily on the stakeholder for survival, stakeholders can express their demands directly to the firm.

In one of the few studies that examine stakeholder groups' power directly in a non-Western context, Elijido-Ten et al. (2010), used semi-structured and unstructured interviews, triangulated against relevant website and media releases, to identify the major stakeholder groups in Malaysia. Their results showed that shareholders are perceived as the most powerful stakeholder group, as it is the group most important to

firms' survival. In contrast, the media and the environmentalist groups were seen as the least powerful, as companies do not depend on them for resources. Then, regarding environmental disclosure preference, interviews were conducted with these major stakeholder groups to find out whether different groups had different expectations regarding the types of disclosures a firm should make and, if dissatisfied with a firm's adopted disclosure policy, whether they use different intervention strategies in an attempt to induce the desired disclosure outcome. Two companies (Shexxon and Chem-Ecology) that had environmental events were chosen and interviewees were asked to rank four types of annual report environmental disclosure (ARED) (Do nothing; Exploit; Defend; Influence the rules of the game). The results showed that, overall, the stakeholders perceive that the main type of annual report environmental disclosure made by the firms is to defend its actions concerning a specific event. This finding supports previous studies that have often found that firms disclose environmental information to maintain or restore the company's legitimacy, but also suggest that it may be related to the information being demanded by stakeholders.

Moreover, in the Shexxon case, most of the participants indicated that the firm should provide ARED. However, the major shareholder group expected that the ARED would be used by the firm to exploit the situation to avoid any adverse effect on profitability. Since the major shareholders' interests are in line with the firm, their disclosure preference is reflected in the management's decision. The result indicates that the expectations of salient stakeholders significantly influences companies' environmental disclosure decisions (Elijido-Ten et al. 2010), which is an important concept for the study undertaken in this thesis.

It can be seen that environmental reporting and disclosure is a tool for corporations to develop and maintain relationships with their stakeholders. In order to “gain the support and approval, or to distract opposition and disapproval” (Gray et al. 1996, p46) from its stakeholders, a corporation will provide voluntary information about how their operations impact on the environment. Environmental reporting and disclosure is a part of the corporation’s governance strategy, therefore, the more powerful the stakeholders are, the more information is provided to comply with their particular expectations.

However, every country has its unique social, political, regulatory, economic and cultural institutions, which may lead to significant differences in stakeholder powers in relation to approaches to CSR and CER (Van der Laan Smith et al. 2005; de Abreu et al. 2012). As noted earlier, China is a state capitalist country, where the State dominates the economy, and ideology plays an important role. As such, studies of stakeholder influence in Chinese CER will extend the current understanding on Stakeholder Theory.

In China, the major stakeholder of corporations is likely the Chinese central government. And this has been noted by a number of researchers. For example, Situ and Tilt (2012) examined the annual reports of the top 20 Chinese listed companies for the years 2005 to 2009, selected from the *Fortune China 100*, which ranks companies by operating revenue, and found that Chinese government is a determinant of CER by these firms. Similarly, Dong et al. (2014) examined the influence of key stakeholder groups on CER by Chinese mining companies, and found that Chinese government appears to be the salient stakeholder. However, there is some evidence that some Western stakeholders, such as international organisations that are seen to

have influence globally, foreign partners of Chinese companies, and overseas stock⁵ markets, are also influential. These are referred to collectively in this thesis as the stakeholder group ‘the West’. Therefore, specific reference will be made to the role of the State as a stakeholder and the West as a stakeholder. The reasons for specific consideration of these two groups of stakeholders are discussed next.

3.5 Stakeholders of CER in China

As described by Freeman (1984), stakeholders are those who can affect or are affected by the achievement of an organisation’s objectives. Previous studies (Jamali 2008; Taylor and Shan 2007; Yamak and Suer 2005) have found that a range of stakeholders, including shareholders, customers, employees, investors, local communities, government and many others, drive the corporate social and environmental responsibility decisions of companies.

In China, corporate environmental responsibility is a relatively new concept. However, in recent times, more and more Chinese companies have begun to adopt and practice environmental responsibilities. Evidence of this is provided by the study by Zhang *et al.* (2009) who investigated 138 listed companies in China in the chemical industry, from 2003 to 2005. They found that the number of companies that had environmental disclosures in their annual reports increased from 73 (or 52.9%) in 2003 to 95 (or 68.84%) in 2005. In general, the stakeholders of corporate environmental disclosure in China that have been identified, include investors, managers, business partners, non-government organisations, the Media, civil society,

⁵ In this study, overseas stock markets include the Hong Kong Exchange and the Singapore Exchange. Although Hong Kong is part of China, and Singapore may not normally be viewed as a Western country, compared to the Chinese A stock market, they are more developed, and relatively free market, stock exchanges, therefore are included in this study as part of ‘the West’.

international pressure groups and governments (Wang and Juslin 2009). In a previous study however, Situ and Tilt (2012) found that ownership is one of the most important characteristics in determining the extent of environmental disclosure in China. In their study, being a state-owned enterprise increased the amount of environmental disclosure in an annual report significantly, which indicates that the Chinese government is a major driver of environmental disclosure. Therefore, in this study, the central government, henceforth referred to as the State, is one of the specific stakeholders that are examined.

Likewise, globalisation has brought more advanced corporate governance requirements for firms as environmental risk management is a major part of modern corporate governance. As discussed in Chapter 2, pressures from the international community are seen as emerging and important influences on disclosure in China. Therefore, the second specific stakeholder group examined in this study is the West.

The combined influence of these two dominant stakeholders is significant and they are discussed in detail in the following sections. While there is some evidence of other stakeholders becoming important, such as consumers and local NGOs (Wang and Juslin 2009), these are beyond the scope of this study.

3.5.1 The State as a stakeholder

The State has been considered as a stakeholder of CER in limited prior research. For example, Yamak and Suer (2005) argue that the State is a major stakeholder in shaping the corporate social and environmental responsibility practices of Turkish firms as part of their responsibility as a government is to address environmental problem in the country.

A similarly argument can be made for China, where extreme environmental concerns impel the Chinese government to pay more attention to environmental issues. Previous studies show that Chinese CER is promoted by the Chinese government (Dong et al. 2014; Guo 2005; Li and Zhang 2010; Lu 2008; Situ and Tilt 2012; Situ et al. 2013; Wang and Juslin 2009). In general therefore, the State as a stakeholder influences CER in China in two direct ways: (1) by issuing regulations and guidelines; and (2) by owning the enterprises and issuing policies for SOEs. The State also has indirect influence through its expression of political power, its appeal to cultural and nationalist tendencies, and through doctrine and propaganda. Therefore, two research methods are used in this study to test the Chinese government's direct influences on Corporate Environmental Reporting, and to examine the Chinese government's indirect influence on CER (Chapter 5 will discussed the methods used in this study).

The direct and indirect influences of the state are discussed in Section 3.6, but first, some background to the regulatory system, and the system of state ownership are presented.

➤ *Regulatory activities of the Chinese government*

As discussed in the previous Chapter, the first Environmental Protection Law in China was issued as early as 1979. The law, which introduced several principles, polices, governance measurements and punishments for non-compliance, is now the basic law of environmental protection in China. Since then, a series of nature and resource protection laws were enacted during the 1980s and 1990s, and all of them together built up the preliminary legal system for China's environmental protection. During this period, it is noted that the government was the only user of CER (Guo

2005). Therefore, at that time, the Chinese government was a major stakeholder of corporate environmental reporting, and probably the only stakeholder.

Entering the 2000s, the Chinese government released more and more rigorous laws to ensure Chinese companies were taking their corporate social responsibilities more seriously. In particular, in 2007, the issuing of the MDEI released a strong signal that the Chinese government accepts corporate environmental disclosure as a new environmental governance mechanism, and would like to see more public corporate environmental disclosure. Although it does not include a mandatory requirement for Chinese companies to disclose environmental information, the law states that those companies that are willing to provide voluntary environmental information could be given priority in gaining government funded environmental protection projects, other government funded projects and other rewards. In recent years, the Chinese government has expanded investment in clean energy; it is reported by Pew Charitable Trust (2010a) that the overall clean energy investment in China reached US\$54.4 billion. According to Wu Xiaoqing, China has been increasing its spending on environmental protection steadily, with an investment of 602.6 billion yuan (US\$97 billion) in 2011, 825.3 billion yuan (US\$134 billion) in 2012 and an estimated sum of 1 trillion yuan (US\$162 billion) in 2013 (The Climate Group 2014). Investment in China's environment protection industry during 2015-2020 is estimated to be 23 trillion yuan (US\$3.7 trillion) (Tang 2015). Therefore, this would be an incentive for Chinese companies to disclose more environmental information voluntarily.

Meanwhile, a strategy of encouraging CER has been carried out by the State Environmental Protection Administration. A series of guidelines for companies to

disclose social and environmental information, such as the *Guidelines of State-owned Enterprises Performing Social Responsibilities*, the *Guidelines about Enhancing Supervision of Listed Companies' Social Responsibilities*, the *Guidelines about China's Industrial Enterprises and Industrial Associations' Social Responsibilities* and the *Guidelines about Social Responsibilities of Listed Companies in Shanghai Stock Exchange*, have been issued. These guidelines give detailed disclosure requirements for Chinese companies and are meaningful for improving Chinese corporate social and environmental reporting.

Previous studies (China WTO Tribune 2009; KPMG 2008b; KPMG and Universiteit van Amsterdam 2005) have found that, before 2002, corporate responsibility reporting was almost non-existent in mainland China; in 2005, less than 10 Chinese companies published social responsibility information; however, in the following years, the number of Chinese companies that disclosed social responsibility information significantly increased; in 2009, the number of corporate social responsibility reports had reached 582 (China WTO Tribune 2009). Since a series of regulations and guidelines promoting more corporate social responsibility reporting were introduced at the same period, it is reasonable to assume that the Chinese government plays an important role in influencing CER through its regulatory activities. An aim of this study is to find more evidence to confirm or refute this assumption.

➤ *Chinese State-owned Enterprises*

Before the economic reforms began in the late 1970s, China had a centrally planned economy. There were only two categories of enterprises in China, state-owned enterprises and urban collective enterprises (Xiao 1998). The state-owned enterprises

played a significant role in the Chinese economy; in 1978, the state-owned enterprises' industrial output counted for 77.6% of that of the whole nation (Xiao 1998). At that time, enterprises were part of the Chinese government, and government officials allocated resources using a central plan (Wang and Juslin 2009). Also, managers of the state-owned enterprises were appointed by the government, responsible to their superiors at various level of the government, and held ranks which are similar to government officers (Xiao 1998). During this period, the roles of government and enterprise were mixed. State-owned enterprises had an obligation to take various social responsibilities for all their employees, such as housing, school and medication, on behalf of the state (Lu 1997).

State-owned enterprise reform is a major part of economic reform, and began along with economic reforms in 1978. State-owned enterprise reform can be divided into two stages (Xiao 1998). The first stage was 1978 to 1993, when the key reform was to separate SOEs from the government by introducing the agency model. Government was no longer the management of SOEs, but an owner only. SOEs continued to play an important role in the Chinese economy, although non-state enterprises emerged quickly after the economic reforms were introduced. "In 1994, China had more than 102,000 SOEs, representing only 1% of the total number of enterprises, but employing 75% of the urban industrial workforce, 57% of new investment and 70% of bank loans" (Moore and Wen 2006, p281). However, the economic performance of SOEs was poor in comparison to the non-state enterprises. In 1996, half of the state-owned enterprises reported losses (Moore and Wen 2006). In order to improve SOEs' economic performance, the Chinese government granted them more autonomy to state-owned enterprises, and gave them relief from the obligation of taking on various social responsibilities. At the same time, the non-state enterprises were also reluctant

to take on social responsibilities, because they did not have the same resources and equal market-share as the SOEs. In order to pursue more profit, they often operated irresponsibly. As a result, to maximize profit was the only target for Chinese enterprises, and corporate social responsibility (including environmental responsibility) was absent during this period (Wang and Juslin 2009).

The second stage of SOE reform started from 1994, and the key reform in this stage was to restructure ownership, namely shareholding reform (Xiao 1998). The reform comprised two parts: to turn small SOEs into private enterprises, and to reorganize large and medium sized SOEs as shareholding companies (Lin and Zhu 2000). As such, the State is now only one of the shareholders of SOEs. However, Lin & Zhu (2000) argue that the government is still significantly involved in the ownership and governance of the restructured enterprises, and that this is inevitable during the transition. As shown in Figure 3.2, SOEs are deeply embedded in the Chinese government's bureaucratic structure. The State-owned Assets Supervision and Administration Commission (SASAC), which is directly under State Council, is responsible for managing the SOEs, including appointing top executives and approving any mergers or sales of stock or assets, as well as drafting laws related to SOEs. Hence, the Chinese government still controls SOEs through their shareholdings despite the reforms.

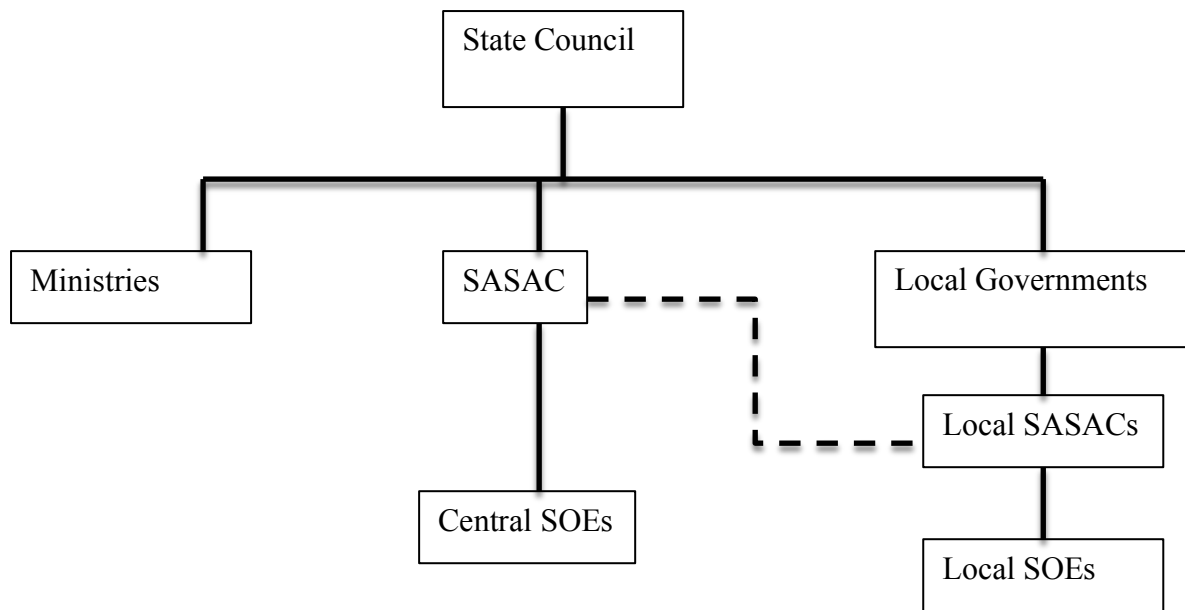


Figure 3.2: Bureaucratic structures of Chinese SOEs

Moreover, it is noted that, although the non-state sector became dominant after the reforms and accounted for much of the total output, most of the largest Chinese companies are still state-owned, and still control the majority of Chinese resources, such as energy, transportation and telecommunication. In 2012, 80 percent of the top 100 Chinese companies⁶ were state-owned enterprises. In 2015, there are 128 Chinese companies on the Global 500 list, and within that there are 128 Chinese companies, of which the top 12 are all SOEs (Forbes 2015).

In addition, as mentioned previously, along with a series of environmental problems, such as pollution discharge, which seriously affects the Chinese people's daily life and survival, public awareness of protecting the environment grows. As a result, conflicts between local people and companies, which are caused by water pollution, land degradation *etc.*, have increased. These bring instability to society which in turn

⁶ Standard & Poor's has conducted a statistical survey of the Top 100 listed corporations in China. This is the third year that Standard & Poor's has reviewed these leading corporations. The selection criteria are based on the latest available revenue size.

urges the Chinese government take more action to improve corporate environmental activities.

Therefore, it is reasonable to assume that the Chinese government plays an important role in shaping Chinese CER in China. However, after the economic reforms, in particular after China joined the World Trade Organisation in December 2001, the concept of corporate social and environmental responsibility has been introduced to Chinese companies. As the original concept and most of the guidelines for corporate social and environmental responsibility are from the West, it is also reasonable to assume that the West is another important stakeholder of Chinese corporate environmental reporting. Details of this assumption are discussed next.

3.5.2 The West as a stakeholder

➤ Brief history of CSR development in Western countries

A full review of the worldwide corporate social and environmental reporting research is discussed in the next chapter, but the concept is briefly introduced here from the perspective of developed countries.

CSR practice in developed countries emerged as early as the late nineteenth century. For example, the social reporting produced by an Australian company, Broken Hill Proprietary Ltd. can be traced from 1885 Guthrie and Parker (Guthrie and Parker 1989); Unerman (2000) also found evidence that the Anglo-Dutch oil company Shell disclosed social information dating back to 1897.

Since the early 1990s, social and environmental reporting practice has become widespread among companies in many countries (and most are in developed countries). Some large companies publish stand-alone social and environmental

reports (also called, among other things, CSR reports or sustainability reports) and disclose this kind of information on their websites (Deegan 2009a; Ernst and Ernst 1979; ICAEW 2004; Parker 1986; Trotman and Bradley 1981; Tregidga et al. 2014; Cho et al. 2015; KPMG 2013). Mathews (1997, p482) described the 1990s as “the start of a new era of interest in environmental accounting matters”, and as growing attention has been paid to environmental issues, literature on environmental accounting has become more predominant (Mathews 1997).

However, while corporate social and environmental responsibility developed quickly in the 1970s and became widespread in the early 1990s, corporate social and environmental responsibility in China was relatively absent (Wang and Juslin 2009). The Western corporate social responsibility concept was not introduced to China until 1990, when the first academic publication about corporate social responsibility by Yuan, was published (Wang and Juslin 2009).

➤ *Influences from international organisations*

International organisations are one of the major players demanding more Chinese companies become involved in practicing corporate social and environmental responsibility. In particular, they provide funds to support researchers in doing more research on the issue in order to introduce this modern concept to China, to help the Chinese government launch better policies that promote corporate social and environmental responsibility, and to help Chinese companies to better understand and practice it. For example, in 2002, the World Bank’s Development Research Group co-operated with the Chinese Research Academy of Environmental Sciences to launch a Green-Watch Program, and advised that public disclosure can improve companies’ social and environmental performance, and therefore, “public disclosure provides a

promising complement to conventional regulation” (Wang et al. 2002, p20). In 2006, the Asian Development Bank provided US\$600,000 for the project entitled “Support for Establishing a Clean Development Mechanism Fund” to help the Chinese government establish a fund that can further pursue the goal of clean development (ADB 2008b). Also, in 2009, the Asian Development Bank funded the project “Improving Corporate Governance and Enhancing Institutional Capacity of Environmental and Social Management” with US\$700,000, which aims to improve corporate governance and institutional capacity for environmental and social management in China (ADB 2008a). Moreover, in 2008 China and The Netherlands signed a Sino-Dutch Corporate Social responsibility Project⁷; this project aims to further introduce the Western Corporate Social responsibility concept to Chinese companies, and includes providing training for Chinese companies and policy makers, publishing practical experience from companies of developed countries and doing research on corporate social responsibility in China. Similarly, in 2009, China and Sweden signed a new corporate social responsibility agreement, which agreed that Chinese companies would improve human rights, labour, consumer rights and reduce emissions, while Sweden is to provide proper training⁸.

Greenpeace is another very important international organisation influencing corporate social responsibility in China. The goal of Greenpeace is to change attitudes and behaviour, to protect and conserve the environment and to promote peace (Greenpeace China 2011). In China, it acts as a non-official watchdog, reporting the heavy polluted companies, and lobbying the government to improve the environment

⁷ See <http://www.siccsr.org/cn/Column.asp?ColumnId=1>, accessed on 10 Jan 2012 (Chinese)

⁸ See <http://www.csr-china.net/templates/node/index.aspx?nodeid=bbdf3f6e-bd02-47be-a81c-03774310afc7&page=contentpage&contentid=df4c5fdc-3012-47d0-b3bc-cc09bb19c45c>, access on 10 Jan 2012

and do research on environmental issues. Evidently, international organisations play a very important role in driving Chinese companies practicing corporate social and environmental responsibilities, and comprise one element of the overall pressure faced by China from the West.

➤ *Influences from globalisation*

Along with economic reforms, those Chinese companies that are players in multinationals' global supply chain have started to practice corporate social responsibility. However, CSR was first resisted by Chinese companies; it was considered to be a new trade barrier, which made them less competitive in the global market (Wang and Juslin 2009). Before the early 2000s, although some Chinese companies did practice a form of corporate social responsibility, they only passively accepted it.

This situation changed after China joined the World Trade Organisation in 2001. More multinationals invested in the Chinese market. According to rough statistics, by 2005, there were 470 out of the Fortune Global 500 companies that had invested in China (Cui et al. 2007). In 2007, the foreign-invested enterprises' industrial output counted for 30.9% of the whole nation; and they paid tax of RMB 195.12 billion in 2007, which is equivalent to 3.8% of China's taxation revenue (Yin and Guan 2009). As mentioned previously, most multinationals perform advanced social and environmental reporting, and bring modern corporate management, of which environmental risk management is an important part, to China. It is believed the multinationals who invest in China play an important role in influencing corporate social and environmental responsibility because they practice corporate social and environmental responsibility themselves, they fund international corporate social

responsibility conferences held in China, and they support researchers to carry out research on corporate social responsibility in China. They also publish corporate social and environmental reports in the Chinese language, and as such many Chinese enterprises view the multinationals as a benchmark to learn from and to follow (Cui et al. 2007).

At the same time, more Chinese companies are involved in the global supply chain and are doing business with foreign partners. Inevitably, they are required to operate following international Corporate Social Responsibility guidelines, so they may face more stringent auditing demands, and have to receive relevant certifications. According to Wang et al. (2012), 90% of the Fortune Global 500 enterprises have developed a set of comprehensive social responsibility codes of conduct, and require their suppliers to comply with them. Also, corporate social and environmental responsibility is a market entry requirement for many developed countries. For example, the German Importers Association has developed a “Social Responsibility Code of Conduct”, which requires all German importers to audit their suppliers based on the standard of Social Accountability 8000 (SA8000). Also, exporters who want to enter the European Union market have to comply with the ISO 14000 environmental management standards (Wang et al. 2012). It is estimated that over 8000 enterprises in the coastal regions of China have experienced social responsibility auditing since 1995 (Wang et al. 2012). It is therefore evident that globalisation is a major driver of corporate social and environmental responsibility in China, which is likely to lead to increased disclosure..

In addition, it is believed that corporate social reporting is an efficient and economical way for suppliers to communicate with their purchasers (Gilbert 2011). Some

multinationals, including Puma, Dell and Acer, now encourage their suppliers, including Chinese suppliers, to publish social reports (Gilbert 2011). Therefore, it is reasonable to assume that there is significantly pressure for corporate social and environmental reporting in China in an increasingly globalised world.

➤ *Influence from foreign investments*

Along with the fast pace of economic development, Chinese companies are eager to gain more capital. Since 2002, more and more Chinese companies are listed on foreign stock markets (Liu 2006). As of 12 January 2012, there were 151 Chinese companies listed on the United States' stock exchanges (including NASDAQ, NYSE and AMEX), the total market value being US\$835.46 billion⁹. By the end of 2011, there were 189 Chinese companies listed on the Hong Kong Exchange, the total market value being HK\$4837.24 billion¹⁰. It is estimated that there are 50 Chinese companies listed on the Singapore Exchange and 19 Chinese companies listed on the London Stock Exchange¹¹. Also, in recent times, some Chinese companies have started to list on the German and Korean stock markets. As they have more restrictive social and environmental disclosure requirements, Chinese companies that are listed on foreign stock markets have to disclose more social and environmental information. For example, from 2006, a standard (HK(IFRIC¹²)-Int 5) requires companies listed on the Hong Kong Exchange to disclose "Rights to Interests arising from

⁹ Data obtains from NASDAQ website:

<http://www.nasdaq.com/screening/companies-by-region.aspx?region=Asia&country=China>, accessed on 23 Oct 2015

¹⁰ Hong Kong Exchange website:

http://www.hkex.com.hk/chi/stat/smstat/chidimen/cd_hmb_c.htm, accessed on 23 Oct 2015

¹¹ Hong Kong Richful Accountant Service website:

<http://www.rf.hk/listed/singapore/652.html>, accessed on 23 Oct 2015

¹² This Hong Kong Financial Reporting Standard contains International Financial Reporting Standards Foundation copyright material. Reproduction within Hong Kong in unaltered form (retaining this notice) is permitted for personal and non-commercial use subject to the inclusion of an acknowledgment of the source.

Decommissioning, Restoration and Environmental Rehabilitation Funds” (HKICPA 2010). Moreover, the United States’ Securities and Exchange Committee requires listed companies to separately disclose environmental contingencies and environmental expenditures, and to disclose any information that may have impacts on the company’s financial position. Therefore, it can be assumed that overseas stock markets’ requirements have some influence on Chinese corporate social reporting.

Likewise, since the first Socially Responsible Investment Fund, Pax World Fund, was established in 1970, Socially Responsible Investment (SRI) has become more and more important in the capital markets (Wang 2011), particularly in Western countries. As of September 2010, the market value of Global SRI was about EU\$7.6 trillion; and the combined market value of the United States and European SRI was EU\$7.14 trillion, which is equivalent to 94% of the global SRI market value at that time (Wang 2011). The Global SRI keeps growing in more recent years, according to 2014 Global Sustainable Investment Review, the total global SRI assets have reached US\$21.4 trillion at the start of 2014 (Global Sustainable Investment Alliance 2015).

Also, on 1 September 2010, the world’s second largest sovereign wealth fund, The Government Pension Fund of Norway, announced that they decided to invest more in environmentally responsible enterprises. The Norwegian government further confirmed that they have invested about 1% of the total fund (US\$4 billion) in developing countries’ environmentally responsible stocks¹³. It is apparent that more and more foreign investments consider companies’ social and environmental performance when they invest. Accordingly, Chinese companies who want to attract

¹³ See <http://www.csr-china.net/templates/node/index.aspx?nodeid=bbdf3f6e-bd02-47be-a81c-03774310afc7&page=contentpage&contentid=df4c5fdc-3012-47d0-b3bc-cc09bb19c45c>, accessed on 10 Jan 2012

foreign investments have to perform more advanced social and environmental reporting.

Moreover, Chinese stock markets have started to open up to foreign investors; corporate social and environmental performance is one of the important factors that are considered by the foreign investment funds when they invest. In order to attract more capital investment, more Chinese companies are likely to produce more social and environmental reporting

Further, foreign investment influences Chinese corporate social responsibility not only through the stock market, but also through financing. For example, on 2 November 2004, the International Finance Corporation invested US\$30 million in Chinese green energy companies for developing Cogeneration power plants and building a power generation facility which uses solid waste as fuel (Zhao 2011).

In summary, international organisations, globalisation and foreign investments play major roles in driving Chinese companies to accept their social responsibility. Previous studies show that corporate social and environmental reporting in China has continued growing, particularly from the mid-2000s (Dong et al. 2014; KPMG 2008b; Lu 2008; Situ and Tilt 2012; Situ et al. 2013), therefore confirming that the West is an important stakeholder of corporate social and environmental reporting in China.

This study will examine these two major stakeholder groups from a Stakeholder Theory Perspective. However, simply considering the State as a stakeholder in the usual sense is not sufficient to explain the growing phenomenon of environmental reporting in China. The complex interactions between the Chinese government and SOEs require additional analysis to understand the ultimate effect on social responsibility activities, and specifically on environmental reporting. Therefore, the

model of State Capitalism is used in combination with Stakeholder Theory to further examine how the Chinese government plays a major role in influencing CER. In order to reveal the structures of the Chinese government's power on Corporate Environmental Reporting, this study will use an approach of Critical Discourse Analysis as a method to see how Chinese companies reconstruct their reporting to adhere to the Chinese government's policy and whether there is evidence of competing influences.

3.6 Hypotheses development

As discussed above, the Chinese government wields power over Chinese companies' strategy of disclosing environmental information. It does this through three main roles: as regulator (political power), shareholder (voting power) and creditor/customer/supplier (economic power). Notwithstanding the expected influence of the Chinese Government on CER however, the recent move by China towards a market economy, the listing of Chinese-owned companies on foreign stock exchanges and increased trade with the West could exert counter-pressure on the nature of the disclosure. In particular, global guidelines, such as the Global Reporting Initiative (GRI), may have an impact on CER in China. In order to test whether and how the two influences (State and West) are operationalized, a series of hypotheses are developed. They are discussed next.

3.6.1 Influences from the State

➤ Political power

Since 2005, the Chinese central government has been trying to shift China's economy to become more sustainable and hence is using its political power to influence this shift. As a result, as part of the 'Harmonious Society' requirements, environmental

issues or 'green policy' has been introduced as the nation's priority, and environmental reporting is one of the plans that have been put into effect. As noted earlier, in 2007 the MEP released the MDEI (Enacted in May 2008), and this has been further strengthened by a series of guidelines.

Although, as argued in Chapter 2, there are currently no mandatory requirements for enterprises to disclose environmental information and the authority of the existing guidelines is not as strong as laws, the guidelines are still meaningful to influence Chinese companies' to improve their social and environmental behaviours (Situ and Tilt 2012). Therefore, it is expected that there will be a positive relationship between CER and the Chinese government's political power.

Moreover, since 2008, the Shanghai Stock Exchange requires that companies that comprise the Corporate Governance sector should release a stand-alone CSR report. Although the Shanghai Stock Exchange is not a government agency, the Chinese government's impact on it is significant, as the Shanghai Stock Exchange is developed, owned and controlled by the Chinese government (Fang 2007). Therefore the requirements of the Shanghai Stock Exchange will reflect the Chinese government's policy. As a result, it is expected that companies that are in the Corporate Governance sector will disclose more CER.

Based on the discussion above, the Chinese government can influence the companies' decision whether to disclose CER and also the extent of the CER that they produce through its political power. Therefore, the first hypotheses to be tested are:

Hypothesis 1a: The probability of a company who claims that they comply with State issued guidelines making the decision to disclose

environmental information is higher than for those without such a claim.

Hypothesis 1b: The extent of CER is higher for companies who claim that they comply with State issued guidelines when preparing their reports compared to those without such a claim.

Hypothesis 2a: The probability of companies in the Corporate Governance sector making the decision to disclose environmental information is higher than for companies that are not in this sector.

Hypothesis 2b: The extent of CER by companies in the Corporate Governance sector is higher than that of companies who are not in the Corporate Governance sector.

➤ Voting Power

The Chinese government is likely the major promoter of CER in China and this has been shown in a number of studies, which are reviewed in Chapter 4. As a shareholder of SOEs, the Chinese government may exert more influence on SOEs' CER activity, and this is referred to as their 'voting power'. Their influence may be exerted through state ownership of companies or through shareholdings. One of the objectives of economic reforms in China is to allow former SOEs autonomy in order to achieve high efficiency and productivity, and to improve the effectiveness of corporate governance through the involvement of domestic and international share markets (Ferguson et al. 2002; Wang et al. 2008). However, in order not to lose the control of the company, the Chinese government or its controlled entities will hold at least a 50% share of the company, and these are non-tradable in the share market. Therefore, if a company has non-tradable shares held by the State, there will be more control from the Chinese government over the company. With the change to the

nation's priorities to include the environment, those companies may disclose more environmental information.

Therefore, the following hypotheses are tested in this study:

Hypothesis 3a: The probability of a central SOE making the decision to disclose environmental information is higher than for local or non-SOEs.

Hypothesis 3b: The extent of CER by central SOEs is greater than for local or non SOE.

Hypothesis 4a: The probability of a local SOE making the decision to disclose environmental information is higher than for non SOEs.

Hypothesis 4b: The extent of CER by local SOEs is greater than for non SOEs.

Hypothesis 5a: The probability of a company that has non-tradable shares held by the State making decision to disclose environmental information is higher than for those without the state holding non-tradable shares.

Hypothesis 5b: The extent of CER by a company that has non-tradable shares held by the State is greater than those without the state holding non-tradable shares.

➤ Economic power

According to State Capitalism, developing countries such as China are learning to use the market to promote political ends. As discussed in Chapter 2, facing environmental problems, a new political commitment of building up a “Harmonious Society” was introduced by China’s Chairman Hu Jintao. As part of this political commitment, a range of market based instruments, charges and incentives are used as tools to promote environmental protection. According to the requirement of the Eleventh-Five Year Plan of the State’s Environmental Protection policy, about 1.35 trillion RMB, which counts as 1.35% of each year’s GDP, should be invested in environmental

protection programs. As noted in Section 2.3, China is a significant investor in clean energy covering 25% of the world's clean energy power generation (Pew Charitable Trust 2010b). In addition, a pollutant charge system has been introduced, and new resource tax standards for mining products, tariffs on energy-intensive products, and taxation incentive policies for low pollution and low energy consumption were implemented one after another (van den Burg 2008). Energy taxes, carbon taxes and environmental taxes are also under consideration (Bina 2010). Finally, according to the MDEI, companies who are willing to provide voluntary environmental information could be given priority in gaining government funded environmental protection projects, other government funded projects and other rewards. It is therefore proposed that there will be a positive relationship between environmental disclosure and government grants.

The hypotheses to test the relationship between CER and the Chinese government's economic power are as follows:

Hypothesis 6a: The probability of a company that received government grants making the decision to disclose environmental information is higher than for those that did not receive any grants.

Hypothesis 6b: The extent of CER by a company that received government grants is greater than that of those that did not receive any grants.

Hypothesis 7a: The probability of a company that received government grants on environmental issues making the decision to disclose environmental information is higher than for those that did not receive any environmental grants.

Hypothesis 7b: The extent of CER by a company that received government grants on environmental issues is greater than that of those that did not receive any environmental grants.

3.6.2 Influences from the West

While the Chinese government is very important in promoting CER in China, as noted earlier, Chinese companies are also more involved in economic globalisation. Thus the Chinese government is not the only influence as the impact of the West has become more noticeable in recent years.

In particular, more and more Chinese companies list on overseas stock markets. As discussed in the previous section, environmental awareness in the West is higher than in China, so it is proposed that the more overseas listed shares a company has the more pressure it faces from the West, and therefore will provide more environmental information to the public.

Moreover, the GRI is one of the most popular global guidelines for social and environmental reporting. It has a comprehensive structure, definitions and indicators to help companies in preparing their social and environmental reports. Therefore, it is assumed that if a company has signed up to the GRI, it will disclose more environmental information.

On the basis of the above discussion, the following hypotheses are developed to test the Western influence on Chinese CER:

Hypothesis 8a: The probability of dual-listed company making the decision to disclose environmental information is higher than for those that are not dual-listed.

Hypothesis 8b: The extent of CER by a dual-listed company is greater than that of those that are not dual-listed.

Hypothesis 9a: The probability of a company that has registered with the GRI making the decision to disclose environmental information is higher than for those that have not registered with the GRI.

Hypothesis 9b: The extent of CER by a company that has registered with the GRI is greater than that of those that have not registered with the GRI.

3.7 Chapter summary

Environmental Reporting has been studied for many years, and a great deal of theory has been developed to explain why companies are willing to provide voluntary reporting. In this chapter, an overview of the theoretical framework has been introduced. Managerial Stakeholder Theory and State Capitalism, which are used in this study, are then discussed in detail, and stakeholders, in particular two groups of stakeholders of CER, the State and the West, are also discussed. The next chapter reviews the current literature on corporate social responsibility reporting (of which environmental reporting is an important part).

Chapter 4: Review of Empirical Research on Social and Environmental Reporting

4.1 Introduction

This Chapter reviews the extant research relevant to social and environmental reporting to situate this study in the overall literature. While systematic analysis of social and environmental reporting has been done in developed countries, research on CER in China is still at an emerging stage. Studies of corporate social and environmental reporting in countries other than China are described first, then empirical findings of those studies done on corporate social and environmental reporting in China are highlighted, and this leads to the gaps which this study attempts to address.

4.2 Corporate social and environmental reporting studies

As discussed previously, along with the growing problems of environmental pollution and resource shortage, corporations globally are under pressure to take their social responsibilities more seriously. As such, more and more corporations are involved in providing environmental information to the public (Deegan 2009a). Correspondingly, accounting for the environment, in particular corporate environmental reporting, has become one of the major fields of accounting study (Mathews 1997; Tilt 2001). In addition, studies on CER in developed countries have become very diverse (Berthelot et al. 2003), ranging from studies of reporting incidence and frequency, through studies of reporting content, to in-depth analyses of the influence on reporting.

4.2.1 Adoption of corporate social and environmental reporting

In the 1970s, studies mainly concentrated on the adoption or incidence of corporate social and environmental reporting (Ernst and Ernst 1979; Guthrie and Parker 1990; ICAEW 2004; KPMG 2002, 2008a, 2008b). Since that time, it is considered that corporate responsibility reporting has become mainstream, and it is now the norm and an expectation among the world's largest companies (KPMG 2008a). According to KPMG's latest survey (KPMG 2013), 93 percent of the G250¹⁴ now report on their social and environmental activities, which has increased by more than 10% compared to the number of reporting companies in the 2008 survey. An increasing trend of corporate social and environmental reporting in less developed countries has also been found by a number of scholars. For example, Kabir and Akinnusi (2012) examine corporate social reporting in the corporate reports of manufacturing companies in Swaziland over a period of two years from 2007 to 2008. They found there was a trend of increasing corporate social responsibility information disclosure among the companies from 2007 to 2008 with an increase of almost 12 percent. A study of Pakistan also found that less developed countries are catching up with the developed countries in terms of environmental reporting. In their paper, the Annual Reports of twelve sectors were studied for a period of 5 years from 2005 to 2009, and the results show the trend is increasing over those years (Zamir et al. 2012). It can therefore be seen that "Around the world, corporate responsibility reporting has become a fundamental imperative for businesses" (KPMG 2011, p6).

Studies have constantly found the quantity of corporate social and environmental reporting is increasing, however, the studies that evaluate the quality of corporate

¹⁴ The largest 250 global companies based on the Fortune Global 500 ranking

social and environmental reporting find that although the number of reporting companies and the volume of disclosing information keeps increasing, the quality of the information reported is generally not high. Research indicates that most social and environmental disclosures are in qualitative, rather than quantitative or financial, terms plus most of the companies are reluctant to disclose negative information (Damak-Ayadi 2010; Guthrie and Parker 1990; KPMG 2008a; Niskanen and Nieminen 2001). For example, Niskanen and Nieminen (2001) examined the environmental reporting of Finnish listed companies in their annual reports during the period 1985-1996. They compare the negative environmental news published by *Helsingin Sanomat* about the forest industry and other firms to the negative environmental information disclosed in sample firms' annual reports. The results indicate that there were only 7 (14%) annual reports reporting negative information while there were 50 corresponding negative news stories published by *Helsingin Sanomat* during the period. Guenther et al. (2006) also argue that there is a gap between the quantity and the quality of the reporting. They use content analysis to investigate environmental reporting by mining, oil and gas industry companies who registered on the GRI for the year 2005. They found that there is a quantity-quality gap in the reporting of environmental indicators. Only one third of the indicators suggested by the GRI were reported by the sample companies. In particular, those indicators perceived to be the most relevant to the companies were reported most. KPMG reinforce that there is poor quality in corporate social and environmental reporting. Their 2011 survey reports that 41 percent of G250 did not report on their carbon footprint in 2011 (KPMG 2011). In their 2013 report, 13 percent of G250 companies did not report their corporate responsibility target at all, and 26 percent did not relate their corporate responsibility targets to material issues (KPMG 2013).

In order to better understand companies' social and environmental reporting activities, from the 1980s more studies began to focus on the factors that appear to influence social and environmental reporting.

4.2.2 Influences on corporate social and environmental reporting

After the 1980s, scholars turned to identifying the factors that influence and motivate firms to report. Adams (2002) summarizes the factors that have been examined by previous studies into three categories:

- 1) Corporate characteristics, such as size, industry group, financial/economic performance and share trading volume, price and risk;
- 2) General contextual factors, such as country of origin, time, specific events, media pressure, stakeholders and social, political, cultural and economic context; and
- 3) Internal contextual factors, including different aspects of corporate governance.

This section outlines the major findings of prior literature in these three categories; these are discussed further in terms of their relationship to research conducted in this thesis in Chapter 5.

➤ Corporate characteristics

A number of studies have explored what kind of corporate characteristics influence CER (Cowen et al. 1987; Cox and Douthett 2009; Hackston and Milne 1996; Roberts 1992; Trotman and Bradley 1981). Evidence in these studies shows that size and industry are the major determinants of CER. Most of these studies have found that company size is highly positively correlated with environmental disclosure (Cowen et al. 1987; Gray and Vint 1995; Guthrie and Parker 1990; Hackston and Milne 1996;

Tilt 2001). Since larger companies are more likely to be targeted by the public, they face more pressures and thereby provide more information to avoid public concern (Gray et al. 1995). The findings of the KPMG (2011) survey reinforce this belief. Figure 4.1 below, shows that bigger companies perform better in corporate social and environmental responsibility reporting. There are 92 percent of companies with revenue of more than US\$50 billion that report on their corporate social and environmental responsibility activities, which is twice as likely as those with revenues under US\$1 billion.

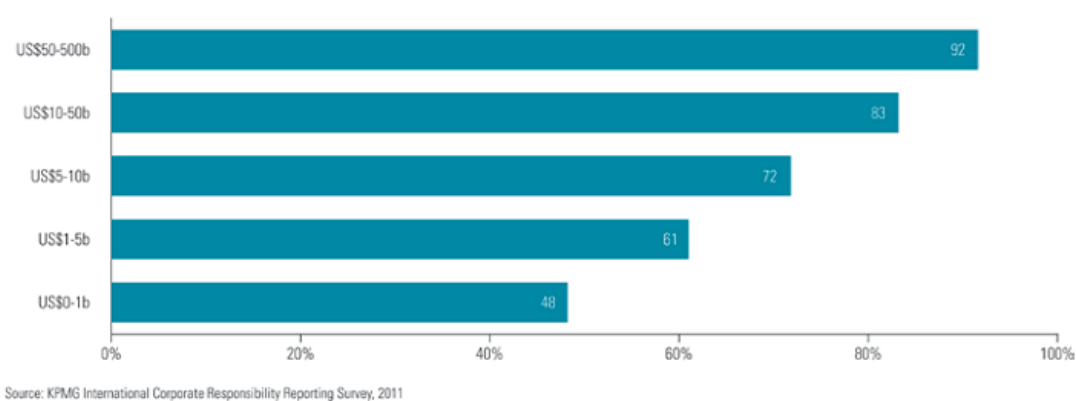


Figure 4.1: Size impacts on CSR reporting activities

Industry sector is another of the major determinants of corporate social and environmental reporting. The more environmentally sensitive companies are, the more information the companies disclose. For example, Hackston and Milne (1996) divided industry type into high-profile and low-profile industries. High-profile refers to those with consumer visibility, a high level of political risk, or concentrated intense competition, as those may have captured a systematic relationship between such characteristics and social responsibility activities (Hackston and Milne 1996). Their results show that those in a high-profile industry did provide more environmental information. Similarly, Brammer and Pavelin (2008) examined 447 large UK companies, and also found that the higher the environmental sensitivity, the greater

the pressure on the firm to publicly account for their activities and performance, including undertaking environmental reporting. According to the survey by KPMG (2011), the Forestry, Pulp & Paper sector and the Mining sectors are on the top of the list of reporters, both with 84 percent of companies that have corporate social and environmental responsibility reporting, followed by the Automotive sector (78 percent). Meanwhile, the Trade & Retail sector sits at the bottom of list, where there are 52 percent of companies that report on their social and environmental responsibility activities. It can be seen that “those that have the greatest influence over society and the environment (such as certain sectors of the energy and natural resources industry) show a higher commitment to reporting than other sectors that may be seen as wielding less influence” (KPMG 2011, p12). Similar results were found in the 2013 survey, although it was noted that the gap between sectors is narrowing (KPMG 2013).

Financial / economic performance has also been examined, and results are mixed. Jose'-Manuel et al. (2009) examined the relationship between Return on Assets (ROA), Return on Equity (ROE), leverage and Greenhouse Gas Emission disclosure, and he found that the independent variable ROE has a negative and significant effect, while leverage and ROA display a non-significant and negative effect. However, Clarkson et al. (2008) examined 191 USA firms and observed a positive relationship between leverage and environmental disclosure, and noted this is because agency costs of debt are higher for firms with relatively more debt in their capital structure. Cox and Douthett (2009) also studied US firms, and their findings indicate that the level of mandatory environmental disclosures is significantly related to the firm's profits; however, the sign of the relation is conditional on the nature of the firm's

communication strategy. When a firm provide the information in the context of confirmatory environmental disclosures¹⁵, there is a positive relationship between mandatory environmental disclosure and profits, but it is otherwise negative in the context of non-confirmatory disclosures.

Regarding stock market value, Magness (2006) examined how the 1996 Placer Dome mine leak affected Canadian gold mining firms' stock market values. She also assesses whether corporate environmental disclosure strategies affect the stock market impact of this ecological accident. Her findings suggest that the accident did lead the stock market value of Canadian gold mining firms to go down. However, the decrease in stock market value was less for firms that explicitly disclosed the existence of environmental management processes at the board or executive levels.

Ownership structure has been studied recently and some results indicate that ownership structure has a direct impact on companies' tendency to report social and environmental responsibility activities (Dong et al. 2014; KPMG 2011; Li and Zhang 2010; Munilla and Miles 2005; Gunawan et al. 2009). For example, Gunawan et al. (2009) found ownership structure is a likely determinant of social and environmental reporting in Indonesia, with SOEs tending to provide more. According to KPMG (2011), compared to other types of ownership structure, publicly listed companies perform the most advanced social and environmental responsibility reporting, with 69 percent of listed companies around the world disclosing information about their social and environmental responsibility. State-owned companies, at 57 percent, are the

¹⁵ A confirmatory disclosure is one intended to give "confirmation" that profitability has not been at the expense of the environment.

second highest reporters on the list. However, only 36 percent of family owned firms report on their social and environmental responsibility information. See Figure 4.2 below.

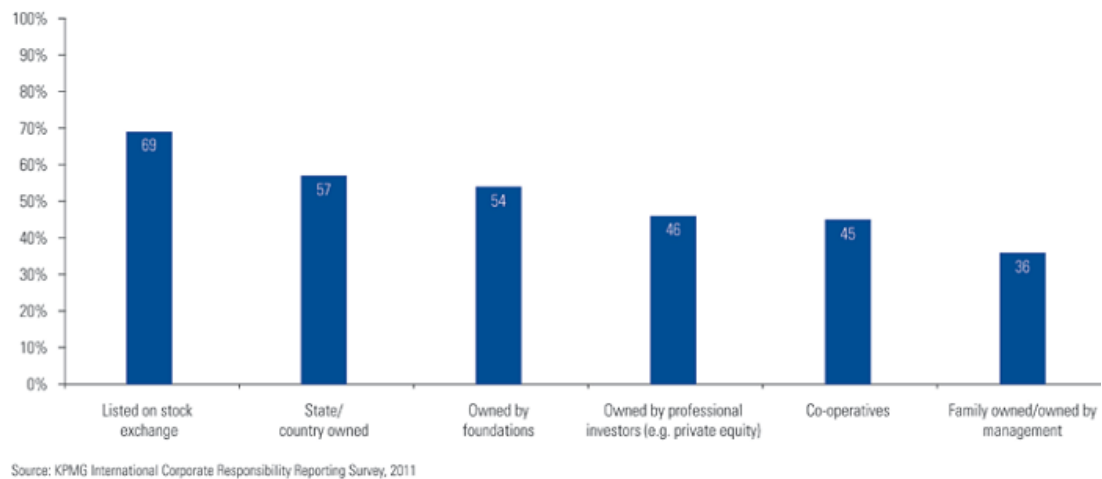


Figure 4.2: Ownership structure’s impact on CSR report activities

Notwithstanding the results above, Prado-Lorenzo et al. (2009) explore the relationship between ownership structure and corporate social and environmental reporting by examining 116 nonfinancial Spanish firms quoted on the Spanish continuous market. Their results show that the presence of financial institutions, dominant shareholders and minority shareholders in the ownership structure, do not affect any of the characteristics determined to be related to the firms’ social disclosure practices.

➤ *General contextual factors*

Country and Region is a significant factor that affects social and environmental reporting (Guthrie and Parker 1990; Kolk et al. 2001; KPMG 2002, 2008a, 2011). KPMG (2011) measure corporate social and environmental reporting at the country level, and their findings indicate that Japan (99%) and the UK (100%) are the

traditional leaders of reporting on social and environmental responsibility. European companies followed, with 71 percent of the companies reporting. In 2011, Nordic countries showed the most impressive rise in the number of reporting companies, while in the 2013 survey, the Asia Pacific saw the largest rise. In 2011, companies in the Asia Pacific region lagged behind the world (KPMG 2011), but are quickly catching up, however, KPMG (2013) note that this is mostly due to high growth rates in several of the countries in this region.

This effect of countries and regions on social responsibility report has been found constantly over time. Over two decades ago, Guthrie & Parker (1990) compared the levels of social disclosure within annual reports of the 50 largest listed companies in Australia, the United Kingdom and the United States. The results of the content analysis indicate that there was a difference in levels of corporate social disclosure, as well as the difference in content category themes between the different countries. Significant differences in the method of social disclosures also exist between countries. More recently, Chen and Bouvain (2009) compared the CSR reports of the leading companies in four countries: US, UK, Australia, and Germany. Their results show that countries showed significant differences in the mention of society, community, and customer related issues. In liberal economic markets, such as the US, UK and Australia, community-and employee-related issues are the most significant theme that is disclosed. However, in a coordinated economic market, German companies' reports are quite different from US, UK and Australia, as there is more emphasis on social and environmental issues. Thus, the differences in the extent and content of CSR reporting may be related to different varieties of capitalism and the different views of the role of business in society found in different countries. Consequently, it can be expected that different countries may have different corporate

social and environmental reporting practices (Jamali and Mirshak 2007; Vitell and Hidalgo 2006).

A Country's economic development stage also affects social and environmental reporting. It is argued that, in less developed countries, social and environmental reporting activities lag far behind. A number of studies have been undertaken on countries in the sub-continent, for example, Mohammad et al. (2009) examined the separate corporate social disclosure reports (between 1 July 2006 and 30 June 2007) of 263 companies which were listed on the Dhaka Stock Exchange (DSE). They found that only 15.5% of the listed companies on the DSE issued separate reports on social responsibility, compared to 52% of the world's largest 250 companies in 2005. The number of Bangladeshi listed companies disclosing social responsibility information is significantly low and the nature of the reporting in Bangladesh is predominantly descriptive and comprises "generalized qualitative statements without supporting evidence" (Mohammad et al. 2009, p8). In regard to the themes, Mohammad et al. (2009) showed that human resources comprises the majority of the disclosure, followed by the community and the environment. Similar results have been found in Indonesian and Malaysian studies (Gunawan et al. 2009; Thompson and Zakaria 2004).

Globalisation is another factor that influences corporate social and environmental reporting, especially in less developed countries, where environmental awareness is relatively low. Islam and Deegan (2008) again in a study of Bangladesh found that the awareness of stakeholders is low, and the main pressure for corporate social and environmental reporting is from the West. Due to Western consumers' concern about

the poor working conditions in “sweatshop” factories, human resources is the most predominant theme in their reporting.

Some scholars have studied the influence of specific events. For example, Deegan *et al.* (2000) review the effect of five major social incidents, including the Exxon Valdez and Bhopal disasters; the Moura Mine disaster in Queensland; an oil spill, caused by the Iron Baron, off the coast of Tasmania; and the Kirki oil spill, off the coast of Western Australia, on selected Australian companies’ annual report disclosure. They found that these incidents had significant influence on Australian voluntary reporting; sample Australian companies tended to provide more social and environmental information following a major social and environmental incident. Magness (2006) conducted a later study on Canadian companies and found that companies that obtained external financing one year after an accident made more disclosure than other companies did.

A number of other studies attempt to explore where the pressures for forcing any given level of information disclosure come from (Damak-Ayadi 2010; Deegan et al. 2000; Dobers and Wolff 2000; Holcomb et al. 2007; Jose’-Manuel et al. 2009; KPMG 2008a). These studies have found that some pressure comes from regulatory bodies (Damak-Ayadi 2010; Holcomb et al. 2007), also from investment rating systems such as the Dow Jones Sustainability Index and the Community’s Corporate Responsibility Index (Dobers and Wolff 2000; Jose’-Manuel et al. 2009), and pressure also comes from other various stakeholders, such as customers, employees, creditors, suppliers, NGOs, Local/Regional/National community (Enquist and Johnson 2006; Munilla and Miles 2005; Prado-Lorenzo et al. 2009).

➤ *Internal contextual factors*

More recently, increasingly studies have explored the relationship between corporate governance and corporate responsibility reporting. Adams (2002) argues that internal contextual factors could significantly affect the quantity, quality, extensiveness and completeness of reporting. In her study, she interviewed three British companies and four German companies during 1998. The findings show a number of influences on the reporting, including the reporting process which includes the company chair and board of directors, the existence of a corporate social reporting committee; corporate structure and governance procedures; the extent of the involvement of accountants, and attitudes to reporting, which includes views on recent increases in reporting, reporting of bad news, reporting in the future, and perceived costs and benefits of reporting; and corporate culture.

Previous studies indicate that good corporate governance appears to include good environmental performance, and has a positive effect on environmental reporting (De Villiers et al. 2009; KPMG 2008a; O'Donovan 2002; Tilt 2001; Rao and Tilt 2015). Tilt (2001) studied the relationship between corporate environmental policies, standards and disclosure practices of Australian companies. Her results showed that Australian companies did not use a fully integrated environmental management system, which resulted in a lack of public environmental reports in Australia at that time. The 2008 survey of KPMG (2008a, p22) confirms that good corporate responsibility governance results in better corporate responsibility reporting, it states that:

About three-quarters of the Global 250 have a publicly communicated sustainability strategy in place that includes stated objectives. Most of these have also issued a corporate responsibility report, presumably under the umbrella of their overarching strategy. Survey results found that only 37 G250 companies that do issue a report do not have an overall corporate responsibility strategy.

In summary, a number of influences on social and environmental reporting have been identified in prior literature. However, the research in this area has traditionally focused on companies in more developed economies, usually in the West, as there has been a longer history of environmental activism in such countries. More recently, there has been increasing interest in understanding reporting in developing countries that have a significant impact on the environment, particularly as they experience growth and move towards a more capitalist orientation. However, while the determinants of CER has been studied by a number of scholars, few include the role of political context and ideology in influencing CER, especially how the ideology of a socialist country, such as China, impacts the CER discourse. Therefore, this paper attempts to narrow this gap by considering relevant traditional determinants as well as those specific to the Chinese context.

4.2.3 Reliability of environmental reporting

While some scholars conducted empirical studies, others have studied corporate social and environmental reporting using a more critical approach. It is argued that companies' social and environmental responsibility reporting is not consistent with their corporate responsibility strategies (Dobbs and van Staden 2011; KPMG 2008a). Under pressures, such as higher expectations from stakeholders, high profile ethics-related scandals, and emerging national legislation and standards, 92 percent of the G250 companies disclosed a code of conduct or ethics in 2008. However, of these only 59 percent reported on non-compliance incidents within their codes. Also, over 90 percent of the G250 companies had a supply chain code of conduct, but only half disclosed details of how it is implemented and monitored (KPMG 2008a). A recent study done on 122 New Zealand listed companies by Dobbs and van Staden (2011) confirms this finding. In the research, survey questionnaires were sent to selected

companies, and the results indicate that companies rate 'To satisfy community concerns with operations' as the most important factor in their decision to report. However, the results of content analysis done on the companies' reports show that community disclosure scored below the other themes and below best practice levels (Dobbs and van Staden 2011). The gap between corporate responsibility strategy and corporate responsibility reporting shows that corporate responsibility reporting still requires further development and guidance (Dobbs and van Staden 2011). As a result, Dobbs and van Staden (2011) conclude that social and environmental reporting by New Zealand companies is not reliable, and suggest that users of the reports must approach the disclosures with caution. This argument is reinforced by a number of researchers. For example, Deegan et al. (2000) found, as discussed above, that Australian companies tend to provide more social and environmental information following a major social or environmental incident. Therefore, they argue that the reason why companies disclose environmental information is to address the social pressure and respond to societal needs. Their disclosure activity, however, is said to be more likely 'window dressing' than genuine action (Deegan et al. 2000).

4.2.4 Improvement of social and environmental reporting

Finally, studies have investigated the quality of, and medium for social and environmental reporting. A few studies consider where companies disclose their corporate social and environmental information (Deegan 2009a). In the early stages of the development of corporate social and environmental reporting practices, the annual report was the major medium that corporations used to communicate with their audiences. Deegan (2009a, p330) states, "in the early and mid-1990s, companies tended to take the form of disclosures within the annual report (accompanying the annual financial accounts) about the environmental (and subsequently social) policies,

practices and/or impact of the reporting organisation.” Later, when corporate social and environmental reporting practices became widely accepted, some leading companies started to provide more detailed information about their social and environmental responsibility by publishing a separate stand-alone social and environmental report, in addition to a summary of these disclosures in their annual report (Deegan 2009a). In 2008, 79 percent of the world’s largest 250 companies published a stand-alone corporate responsibility report (KPMG 2008a). “The question is no longer ‘Who is reporting?’ but ‘Who is not?’ Corporate responsibility reporting is now a mainstream expectation of companies” (KPMG 2008a, p14). According to the latest survey done by KPMG (2011, 2013), more and more companies are using multiple channels to communicate with a wide variety of stakeholder groups about their social and environmental responsibility. According to KPMG (2011, p22):

Only 20 percent of G250 rely solely on stand-alone CR reports, and barely 10 percent restrict their report either to web-only formats or annual reports alone. Many organizations (approximately 40 percent) now incorporate a special-purpose CR website into their communications that enhances accessibility for the various audiences and enables readers to view data through different lenses and perspectives. A growing number also integrate CR metrics into their annual reports as part of a wider mix, and a small but growing number have even developed mobile applications (such as iPad Apps) to deliver even greater access to stakeholders.

It is believed that those companies who utilize multiple platforms to communicate with their stakeholders would win ground from their competitors who use only one channel to report corporate social and environmental responsibility (KPMG 2011).

Other scholars argue that the quality of corporate social and environmental reporting is low, therefore assurance of corporate social and environmental reporting is necessary (Guenther et al. 2006; KPMG 2011; Niskanen and Nieminen 2001). The KPMG survey (2011) illustrates that data quality becomes a significant issue and, as a

result, a growing number of companies seek third party assurance professionals to access and verify their corporate responsibility reporting processes in order to improve the quality and reliability of their reporting data. In 2011, 51 percent of mining companies and 46 percent of utility companies conducted assurance activities on their social and environmental responsibility reports. In 2013, 72 percent of the largest companies across 41 countries (referred to as the N100) assured their reports (KPMG 2013).

The above review shows that systematic analysis of social and environmental reporting has been done in developed countries with some studies emerging on developing countries.

A number of papers suggest that ‘country’ is a determinant for level of reporting, but do not go much further. A few papers have tried to review these studies. For example, Belal and Momin (2009) categorise the work on developing countries into three groups (really 2 groups) – extent studies using content analysis, and perception studies (either managers or stakeholders). See Figure 4.3.

Categories⁵	Research methods	Brief Description	CSR studies
Studies related to extent and level of CSR and their determinants	Content analysis	Predominantly quantitative studies which indirectly explore corporate motivations behind CSR by measuring the volume and the extent of disclosures. This category also includes studies which examined the determinants of CSR.	(Andrew, Gul, Guthrie, & Teoh, 1989; Batra, 1996; Belal, 2000, 2001; Belal, 1997; Choi, 1998, 1999; de Villiers, 1999; de Villiers & van Staden, 2006; Disu & Gray, 1998; Gao, Heravi, & Xiao, 2005; Haniffa & Cooke, 2005; Hegde, Bloom, & Fuglister, 1997; Imam, 1999, 2000; Kamla, 2007; Kisenyi & Gray, 1998; Kuasirikun & Sherer, 2004; Lodhia, 2000; Lynn, 1992; Maali, Casson, & Napier, 2006; Naser, Al-Hussaini, Al-Kwari, & Nuseibeh, 2006; Newson & Deegan, 2002; Rashid & Lodh, 2008; Savage, 1994; Singh & Ahuja, 1983; Thompson & Zakaria, 2004; Tsang, 1998; Williams, 1999; Williams & Pei, 1999; Xiao, Gao, Heravi, & Cheung, 2005) (31)
Managerial perceptions studies	Questionnaires and interviews	Predominantly qualitative studies which directly explore corporate motivations behind CSR mainly via in-depth interviews with relevant corporate managers.	(Belal & Owen, 2007; Islam & Deegan, 2008; Jaggi & Zhao, 1996; Rahaman, 2000; Rahaman, Lawrence, & Roper, 2004; Teoh & Thong, 1984) (6)
Stakeholder perceptions studies	Questionnaires and interviews	Predominantly qualitative studies which explore CSR from the stakeholder perspective mainly via in-depth interviews with relevant stakeholder groups.	(Al-khater & Naser, 2003; Kuasirikun, 2005; Lodhia, 2003; Naser & Baker, 1999) (4)

Source: Belal and Momin 2009, p5

Figure 4.3 Summary of developing countries' CSR research

However, all these studies, only descriptively analyse their data, without considering the social, economic and political context (Belal and Momin 2009), and no real thought about the theoretical assumptions being made. Especially, “research on CER in BRICs (Brazil, Russian, India and China) countries is still conspicuous by its absence... published CSR research on mainland China, Russia and East European countries is relatively scarce” (Belal and Momin 2009, p28). Therefore, contextually anchored country specific CSR research is encouraged (Belal and Momin 2009).

China is a highly centralized country and its political and legal system is different from other countries, especially Western countries. China is the world's largest developing country and it is now in transition from a centralized, command economy towards a free market-oriented economy. Given that China has significant social and environmental impact, a study on CER in Mainland China would be a valuable addition to the CSR literature. Moreover, there is only a handful studies have been done on influences on CER in developing countries. In particular, an in-depth insight of influences on CER from a stakeholder perspective is missing (Belal and Momin 2009). Therefore, a study of CER in China will add to the extant scholarly knowledge on corporate social and environmental reporting. Further, corporate social responsibility is a relatively new concept in China, it was taken seriously in China only after China joined the World Trade Organisation in 2001 (Gao 2011). As a result, this study explores CER in the Chinese context, and attempts to reveal some characteristics of CER in China.

4.3 Corporate social and environmental reporting in China

Corporate social reporting is a new concept in China, most Chinese companies do not treat it as a part of their corporate governance framework (RCCSR 2011). However, corporate social reporting has developed dramatically in recent years. The Chinese Research Centre for Corporate Social Responsibility, the Academy of Social Science (RCCSR), reports that, from 2006 to 2010, the number of Chinese companies publishing CSR reports has jumped from 32 to more than 700¹⁶, a more than twenty-

¹⁶ The number of Chinese companies publishing CSR reports reported by *Executive Summary Of Chinese CSR Report Preparation Guide* is different from that reported by *the Survey of Corporate Responsibility Reporting of Chinese Listed Companies 2011*, because the sample examined by *Executive Summary Of Chinese CSR Report Preparation Guide* includes all the Chinese companies,

fold increase in only four years (RCCSR 2011). In 2011, the reporting continued to increase. According to the *Survey of Corporate Responsibility Reporting of Chinese Listed Companies 2011* (RCCSR 2011), there are a total of 531 firms out of 2200 listed companies¹¹⁷ that have corporate social reporting, which is an increase of 10% compared to the number of reporting companies in 2000. Among the 531 listed companies, 482 listed companies issued a stand-alone report. However, it is noted that, while 79 listed companies are disclosing social and environmental information for the first time, there are 30 listed companies that have discontinued reporting. This indicates that corporate social and environmental reporting is still not a regular activity of Chinese listed companies.

Corporate social and environmental reporting in China has, in fact, been studied since the early 1990s (Song and Li 1992; Xiao and Mi 2004; Zhang 1993). In recent years, along with the increase in corporate social and environmental reporting in China, the study of Chinese disclosure has attracted a growing number of Chinese scholars.

Determinants and other corporate characteristics of corporate social and environmental reporting have been studied by most of these Chinese researchers. For example, Shen and Jin (2006) examined the annual reports (from 1999 to 2004) of petrochemical plastics industry companies listed on the Shanghai and Shenzhen Stock Markets, their results mirror findings in developed countries; namely, that company size, profitability and industry are the important determinants of corporate social and environmental reporting in China. However, different from developed countries, financing needs and financial leverage have no impact on social and environmental

while the sample examined by *the Survey of Corporate Responsibility Reporting of Chinese Listed Companies 2011* only includes companies listed in Shanghai and Shenzhen A stock markets.

¹⁷ Their sample includes all the annual reports and social responsibility reports issued by the companies listed on the Shanghai and Shenzhen A Stock Markets

reporting, which indicates that listed companies in China do not consider management risk and agency costs when disclosing social responsibility information (Shen and Jin 2006). These findings were supported by Zhu and Xue (2008), who examined the annual reports in 2006 of 248 manufacturing companies listed on the Shanghai A Stock Market and show similar results.

In relation to corporate governance, Ma and Zhao (2007) found that, unlike the results found for developed countries, the number of independent directors on the board of Chinese firms has no significant effect on corporate social and environmental reporting. They conclude that this is probably due to the fact that the independent director system does not function effectively in most Chinese companies.

The quality of corporate social reporting in China has also been assessed by some scholars. Song and Gong (2007) used content analysis to examine the annual reports of listed Chinese companies and found that the quality of corporate social reporting in China is quite low, which makes the report less valuable for decision-making.

The relationship between corporate social reporting and the stock market performance of Chinese firms has also been explored. According to Shen and Yang (2008), there is a positive relationship between corporate social reporting and its stock market performance and they conclude that disclosing social and environmental information would benefit other Chinese listed companies.

In general, corporate social and responsibility reporting is becoming a more and more popular topic of research in China. However, Guan and Noronha (2013) reviewed the recent 'Chinese' literature on Chinese CER, and concluded that much of them is conceptual, descriptive, or argumentative in nature. Moreover, proper research methodologies are not systematically applied in some studies, and supporting theories

are lacking. As a result, this study uses a mixed quantitative and qualitative method to do an in-depth analysis of the influences on the increasing trend of Chinese CER, and attempt to narrow this gap.

In addition, it is noted that most of the studies reviewed in this section are written in the Chinese language. This can be a barrier to scholars who are not familiar with Chinese. English-language articles about corporate social and environmental reporting in China are rare. According to Moon and Shen (2010), from 1993 to 2007, only 73 relevant articles can be found in refereed journals in Business Resource Premier (EBSCO). “This online database, covering a wide range of journals in business, management, economics, finance, accounting, international business, operations research, organisational dynamic, gives access to over 1100 scholarly publications in the field of business” (Moon and Shen 2010, p617).

Although there is a lack of studies in the English language on corporate social and environmental reporting in China, some researchers have published in English and these provide some valuable insights. For example, some scholars provide a normative perspective. Li et al. (2008) reviewed the current situation in China, discussed the problems related to this situation, and concluded that public access to environmental information in China should be improved, as it is likely to improve the quality of decision-making, pollution control, and the environmental performance of governments and enterprises.

A number of surveys study the trends in corporate social and environmental reporting in China (Dong et al. 2014; Gao 2011; KPMG 2008b; Situ and Tilt 2012). Situ and Tilt (2012) studied the annual reports of the top 10 Chinese listed companies from 2005 to 2009, and found that an upward tendency occurs over the observational

period, with the average amount of environmental words increasing. It can be seen from this study that corporate social and environmental reporting is growing rapidly in China, which is similar to the findings of research done in the Chinese language.

Determinants of corporate social and environmental reporting in China have also been explored by some researchers in the English language. For example, Zhang et al. (2009) studied Chinese chemical industrial companies, and found over 50% of sampled companies provided environmental information in their annual report, which indicates that environmentally sensitive industries perform better than others. The study also found that larger firms, and firms with stronger profitability, tend to disclose more environmental information, in order to build a positive image and avoid political costs such as higher taxes. In addition, some studies argue that the Chinese government is a very important determinant of the extent of CER in China (Guo 2005; Li and Zhang 2010; Situ and Tilt 2012; Situ et al. 2013). As discussed earlier however, the majority of these use state ownership as a proxy for government influence. The results of the study by Situ and Tilt (2012) found that being a state-owned company increases the amount of environmental disclosure significantly.

Other studies have examined the level of corporate social and environmental reporting in China and compared their results to competing theoretical frameworks. Taylor and Shan (2007), for example, examined the annual reports of the largest Chinese companies listed on the Hong Kong stock market and found that voluntary corporate social and environmental reporting of Chinese companies listed in Hong Kong is quite limited and patchy. They found that legitimacy theory is less effective than stakeholder theory as an explanation of the quantity and quality of corporate social and environmental reporting in the Chinese context.

The cultural impacts on corporate social and environmental reporting in China are the subject of limited attention. Rowe and Guthrie (2009) interviewed senior managers and executives in fifteen enterprises operating in Shanghai, and their results indicate that CER in Shanghai is influenced by informal institutional cultural norms, such as *Guanxi*¹⁸, *trust* and *secrecy*. Taking a national culture perspective, Wang and Juslin (2009) argue that the Western corporate social responsibility concept does not fit the Chinese market well, as corporate social responsibility should combine with the harmony principles from the traditional Chinese cultural influences of Confucianism and Taoism. This approach would make corporate social responsibility more acceptable to the Chinese market, and would improve the Chinese enterprises' corporate social responsibility performance. This contextualisation of the research for a Chinese setting is an important issue that is ignored in many previous studies, and is one that is addressed in this thesis.

In addition, although increasing attention has been paid to corporate social and environmental reporting in China, stakeholders of the reporting are under explored. According to the research carried out by Moon and Shen (2010), before 2005 no English-language articles about corporate social responsibility in China focus on stakeholder issues, and between 2005 and 2007 only 6 articles, which is 8% of the total, have a stakeholder focus.

Previous studies in developed countries suggested that firms with a higher stakeholder orientation have both higher levels and quality of social responsibility disclosures (Van der Laan Smith et al. 2005). However, in developed countries, environmental

¹⁸ *Guanxi* is an indigenous Chinese construct and define it as an informal, particularistic personal connection between two individuals who are bounded by an implicit psychological contract to follow the social norm of *guanxi* such as maintaining a long-term relationship, mutual commitment, loyalty, and obligation (Jones 2007).

awareness is relatively high, and therefore, the stakeholder pressures are diversified. However, as environmental awareness in China is relatively low, and the Chinese government plays a very important role in Chinese economics, so how the business sector in China reacts to the stakeholder press may be different from other countries. Therefore, this study helps to redress this imbalance by considering stakeholder theory as part of its theoretical framework.

Recently, a few scholars have studied the stakeholder influence on Chinese CER, however, they have provided different results (Dong et al. 2014; Lu and Abeysekera 2014). In a study of stakeholder power on Chinese CER, Lu and Abeysekera (2014) investigated the influence on listed firms identified by a social responsibility ranking list, and found that the power of various stakeholders on CER is generally weak. Unexpectedly, the listed SOEs did not show a substantial difference in CER compared to non-SOEs. However, contradictory evidence was found by Dong et al. (2014), who examined the influence of key stakeholder groups on CER by Chinese mining companies and found that the Chinese government and international consumers appear to be the salient stakeholders. Moreover, most previous studies on the Chinese government's influence on CER use state ownership as a proxy to examine the influence of the Chinese government, without considering the complex role of the Chinese government within the current social and political context of the country. In order to better understand, and potentially improve, CER in China it is important to understand the complexities of State power. In addition, while some studies have considered the influence of the State, few have considered the potential competing influences in the growing Chinese economy. Therefore, this study investigates two major stakeholders of Chinese CER: the Chinese government and the West.

4.4 Chapter summary

Environmental reporting in China is a relatively new concept and has been studied since the early 1990s. Even though there is a lack of studies of corporate social and environmental reporting in China, the studies that have been done provide an important background to current understanding of reporting practices. This chapter briefly explored the extant literature on environmental reporting in developed countries and on developing countries, and then reviewed the studies conducted specifically on China. Thus, this chapter provides the background to environmental disclosure and the gaps in the study of the phenomenon in China. In summary, the main gaps are:

- (1) While systematic studies have been done on CER in developed countries, those on developing countries lag behind. In particular, China is a state capitalist country, and it is expected that stakeholder influence on CER would be different from those in free market capitalist countries. Therefore, this research studies CER in the Chinese context.
- (2) Studies on Chinese CER has increased recently, however, there has been limited examination of the influence of stakeholders and other factors, such as political ideology on CER in China. Therefore, this study explores Chinese CER from stakeholder perspective; this includes how the Chinese government use ideology to influence Chinese CER.
- (3) Most of the previous studies on the Chinese government's influence on CER focus on its shareholding power. However, given that the Chinese government

plays a complex role in the country's politics and economics, it may not be appropriate to solely consider its shareholding power. Therefore, this study attempts to narrow this gap by exploring the different roles of the Chinese government in influencing CER.

The next chapter describes the methods that are used to investigate the research questions posed in this thesis, which contribute to understanding of the influences on the increasing trend of Chinese CER and specifically the influence of stakeholders in a Chinese context.

Chapter 5: Research Methods

5.1 Introduction

This chapter presents the research design of this thesis and the methods used to answer the research questions. In this study, both Content Analysis and Historical Discourse Analysis are performed. The method of data collection through Content Analysis is described first, including the selection of the sample and the statistical modelling used to analyse the data. This is followed by an overview of Critical Discourse Analysis (CDA) and how Historical Discourse Analysis is used in this study.

5.2 Data collection and samples

5.2.1 Data selection

In China, there are two stock exchanges, namely the Shanghai Stock Exchange and the Shenzhen Stock Exchange. This study only focuses on the Shanghai Stock Exchange. The main reasons are as follows:

- Dual listing is a variable of interest in this study as will be discussed later. Most of the dual-listed companies (companies that are listed on both a Chinese Stock Exchange and an offshore Stock Exchange) are listed on the Shanghai Stock Exchange.
- All Shanghai Stock Exchange listed firms' reports are publicly accessible.
- The regulations and guidelines of the Shanghai Stock Exchange and the Shenzhen Stock Exchange are different, which makes comparison of the CER of listed companies under two stock exchanges in China difficult.

Therefore, in this study, the Shanghai Stock Exchange is used as the sampling frame. The sampling frame is “the list of elements from which the sample is actually drawn” (Blumberg et al. 2011, p177).

Previous studies (Situ and Tilt 2012) found that size is one of the determinants of CER in China so, to mitigate the size effect, all companies from the Shanghai Stock Exchange’s SSE 180 Index (SSE 180) are chosen as sample companies, as the “SSE 180 selects constituents with best representation through a scientific and objective method. It is a benchmark index reflecting the Shanghai market and serving as a performance benchmark for investment and a basis for financial innovation” (China Securities Index Co. 2012). Firms on the SSE 180 over five years (2007-2001) are used.

The use of these companies over a five-year period provides appropriate data for statistical analysis. According to the rule-of-thumb (Green 1991), the power for a test of a multiple correlation with a medium effect size is approximately 0.8 if $N \geq 50 + 8n$, where N is the number of observations in the sample and n is the number of predictors. As there are 4 independent variables in this study, the minimum sample size should be 82 ($50 + 8*4 = 82$). This study tests 180 listed companies, therefore the sample size is more than appropriate.

5.2.2 Panel data

As the sample in this study is longitudinal, panel data analysis is considered the most appropriate technique to analyse the data. Panel data is a set of data “that follow a given sample of individuals over time, and thus provide multiple observations on each individual in the sample” (Cheng 2003, p2). For economic research, panel data sets have several major advantages over conventional cross-sectional and time-series data

sets (Cheng 2003; Shan 2009). Panel data usually give the researcher a large number of data points, increasing the degrees of freedom and reducing the co-linearity among explanatory variables, hence improving the efficiency of econometric estimates. More importantly, panel data allow a researcher to analyse a number of important economic questions that cannot be addressed using cross-sectional or time-series data sets (Cheng 2003, p3). Also, Shan (2009, p168) argues that “panel data frequently are useful in situations where the population can be divided into various groups or strata”. Therefore, in this study, panel data are used to test the influences of the State and the West on Chinese CER over time. The term panel data in this study refers to the same SSE 180 companies for the period 2007 to 2011. The list of SSE 180 companies was obtained from the website of the Shanghai Stock Exchange on 02 August 2012, and then the same companies that were listed on the Shanghai Stock Exchange for the entire period 2007-2011 are used as the observations for this study.

Table 5.1 shows that this results in an unbalanced panel dataset as some companies were only listed after 2007. This resulted in a total of 815 observations for analysis.

Table 5.1: Distribution of observation by year

Year	Sample companies (n.)
2007	143
2008	150
2009	165
2010	177
2011	180
Total	815

All companies listed on the SSE provided their reports in Chinese, only some of the sample companies, especially those listed overseas, issued English reports. Therefore, in this study, only the Chinese versions of the reports are examined for consistency.

The researcher is a native Chinese speaker therefore she was able to read the Chinese reports. When doing Critical Discourse Analysis, the researcher analysed the discourse in Chinese, then translated it into English with her understanding of the meaning. As Chinese and English belong to different language families, the lexicons of these two languages are very different. For some Chinese, there is no equivalent word that can be found in English. For some words, even though there are equivalent words in English, the words in Chinese have richer information beneath compared to the English equivalent. This is particularly so for the Chinese four-word mottos that have sophisticated contextual meanings. It is therefore, not wise to simply substitute them for the equivalent English words. It can be seen that the process of translating involves a phase where there is some interpretation to understand the meaning of the words. Therefore, the researcher analysed the discourse in Chinese before translating it into English. Direct quoting from the companies' reports is also used this process. It should be noted that this analytical process includes a element of reflexivity, as the researcher's background will affect the analysis, and therefore the findings of this study. In particular, it is likely to affect the level of critique of power from the Chinese government, as this kind of critique is not usual by Chinese scholars. The researcher was born in China, and lived there for nearly 30 years, she then moved to Australia, and pursued her PhD during the last eight years. This has given her the opportunity to experience the two different political systems, and enables to be in a good position to understand and discuss the Chinese government's power in a relatively balanced way.

5.2.3 Data collection

Annual reports and stand-alone CSR reports of sample companies are included in the data analysis. Adams et al. (1998) argued that the annual report is the most important, popular and regular medium through which companies make their disclosures. Also, Guthrie and Petty (2000) suggest that an annual report is a means by which a firm locates and identifies itself for various external and internal stakeholders. Further, Shan (2009) suggests that although some firms in China may use other reporting channels to disclose information, the annual report is still the most comprehensive and authoritative document that is legally required in that country.

It is important to note, however, that Unerman (2000) observed that studying social and environmental disclosures contained solely in the annual report risks capturing an incomplete picture. Situ and Tilt (2012) also found that more Chinese companies have started to use stand-alone social responsibility reports as a medium to report environmental information. Therefore, the annual reports for all sample companies, plus any available stand-alone CSR reports for the companies, are used as the data source for the Content Analysis, which is discussed below. Moreover, according to the requirements of the China Securities Regulatory Commission (CSRC)'s Annual report standard, all listed companies in China must publish their reports in the Chinese language, therefore, necessitating the analysis of the Chinese version in this study.

The CSRC's Annual report standard also requires that all listed companies in China must publicly publish information regarding their stock issues, half-yearly reports, an annual report and reports for important events. The Shanghai Stock Exchange also requires listed companies to publish their annual reports and stand-alone CSR reports

(if applicable) on the exchange's website. Therefore, sample companies' annual reports and stand-alone CSR reports were firstly collected from the Shanghai Stock Exchange (SSE) website: <http://www.sse.com.cn>. Then, the companies' own websites were checked to make sure all stand-alone CSR reports had been collected.

Additional financial data required for the analysis, such as total assets, market capital, turnover and number of employees, are sourced from the China Stock Market Finance Database (CSMAR).

5.2.4 Selecting the texts for the Discourse Analysis

The investigation in this study is developed over two stages. Content Analysis is performed in the first stage. As discussed above, all companies in the sampling frame that have CER in either (or both) their Annual Report and CSR report were analysed for the level and nature of the disclosures. In the second stage, Critical Discourse Analysis (CDA), more specifically, the Discourse Historical Approach (DHA) is then performed to explore whether and how the West and the State (in particular, the indirect influence of the State) influence the discourse of CER.

CDA is not a well-defined empirical methodology, and therefore, there is no specific 'CDA approach' to gathering data. It depends on what data are accessible and how much data can be analysed within the respective research project (Wodak and Meyer 2009). According to Wodak and Meyer (2009, p98), a range of empirical data could be collected, considering the following criteria: 1) specific political units, 2) specific periods of time relating to important discursive events, 3) specific social and especially political and scientific actors, 4) specific discourses, 5) specific fields of political action and specific policy fields, 6) specific semiotic media and genres.

Following these criteria, this study divides the SSE180 companies used as the sample for quantitative analysis into four groups. These groups represent combinations of the two major influences under study, the State and the West. The groups comprise: SOE & dual-listed, Non-SOE & dual-listed, SOE & Non-dual-listed, and Non-SOE & Non-dual-listed. It is expected that the Chinese government will have more influence on SOEs, while the West will have more influence on the dual-listed companies. Different groups of companies may have different discursive strategies when producing their reports. As a result, selecting sample companies from each of these four different groups is seen as thorough, and facilitates the ability to determine the sameness and difference among the groups.

The sample used for the Discourse Analysis is limited to 70 documents¹⁹ (seven companies' annual reports and CSR reports over five years). Two companies from each of the groups were selected from those companies that have CER in both the Annual Report and CSR report. The chosen companies are the ones that disclosed the most amount of CER and the one that disclosed the median amount of CER in each group. The highest disclosing company was chosen because CER in China is at an emerging stage, thus the volume of environmental reporting by Chinese companies is still small. Those companies with the highest level of disclosure provide sufficient data to allow a comprehensive analysis. The median disclosing company was also selected to represent the disclosure made on average. In the Content Analysis, the results show that state ownership influences the quantity of disclosing companies, but has no influence on the quality of the disclosure (details of the results will be discussed in Chapter 6); while overseas listing has a significant influence on both the

¹⁹ In the group of Non-SOE & dual-listed, there is only one company. Therefore, in total, there are seven companies that are chosen as sample companies.

quantity and the quality of the disclosure. Therefore, the combination of the highest and median disclosers provides sufficient data to facilitate in-depth analysis of the influence of the State and the West.

Finally, the Discourse-Historical Approach emphasises the importance of considering the historical context, and therefore, the selected companies' annual reports and CSR reports during each of the years 2007 to 2011 are examined, covering a period where changes in Chinese government policy occurred (see Table 1.1). A summary of the selected companies is shown in Table 5.2.

Table 5.2 Selected companies for DHA

SOE (yes/no)	Dual-listed (yes/no)	Total number of companies in group	Highest disclosing company (stock No.)	Median disclosing company (stock No.)
Y	Y	27	601919	601600
N	Y	1	600016	
N	N	10	601166	600660
Y	N	40	600019	600432

Although there are limitations to use one form of media when doing DHA, reasons of selecting companies' reports as an archive for analysis are:

First companies' reports represent 'important texts', they are widely distributed, associated with changes in practice, or are produced in reaction to a particular event(s) (Phillips and Hardy 2002, p73). Second, companies' reports are widely used as texts, when conducting CDA (Tregidga et al. 2013; Tregidga et al. 2014; Tregidga et al. 2012; Milne et al. 2009). Finally, this study focus on whether and how Chinese social and political context construct and reconstruct the discourse of CER, that is

what is reported, how it is reported and how it changes over time. Through analysing the discourse of CER within Chinese social and political context, this study aims to understand how the Chinese government exerts different types of power on CER. Therefore, this study selects companies' reports (both annual and stand-alone) as the text for analysis.

5.3 Content Analysis

Content Analysis is defined as “an approach to the analysis of documents and texts that seeks to quantify content in terms of predetermined categories and in a systematic and replicable manner” (Bryman and Bell 2007, p304). Royse (2008, p256) summarizes the advantages of content analysis as follows:

- It is unobtrusive. The most important advantage for content analysis is that it can be virtually unobtrusive. Content analysis can be used reactively and non-reactively (Berg 2004).
- It is generally inexpensive to conduct. Generally, the materials necessary for conducting content analysis are easily and inexpensively accessible (Berg 2004).
- It allows the investigator to mine existing agency documents and databases.
- It can deal with large amounts of data.

Beyond the above advantages, Bryman and Bell (2007) also argue that when studying environmental reporting content analysis is widely applied because it has been seen as a systematic and objective method of analysing the texts and documents produced by organisations, such as annual reports. As a result, content analysis is used in the first stage of this study to explore the extent and nature of CER in China.

5.3.1 Unit of analysis

What is to be counted in content analysis is defined as the unit of analysis (Bryman and Bell 2007). As discussed above, companies' annual reports and stand-alone CSR reports are used as the source of the unit of analysis. Previous literature argues that recording units and context units should be separated. Recording units refer to the units that are to be counted in specific categories, while context units refer to those that are of concern to the process of describing the recording units (Krippendorff 1980). Tilt (2001) noted that units that are used most frequently in studies of social and environmental disclosure are words, sentences and pages. Different researchers use different units of analysis as what is to be counted depends on the subject of research under consideration.

Some scholars (such as Hackston and Milne 1996) argue that word count is commonly used in analysing text, especially in classifying text. Therefore, numbers of words were chosen as the recording units to count the amount of environmental disclosures in given themes. However, words are meaningless without being situated within a sentence; therefore, sentences are used as context units to capture the environmental disclosure information while words are used to count the amount of environmental disclosures in given themes in this study. Various environmental guidelines and regulations are used to categorize the themes in this study, and this categorisation is discussed in the following section.

5.3.2 Overview of major environmental disclosure guidelines used in China

➤ Global Reporting Initiative (GRI 3.1)

As discussed previously, CER is predominantly voluntary. There are numerous guidelines that have been published to guide corporations in preparing their reports.

Among them, the GRI guideline is one of the most notable (Roca and Searcy 2012). Globally, at the time of writing, there are 6862 organisations that have registered on the GRI, with 17,177 CSR reports prepared based on the GRI framework including a GRI Content Index (GRI 2015).

According to GRI 3.1, environmental information that should be disclosed by the companies refers to an organisation's impacts on living and non-living natural systems, including ecosystems, land, air and water. It includes: Management Approach, Organisational Responsibility, Training and Awareness, Monitoring and Follow up, Additional Contextual Information and Performance Indicators. Performance Indicators is further divided into nine aspects: material, energy, biodiversity, waste and pollutant, product and service, compliance, transportation, and total environmental expenditure and investment. The GRI 3.1 covers a wide range of environmental impacts. However, the other two guidelines that have been developed in China discussed in Chapter 4, focus more on energy saving and emission reduction, as well as on management approach. These are considered further below.

➤ *Shanghai Stock Exchange environmental disclosure guideline (SSE guideline)*

The SSE guideline, as noted in the previous chapter, is a replication of the MDEI (details of the MDEI have been discussed earlier). It encourages SSE listed companies to disclose a set of voluntary environmental information to the public. There are nine requirements in total:

- 1) Their environmental protection guidelines, annual environmental protection objectives and achievements;
- 2) Their total annual resource consumption;
- 3) Information on their environmental protection investment and environmental technology development;

- 4) Type, volume and content of pollutants discharged by them and where the pollutants are discharged into;
- 5) Information on the construction and operation of their environmental protection facilities;
- 6) Information on the handling and disposal of waste generated from their production, information on recycling and comprehensive use of waste products;
- 7) Voluntary agreement entered into with environmental protection departments for environment improvement behaviour;
- 8) Information on their performance of social responsibilities; and
- 9) Other environmental information voluntarily disclosed by them.

From the list above, it is clear that the information required mainly covers management of environmental protection, resources saving and pollutant reduction; there are three out of nine requirements that relate to management systems, two requirements about pollutant and waste issues, and one requirement which requires disclosure of resource consumption.

➤ *Guideline for preparing corporate social responsibility reports developed by the Chinese Academic of Social Sciences (CASS-CSR 2.0)*

Comparing CASS-CSR 2.0 to the SSE guideline, the information required is very similar. However, CASS-CSR 2.0 provides a series of more detailed indicators; it also provides explanations and examples of the indicators. CASS-CSR 2.0 requires companies to disclose environmental performance information about their achievements in energy saving, emission reduction and environmental protection, which include three sections: Environmental Management, Resources and Energy Saving, and Pollution and Emission Reduction. Compared to the GRI, which requires companies to cover wider range of environmental impacts, the requirements of both CASS-CSR 2.0 and the SSE guidelines reflect the nation's policy. As energy saving

and emission reduction are now the priorities for the whole country, both guidelines focus on these issues.

CASS-CSR 2.0 is also different from GRI 3.1, as it separates performance indicators from management approach; it is developed with an indicator system. The Environmental management section comprises 10 indicators, while the Resources and energy saving section, and Pollution and emission reduction sections, include 12 and 10 indicators respectively. Further analysis of CASS-CSR 2.0 shows that even though CASS-CSR 2.0 has a section called environmental management it only covers the overall environmental management system, strategy and policy information. Regarding the specific management approach, it only emphasises the management approach for energy saving and pollution reduction, but categorizes them into the other sections respectively, rather than in a management approach section. This kind of categorisation indicates that energy saving and pollution reduction are given importance by CASS, reflecting the main themes that are required by the government. Moreover, CASS-CSR 2.0 divides the indicators into core indicators and expanded indicators. Core indicators are applicable to all industries and expanded indicators, which supplement the core indicators, are applicable only to specific industries and guide the company towards better fulfilment of CSR. While the GRI treats biodiversity as a separate aspect of the performance indicators and includes 5 indicators, CASS-CSR 2.0 just mentions this as an expanded indicator under the environmental management sector. However, some performance indicators, such as green offices and control of noise, which are required by CASS-CSR 2.0, are not explicitly required by GRI 3.1. Details of the selection of the guideline related to the environment are provided in Table 5.3 below.

Table 5.3: CASS-CSR 2.0 guideline (excerpt)

Core Indicator	Expanded Indicator
<i>(E1) Environmental Management</i>	
E1.1 Environmental management system E1.2 Environmental incident emergency mechanism E1.3 Environmental protection training and education E1.4 Environmental protection training performance E1.5 Green procurement E1.6 Environmental protection charity E1.7 Research on and sales of environmentally-friendly products E1.8 Research, development and application of environmental technology equipment E1.9 Total investment in environmental protection E1.10 Environmental evaluation of new projects	E1.11 Protect bio-diversity E1.12 Negative information on environment responsibility
<i>(E2) Resources and Energy Saving</i>	
E2.1 Policy measures for energy saving E2.2 Energy consumption per unit output value and amount of energy conserve E2.3 Water saving mechanism/measures E2.4 Water consumption per unit output value and amount of water conserved E2.5 Policies and measures for using renewable energy E2.7 Circular economy policies / measures E2.8 Reuse rate of energy resources E2.9 Green office measures	E2.6 Percentage of renewable energy used E2.10 Green office performance E2.11 Energy saved due to fewer business trips E2.12 Energy efficiency in buildings and sales offices
<i>(E3) Pollution and emission reduction</i>	
E3.1 Policies, measures or technologies used to reduce waste gas emission E3.2 Emission and reduction of waste gas E3.3 Policies, measures or technologies used to reduce waste water emission E3.4 Emission and reduction of waste water E3.5 Policies, measures or technologies used to reduce waste residue emission E3.6 Emission and reduction of waste residue E3.7 Actively contribute to fighting climate change E3.8 Emission and reduction of	

Greenhouse Gases (GHG) E3.9 Control of production noise E3.10 Environmental improvement of factory and its surrounding area	
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5.3.3 Categorisation

From the discussion above, it is evident that the three guidelines all have strengths and weakness as a framework for the categorisation of Chinese CER.

The GRI framework has been widely accepted by most corporations globally, therefore, a number of scholars use the GRI 3.1 to analyse reports, especially its key performance indicators, as the criteria to classify corporations' environmental information into different themes. For example, Gallego (2006) conducted an analysis of 19 Spanish corporations' CSR reporting by using GRI 3.1 indicators. Similarly, Skouloudis et al. (2009) used GRI 3.1 indicators to score 17 CSR reports by Greek corporations. More recently, Roca and Searcy (2012) use the indicators suggested by the GRI 3.1 to examine 94 reports provided by Canadian corporations. As the Chinese economy is developing towards being more globalised, Chinese companies have to accept globally accepted guidelines when they prepare their reports, in particular, those companies that are listed on overseas stock markets, suggesting the GRI is appropriate for analysis of Chinese reports.

However, questions regarding the effectiveness of using the GRI as a guideline in China have been raised. The Chinese Academy of Social Science (CASS) argues that the GRI does not fit the Chinese context or reporting. Social and environmental reporting in China is now only emerging and, as such, the GRI cannot effectively guide Chinese companies in preparing their CER. CASS therefore published their own guideline to help Chinese corporations to prepare their CSR reports. CASS uses

this guideline as the criteria to assess Chinese corporations' CSR reports and has published the results annually from 2011. Moreover, the development of CASS-CSR 2.0 was based on a series of Chinese laws that are related to CSR issues, and it also refers to other important guidelines in China, such as the Shanghai Stock Exchange Environmental Disclosure Guideline, the Shenzhen Stock Exchange CSR Guideline, the Central State-owned Enterprises perform CSR Guideline, the Chinese Textile Enterprises CSR Management System and the Advice for the Chinese Bank and Financial enterprises to Enhance their CSR by the China Banking Regulatory Commission. Therefore, a number of scholars have started to use CASS-CSR to categorize and score Chinese CSR reporting, for example Dong et al. (2014). In addition, CASS is the institution directly under the State Council; it is the 'think-tank' of the Chinese government. It is therefore clear that CASS-CSR 2.0 represents the Chinese government's CSR policies. As this study aims to examine the Chinese government's influence on CER of Chinese corporations, it is necessary to consider the CASS-CSR guideline when developing the themes to categorize Chinese CER.

The SSE Guideline is the other important guideline used by Chinese companies. It re-strengthens the voluntary disclosure requirements of the MDEI, and since the sample companies in this study are selected from the Shanghai Stock Exchange, it is important to also consider the requirements of this guideline.

According to the White paper on Chinese corporate social responsibility reports 2012 (CASS 2012), there are 142 out of 328 reports that claimed that they use the GRI as the guideline for preparing their reports; 110 out of 328 reports claim they use SSE's environmental information disclosing guideline; and 60 out of 328 reports claim to use CASS-CSR as their reporting guideline.

Given the diversity of guidelines used in China it is inappropriate to use a single guideline to categorize environmental information disclosed by Chinese companies. In this study, the categorisation of environmental disclosure themes is developed by considering all of the above three guidelines which are used by Chinese companies.

Six themes have been developed for the analysis: General Statement, Environmental Management Approach, Resources and Energy Saving, Pollution and Emission Reduction, Bio-diversity and Land Rehabilitation, Compliance-China, Compliance Global and Others. The details of each of the themes and how they map onto the three guidelines are provided in the table 5.4 below.

Table 5.4: Categorisations of the themes

Theme	Maps to GRI	Maps to CASS -CSR	Maps to SSE
<p>General Statement</p> <ul style="list-style-type: none"> • Overview of company's philosophy and the background to all of their activities that affect the environment • Overall performance, major achievement and weakness • Organisation wide goals regarding performance relevant to the environment aspects • Brief, organisation wide policy that defines the organisation's overall commitment related to environment • Major organisational environmental risks and opportunities • Any information of company's commitments on future environmental undertakings or improvements. 	<ul style="list-style-type: none"> • Additional contextual information • Overall goals and performance • Overall policy 		1
<p>General Management Approach</p> <ul style="list-style-type: none"> • Existence of department and/or committee for environment management • Any statement about formal management systems regarding environmental risk and performance • Environmental incident emergency mechanism • Training and education in relation to raising environmental awareness • Any strategies and procedures for implementing policies or achieving goals. • Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation • Green procurement • Green credit 	<ul style="list-style-type: none"> • Organisational responsibility • Training and awareness • Supervision and follow-up • Management approach of general operation EN26, EN27, EN30, EN6 	E1.1, E1.2, E1.3, E1.4, E1.5, E1.7, E1.10, E1.8, E1.9	3,5

<ul style="list-style-type: none"> • Environmental evaluation of new projects • Total investment in environmental protection • Research, development and application of environmental technology equipment • Information on the construction and operation of environmental protection facilities 			
<p>Resources and Energy Saving</p> <ul style="list-style-type: none"> • Initiatives to reduce direct/indirect energy, water and materials consumption • Mechanism/measures to saving energy, water and materials • Green office • Circular economy policies/measures • Other general statement regarding resources and energy saving • Direct/indirect energy consumption • Energy saved due to conservation and efficiency improvement • Any information about renewable energy used • Reuse rate of energy resources • Water consumption and water conserved • Percentage and total volume of water recycled and reused • Materials used by weight or volume • Percentage of materials used that are recycled input materials • Energy efficiency in office and buildings • Energy saved due to fewer business trips 	<ul style="list-style-type: none"> • Management approach of materials, energy and water • EN6, EN7 • EN1, EN2, EN3, EN4, EN5, EN8, EN9, EN10 	E2.1, E2.3, E2.5, E2.7, E2.9 E2.2, E2.6, E2.4, E2.8, E2.10, E2.11, E2.12	2

Theme	Maps to GRI	Maps to CASS-CSR	Maps to SSE
<p>Pollution and Emission Reduction</p> <ul style="list-style-type: none"> • Initiatives to reduce greenhouse gases emissions • Initiatives and technology used to reduce waste residue emission, waste water emissions and other waste gas emissions • Activities contribute to fighting with climate change • Measures and policies of noise control • Total direct/indirect emission and reduction of greenhouse gases and other waste gas • Emission and reduction of waste water • Emission and reduction of waste residue • Total number and volume of significant spills • Total water discharge by quality and destination • Total weight of waste by type and disposal method 	<ul style="list-style-type: none"> • Management approach related to waste and pollutants • EN18 • EN16, EN17, EN19, EN20, EN21, EN22, EN23, EN24, EN25 	E3.1, E3.7, E3.3, E3.5, E3.9, E3.2, E3.4, E3.6, E3.8	4,6
<p>Compliance - China</p> <ul style="list-style-type: none"> • Fines and sanctions for non-compliance with environmental laws and regulations in China • Any information on stewardships, benchmarking and compliance of various environmental acts, regulations, policies or guidelines in China • Any information about memberships or relationships with "green" groups including government bodies, NGOs and others in China • Any information that companies finish the target assigned by the Chinese government 	EN28		7

Theme	Maps to GRI	Maps to CASS-CSR	Maps to SSE
<p>Compliance - Global</p> <ul style="list-style-type: none"> • Any information on stewardships, benchmarking and compliance of various environmental acts, regulations, policies or guidelines • Any information about memberships or relationships with "green" groups including government bodies, NGOs and others 	EN28		7
<p>Bio-diversity and Land Rehabilitation</p> <ul style="list-style-type: none"> • Any activities and improvements done for the purpose of sustaining biodiversity • Description of significant impacts of activities, products, and services on biodiversity • Habitats protected or restored • Prevention or repair of damage to the land resulting from processing natural resources • Any information on land care (such as forest reserves and recovery, preventing desertized) • Environmental improvement of factory and its surrounding area 	EN11, EN12, EN13, EN14, EN15	E1.11, E3.10	
<p>Others</p> <ul style="list-style-type: none"> • Environmental awards • Environmental donation • Environmental volunteer • Other environmental information 		E1.6	9

5.3.4 Variable measurement

As discussed above, the level of CER determined using content analysis is analysed using statistical modelling. The variables in the modelling comprise three types: dependent variables, independent variables and control variables. The measurement of each of the variables is discussed below.

➤ *Dependent Variables*

Dependent variable, in this study, refers to the extent of environmental information that is disclosed by the Chinese companies. It will be measured in terms of Total Disclosure in both Annual and CSR Reports, Disclosure in only Annual Reports and disclosure in only CSR Reports.

Total Disclosure is defined as the number of words on environmental information in the Annual reports and CSR reports of a company, obtained by using NVivo. First, a text search is performed by using the key words: 环境 (Environment), 生态(Ecology), 自然(Nature), 绿色(Green), 污(Pollution), 废(Waste), 减排(Emission Reduction), 节能(Energy Saving) and 环保(environmental protection)²⁰. Then, sentences near the key words are read; if the sentences are related to environmental information of the themes described in Table 5.4, the sentences are collected and categorising into different themes by using the coding rules (discussed below). Finally, the Matrix Coding function of NVivo is used to perform a word count for each category and summed. Annual Report disclosure and CSR report disclosure are measured in the same way. The label and definition for each category that makes up the three dependent variables is shown in Table 5.5 below

²⁰ As discussed above, only Chinese version reports are examined in this study. Therefore, Chinese was used when performing text search.

Table 5.5: Dependent variables

Label	Definition
Total	Total words of environmental disclosure in both companies' annual report and CSR reports
GenSta	Number of words relevant to General Statement
ManApp	Number of words relevant to Management approach
EnSemR	Number of words relevant to Energy Saving and Emission Reduction
CompCH	Number of words relevant to Compliance - China
CompGLC	Number of words relevant to Compliance - Global
BioReh	Number of words relevant to Biodiversity and Land Rehabilitation
Others	Number of words relevant to Other environmental information
TotalCSR	Number of words relevant to Total environmental information in companies' CSR reports
GenStaCSR	Number of words relevant to General Statement in companies' CSR reports
ManAppCSR	Number of words relevant to Management approach in companies' CSR reports
EnSemRCSR	Number of words relevant to Energy Saving and Emission Reduction in companies' CSR reports
CompCHCSR	Number of words relevant to Compliance - China in companies' CSR reports
CompGLCSR	Number of words relevant to Compliance - Global in companies' CSR reports
BioRehCSR	Number of words relevant to Biodiversity and Land Rehabilitation in companies' CSR reports
OthersCSR	Number of words relevant to Other environmental information in companies' CSR reports
TotalAR	Number of words relevant to Total environmental information in companies' annual reports
GenStaAR	Number of words relevant to General Statement in annual reports
ManAppAR	Number of words relevant to Management approach in annual reports
EnSemRAR	Number of words relevant to Energy Saving and Emission Reduction in companies' annual reports
CompCHAR	Number of words relevant to Compliance - China in companies' annual reports
CompGLAR	Number of words relevant to Compliance - Global in companies' annual reports
BioRehAR	Number of words relevant to Biodiversity and Land Rehabilitation in companies' annual reports
OthersAR	Number of words relevant to Other environmental information in companies' annual reports

➤ *Independent Variables*

As discussed in Chapter 3, pressure from the Chinese government and pressure from the international community, in particular from the West, is likely to influence

Chinese CER significantly, therefore the influences of the Chinese government and the influences from the West are the specific factors that are examined in this study and are represented by a series of explanatory (independent) variables. The measurement of each independent variable is discussed in the following section.

Variables for influence of the State

In China, extreme environmental concerns have impelled the Chinese government to pay more attention to environmental issues. Previous studies (Lu 2008; Guo 2005) show that Chinese CER is promoted by the Chinese government. Unlike other countries though, especially western countries, the Chinese government influences CER in China through its various roles, including using political power, voting power and economic power.

Political power

Previous studies have argued that government can influence CER by issuing regulations (Yamak and Suer 2005). In China, even though there is currently no mandatory regulation on CER, there are a series of guidelines that have been released since 2005. It was argued in Chapter 2 that, in China, these guidelines are meaningful when promoting and guiding companies to disclose environmental information, even though they are not mandatory.

As shown in Table 2.1, the Guidelines on Environmental Information Disclosure by Companies Listed on the Shanghai Stock Exchange (SSE guideline) and the Chinese CSR Report Preparation Guide (CASS guideline) are the two guidelines that apply to all industries. Therefore, whether a CSR report complies with either of the above two

Guidelines is used as two separate dummy variables to measure the political power of the Chinese government in this study.

Voting power

As discussed in Chapter 2, state-owned enterprises play a very important role in Chinese economics. They are not only boosting Chinese economic development, but also play an important role in helping the Chinese government to achieve their political aims. Therefore, it is expected that state ownership would have some influence on the Chinese CER.

In this study, state ownership is considered as a dummy variable to measure the voting power of the Chinese government. As discussed in Chapter 2, there is often conflict between local benefit and the central government's policy, and the central government's environmental protection policy is difficult to enforce at the local level, so it is proposed that SOEs' CER performance will be different at the central level and the local level. As a result, SOEs are divided into Central state-owned enterprises (C-SOE) and Local state-owned enterprises (L-SOE).

A C-SOE is a company that is realistically controlled by the State-owned Assets Supervision and Administration Commission of State Council (SASAC), the Ministry of Finance or other ministry, administrations, bureaus and governmental institutes at the central level. A company is a L-SOE, if it is controlled by a local State-owned Assets Supervision and Administration Commission, local municipal government or administrations, or bureaus and governmental institutes at the local level. The Chart of Relationships between a Company and its Actual Controller in all sample companies' annual reports during 2007 to 2011 were screened to determine whether a company is C-SOE, L-SOE or a non-state-owned enterprise (N-SOE).

The percentage of non-tradable shares held by the State is another variable adopted to measure the voting power of the Chinese government. The percentage of non-tradable shares held by the State, including central and local government is obtained from the Changes in Share Capital and Shareholdings of Substantial Shareholders section in the sample companies' annual reports from 2007 to 2011.

Economic power

In addition to regulatory activities, the Chinese government has also started to use more economic incentives to promote more CER in China, including the provision of government grants. Moreover, according to the MDEI, companies who have better CER are given priority for receiving the government's environmental grants. Therefore, it is expected that the Chinese government also influences CER through its economic power.

Economic power in this study is measured by two variables: the total amount of government grants received by companies, and the amount of government grants received by companies on environmental issues. The two variables were obtained by reading the financial statements and the notes in the annual reports of companies included in the study.

Variables for influence of the West

As discussed in Chapter 3, along with the Chinese 'Open Policy', Chinese companies are more involved in economic globalisation, and therefore faces growing pressure from the international community, in particular from Western countries, to take their environmental responsibility more seriously. The influence from the West may be from international organisations, foreign investment in Chinese companies or

international trading. However, data about whether a company trades internationally are not readily available so this study will focus on foreign investment and international organisations to measure the influence from the West.

Dual-listed companies

As discussed in Chapter 4, more and more Chinese companies are listed on overseas stock exchanges in order to attract foreign investments. The requirements to disclose environmental information to the public by overseas stock exchanges is generally higher than that in China. As a result, to test the influence on CER in China from foreign investment, whether a company has overseas listed shares, that is, whether it is dual-list, is used as a proxy variable for western influence in this study.

In this study, dual-listed companies refer to companies that are listed on both the Shanghai Stock Exchange and offshore Stock Exchanges (such as the Hong Kong Stock Exchange and the New York Stock Exchange). All sample companies' reports from 2007 to 2011 were read to determine the percentage of overseas listed shares (from the Changes in Share Capital and Shareholdings of Substantial Shareholders section). A company is classified as a dual-listed company if it has any overseas listed shares; otherwise, it is classified as an A-share²¹ company.

Registration with the GRI

As discussed earlier in this chapter, the GRI is the most commonly used global guideline for CSR reporting. It provides a comprehensive definition, indicators and

²¹ A-Shares is shares in mainland China-based companies that trade on Chinese stock exchanges such as the Shanghai Stock Exchange and the Shenzhen Stock Exchange. A-shares are generally only available for purchase by mainland citizens.

structures to help companies to prepare their CSR reporting. Therefore, it is expected that companies that are registered with the GRI would provide more CER. As the GRI is a global guideline in each year, whether or not a company has registered is used as a measure of influence from an international organisation.

According to the GRI website, 44 of the sample companies in this study are on the list, however the website only provides the list of companies that have signed up to the GRI to date, without showing when the company signed. As this study uses panel data from 2007 to 2011, some companies that are on the list may have signed up to the GRI after 2007. Therefore, the data for whether the sample companies have registered with the GRI was obtained by reading the sample companies' CSR reports over the period 2007 to 2011. A dummy variable is created with a value of 1 for a company that has indicated that they used the GRI as a guideline to prepare their report, and 0 otherwise.

➤ *Control variables*

Several control variables are included in the study that are consistently shown to be related to corporate environmental disclosure performance in prior literature. These include company financial performance, company size and industry.

Financial performance

Ullmann (1985) argues that financial performance can influence a corporation's financial capability to undertake costly programs related to social demands. Deegan (2009b) also argues that the higher the profit earned by the firm, the greater the political cost faced by the firm. In order to reduce criticism that a company has excessive profit and does not pay a "fair share" to other parties, companies are more

likely to disclose more information to legitimate themselves. Following Waddock and Graves (1997), this study uses Return on Assets (ROA) for the measurement of financial performance.

However, a reciprocal or feedback process between the outcome variable (word-count) and an independent variable may result in an endogeneity problem. Endogeneity has serious consequences for model estimates—it can result in biased and inconsistent estimates and hypothesis tests can be misleading: a single endogenous variable can seriously distort estimates. There is potential feedback or reverse causality between the dependent variable and one or more of the control variables in the model. For example, the current financial performance of a firm might be endogenous to extent of reporting: higher reporting may cause a change in profitability, but current profitability may influence the level of reporting. A straightforward control for this problem is to use lagged values of the variable(s)—that is, lagged variables become instrumental variables for the current variables. One possible drawback of this process is that when a lagged variable is a proxy for the variable of interest the interpretation of coefficients may be more difficult. This drawback is not material in this case as lags are only necessary for control variables, not for explanatory variables. Thus, a one-year lag of ROA is used, as previous years' performance has been shown to be related to environmental reporting.

Company size

A number of studies (Musteen et al. 2010; Situ and Tilt 2012) have consistently found that company size is highly positively correlated with environmental disclosure. The larger the companies are, the more information will be disclosed to avoid public concern. Company size has been assessed using different measures in the literature.

Total Assets, Total Market Capital, Total number of employees and Total Revenue have been commonly used to measure the size of a company in previous research (Taylor and Shan 2007; Cowen et al. 1987; Situ and Tilt 2012). However, Hackston and Milne (1996) argue that there are no theoretical reasons for a particular measure of size and most are highly correlated. Therefore, Total Assets is adopted in this study to control for the size of Chinese listed companies. However, a reciprocal or feedback process between the outcome variable (word-count) and an independent variable results in an endogeneity problem. Endogeneity has serious consequences for model estimates—it can result in biased and inconsistent estimates and hypothesis tests can be misleading: a single endogenous variable can seriously distort estimates. For word-count there is potential feedback or reverse causality between the dependent variable word-count and one or more of the control variables in the model. For example, current profitability might be endogenous to extent of reporting: higher reporting may cause a change in profitability, but current profitability may influence the level of reporting. A straightforward control for this problem is to use lagged values of the control variable(s)—that is lagged variables become instrumental variables for the current control variables. One possible drawback of this process is that when a lagged variable is a proxy for the variable of interest the interpretation of coefficients may be more difficult. This drawback is not material in this case as lags are only necessary for control variables. Thus, a lagged variable representing the previous year's total asset value is used to measure the size variable in the analysis.

Industry

Industry is also a variable that strongly impacts Chinese environmental disclosure. Previous studies (Solomon et al. 2011; Hackston and Milne 1996; Parker 1986; Dobbs and van Staden 2011) found that companies that are in an industry with consumer

visibility, a high level of political risk, or concentrated intense competition, provide better environmental disclosure, as those may have captured a systematic relationship between such characteristics and social responsibility activities. In this study, the industry code of each sample company is obtained from the list of industry categorisations issued by the China Securities Regulatory Commission. According to the China Securities Regulatory Commission, listed companies are grouped into a total of 13 industries. They are Agriculture, forestry, livestock farming & fishery, Mining, Manufacturing, Utilities, Construction, Wholesale and retail, Transportation, Hotel and catering, IT, Finance and Insurance, Real estate, Social service, Communication and cultural, and Comprehensive. Previous studies usually classify companies into two industry categories, high profile industries and low profile industries. According to Roberts (1992), high profile industries are those with consumer visibility, a high level of political risk or concentrated intense competition. Similarly, Reverte (2009) defined high profile industries as those with more risk of being criticised in corporate social responsibility matters because their activities have the perception of higher risk.

Consistent with these past studies (such as Faisal et al. 2012; Hackston and Milne 1996), this study classified the 13 industries issued by the China Securities Regulatory Commission into high profile industries and low profile industries. As shown in Table 5.6, industries such as Agriculture, Mining, Manufacturing and Utilities were classified as high profile as they have significant impacts on the physical environment. Finance and Insurance industry was also classified into high profile industry in this study. As in China, companies in finance and insurance industry help government to direct capital away from the polluted companies, and therefore, viewed as environmental sensitive. Others like Construction, Transportation, IT, Whole Sale

and retail Trade, Real Estate, Social Service, Communication and culture, and Comprehensive industries were classified as low profile industries. In the model a value of 1 is given to those in high profile industries, and 0 to those in low profile industries.

Table 5.6: Classification of industries

Industry name	Industry Code	No. of selected companies	No. in High profile industries	No. in Low profile industries
Agriculture, forestry, livestock farming, fishery	A	12	12	
Mining	B	105	105	
Manufacturing	C	284	284	
Utilities	D	32	32	
Construction	E	24		24
Transportation	F	52		52
IT	G	35		35
Wholesale and retail trade	H	28		28
Finance and insurance	I	122	122	
Real estate	J	109		109
Social service	K	3		3
Communication and Cultural Industry	L	0		0
Comprehensive	M	9		9
		815	555	260

5.3.5 Analysis of data

In this section, the descriptive analysis and panel data econometric modelling applied to the sample data are outlined.

➤ Descriptive analysis

“Descriptive statistics involves arranging, summarizing and presenting a set of data in such a way that the meaningful essentials of the data can be extracted and grasped easily.... Although descriptive statistical methods are relatively straightforward, their

importance should not be underestimated” (Keller et al. 1988, p15). Therefore, a descriptive and comparative analysis showing trends and associations is initially undertaken examining disclosures by the themes that were developed based on the international guidelines.

➤ *Panel data econometric model*

As discussed earlier in this chapter, panel data increase the degrees of freedom, reduce collinearity among explanatory variables, improve efficiency, reliability and stability of econometric estimates, and identify and measure effects not detectable in cross-sectional or time-series data. Furthermore, panel data provide better predictions of individual (e.g. company) behaviour while failure to use panel models potentially results in biased estimated coefficients and unreliable diagnostic statistics (including omitted variable bias). Although there are some drawbacks, econometric panel modelling has become the dominant method of analysing longitudinal data (i.e. data in which the same entities are observed across time), and is therefore used to undertake the quantitative analysis.

In this study, the companies’ decision making about environmental reporting is treated as a two-stage process. First, the company makes decision as to whether it will disclose any environmental information (of any kind, such as including it in the Annual Report or producing a separate report) – the selection process. The econometric model for selection is modelled as a limited dependent variable panel probit model, henceforth referred to as the selection model. This model includes all companies in the data set. Then, for companies that do choose to disclose environmental information the company decides how extensive the reporting will be – measured as the word count relating to environmental reporting. This second model, a

linear panel random effects (with Mundlak corrections) model, includes only those companies which have environmental reporting in either the Annual Report or a standalone CSR Report, henceforth referred to as the extent of reporting model.

Selection model

When an outcome is measured as a binary choice the model used is referred to as the limited dependent variable model. In this study, whether or not a company chooses to produce an environmental report can be classified as a binary yes/no outcome—where, by convention, yes is coded as one and no as zero. For a limited dependent variable the binomial probit model is used²². The probit model is based on the standard normal cumulative density function (CDF) and can be characterized as:

$$\Pr(y_{it} = 1 | X_{it}) = \Phi(X_{it}\beta_i) \quad [1]$$

Where: Pr is the probability of the outcome being one given the set of X explanatory variables and β coefficients; Φ represents the standard normal density model.

The random effects panel model can be written in linear form as:

$$y_{it}^* = X_{it}' \beta + u_i + v_{it} \quad [2]$$

and

$$y_{it} = \begin{cases} 1 & \text{if } y_{it}^* > 0 \\ 0 & \text{otherwise} \end{cases} \quad [3]$$

Where y represents the observed zero-one dependent variables (e.g. the indicator of whether they chose to report), y^* represents the unobserved latent variable model, u_i

²² Non-linear probabilities can be modeled using either the logit or probit model. Although the logit is more common than the probit this is generally historic—logit models are easier to compute, but this is no longer an important consideration. The core difference is that the logit's errors are assumed to follow the standard logistic (zero mean and variance $\pi^2/3$) while the probit follows the standard normal distribution. Note that in practical terms logit and probit models come to the same conclusions, but the probit is easier to interpret.

are the individual (i.e. company) specific effects that vary across companies but are constant over time and v is the usual unobserved zero-mean constant variance, uncorrelated, random disturbance (representing the net effect of all other unobserved factors that may influence the outcome); i are individual companies ($i = 1, \dots, N$) and t is time ($t = 1, \dots, T$)

In this study, both Annual reports and CSR reports are examined, and following the outline of the limited dependent variable model above, three selection equations are estimated as follows:

$$\begin{aligned} \text{Total_Select}_{it} = & \beta_0 + \beta_1 \text{staownedC} + \beta_2 \text{staownedL} + \beta_3 \text{stashareD} + \beta_4 \text{envgraD} + \\ & \beta_5 \text{totgraD} + \beta_6 \text{highprofile} + \delta_1 \text{loglagtotass} + \delta_2 \text{lagroa} + \lambda_1 \text{loglagtotassmm} + \\ & \lambda_2 \text{lagroamm} + v_{it} + u_i \end{aligned} \quad [4]$$

$$\begin{aligned} \text{AR_Select}_{it} = & \beta_0 + \beta_1 \text{staownedC} + \beta_2 \text{staownedL} + \beta_3 \text{stashareD} + \beta_4 \text{envgraD} + \\ & \beta_5 \text{totgraD} + \beta_6 \text{highprofile} + \delta_1 \text{loglagtotass} + \delta_2 \text{lagroa} + \lambda_1 \text{loglagtotassmm} + \\ & \lambda_2 \text{lagroamm} + v_{it} + u_i \end{aligned} \quad [5]$$

$$\begin{aligned} \text{CSR_Select}_{it} = & \beta_0 + \beta_1 \text{staownedC} + \beta_2 \text{staownedL} + \beta_3 \text{stashareD} + \beta_4 \text{envgraD} + \\ & \beta_5 \text{totgraD} + \beta_6 \text{highprofile} + \delta_1 \text{loglagtotass} + \delta_2 \text{lagroa} + \lambda_1 \text{loglagtotassmm} + \\ & \lambda_2 \text{lagroamm} + v_{it} + u_i \end{aligned} \quad [6]$$

Where:

Total: takes the value 0 for non-reporting companies and 1 if there is a non-zero word-count relating to environmental reporting either in their Annual reports or CSR reports;

AR: takes the value 0 for non-reporting companies and 1 if there is a non-zero word-count relating to environmental reporting in their Annual reports only;

CSR: takes the value 0 for non-reporting companies and 1 if there is a non-zero word-count relating to environmental reporting in their CSR reports only;

- staownedC:** 1 refers to central SOEs, 0 otherwise;
- staownedL:** 1 refers to local SOEs, 0 otherwise;
- stashareD:** 1 refers to companies that have non-tradable share held by the state, 0 otherwise.;
- totgraD:** 1 refers to companies that received government grant, 0 otherwise;
- envgraD:** 1 refers to companies that received government grant related to environmental issue, 0 otherwise;
- highprofile:** 1 refers to high profile industries, and 0 refers to low profile industries;
- loglagtotass:** the natural logarithm total assets lagged by one year;
- lagroa:** one year lagged Return on Assets.
- year:** the same companies over 5 years are used in the panel model, therefore, sample years from 2008 to 2011 are included as dummy variables;
- csrD:** 1 refers to a company that has environmental reporting in its CSR report, and 0 otherwise;
- arD:** 1 refers to a company that has environmental reporting in its annual report, and 0 otherwise;

The same companies over 5 years are used in the panel model, therefore, all sample years are included as dummy variables to consider the influence of time. In addition, Mundlak corrections are included when running the regression, because the inclusion of the Mundlak corrections resolves the issue of potential correlation between the individual effect (the unobserved heterogeneity) and the explanatory variables (by assuming a relationship between the individual effect and the means of the time-varying variables for individuals) (further details on the use of Mundlak corrections are explained in the following section).

Extent of reporting model

In the first stage, all sample companies are included when running selection models to see how the explanatory variables influence the companies' decision about whether to disclose any environmental information. In the second stage, for companies that decided to disclose environmental information, a model is developed to further examine the extent of the reporting.

The extent of reporting, measured by word-count, is a continuous dependent variable. For continuous dependent variables the linear model is used. The (one-way) linear panel model can be represented as:

$$Y_{it} = X'_{it}\beta + u_i + v_{it} \quad [7]$$

Where: Y is the dependent variable, X is the set of (k) explanatory variables, β is the vector of coefficients to be estimated (including a common intercept).

Two interpretations can be given to the coefficient representing the unobserved individual heterogeneity or the individual effects. If they are assumed to be a normally distributed random variable (with unknown variance) the model is referred to as the random effects model (RE). In this model an important assumption is that the individual (i.e. company) heterogeneity is independent of the explanatory variables (the X_{it}). An alternative is to use an adjustment to the RE model. The Mundlak specification of the RE allows for potential correlation between the individual specific effects and explanatory variables (Chamberlain 1980; Mundlak 1978). In this version of the RE the individual or company (over time) means for each of the time-varying explanatory variables are included as additional explanatory variables—the Mundlak “corrections”. Once the correction is made the RE panel estimator is unbiased, consistent and efficient. With Mundlak “corrections” the RE model is specified as:

$$Y_{it} = X_{it}\beta + \bar{Z}_i'\lambda + u_i + v_{it} \quad [8]$$

Where: \bar{Z} is the means of the time-variant explanatory variables included in the model (other symbols are as described above).

As discussed in the control variable section, lagged variables are used as a proxy to control the endogeneity problem, which is specified as below:

$$ExtCSR_{it} = \beta_0 + \beta_1 x_{1t} + \dots + \beta_k x_{kt} + \delta_1 w_{1t-1} + \dots + \delta_f w_{ft-1} + \lambda_1 \bar{Z} + \dots + \lambda_g \bar{Z}_g + u_i + v_{it} \quad [9]$$

Where *ExtCSR* is the dependent variable, *X* are the *I* to *k* current explanatory variables (with coefficients β); *W* are the *I* to *f* lagged control variables (with coefficient δ); \bar{Z} are the *I* to *g* Mundlak corrections (with coefficients λ); u_i are the individual (i.e. company) specific effects that vary across companies but are constant over time and v is the usual unobserved zero-mean constant variance, uncorrelated, random disturbance (representing the net effect of all other unobserved factors that may influence the outcome); *i* are individual companies ($i = 1, \dots, N$) and *t* is time ($t = 1, \dots, T$).

As both Annual reports and CSR reports are examined in this study, following the outline of the linear panel random effects (with Mundlak corrections) model above, three equations are estimated as follows:

$$\begin{aligned} Total_Extent_{it} = & \beta_0 + \beta_1 staownedC + \beta_2 staownedL + \beta_3 stashareD + \beta_4 envgraD + \\ & \beta_5 totgraD + \beta_6 CASS + \beta_7 SSE + \beta_8 GOV + \beta_9 GRI + \beta_{10} oveshareD + \\ & \beta_{11} grantsstaown + \beta_{12} griosshare + \beta_{13} highprofile + \delta_1 loglagtotass + \delta_2 lagroa \\ & + \lambda_1 loglagtotassmm + \lambda_2 lagroamm + v_{it} + u_i \end{aligned} \quad [10]$$

$$\begin{aligned} AR_Extent_{it} = & \beta_0 + \beta_1 staownedC + \beta_2 staownedL + \beta_3 stashareD + \beta_4 envgraD + \\ & \beta_5 totgraD + \beta_6 CASS + \beta_7 SSE + \beta_8 GOV + \beta_9 GRI + \beta_{10} oveshareD + \\ & \beta_{11} grantsstaown + \beta_{12} griosshare + \beta_{13} highprofile + \delta_1 loglagtotass + \delta_2 lagroa \end{aligned}$$

$$+ \lambda_1 \text{loglagtotassmm} + \lambda_2 \text{lagroamm} + v_{it} + u_i \quad [11]$$

$$\begin{aligned} \text{CSR_Extent}_{it} = & \beta_0 + \beta_1 \text{staownedC} + \beta_2 \text{staownedL} + \beta_3 \text{stashareD} + \beta_4 \text{envgraD} + \\ & \beta_5 \text{totgraD} + \beta_6 \text{CASS} + \beta_7 \text{SSE} + \beta_8 \text{GOV} + \beta_9 \text{GRI} + \beta_{10} \text{oveshareD} + \\ & \beta_{11} \text{grantsstaown} + \beta_{12} \text{griosshare} + \beta_{13} \text{highprofile} + \delta_1 \text{loglagtotass} + \delta_2 \text{lagroa} \\ & + \lambda_1 \text{loglagtotassmm} + \lambda_2 \text{lagroamm} + v_{it} + u_i \quad [12] \end{aligned}$$

Where:

Total: is the word counts that related to environmental information in both Annual report and CSR report;

AR: is the word counts that related to environmental information in Annual reports only;

CSR: is the word counts that related to environmental information in CSR reports only;

staownedC: 1 refers to central SOEs, 0 otherwise;

staownedL: 1 refers to local SOEs, 0 otherwise;

stashareD: 1 refers to companies that have non-tradable share held by the state, 0 otherwise;

totgraD: 1 refers to companies that received government grant, 0 otherwise;

envgraD: 1 refers to companies that received government grant related to environmental issue, 0 otherwise;

CASS: 1 refers to companies indicted that they used the CASS as a guideline to prepare their report, 0 otherwise;

SSE: 1 refers to companies indicated that they used the SSE as a guideline to prepare their report, 0 otherwise;

GOV: 1 refers to companies in the Corporate Governance sector, 0 otherwise;

GRI: 1 refers to a company that has indicated that they used the GRI as a guideline to prepare their report, and 0 otherwise;

oveshareD: 1 refers to dual-listed companies, 0 refers to A-share

companies;

grantsstaown: interaction between the government grants received by the companies and the state ownership;

griosshare: interaction between a dual-listed company and whether a company is registered on GRI;

highprofile: 1 refers to high profile industries, and 0 refers to low profile industries

loglagtotass: the natural logarithm total assets lagged by one year;

lagroa: one year lagged Return on Assets;

year: the same companies over 5 years are used in the panel model, therefore, sample years from 2008 to 2011 are included as dummy variables;

csrD: 1 refers to a company that has environmental reporting in its CSR report, and 0 otherwise;

arD: 1 refers to a company that has environmental reporting in its annual report, and 0 otherwise;

As in the selection model, the sample years are included as dummy variables to control for the influence of time. Moreover, there is the possibility of interaction between the government grants received by the companies and state ownership, as an SOE is more likely to gain government grants, and SOEs are more likely to be aware of, and meet, the required criteria. In addition, there is potential interaction between a company being dual-listed and whether the company is registered on the GRI, as western stock exchanges may favour the GRI approach to environmental reporting. As a result, grantsstaown and griosshare are used as interaction terms in the extent of reporting models. Compared to the selection model, there are five more explanatory variables in the extent of reporting models, they are CASS, SSE, GOV, GRI, and overshared. These could not be included in the selection model as they all “predict

success perfectly”. That is, all dual-listed companies chose to disclose environmental information, similarly for the other four variables, so could not be included.

As discussed in Chapter 4, the State not only directly, but also indirectly, influences CER through its expression of political power and through doctrine and propaganda. This is difficult to examine using Content Analysis. Therefore, while Content Analysis is used to test the Chinese government’s direct influences on Corporate Environmental Reporting, Discourse Analysis, which aims to reveal the power relations that are frequently hidden, is used to examine the Chinese government’s indirect influence on Corporate Environmental Reporting, and comprises the third and final element of the methods of analysis. The design of the Discourse Analysis undertaken is discussed in the following section.

5.4 Critical Discourse Analysis

Critical Discourse Analysis considers language as a device which contributes to the (re)shaping and maintenance of social relationships (Van Dijk 1993; Tregidga and Milne 2006). This is consistent with the view that CER is a tool for companies to develop, maintain and defend their relationships with society (Deegan 2009a). Discourse is defined as “a system of texts that bring an object into being” (Hardy and Phillips, 1999, p.2, cited by Tregidga and Milne 2006). Analysis of discourse is important since the relationship between text and context is inseparable, and context is so important in the construction of text (Tregidga and Milne 2006). By analysing the text, “we seek to acknowledge its constitutive nature and transformative potential” (Tregidga and Milne 2006, p224). Therefore, in order to explore what are the influences behind CER in China, in particular, whether the Chinese government is the main source of influence and how it influences corporate environmental reporting,

Critical Discourse Analysis, specifically Discourse Historical Analysis, is applied in this study.

5.4.1 What is Critical Discourse Analysis?

Critical Discourse Analysis emerged in the early 1990s (Wodak and Meyer 2009). It includes theories as well as methodologies. As a methodology, it does not refer to a single method; rather, it is a school of approaches. Different researchers have their own research processes. However, these approaches are characterized by a number of similar principles (Wodak and Meyer 2009):

1. All approaches are problem-oriented, and thus necessarily interdisciplinary and eclectic.
2. They are commonly interested in de-mystifying ideologies and power through the systematic and *retroductable*²³ investigation of semiotic data.

In summary, Critical Discourse Analysis is a series of research programs with fundamental interest in analysing opaque as well as transparent structural relationships of dominance, discrimination, power and control as manifested in language (Wodak and Meyer 2009). To understand Critical Discourse Analysis it is important to understand the term “discourse” and “critical”. According to Fairclough and Wodak (1997, p258):

Critical Discourse Analysis sees discourse – language use in speech and writing – as a form of ‘social practice’. Describing discourse as social practice implies a dialectical relationship between a particular discursive event and the situation(s), institution(s), which frame it: The discursive event is shaped by them, but it also shapes them. That is discourse is socially constitutive as well as socially conditioned – it constitutes situations, objects of knowledge, and the social identities of and relationships between people and groups of people. It is constitutive both in the sense that it helps to sustain

²³ “Retroductable” means that critical discourse analysis “should be transparent so that any reader can trace and understand the detailed in-depth textual analysis” (Kendall 2007).

and reproduce the social status quo, and in the sense that it contributes to transforming it. Since discourse is so socially consequential, it gives rise to important issues of power. Discursive practices may have major ideological effects – that is they can help produce and reproduce unequal power relations between (for instance) social classes, women and men, and ethnic/cultural majorities and minorities through the ways in which they represent things and position people.

Therefore, it is evident that Critical Discourse Analysis is interested in studying social phenomena rather than investigating a linguistic unit per se (Wodak and Meyer 2009).

Discourse in Critical Discourse Analysis refers to “a language (that) is used in diverse systematic ways, in a society as a whole, but also in many specific sub-domains, social fields, national, regional, and local contexts” (Chilton et al. 2012, p1).

Understanding the term “critical” is also of particular importance. It is important to emphasise here that being critical is not necessarily negative. The objects under investigation do not have to be related to negativity or be exceptionally “serious” social or political experiences or events (Wodak and Meyer 2009). Rather, to criticise is to engage in a rational conceptual activity. Critique is essentially making visible the interconnectedness of things. Being critical in Critical Discourse Analysis means “making explicit the implicit relationship between discourse, power and ideology, challenging surface meanings, and not taking anything for granted” (Chilton et al. 2012, p3). In this sense, Critical Discourse Analysis aims at revealing structures of power and unmasking ideologies; it seeks not only to describe and explain, but also to root out the relationship between the integrated context and the text.

5.4.2 Approaches of Critical Discourse Analysis

Wodak and Meyer (2009, p25) argue that “Critical Discourse Analysis does not constitute a well-defined empirical methodology but rather a bulk of approaches with theoretical similarities and research questions of a specific kind”. Since Critical Discourse Analysis aims to reveal the power relations that are frequently hidden, and

then to derive results which are also of practical relevance, it follows a different and critical approach to problems. There is a variety of theories at different levels within Critical Discourse Analysis, hence there are various approaches that are able to translate their theoretical claims into instruments and methods of analysis. Wodak and Meyer (2009) summarise the approaches as Dispositive Analysis (DA), the Socio-cognitive Approach (SCA), Discourse-Historical Approach (DHA), Corpus Linguistics Approach (CLA), Social Actors Approach (SAA) and Dialectical-Relational Approach (DRA).

Dispositive Analysis is heavily influenced by Michel Foucault's work. It introduces a dualism of discourse and social reality. It argues "an individual's sense of who they are arises from their imbrication in systems of historically contingent meanings communicated by institutionalised patterns of behaving, thinking and speaking" (Tenorio 2014, p192). Dispositive Analysis applies the notion of discourse as "an institutionalized way of talking that regulates and reinforces action and thereby exerts power" (Link 1983, p60). It aims at the analysis of discourses and dispositive and focus on context, text surface and rhetorical means (Wodak and Meyer 2009). Therefore, Dispositive Analysis is a more content-oriented analysis (Tenorio 2014).

Dialectical-Relational Approach is "an essentially Marxist framework" (Tenorio 2014, p190), and it focuses on social conflict in the Marxian tradition. According to the Dialectical-Relational Approach, every social practice has a semiotic element. It understands Critical Discourse Analysis as the analysis of dialectical relationships

between *semiosis*²⁴ and other elements of social practices, in the social processes.

Fairclough (2009, p164) argues that:

There are three major ways in which semiosis relates to other elements of social practices and of social events – as a facet of action; in the construal (representation) of aspects of the world; and in the constitution of identities. And there are three semiotic (or discourse-analytical) categories corresponding to these: genre, discourse and style. ... A central concern (of Dialectical-Relational Approach) is shifting relations between genres, between discourse and between styles: change in the social structuring of relations between them which achieves relative permanence and stability in orders of discourse, and the ongoing working and re-working of relations between them which is regarded as a normal feature of text.

Social Actors Approach refers to “a broad scope of sociological and linguistic theories, especially to those explaining the role of action to establish social structure: representation is ultimately based on practice” (Wodak and Meyer 2009, p26). This approach argues that “text types represent social practices, which involve participants, actions, performance modes, presentation styles, times and locations, resources and eligibility conditions” (Tenorio 2014, p193). According to Leeuwen (2009) social actors, their actions and purposes can be linguistically represented in a range of different ways, and the Social Actors Approach seeks to analyse how specific discourses legitimise some of these actors and practices and intentions rather than others.

Corpus Linguistics Approach is a methodology that uses computer support – in particular, software called ‘concordance programs’ – to analyze authentic, and usually very large, volumes of textual data (Mautner 2009, p122). According to Wodak and Meyer (2009, p26), the Corpus Linguistics Approach is “a quantitative, linguistic extension of CDA, it provides additional linguistic devices for thorough analysis – and can be applied against the backdrop of CDA approaches.”

²⁴ Semiosis is from Greek, it refers to any form of activity, conduct, or process that involves signs, including the production of meaning. Briefly – semiosis is a sign process.

Socio-Cognitive Approach is characterized by the triangular interaction between cognition, discourse and society (Tenorio 2014). Van Dijk (2009, p26) believes that “social actors involved in discourse do not only use their individual experiences and strategies, they rely on collective frames of perceptions.” One individual’s dynamic constructed cognition is informed by social representations, that is, the concepts, values, norms and images is shared in the same social group, and activated and maintained in discourse. Therefore, the context of the Socio-Cognitive Approach is not only a kind of social environment, situation or structure, but a subjective mental representation. The context of discourse is defined as the combined cognitive and social dimensions of the triangle (Wodak and Meyer 2009). The Socio-Cognitive Approach argues that societal structure does not directly affect discourse structure, but cognition is the interface between societal and discourse structure. The societal structure influences socially shared perception, which forms a core element of the individual’s social identity, and then is ultimately present in the text (Wodak and Meyer 2009). Therefore, this approach is commonly used when analysing how elites and dominated groups use discourse as means to gain access to and/or resist power.

Discourse Historical Approach also attempts to reveal how language is used by those in power to maintain their domination (Tenorio 2014). It focuses on developing conceptual frameworks for specific social problems, especially in the field of politics. It attempts to analyze the discursive construction of sameness and difference, and the reconstruction of discursive issues from the past. The importance of this approach is to bring together the textual and contextual levels of analysis (Tenorio 2014). The context of Discourse-Historical Analysis is understood mainly as historical, which takes into account four levels: 1) the immediate language- or text-internal co-text; 2) the inter-textual and inter-discursive relationship between utterances, texts, genres and

discourses; 3) the extra-linguistic (social) level, which is called the context of situation; and 4) the broader socio-political and historical context (Wodak and Meyer 2009, p31). Through the four levels of analysis, the Discourse Historical Approach is able to find out “the de-contextualization and re-contextualization processes in which elements typical of a particular context can be taken out of and inserted into a new context with which it has not been conventionally associated” (Tenorio 2014, p192). Wodak and Meyer (2009) further develop a series of discursive strategies for identifying ideological positions, they are:

- Referential strategy or strategy of nomination, where the salient linguistic devices are membership categorisation, metaphors, metonymies²⁵ and synecdoche²⁶.
- Strategies of predication which appear in evaluative attributions of positive or negative traits and implicit or explicit predicates.
- Strategies of argumentation which are reflected in certain *topoi*²⁷ (i.e. used to justify political inclusion or exclusion).
- Strategies of perspectivisation, framing or discourse representation use specific means of reporting description, narration or the quotation of events and utterances.
- Strategies of intensification and mitigation intensify or mitigate the illocutionary force of utterances.

²⁵ Metonymy is a figure of speech in which a thing or concept is called not by its own name but rather by the name of something associated in meaning with that thing or concept.

²⁶ Synecdoche is a figure of speech in which a term that denotes one thing is used to refer to a related thing.

²⁷ *Topoi* refer in the context of classical Greek rhetoric to a standardized method of constructing or treating an argument.

5.4.3 Discourse Historical Approach

This study uses the Discourse Historical Approach to explore the discourse in Chinese companies' annual reports over time.

➤ Justification

The Discourse-Historical Approach has not been used extensively, if at all, in studies of environmental reporting, but has been used widely in studies of political discourse (Van Leeuwen and Wodak 1999) The approach focusses on the historical dimension of the political discourse and is appropriate for this study as it is one of the first to examine the nature and influence of political ideology which is strongly grounded in Chinese history.

As it is one of the approaches to CDA, unsurprisingly, much of the theoretical and methodological framing of the Discourse-Historical Approach draws on CDA. However, the Discourse-Historical Approach “emerged as a response to criticisms levelled at CDA, especially concerning the latter’s determinist tendencies linked to power and social structure and its concomitant neglect of the subject” (Glynos et al. 2009, p17). While the Discourse-Historical Approach maintains the structural components of CDA which argue that humans’ discursive behaviour is shaped by external socio-political pressures, it emphasises “the need to draw from a social-psychology informed reading of the subject, in order to shed light on processes of interaction between text and context (and to acknowledge the influence of context upon possible readings of text)” (Glynos et al. 2009, p18). Wodak and Meyer (2009) argue that the objective social situations which are determined by social structures (such as gender, class or ethnicity) cannot sufficiently demonstrate the influence of social context on language variation; it is the subjective definitions of the social

situations that influence discourse. These subjective definitions are determined by the social-psychological (cognitive) contexts of the relevant actors. According to the Discourse-Historical Approach, the social cognitive, that is also known as ideology, is the mental reflection of the world shared by a special group in a certain period (Van Dijk 2009; Wodak and Meyer 2009). It is important to include this context within the analytical process. The Discourse-Historical Approach offers insight into the interplay between social structures and individual actors, and offers a way to re-conceptualise subjectivity and agency in more cognitivist terms (Glynos et al. 2009, p18). Therefore, the Discourse-Historical Approach is viewed as appropriate for this study that attempts to analyse the discourse in annual reports within the Chinese social and political context.

Moreover, the Discourse-Historical Approach defines discourse as context dependent linguistic activities. History, within the Discourse-Historical Approach, is a relevant context that needs to be considered when analysing the text. The Discourse-Historical Approach believes that ideologies are dynamic, and change in different historical contexts. In addition, ideology is the mediator of the interaction between social structure and individual actor (Glynos et al. 2009). In order to understand how discourse is shaped by the social structure, the historical context should be taken into account. However, as criticised by Ferguson (2007), the existing studies in accounting that use CDA as a methodological framework mainly adopt a “textually-oriented” approach, and therefore overemphasise the texts themselves, while paying insufficient attention to the social and historical context. Therefore, this study uses the Discourse-Historical Approach to analyse the influence of the Chinese government on Chinese CER, and attempts to narrow that gap.

As discussed above, the Discourse-Historical Approach is concerned with the relationship between discourse and social context, especially in the changes in social context over time. It “aims to ‘demystify’ the hegemony of specific discourses by deciphering the ideologies that establish, perpetuate or fight dominance” (Wodak and Meyer 2009, p88). Therefore, this approach is the most appropriate type of CDA to use in exploring the role of the Chinese government in influencing Chinese CER given that, as discussed earlier, ideology is a significant aspect of the Chinese context.

➤ *Stages of the Discourse-Historical Approach*

Wodak and Meyer (2009, p96) suggest that the Discourse-Historical Approach should ideally follow eight stages:

1. Activation and consultation of preceding theoretical knowledge (i.e. recollection, reading and discussion of previous research).
2. Systematic collection of data and context information (depending on the research question, various discourse and discursive events, social fields as well as actors, semiotic media, genres and texts are focused on).
3. Selection and preparation of data for specific analyses (selection and downsizing of data according to relevant criteria, transcription of tape recordings, etc.).
4. Specification of the research question and formulation of assumptions (on the basis of a literature review and a first skimming of the data).
5. Qualitative pilot analysis (allows testing categories and first assumptions as well as the further specification of assumptions).
6. Detailed case studies (of a whole range of data, primarily qualitative, but in part also quantitative).

7. Formulation of critique (interpretation of results, taking into account the relevant context knowledge and referring to the three dimensions of critique).
8. Application of the detailed analytical results (if possible, the results might be applied or proposed for application).

However, they also suggest that this eight-stage program is “best realized in a big interdisciplinary project with enough resources of time, personnel and money. Depending on the funding, time and other constraints, smaller studies are, of course, useful and legitimate. ... one can certainly conduct only a few case studies and must restrict the range of the data collection (to very few genres)” (Wodak and Meyer 2009, p96). In this study, the initial four stages identified as necessary in a full DHA study comprise the early chapters of the thesis, and the ‘Qualitative pilot analysis’ (testing categories and first assumptions), is completed through the Content Analysis component of the thesis presented in Chapter 6. Therefore, when applying the Discourse-Historical Approach, the data are downsized to a smaller sample for specific analyses, and the focus is on steps 6 and 7: Detailed case studies and Formulation of critique.

➤ *Steps in the Discourse-Historical Approach*

In order to reveal the link between the Chinese government’s commitments and Chinese CER, four steps of the Discourse-Historical Approach are followed. First, the specific contents or topics of a specific discourse are identified. Second, linguistic means are examined. Third, the discursive strategies are investigated. Finally, the specific context-dependent linguistic realisations are examined. In the following sections each of these steps is outlined, along with the questions developed to guide the analysis.

1. Identify the specific contents or topics of a specific discourse.

According to Wodak and Meyer (2009), discourse is not just a language, it is a social practice not only shaped by the broader social context, but also shaping the social structure and order. It is a cluster of context-dependent semiotic practices that are situated within specific fields of social action. The approach of identifying the specific contents or topics of a specific discourse means delimiting the borders of a ‘discourse’ and differentiating it from other ‘discourses’. In this study, CER as a discourse that unfolds across a number of inter-related social contexts is examined. A set of subtopics of CER discourse is developed by using the three major CSR guidelines, GRI, SSE and CASS. The three guidelines overlap with each other. However, while GRI has more comprehensive indicators, which include the indicators of biodiversity and rehabilitation, the SSE focuses more on energy saving and emissions reduction. Therefore, this study develops five categories of themes (General Statement, Management Approach, Energy Saving and Pollutant Emission, Compliance – Global, Compliance – China, Biodiversity and Rehabilitation) as described earlier. By examining which topics have been disclosed, and which topics have not been disclosed, the relationship between the government and Chinese CER, and the relationship between the West and Chinese CER, are explored.

To identify the specific contents or topics of a specific discourse is to perform a *descriptive* analysis of the text (step 1). In applying the first step in this study, the following question is developed to guide the analysis:

- What is said and what is not said in the reports?

2. Examine linguistic means.

Annual reports and CSR reports are the texts used by the companies to communicate with their stakeholders. The Discourse-Historical Approach argues that texts can be assigned to genres. “A ‘genre’ may be characterized as ‘a socially ratified way of using language in connection with a particular type of social activity’”(Fairclough, 1995, p14 cited in Wodak & Meyer, 2009, p90). Therefore, by examining linguistic means, the intention of the companies when they disclose environmental information can be determined, that is, who the companies think would want to read the environmental information. To guide the examination of the linguistic means, the following questions are used:

- Do the companies disclose different environmental information in their Annual Report and CSR Report?
- What type of language do the companies use in their reports? Is there any inter-discursive relationship between the CER and the government’s policies and guidelines? Is there any inter-discursive relationship between the CER and GRI?

3. Investigate discursive strategies.

To investigate discursive strategies is to find out what is the meaning of the discourse, what is the information the companies are trying to tell their report readers, and what is the particular social, political, psychological or linguistic goal the companies want to achieve. When investigating the discursive strategies, the analysis is especially interested in revealing the implicit or indirect meaning of the discourse, since such meanings are related to underlying beliefs. As argued by Van Dijk (2009), discourse is the mental representation of the social context, so in order to find out the complex relationship between discourse and context, the implication of the discourse should be analysed. Four Questions are established to guide the investigation of the discursive strategies in this study:

- What does “environment” mean when referred to by the companies?
- Do the companies talk positively or negatively about the environment?
- What arguments are employed in the discourse to support their claims?
- Are there any particular perspectives taken by the companies, in terms of the environment?

4. Examine the specific, context dependent linguistic realisations.

Critical Discourse Analysis links detailed discourse analysis with broader social practices analysis. As discussed previously, CDA considers discourse as context-dependent social activities. Discourse is a language used relative to social, political and cultural formations; it reflects social construction, but also shapes individuals’ interaction with society; it is interested in studying the relationship between discourse and context. Therefore, to find out the influences on Chinese CER, it is important to explore the social contexts within which the discourse unfolds, and then examine how the discourse is reconstructed and deconstructed between different contexts.

Further, as argued by Van Dijk (2009), discourse is not directly related to social structures, but mediated by a cognitive device. Hence, “context is not simply some kind of social environment, situation or structure...rather, it is a subjective mental representation, a dynamic online model, of the participants about the for-them-now relative properties of the communicative situation” (Van Dijk 2009, p66).

Examining the specific, context-dependent linguistic realisations is to “reveal connections that usually remain hidden and interrogating the ideological basis of social organisation” (Thomas 2003, p782). According to Wodak and Meyer (2009, p89), the Discourse-Historical Approach “follows the principle of triangulation, which implies taking a whole range of empirical observations, theories and methods

as well as background information into account.” “This triangular approach is based on a concept of ‘context’ which takes into account four levels (Wodak and Meyer 2009, p93):

- 1) The immediate, language or text-internal co-text and co-discourse.
- 2) The inter-textual and inter-discursive relationship between utterances, texts, genres and discourses.
- 3) The extra-linguistic social variables and institutional frames of specific ‘context of situation’.
- 4) The broader socio-political and historical context, which discursive practices are embedded in and related to.

Following the above discussion, two questions are posed to guide the analysis in the final step:

- Are the difference and the sameness of reporting among different companies affected by the context? How are they affected?
- Is there ideology evident in the Chinese CER? How does the ideology affect the discourse?

5.11 Chapter summary

This chapter outlined the methodological framework used in the study. As discussed, Content Analysis is employed to examine the direct influence of the State and the West. However, it is proposed that the State can also indirectly influence the CER by means of ideology. Therefore, Critical Discourse Analysis, which is commonly used in revealing the power that is frequently hidden, is also used to examine the indirect influences, particularly of the State but also potential influences that may mediate that of the State.

Each of the questions identified in the preceding sections are used to guide the

analysis, the results of which are presented and discussed in the next chapter.

Chapter 6: Results and Discussion

6.1 Introduction

In this chapter, the results of the analysis are presented and discussed in three major sections. First descriptive analyses including trends, themes and comparative analyses, are provided. This is followed by the results of the panel data econometric models. Finally, the Discourse Analysis is presented. Discussion of the general observations for each type of analysis is provided in this chapter, while overall conclusions and implications are contained in the final chapter of the thesis. A full descriptive analysis can be found in Appendix 1.

6.2 Trends Over Time

Generally, environmental disclosure by Chinese companies shows an increasing trend, in terms of both the number of Chinese companies that disclose environmental information and the extent or level of the disclosure made by those companies.

Figure 6.1 below shows the trends for the number of Chinese companies that disclosed environmental information over the study period. The results show a dramatic increase in 2008 from 52% in 2007 to 85% in 2008, but then show little further change.

When broken down into annual reports and CSR reports, it is apparent that CSR reports contribute most to the total increase. In 2008, 62% of companies had a CSR report, compared to 6% in 2007, an increase of 933%. After 2008, the increase was slower, in three years it increased by only 10% from 62% in 2008 to 68% in 2011.

As for the number of Chinese companies that have environmental information in their annual reports, this increased steadily before 2010, but the greatest increase also

occurred in 2008, with an increase of 8%. However, a notable decrease occurred in 2011 from 64% in 2010 to 59% in 2011, which indicates that more and more Chinese companies prefer to use a CSR report as the medium to communicate environmental information to their stakeholders.

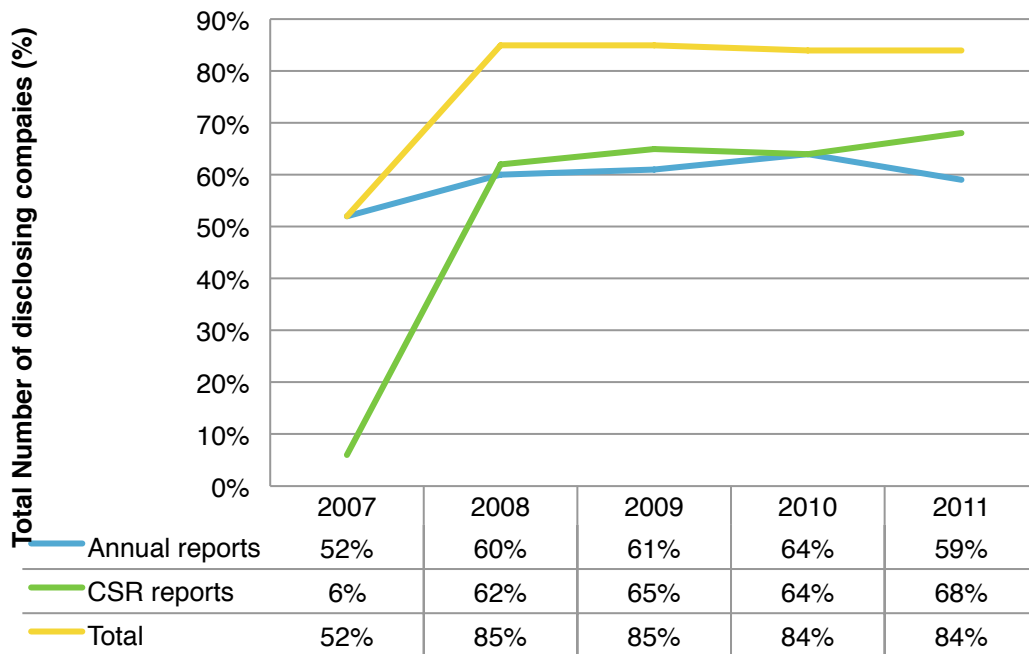


Figure 6.1: Number of disclosing companies

The most notable result in the trend analysis is that the number of disclosing companies significantly increased in 2008. As discussed earlier, the government implemented a series of regulations, policies and programs to enhance companies' green performance in the mid-2000s, and it reached a peak in 2008, when the MDEI was enacted. Thus, the preliminary results suggest that the Chinese government significantly influenced the decision to produce CER in China at that time through regulatory changes.

6.3 Descriptive Analysis by Theme

The number of companies that disclose environmental information within specific themes was also examined. The results are presented in Table 6.1.

Table 6.1: The number of disclosing companies by theme

	N	%
General Statement	588	72
Management Approach	442	54
Energy Saving & Emission Reduction	426	52
Compliance-Chinese	339	41
Others	263	32
Compliance-Global	118	14
Biodiversity & Rehabilitation	98	12

Table 6.1 shows that Management approach, Energy saving & emission reduction and General statement are the top three themes that appear in the reports. Over half of the environmental information disclosed by sample companies was related to these themes.

There are 72% of companies that disclosed in the “General Statement” theme in their reports. As previous studies claim that Chinese CER is at an emerging stage, it is no surprise that companies disclose information about their commitments, goals and policies relevant to the environmental aspects and the environmental risks and opportunities they face, rather than disclose specific information about their environmental performance (Gao 2011; Situ and Tilt 2012). The results of this study confirm the emerging nature of Chinese CER practice, but show that it is increasing.

“Environmental management approach” ranks as the second most common theme. The number of companies that disclosed environmental information within this theme

is 442, which counts as 54% of the total. One possible reason for the predominance of this theme is the implementation of the MDEI in 2008. According to the MDEI, Article 19, companies are encouraged to voluntarily disclose “Information on their environmental protection investment and environmental technology development” and “Information on the construction and operation of their environmental protection facilities”. As discussed previously, although it is not mandatory, the Chinese government’s influence on Chinese companies’ management is so strong that the Chinese companies want to fulfil the government’s expectations and hence, follow the MDEI requirements. The other possible reason is that, as Green policy became the nation’s priority (as discussed in Chapter 3), government grants were awarded to encourage the companies to research and develop new technologies and green products. As a result, companies disclose information about their efforts to research, develop and apply environmentally friendly technology or equipment. Moreover, when reading the reports, it can be seen that Banks disclose a large amount of information on how they set up criteria for “Green Credit” and implement it to mitigate the environmental impact of their services, and match the government’s “Green Policy”, This sub-theme of green policy, therefore contributes most to the theme of “Environmental management approach”.

“Energy Saving & Emission Reduction” is the other significant theme that appears in the reports, with 52% of the sample companies disclosing in this theme. It is noted that the eleventh five-year plan (which maps strategies of the whole country’s economic development in the following 5 years) set targets to reduce pollutant emissions. The plan required the reduction of energy consumption per unit of gross domestic product (GDP) by 20%, and reduced Sulphur Dioxide (SO₂) and Chemical Oxygen Demand (COD) emissions by 10% from 2005 levels by 2010. The total target

is then allocated to each province, then city, and finally to companies. As a result, companies are likely to disclose energy and emission related information, such as how much energy has been saved, by how much pollutants have been reduced, what they have done to reduce emission, etc. This result is also well matched to the voluntary requirements of the MDEI, which encourages companies to voluntarily disclose “their total annual resource consumption”, “type, volume and content of pollutants discharged by them and where the pollutants are discharged into”, “information on the handling and disposal of waste generated from their production” and “information on recycling and comprehensive use of waste products”.

The number of companies disclosing in the theme “Biodiversity and Land Rehabilitation” is lowest. There are only 98 companies that disclosed in this theme, which accounts for just 12% of the sample companies. This result is different from the findings of other studies on developed countries, where they find that Land Rehabilitation is one of the most disclosed themes (Tilt 2001). Although it is a very important component that is required by the GRI, most of the Chinese companies in the sample ignored this theme. This is probably because it is not a theme explicitly encouraged by the Chinese government and land issues are given a lower priority than in places such as Australia and the US where studies note disclosure in this area is generally high.

Finally, to better understand the competing influence on Chinese CER of the Chinese government and of the West, this study separates “Compliance” into “Compliance-China” and “Compliance-Global”. The number of companies that mention the theme of “Compliance-China” in their reports is over 40%. The results show that most of the Chinese companies are willing to disclose information about compliance of various

environmental acts, regulations, policies or guidelines in China, which recognises the Chinese government influences. However, there are also 118 (14%) companies that disclose environmental information about “Compliance-Global”, which although relatively low, indicates some influence of global guidelines.

Regarding the “Others” category, environmental awards appear frequently, and a few companies disclose their donations related to environmental issues.

In general, the disclosure matches the Chinese government’s emphasis, as environmental management approach, energy saving and pollutant emission reduction are the major themes that are disclosed by Chinese companies, while biodiversity and land rehabilitation has been neglected. However, the results of the preliminary analysis by theme show only limited evidence that the Chinese CER is influenced by the West, which is not as expected given recent moves in China towards a more market-oriented economy. Therefore, additional analysis is presented in the following sections.

6.4 Comparative Analysis

To further examine the influence of the Chinese government and the West on Chinese CER, this section discusses the descriptive results by breaking them down into different groups in order to provide a greater level of resolution to the analysis. State-ownership is divided into two types (central and local) to examine the influence from the Chinese government, and then a comparison of dual-listed Chinese companies with non-dual-listed Chinese companies is conducted as a proxy for Western influence.

6.4.1 Comparative analysis by state ownership

Table 6.2 shows that many more SOEs chose to disclose environmental information in their CSR report or annual report than non-SOEs. The government is the controlling shareholder of SOEs so, not surprisingly, the Chinese government has substantial influence on the companies' decision making. As Green reporting is one of the programs used to show commitment to the Chinese government's Green policy, SOEs are thus more inclined to disclose environmental information.

As discussed previously, however, there are conflicting benefits between central SOEs and local SOEs. From Table 6.2, it can be seen that central SOEs outperformed the others, especially for CSR reports. While there are 71.7% of central SOEs that have CSR reports, there are only 46.8% of local SOEs and 42.9% of non-SOEs that have CSR reports. Conversely, there are slightly more local SOEs compared to central SOEs that decided to disclose environmental information in their annual reports.

Table 6.2: Number of disclosing companies by state ownership

	Total*		CSR report		Annual report	
	N	%	N	%	N	%
Non SOE	145	67	93	43	96	44
Central SOE	256	88	208	72	185	64
Local SOE	243	79	144	47	204	66

In order to further examine the state ownership effect on Chinese CER, Table 6.3 presents environmental disclosure by themes and state ownership types. General statement, Management approach and Emission reduction & energy saving are the themes that were disclosed most by all three groups of companies. As discussed earlier in this chapter, these are the themes that are explicitly required by the MDEI,

so it is consistent with expectations to see that SOEs disclose more of this information. The results show, however, that even non-SOEs disclose this information which confirms the earlier argument in this study that, in China, the Chinese government's political power is strong, therefore, it can influence CER even without owning the companies.

Moreover, it can be seen that central SOEs produce CER most often, across all of the themes. However, when comparing the local SOEs and the non-SOEs, the result is mixed. Except for the theme of compliance-Global, for all other themes, there are more local SOEs than non-SOEs that disclose. Interestingly, there are 4% more non-SOEs that have CER in the themes of compliance-global, suggesting non-SOEs are more influenced by international requirement, and it is noteworthy a few of the non-SOEs are dual-listed on Chinese and offshore stock exchanges. As such, whether the dual listing affects the Chinese companies CER is examined in the next section.

Table 6.3: The number of disclosing companies (%) by state ownership & themes

	Non SOE	Central SOE	Local SOE
General Statement	59%	81%	72%
Management Approach	39%	67%	53%
Emission Reduction & Energy Saving	33%	67%	52%
Compliance - China	35%	51%	38%
Others	20%	42%	32%
Bio-diversity & Rehabilitation	2%	21%	11%
Compliance - Global	14%	19%	10%

The comparative analysis shows that central SOEs disclose the most environmental information most often, followed by local SOEs, while non-state-owned enterprises

disclose the least often. As discussed in Chapter 3, the power that is exerted by the Chinese government via shareholdings in the companies is known as voting power. In China, SOEs are the backbone of the Chinese economy (Du and Wang 2013). As the biggest shareholder of SOEs, the Chinese government can influence SOEs' decision-making, therefore SOEs will be more likely to adhere to the Chinese government's policies. As mentioned above, as Green policy becomes the priority policy in China, it is likely that we will see more SOEs providing environmental reporting than non-SOEs. Accordingly, these results confirm the argument that the Chinese government may influence Chinese CER with its voting power. Moreover, as central SOEs perform better CER than local SOEs, it confirms previous literature that states, in China, the commitment to environmental protection is high, while the implementation is low. This is because the local government does not fully implement the central government's policies, as there are conflicting benefits between the local and central regimes.

6.4.2 Comparative analysis by dual listing

As discussed in previous chapters, Western investors, trading partners and consumers (collectively referred to as 'the West') are likely another of the important stakeholders of Chinese CER. Therefore, the number of disclosing companies and the volume of environmental disclosure is broken down into the categories of dual-listed and non-dual-listed companies, in order to analyse whether listing outside China results in companies feeling any pressure to disclose more environmental information.

Table 6.4: The number of disclosing companies by dual-listed

		Total		CSR report		Annual report	
		N	%	N	%	N	%
Non-dual-listed	Y	496	76	306	47	370	56
	Total	657	100	657	100	657	100
Dual-listed	Y	148	94	139	88	115	73
	Total	158	100	158	100	158	100

Note: Y = no. of companies with CER

Table 6.4 shows that non-dual listed companies lag behind dual listed companies, especially in terms of disclosing in CSR reports, as there are 88% of dual-listed companies that have stand-alone CSR reports, compared to less than half of the non-dual-listed companies. In total, compared to non-dual-listed companies, there are 24% more dual-listed companies that disclose environmental information in their annual reports or CSR reports.

Further breaking it down into themes (see Table 6.5 below), the results are consistent with this finding. Overall, there are more dual-listed companies that disclose environmental information in all of the themes. Especially in the theme of biodiversity & Rehabilitation there are significantly more dual-listed companies that disclose, which may indicate some influence of global regulations, such as the GRI.

In summary, dual-listed companies are more likely to produce CER than non-dual-listed companies, which provides preliminary evidence that the West influences Chinese CER.

Table 6.5: The number of disclosing companies by dual-listed & theme

	Non-dual listed	Dual listed
General Statement	68%	89%
Management Approach	47%	86%
Emission Reduction & Energy Saving	44%	86%
Compliance – China	37%	63%
Others	26%	60%
Biodiversity & Rehabilitation	6%	37%
Compliance – Global	13%	21%

The preliminary, descriptive, results presented in sections 6.2 to 6.4 provide some indication that, as expected, the Chinese government plays a major role in the production of CER in China, and also indicate that there may be other, possibly competing, influences. In order to delve into these findings in more detail, econometric panel modelling was undertaken, and this is presented next.

6.5 Results of panel data econometric models

The data used in the econometric modelling is summarised in Appendix 1.

In addition, correlation tests were performed to test for potential multicollinearity, the correlation matrix is presented in Appendix 2. If the coefficients of correlation between continuous independent variables exceed 0.80, that is indicative of serious collinearity (Gujarati 2003). The correlation matrix shows that the correlations between the continuous independent variables are low, suggesting that the problem of multicollinearity is minimal. However, a certain degree of multicollinearity can still exist even when none of the bivariate correlation coefficients are very large, since one

independent variable may be an approximate linear function of a set of several independent variables (Ho and Wong 2001).

6.5.1 Results of Selection Models

As discussed in Chapter 5, companies' environmental reporting is treated as a two-stage decision. In the first stage, a selection model is employed to test whether the influence of the State and/or the West impacts on companies' decision about whether to disclose any environmental information or not. All sample companies are included when running the selection models. Selection model equations were described in Chapter 5, but are repeated below ease of reference:

$$\begin{aligned} \text{Total_Select}_{it} = & \beta_0 + \beta_1\text{staownedC} + \beta_2\text{staownedL} + \beta_3\text{stashareD} + \beta_4\text{envgraD} + \\ & \beta_5\text{totgraD} + \beta_6\text{highprofile} + \delta_1\text{loglagtotass} + \delta_2\text{lagroa} + \lambda_1\text{loglagtotassmm} + \\ & \lambda_2\text{lagroamm} + \lambda_3\text{Year} + v_{it} + u_i \end{aligned}$$

$$\begin{aligned} \text{AR_Select}_{it} = & \beta_0 + \beta_1\text{staownedC} + \beta_2\text{staownedL} + \beta_3\text{stashareD} + \beta_4\text{envgraD} + \\ & \beta_5\text{totgraD} + \beta_6\text{highprofile} + \delta_1\text{loglagtotass} + \delta_2\text{lagroa} + \lambda_1\text{loglagtotassmm} + \\ & \lambda_2\text{lagroamm} + \lambda_3\text{Year} + \lambda_4\text{csrD} + v_{it} + u_i \end{aligned}$$

$$\begin{aligned} \text{CSR_Select}_{it} = & \beta_0 + \beta_1\text{staownedC} + \beta_2\text{staownedL} + \beta_3\text{stashareD} + \beta_4\text{envgraD} + \\ & \beta_5\text{totgraD} + \beta_6\text{highprofile} + \delta_1\text{loglagtotass} + \delta_2\text{lagroa} + \lambda_1\text{loglagtotassmm} + \\ & \lambda_2\text{lagroamm} + \lambda_3\text{Year} + \lambda_4\text{arD} + v_{it} + u_i \end{aligned}$$

Where:

Total_Select: takes the value 0 for non-reporting companies and 1 if there is a non-zero word-count relating to environmental reporting either in their Annual reports or CSR reports;

AR_Select: takes the value 0 for non-reporting companies and 1 if there

is a non-zero word-count relating to environmental reporting in their Annual reports only;

CSR_Select: takes the value 0 for non-reporting companies and 1 if there is a non-zero word-count relating to environmental reporting in their CSR reports only;

staownedC: 1 refers to central SOEs, 0 otherwise;

staownedL: 1 refers to local SOEs, 0 otherwise;

stashareD: 1 refers to companies that have non-tradable share held by the state, 0 otherwise;

totgraD: 1 refers to companies that received government grant, 0 otherwise;

envgraD: 1 refers to companies that received government grant related to environmental issue, 0 otherwise;

highprofile: 1 refers to high profile industries, and 0 refers to low profile industries;

loglagtotass: the natural logarithm total assets lagged by one year;

lagroa: one year lag Return on Assets;

year: the same companies over 5 years are used in the panel model, therefore, sample years from 2008 to 2011 is included as dummy variables;

csrD: 1 refers to a company that has environmental reporting in its CSR report, and 0 otherwise;

arD: 1 refers to a company that has environmental reporting in its

annual report, and 0 otherwise.

Significance levels of up to 20% are used to indicate significance as, according to Kmenta (1986, p128) “there is nothing superior about these two significance levels (1% and 5%) other than that they are widely used”. Maddala (1988, p32) further reports that, “Lindley²⁸ argues that for large samples one should use lower significance levels and for smaller samples higher significance levels.” In this study, there is a relatively small sample size (that is, less than 100 observations in any one year for those who have a CSR report or an AR). Therefore reporting to 20% significance is seen as appropriate.

Table 6.6: Summary of the selection models (N=760)

<i>Explanatory variables:</i>		Total	AR	CSR
Voting power	staownedC	1.056**	0.842***	2.803
	staownedL	0.659*	0.948***	-1.106
	stashareD	-0.057	-0.211	-0.826*
Economic power	envgraD	0.490**	0.546***	0.49
	totgraD	0.468*	0.045	-0.495
<i>Control variables:</i>				
highprofile		1.209***	1.448***	-0.193
loglagtotass		0.752***	0.061	1.607*
lagroa		0.793	0.401	0.63
loglagtotamm		-0.349	0.13	2.225*
lagroamm		-0.017	0.525	-0.49
<i>year</i>				
2008		1.615***	0.297	24.515*
2009		1.285***	0.17	24.938*
2010		1.131***	0.366	24.413*
2011		0.887***	-0.002	25.248*
csrD			-0.046	

²⁸ D V Lindley, “A Statistical Paradox”, Biometrika 1957 pp187-192.

arD			-0.722
Constant	-5.464***	-3.803***	-57.468**

Coefficients marked as: * p<.2; ** p<.1; *** p<.05

Table 6.6 presents a summary of the empirical findings for the Probit regression analyses. Full details of each model can be found in Appendix 3. The result for the dependent variable ‘Total’ (i.e. the probability that companies will decide to disclose CER in either the AR or CSR report) shows that *staownedC*, *staownedL* and *envgraD* and *totgraD* have the expected sign. The positive coefficients in *staownedC* and *staownedL* indicate that the SOEs are more likely to disclose CER than non-SOEs. The significance level of *staownedC* is 10%, compared to that of *staownedL* (significant at the 20% level). This indicates that a central SOE is more likely than a local SOE to make the decision to undertake CER but both have strong impact. Moreover, positive coefficients appear for *envgraD* and *totgraD*, that is, companies that received government grants are more likely to disclose CER than those without government grants. Compared to *totgraD*, the higher significance level of *envgraD* indicates that companies that received government grants related to environmental issues are more likely to report. A negative coefficient appears in *stashareD*, which is unexpected, but it is insignificant. Therefore, there is weak evidence that companies that have non-tradable state-owned shares are less likely to report.

The results for ‘AR’ (i.e. the probability that companies will decide to undertake CER in their Annual Report) are similar to those for Total, except that the significance level of *staownedC*, *staownedL* and *envgraD* are all at the 5% level, which indicates a stronger relationship with those explanatory variables. However, the positive yet insignificant coefficient for *totgraD* shows that receiving a government grant may not influence the companies’ decision to disclose in their Annual report. Regarding the

dependant variable ‘CSR’ (i.e. the probability that companies will decide to disclose in their CSR Report), an expected positive yet insignificant coefficient appears in staownedC and envgraD, while an unexpected negative and insignificant coefficient appears in staownedL, stashare and totgraD.

In terms of control variables, size and industry are significant, which is consistent with previous studies. Year is significant, indicating that total CER is significantly different to the base year of 2007 in each subsequent year and the higher significance for CSR reports indicates that reporting in the CSR reports accounts for most of the increase.

In summary, the results of the probit models show that the Chinese government tends to have a positive influence on the Chinese companies’ decision to undertake CER, in particular, in their annual reports. However, the more non-tradable state shares a company has, the less likely the company will decide to report.

6.5.2 Extent of Reporting Model

Once a company has decided to undertake CER, the second stage of their decision making process is to determine what, and how much, to disclose. Therefore, for companies that decided to disclose environmental information, an Extent of reporting model is developed to examine the level, or volume, of the reporting. The three equations outlined in Chapter 5 are repeated below for the reader’s convenience:

$$\begin{aligned} \text{Total_Extent}_{it} = & \beta_0 + \beta_1\text{staownedC} + \beta_2\text{staownedL} + \beta_3\text{stashareD} + \beta_4\text{envgraD} + \\ & \beta_5\text{totgraD} + \beta_6\text{CASS} + \beta_7\text{SSE} + \beta_8\text{GOV} + \beta_9\text{GRI} + \beta_{10}\text{oveshareD} + \\ & \beta_{11}\text{grantsstaown} + \beta_{12}\text{griosshare} + \beta_{13}\text{highprofile} + \delta_1\text{loglagtotass} + \delta_2\text{lagroa} \\ & + \lambda_1\text{loglagtotassmm} + \lambda_2\text{lagroamm} + v_{it} + u_i \end{aligned}$$

$$\begin{aligned} \text{AR_Extent}_{it} = & \beta_0 + \beta_1\text{staownedC} + \beta_2\text{staownedL} + \beta_3\text{stashareD} + \beta_4\text{envgraD} + \\ & \beta_5\text{totgraD} + \beta_6\text{CASS} + \beta_7\text{SSE} + \beta_8\text{GOV} + \beta_9\text{GRI} + \beta_{10}\text{oveshareD} + \\ & \beta_{11}\text{grantsstaown} + \beta_{12}\text{griosshare} + \beta_{13}\text{highprofile} + \delta_1\text{loglagtotass} + \delta_2\text{lagroa} \\ & + \lambda_1\text{loglagtotassmm} + \lambda_2\text{lagroamm} + v_{it} + u_i \end{aligned}$$

$$\begin{aligned} \text{CSR_Extent}_{it} = & \beta_0 + \beta_1\text{staownedC} + \beta_2\text{staownedL} + \beta_3\text{stashareD} + \beta_4\text{envgraD} + \\ & \beta_5\text{totgraD} + \beta_6\text{CASS} + \beta_7\text{SSE} + \beta_8\text{GOV} + \beta_9\text{GRI} + \beta_{10}\text{oveshareD} + \\ & \beta_{11}\text{grantsstaown} + \beta_{12}\text{griosshare} + \beta_{13}\text{highprofile} + \delta_1\text{loglagtotass} + \delta_2\text{lagroa} \\ & + \lambda_1\text{loglagtotassmm} + \lambda_2\text{lagroamm} + v_{it} + u_i \end{aligned}$$

Where:

Total_Extent: is the word counts that related to environmental information in both Annual report and CSR report;

AR_Extent: is the word counts that related to environmental information in Annual reports only;

CSR_Extent: is the word counts that related to environmental information in CSR reports only;

staownedC: 1 refers to central SOEs, 0 otherwise;

staownedL: 1 refers to local SOEs, 0 otherwise;

stashareD: 1 refers to companies that have non-tradable share held by the state, 0 otherwise.;

totgraD: 1 refers to companies that received government grant, 0 otherwise;

envgraD: 1 refers to companies that received government grant related to environmental issue, 0 otherwise;

CASS: 1 refers to companies indicted that they used the CASS as a guideline to prepare their report, 0 otherwise;

SSE: 1 refers to companies indicated that they used the SSE as a guideline to prepare their report, 0 otherwise;

GOV: 1 refers to companies in the Corporate Governance sector, 0

- otherwise;
- GRI:** 1 refers to a company that has indicated that they used the GRI as a guideline to prepare their report, and 0 otherwise;
- oveshareD:** 1 refers to dual-listed companies, 0 refers to A-share companies;
- grantsstaown:** interaction between the government grants received by the companies and the state ownership;
- griosshare:** interaction between a dual-listed company and whether a company is registered on GRI;
- highprofile:** 1 refers to high profile industries, and 0 refers to low profile industries
- loglagtotass:** the natural logarithm total assets lagged by one year;
- lagroa:** one year lag Return on Assets;
- year:** the same companies over 5 years are used in the panel model, therefore, sample years from 2008 to 2011 is included as dummy variables;
- csrD:** 1 refers to a company that has environmental reporting in its CSR report, and 0 otherwise;
- arD:** 1 refers to a company that has environmental reporting in its annual report, and 0 otherwise;

Table 6.7: Summary of results of extent of reporting models

<i>Explanatory variables:</i>			Total_Extent (N = 602)	AR_Extent (N = 453)	CSR_Extent (N = 421)
Influence from the State	Political power	SSE	1.368***	1.099	1.056
		CASS	1.143	0.862	1.174*
		GOV	1.511***	0.838	1.064
	Voting power	staowned	0.737	0.699	0.887
		staownedL	0.795	0.723	1.059
		stashareD	1.240**	1.16	1.116
	Economic	envgraD	1.343***	1.278***	1.147*

	power	totgraD	0.852	0.758	1.03
	Interaction	grantsstao	1.259	1.531	0.971
Influence from the West		oveshareD	1.982***	1.576**	1.234
		GRI	3.100***	1.557**	2.260***
		griosshare	0.429***	0.543**	0.754
<i>Control variables:</i>					
highprofile			1.173	1.336*	1.202*
loglagtotass			1.403**	1.277*	0.953
lagroa			1.298	1.09	1.254
loglagtotamm			0.833	0.843	1.239
lagroamm			0.787	0.945	0.966
year					
2008			1.878***	0.823	0.616*
2009			2.100***	0.789	0.763
2010			2.112***	0.935	0.772
2011			1.998***	0.796	0.804
csrD				0.854	
arD					1.208***
Constant			40.089***	103.152***	135.346***

Coefficients marked as: * p<.1; ** p<.05; *** p<.01

Table 6.7 provides a summary of the results of the extent of reporting model. Full details can be found in Appendix 4, however, most of them are not significant. The results for Total_Extent show that the view that the Chinese government exerts political power on CER is only partially supported, as SSE and GOV are significant at the 1% level, but CASS is insignificant. Regarding the Chinese government's voting power, unexpectedly, the results show that both staownedC and staownedL are insignificant, which indicates that SOEs do not disclose significantly more environmental information than non-SOEs. However, stashareD is significant at the 5% level, which shows that companies that have non-tradable state-owned shares are likely to produce more CER compared to others. The Chinese government's

influence, in terms of economic power, is also only partially supported, as *envgraD* is significant. This result shows that companies that received government grants related to environmental issues disclose more environmental information than others, but there is no differences, in terms of the extent of CER, between companies that received government grants and those without government grants generally. The results for *AR_Extent* and *CSR_Extent* show that the influence from of State on the extent of Chinese CER is very weak. Only *envgraD* is significant for both *AR_Extent* (1% level) and *CSR_Extent* (10% level).

However, while the results show that the influence of the State on CER is weak, the influence from the West is strong. In particular, the *GRI* is highly significant (5% level) for *Total_Extent*, *AR_Extent* and *CSR_Extent*, which indicates that companies that use the *GRI* as a guideline to prepare their report tend to have more extensive CER. Similarly, *oveshareD* is significant for both *Total_Extent* and *AR_Extent*, but not for *CSR_Extent*, which indicates that companies that dual-list on the Shanghai Stock Exchange and overseas exchanges provide more CER in their Annual Reports, but not in their CSR Reports. This may be due to the more restrictive requirements of these exchanges for listed companies to disclose environmental information in their Annual Report, but have no specific requirements about producing CSR reports. This lends further weight to the proposition that it is pressure external to China that results in greater disclosure.

In summary, the results show that the State's influence on the extent of CER is weak, whether or not in the annual report or CSR report. However the influence from the West on the extent of CER is much more evident, especially for annual reports. This is in direct contrast to the assertions made in most prior literature that assumes that the

Chinese government has the most significant influence on reporting by Chinese companies. The specific content of the reporting is considered in more depth through the discourse analysis presented later in this chapter, but first these results are discussed in detail by consideration of each of the specific hypotheses tested.

6.6 Results of hypothesis testing

To test the influence of the State and the West on CER, nine hypotheses were developed. As presented in Chapter 3, these represent the three types of power of the State - political, voting and economic - and are reproduced below for convenience.

➤ Influences from the State

Political Power:

Hypothesis 1a: The probability of a company who claim that they comply with State issued guidelines when preparing their reports makes decision to disclose environmental information is higher than those without such a claim.

Hypothesis 1b: The extent of CER is higher for companies who claim that they comply with State issued guidelines when preparing their reports compared to those without such a claim.

Hypothesis 2a: The probability of companies in the Corporate Governance sector makes decision to disclose environmental information is higher than companies who are not in this sector.

Hypothesis 2b: The extent of CER by companies in the Corporate Governance sector is higher than that of companies who are not in the Corporate Governance sector.

Voting Power:

Hypothesis 3a: The probability of a central SOE making the decision to disclose environmental information is higher than for local or non-SOEs.

Hypothesis 3b: The extent of CER by central SOEs is greater than for local or non-SOE.

Hypothesis 4a: The probability of a local SOE making the decision to disclose environmental information is higher than for non-SOEs.

Hypothesis 4b: The extent of CER by local SOEs is greater than for non-SOEs.

Hypothesis 5a: The probability of a company that has non-tradable shares held by the State making decision to disclose environmental information is higher than for those without the state holding non-tradable shares.

Hypothesis 5b: The extent of CER by a company that has non-tradable shares held by the State is greater than those without the state holding non-tradable shares.

Economic Power:

Hypothesis 6a: The probability of a company that received government grants making the decision to disclose environmental information is higher than those that did not receive any grants.

Hypothesis 6b : The extent of CER by a company that received government grants is greater than that of those that did not receive any grants.

Hypothesis 7a: The probability of a company that received government grants on environmental issues makes decision to disclose environmental information is higher than those that did not receive any environmental grants.

Hypothesis 7b: The extent of CER by a company that received government grants on environmental issues is greater than that of those that did not receive any environmental grants.

➤ **Influences from the West**

Hypothesis 8a: The probability of dual-listed company makes decision to disclose environmental information is higher than those that are not dual-listed.

Hypothesis 8b: The extent of CER by a dual-listed company is greater than that of those that are not dual-listed.

Hypothesis 9a: The probability of a company that has registered with GRI makes decision to disclose environmental information is higher than those that have not registered with the GRI.

Hypothesis 9b: The extent of CER by a company that has registered with the GRI is greater than that of those that have not registered with the GRI.

6.6.1 Influence from the State

6.6.1.1 Political power

As discussed in Chapter 2, the environmental problem in China is an important issue that harms Chinese economic development and potentially harms the social stability in China and, as such, the Chinese central government is trying to shift the development towards being more sustainable. Reporting on environmental issues is one of the important programs used in responding to the political call for having more sustainable development. Previous studies (Guo 2005; Yamak and Suer 2005) argue that the State can influence companies' decision making with its political power by issuing laws and regulations about reporting, therefore, it is expected that there would be a positive relationship between the Chinese government's political power and Chinese CER.

As noted in Chapter 3, in China, there are currently no mandatory requirements for CER and the guidelines, although not mandatory, are still meaningful to influence Chinese companies' to improve their CER (Situ and Tilt 2012). Therefore, in this

study, compliance with the State issued guidelines (CASS and SSE) is used as a proxy to test the Chinese government's political power on CER. It was predicted in hypothesis 1a that companies who claim that they comply with State issued guidelines when preparing their reports are likely to choose to produce CER, and hypothesis 1b predicts that companies who claim that they comply with State issued guidelines when preparing their reports will provide more environmental information than others. As noted in Chapter 5, when developing the selection models, CASS and SSE could not be included as all companies who claim that they comply with State issued guidelines when preparing their reports chose to disclose environmental information in either their annual report or CSR report. Therefore, this indicates that the Chinese government's political power significantly influences Chinese companies' decision about whether to disclose environmental information. As such, hypothesis 1a is supported. However, the results of the extent of reporting models show that both CASS and SSE are not statistically significant for either annual reports or CSR reports, which suggests that complying with State issued guidelines does not improve the extent of CER. Therefore, hypothesis 1b is not supported.

Moreover, the Shanghai Stock Exchange requires all companies that have been selected into the Corporate Governance sector to disclose environmental information. Therefore, hypothesis 2a predicts that companies in the Corporate Governance sector are more likely to choose to disclose environmental information, and hypothesis 2b predicts that the extent of CER of companies in the Corporate Governance sector is higher than others. Similar to compliance with State issued guidelines, the results show that all companies in the Corporate Governance sector have CER in either annual report or CSR report. However, companies in the Corporate Governance sector

do not provide higher levels of CER than others. Therefore, hypothesis 2a is supported, while hypothesis 2b is not supported.

The results of the first four hypothesis tests show that the Chinese government's political power influences Chinese companies' decision about whether to disclose environmental information or not. This finding is consistent with previous studies that indicate that the government can influence companies' decision making via issuing laws and regulations (termed political power in this study). However, the findings further show that, while the Chinese government's political power influences the companies' selection decision, it does not appear to strongly influence companies' decision about the extent of reporting.

6.6.1.2 Voting power

Although the Chinese economy is now moving towards being more market oriented, SOEs still play a very important role in Chinese economic development. In 2005, 27 of the top 30 Chinese companies²⁹ were state-owned enterprises. The Chinese government is thus significantly involved in the ownership and governance of SOEs as a controlling shareholder. Moreover, as one of the biggest state capitalist countries, SOEs play an instrumental role in helping the Chinese government to achieve its political goals. As green reporting becomes a major program in the Chinese government's environmental governance program, this study hypothesises that there will be a positive relationship between state ownership and CER in China.

²⁹ Standard & Poor's has conducted a statistical survey of the Top 100 listed corporations in China. This is the third year that Standard & Poor's has reviewed these leading corporations. The selection criteria are based on the latest available revenue size.

In addition, as discussed in Chapter 2 and above, there are conflicts of interests between the central Chinese government and the local Chinese governments. The central Chinese government's policy is not always fully implemented by local Chinese governments. Therefore, SOEs are separated into two groups for analysis: central SOEs (of which the central Chinese government is the controlling shareholder) and local SOEs (of which the different local Chinese governments are the controlling shareholders), in order to see if there is any difference between them.

The results show that both central and local state ownership significantly and positively influences companies' decision about whether to disclose CER or not. However, when analysing the results in more detail, it appears that state ownership only influences the choice to include CER in their annual reports, but not in their CSR reports. It is noted that the annual report is the main tool for companies to communicate with their shareholders, and only those more advanced companies issue stand-alone CSR report to communicate with wider stakeholders. As the Chinese government (both central and local) is the controlling shareholder of SOEs, it is not surprising to see they have more influence on SOEs' annual reports, rather than their CSR reports. Therefore, hypotheses 3a and 4a are supported, in particular, in terms of annual report, while hypothesis 5a is not supported.

Surprisingly, the results of the extent of reporting model show that, for companies who chose to disclose environmental information, neither central SOEs nor local SOEs provided a greater extent of reporting than non-SOEs. This finding is not consistent with the previous studies (Situ and Tilt 2012; Dong et al. 2014), which found that state ownership is a very important determinant of the extent of the Chinese CER. However, those studies included all companies (even those who choose

to report nothing), when examining state ownership's influence, so their results maybe misleading, as they do not distinguish between the influence on companies' selection decision and the influence on the extent of CER. In this study, the companies' CER decision-making process is considered as a two-stage process and, as such, it is clear that state ownership mainly influences companies' decision to disclose, not the extent of disclosure, making an important contribution to the literature. Therefore, hypothesis 3b and hypothesis 4b are not supported.

Finally, *stshareD* is used as a proxy to measure the State's voting power. Since the reform of SOEs in China, the Chinese government is not the only shareholder of SOEs, however, to maintain their voting power in SOEs, the Chinese government holds a certain level of non-tradable shares in them. It is expected that the more non-tradable shares held by the Chinese government, the stronger the voting power it has on the SOEs. As environmental development is one of the important goals of the Chinese government, hypothesis 5b predicts that the more non-tradable shares held by the Chinese government, the higher amount of CER will be provided by companies. However, although the results indicate there is a positive relationship between them, it is not statistically significant, which indicates that hypothesis 5b is not supported.

In summary, the Chinese government's voting power is found to significantly influence the companies' CER selection decision, but does not necessarily result in a higher amount of CER.

6.6.1.3 Economic power

As noted in Chapter 3, State capitalism tries to blend the power of the state with the power of capitalism. Rather than trying to eliminate markets, the Chinese government uses the market for its own purposes (The Economist 2012). In response

to the environmental problems resulting from Chinese economic development, “building up a harmonious society”, where environmental protection is one of the important elements, became the new political goal. As the biggest State Capitalism practitioner in the world, it is expected the Chinese government will use market tools to achieve their new political promise. In this study, the total amount of government grants received by companies (totgraD), and the amount of government grants received by companies on environmental issues (envgraD) are used to measure the Chinese government’s economic power.

The results from the selection model show that both envgraD (10% level) and totgraD (20% level) are statistically significant, when considering annual reports and CSR reports combined. However, if separate annual reports and CSR reports are considered, totgraD is insignificant for either, while envgraD is significant at the 5% level for annual reports, but insignificant for CSR reports. These results indicate the Chinese government’s economic power has little influence when companies are making the decision to provide CER in a separate CSR report, and implies that the annual report is still the main report used by Chinese companies to communicate with the Chinese government. Also, it is not surprising to see that the influence of envgraD on CER selection is greater than for totgraD, as companies who receive government grants are required to disclose how they use the funding to the government. Those companies who received government grants on environmental issues would therefore disclose how they used the grant to protect the environment. In general, the results indicate that hypothesis 6a is not supported, while hypothesis 7a is supported mainly for annual report disclosure.

Regarding economic power the results of extent of reporting model are quite similar to the findings for the selection model. Companies that received grants from the Chinese government do not provide higher levels of CER in either their annual report or CSR report. However, if the government grants received were on environmental issues, companies will have more environmental information disclosed in both annual reports and CSR reports. This is because the use of the environmental grants is very restricted, that is, when companies apply for the government's environmental grants they have to specify why and how they intend to use the funding. If they are awarded the grant they must use the funds for what they described in their application. Therefore, companies who received environmental grant should have taken some environmental protection action with the grant funding, and therefore, have more to disclose. In general, hypothesis 6b is not supported, while hypothesis 7b is supported.

6.6.2 Influence of the West

In contrast to somewhat ambivalent results found for the influence of the State, evidence of the influence of the West on Chinese CER is as expected. First, as discussed earlier, all dual-listed companies and companies that are registered with the GRI choose to provide CER, and therefore, hypothesis 8a and hypothesis 9a are supported.

As environmental recognition and CER requirements in developed countries are higher than in China, hypothesis 8b predicts that dual-listed companies will provide greater amounts of CER than companies that are only SSE-listed. Moreover, the GRI is one of the most advanced and commonly used CSR guidelines in the world, therefore, it is predicted that being registered with the GRI will help companies improve the comprehensiveness of their CER (hypothesis 9b). The results show that

dual listing (oveshareD) is statistically significant at the 5% level in influencing the extent of CER in annual reports, and significant at 1% level when considering the amount of disclosure in annual reports and CSR reports as a whole. However, oveshareD is insignificant in the model where CSR report is the dependent variable. This indicates that dual-listed companies disclose higher amounts of CER in their annual report. Therefore, hypothesis 8b is partially supported. The GRI is significant at the 5% level for annual reports, and at the 1% level for CSR reports and for total reporting. This suggests that the GRI significantly improves the quantity of CER by Chinese companies. As a result, hypothesis 9b is supported.

Generally, the results provide evidence that influence from the West not only impacts companies to choose to provide CER, but also may improve the comprehensive nature of the CER, especially for companies who register with the GRI.

6.6.3 Summary of hypothesis testing

This section summarises the results of hypotheses testing. A summary of hypothesis testing results is displayed in Table 6.8, followed by some discussion.

Table 6.8: Results of hypotheses testing

Hypotheses			Results
Influence from the state	Political power	H1a	Supported
		H1b	Not supported
		H2a	Supported
		H2b	Not supported
	Voting Power	H3a	Supported
		H3b	Not supported

		H4a	Supported
		H4b	Not supported
		H5a	Not supported
		H5b	Not supported
	Economic Power	H6a	Supported
		H6b	Not supported
		H7a	Supported
		H7b	Supported
Influence from the West	H8a	Supported	
	H8b	Partially supported	
	H9a	Supported	
	H9b	Supported	

As showed in Table 6.8, generally, the influence of the West on CER in China (both in terms of selection and extent) appears strong. While this is not entirely unexpected given the economic reforms and move to more market based economics taking place, this is one of the first times this has been systematically investigated and is in contrast to much literature that suggests the Chinese government is the single determinant of company reporting activity.

However, and somewhat unexpectedly, the evidence for influence from the State indicates more complexity than has previously been considered. Generally, the state influences companies' CER selection decision through its various roles (including using its political power, voting power and economic power), especially in relation to annual reports. However, the findings show that the state's influence on the extent of CER is not obvious. The State's political power only has influence when considering

total reporting (annual reports and CSR reports together). Regarding voting power, contrary to findings in previous studies, the results indicate that being a SOE does not improve the level of CER, which only appears to be influenced by the State's economic power. This result will be elaborated on in the next chapter.

As discussed in Chapter 2, the role of the government in China is complicated. To understand the interaction between the Chinese government and Chinese CER, it is not sufficient to use only statistical models to examine the relationship, as this does not capture the nuances of the disclosure content. Other elements of the Chinese government's power, such as ideology and patriotism, are hard to measure in a statistical model. Therefore, to better understand the Chinese government's influence on Chinese CER, Discourse Analysis is conducted on a sample of the reports analysed in this study. The results of Discourse Analysis is discussed and presented in the following section.

6.7 Results of the Discourse Historical Analysis

In order to reveal the link between the indirect influences of the Chinese government, such as through ideology, and Chinese CER plus any evidence of other influences, the discourse is examined in four steps. First the specific contents or topics of the discourse are identified. Second, linguistic means are examined. In these first two steps, the content of environmental disclosure from sample companies' reports is examined to find out what the companies have reported, and how the companies report on environmental protection. These two steps aim to seek evidence of the association between the State and the discourse of CER. Hence, these two steps are relatively descriptive. Then, through the next two steps, the findings from the first two steps are interpreted within the wider social-historical context (i.e. considering

government ideology in China), which seeks to reveal the meaning of the Chinese CER, and the strategy behind the companies' choice to undertake CER, through the next two steps. In the third step, the discursive strategies are investigated, and finally, the specific, context dependent, linguistic realisations are considered. Each step is conducted through the development of a question(s) to guide the analysis as outlined in Chapter 5. These guiding questions are reproduced in the relevant sections below for ease of reference.

6.7.1 Step1. Identifying the specific contents or topics of a specific discourse

As outlined in Chapter 5, discourse is not just a language, it is a social practice that shapes, and is shaped by, the broader (Wodak and Meyer 2009). The approach of identifying the specific contents or topics of a specific discourse means delimiting the borders of the discourse and differentiating it from other discourses. In this study, the first step is to perform a descriptive analysis of the text. In applying the first step the following question is developed:

- ***What is said and what is not said in the reports?***

There are various guidelines used in China. In this study, three guidelines (GRI, CASS guideline, SSE guideline) are considered, which are mainly used by Chinese companies, and from these six themes are developed as discussed earlier. These are General Statement, Management Approach, Energy Saving and Emission Reduction, Compliance – Global, Compliance – China, and Biodiversity and Rehabilitation.

Through analysis of the reports, as reported in Section 6.4, it is found that General Statement, Energy Saving and Emission Reduction, and Compliance – China are the themes that are disclosed frequently by all of the companies, while the other themes

are only mentioned by some of the companies' reports. The following section discusses what has been said, followed by what has not been said, under these themes.

By examining the annual reports and CSR reports, it can be seen that they all open with a statement or statements of the company's commitment towards responsible environmental practice. A typical sample is taken from the 2011 CSR report of the Baoshan Iron & Steel Co., Ltd (hereafter referred to as Baosteel):

A leader in Chinese iron & steel manufacturing and a provider of environmental-friendly products and services, Baosteel advocates and is dedicated to the green industrial chain. In addition to facilitating comfortable modern life, we are devoted to the mission of environmental protection and environmental burden relief. We hereby make the following commitments:

I. We will develop manufacturing techniques of high energy and resource efficiency, develop and promote products and systems with high energy and resource efficiency, share with users advanced environmental-friendly designs and technologies, and provide the society with products and services with good environmental performance.

II. We set environmental law compliance as the minimum standard. We promise not to intentionally add substances that are prohibited by law or harmful to the environment and human health during our manufacturing process, and to reduce negative impacts on the environment throughout the service life of our products.

III. We preferably cooperate with suppliers and sub-contractors with good environmental performance, help suppliers raise their awareness and performance of sustainable development, and actively provide customers with green solutions to jointly build the green industrial chain.

IV. We issue environmental declarations for our products based on life cycle assessment and reveal the environmental performance of our core products to facilitate customers and related parties to compare the life cycle impacts of various products.

V. We will actively cooperate with governments, enterprises and the international community to promote application of international research results and develop in line with advanced energy conservation and environmental improvement technologies.

Baosteel will unswervingly seek to improve product performance while reducing the negative impacts on the environment, and to achieve harmonious development of the Corporation and the environment. Baosteel will set environmental-friendly operation as the principle of its development strategy, workflow and daily operation. We will, as we have always been doing, explore the way to sustainable development of the iron and steel industry, build a brand new role in the society and create a better future.

From the above statement, it is evident that, firstly, Baosteel claims that it is not only an advocator of, but is also dedicated to, environmental protection. By stating that, Baosteel justifies its involvement in environmental protection and thus implicitly identifies itself as a responsible actor. It then lists five commitments, and states that,

to be environmental-friendly is the way towards achieving sustainable development, and also the way that they can achieve harmonious development. It further declares that environmentally friendly operation is the principle of its development strategy, workflow and daily operations. The statements impress upon the reader that the company's activities are environmentally friendly by default, as environmentally friendly operation is an intrinsic aspect of its business operations, and is a prerequisite for business.

Following the statement of commitments, the companies generally give evidence of how they respond to environmental protection. Energy Saving and Emission Reduction is the main theme used for companies to show their responsible approach to the environment. In the reports, environmental protection is always presented together with resource conservation and emission reduction. As stated by China COSCO Holding Co. Ltd. in its 2011 CSR report:

With the target of constructing an innovative enterprise, China COSCO provided effective technical supports and guarantees for sustainability of the enterprise by promoting green and environmental protection through technological measures. It continued to insist on the green development concepts, deepened the energy-conservation and emission reduction measures, performed its corporate citizenship responsibilities and tried to construct a resource-conservative and environment-friendly enterprise.

Thus, the company identifies energy saving and emission reduction as protecting the environment. This is not a unique case among the sample companies. Most of the companies provide evidence about their energy saving and emission reduction activities to show how they achieve environmentally friendly operations. Even the banks, when describing green finance, focus on how they oriented money to projects that invest in the technology and equipment that facilitates energy saving and emission reduction, and research on clean energy.

Besides energy saving and emission reduction, companies are keen on disclosing their compliance with laws, regulations, and the Chinese government's policies and guidelines. Sentences such as "Response to the nation's call of green environment", "Response to the nation's call of energy saving and emission reduction", and "company implements nation's energy saving and emission reduction policy" can be read frequently in the reports. It is not surprising, as the Chinese government is the controlling shareholder, that the SOEs are the ones that most often cite the nation's policy. Below is an excerpt from the 2011 CSR report of Baosteel:

The report has been compiled in accordance with the Guidelines for Social Responsibility Performance by Central Enterprises (Document No. 2008-01) and Outline for Implementation of Harmonious Development Strategy in the 12th Five-Year-Plan Period issued by the State-Owned Assets Supervision and Administration Commission of the State Council, the Sustainability Reporting Guidelines (G3 version) of the Global Reporting Initiative (GRI), the 10 principles of the United Nations Global Compact, the Guide-lines of the Chinese Academy of Social Sciences for the Compilation of Social Responsibility Reports by Chinese Enterprises, and Baosteel's practical conditions.

Further, as mentioned earlier, the Five-year Plan maps all of the Chinese economic developments and sets the energy-saving and emission reduction targets. Thus, it is evident in the reports that the companies accordingly disclose information about their efforts to achieve the targets assigned by the government. For example, the Baosteel's 2010 CSR states that:

Over the past five years, we firmly followed various decisions made and arrangements formulated by the Central Government, adapted to the changes in the external environment and met the challenges actively under the leadership of State-owned Assets Supervision and Administration Commission of the State Council...

The State promulgated and promoted policies for contractual energy management as a new energy-saving service mechanism, thus clearing away obstacles regarding management system so as to facilitate implementation of contractual energy management system by enterprises. Baosteel Group responded actively, formulated promptly Guiding Suggestions on Enhancing Implementation of Contractual Energy Management and Promoting Development of Energy-Saving Service Industries and established Shanghai Baosteel Energy-Conservation Service Company, developing energy-conservation and environment-friendly technical service business. Upon the basis of completing pilot projects, Baosteel Co., Ltd. formulated Management Methods of Contractual Energy Management Projects. By the end of the "Eleventh Five-year

Planning” period, 4 among the 10 contractual energy management projects had been completed within the Group. Besides, the Group undertook 2 contractual energy management projects as the service provider...

Baosteel Co., Ltd under Baosteel Group, the former Pudong Iron & Steel Co., Ltd, Shanghai Meishan Iron & Steel Co., Ltd, Baotong Iron & Steel and Xinjiang Bayi Iron & Steel Co., Ltd all outperformed the overall goal of energy savings for “action of one thousand enterprises” signed with the National Development and Reform Commission respectively. Wherein, the aggregate energy savings of Baosteel Co., Ltd., the former Pudong Iron & Steel Co., Ltd., Shanghai Meishan Iron & Steel Co., Ltd and Baotong Iron & Steel exceeded the quota by 21% and the energy savings of Xinjiang Bayi Iron & Steel exceeded the quota by 99%. The SO₂ and COD of Baosteel declined by 63% and 86% respectively in the “Eleventh Five-year Planning” period.

Some companies even established their own five-year plan, according to the nation’s five-year plan. For example, in the 2011 CSR report of Aluminium Corporation of China:

Company seriously prepare <The twelve Five-year energy-saving and emission-reduction Plan>, which include Pollution prevention facilities and technological innovation, such as desulfurization, de-nitrification and etc.

The energy-saving and emission reduction targets in the nation’s five-year plan are assigned to companies and, as a result, companies disclose whether and how they meet the assigned target. This indicates the CSR report is more likely to be aimed at reporting to the government, especially for SOEs, as they are required to be leaders in environmental protection practices. However, even for companies that are not state-owned, the Chinese government still appears to be the main stakeholder of the environmental reporting in CSR reports. For example, Fuyao Glass Group stated in its 2011 CSR report:

2011 is the open year of the twelve five-year plan’s energy saving target. For the purpose of saving energy consumption, enhancing competition ability, saving energy for country, and saving cost for the company, the Group further clears the objectives and implementation measures (how to meet the targets).

Also, in MinSheng Bank’s 2009 CSR report, the following statement appears:

The bank response to the national call of Green Finance Policy, from the perspective of environment and social risk management, translate the requirement of the policy into our internal intuitional standard, dedicate to construct the green financial system, and promote the national economy towards sustainable development.

In the 2011 CSR report, MinSheng bank stated that they “Conscientiously implement the nation’s principle and policy of energy saving and emission reduction, and environmental protection.” This statement shows that the Chinese government is a very important stakeholder of Chinese CER. Even the non-state-owned enterprises structure their reporting to show how dedicated they are, and that they devote themselves to the environmental protection issue which is promoted by the Chinese government. This also explains why the results of the panel data econometric model discussed earlier show that state ownership is not a significant determinant of Chinese CER , and is discussed further later in the Chapter.

For the category of Management Approach, although the results of the Content Analysis show that it is one of the main themes that is disclosed by Chinese companies, detailed analysis show that it focuses on the investment that has been spent, or the research and technology that has been introduced, to facilitate energy saving and emission reduction. This is especially so in the private sector companies. For example, Fuyao Glasses’s 2008 CSR report stated that (in order to save energy and reduce polluted water discharge), the company invested over RMB10 million in improving the equipment. In the 2009 and 2010 CSR reports, the company declared it kept increasing the investment in new technology and equipment. In its 2011 CSR report, the company claimed that it invested over RMB 29 million in a burning system and over RMB 1 million in new equipment that could reduce coal consumption respectively.

However, in their more recent reports, a few more advanced companies mention how they have established a governance system to ensure the business's environmentally friendly operation, which includes the responsibility among different levels of the management team.

Biodiversity and Rehabilitation is one of the indicators required explicitly by the GRI but it is not required by the SSE guideline or CASS guideline. As a result, most of the companies neglect this theme. It is hard to find any information of this category when reading the sample companies' reports. Thus, notwithstanding that the GRI was a significant predictor of the volume of reporting in the statistical modelling, the content of the reports appears to be selective.

Regarding the Compliance – global category, the companies do not frequently mention information relating to this theme. However, again in the more recent reports, some advanced companies have started to provide more information about their environmental protection practices in the global context.

In order to analyse the discursive construction of the discourse, it is necessary to examine the sameness and the difference between companies, and also between different years. As such, the second question developed for the descriptive analysis is:

- ***Is there any sameness and/or difference between companies' reports and in different years?***

The proceeding analysis shows there is significant evidence of 'sameness' between companies' reports, and the sameness is represented by the main theme that have been disclosed by the companies.

Specifically, as Chinese CER is at an emerging stage, it is not surprising to see that general statement is the main theme. However, it is noted that Chinese companies' view of environmental protection is very positive, all the companies begin their CER with statements of commitments towards environmental protection as the Chinese government becomes more concerned with environmental protection. This suggests that CER is a tool for companies to manage pressure from the State. This strategy will be made clearer when investigating the discursive strategies in step 3.

In addition, when companies provide evidence to support their claim that they are environmental responsible, the analysis shows that although companies' CER has become more mature, with more tables and diagrams showing environmental related data (Qian and Zhu 2015), most of the evidence the companies provided is about what they have done to save energy and reduce emissions. As discussed in Chapter 2, energy saving and emission reduction are the themes that are emphasised by the Chinese government when promoting environmental protection. Especially, in the Eleventh Five-year Plan, targets for saving energy and reducing emissions were set up. As it is the national policy, it is as expected to see that the themes of energy saving and emission reduction being disclosed by all companies. This is further evidence that CER is likely a tool used by companies to manage their relationship with the State.

Compliance with the Chinese government's policies and guidelines is another theme that can be read in all of the reports. Most previous studies (such as Li and Zhang 2010; Situ and Tilt 2012) argue that the Chinese government significantly influences Chinese CER through its ownership of enterprises and, as a result, that state-owned enterprises provide better CER than non-state-owned enterprises. However, as noted

in the previous section, both state-owned enterprises and non-state-owned enterprises report on the government's policies to a similar extent. Thus, it seems that the Chinese government's influence on Chinese CER is widespread. It impacts CER broadly, and not only through its voting power.

In another example of sameness, companies include information about various awards they have achieved. For example, at the end of the 2010 CSR of Baosteel, it closes the report with highlights of awards:

April 28, by the end of March, plants directly under Baosteel Co., Ltd hit the record of emission reduction of SO₂ for 15 consecutive months by over 1,600 tons. Thereby, Baosteel Co., Ltd. won the Award for Excess Emission Reduction granted by Shanghai Municipal Bureau of Environmental Protection.

June 2, at the first energy-saving China Contribution Award Appraisal, Baosteel Co., Ltd. won the "Award for Ten Enterprises with Out-standing Contributions in Energy-saving", becoming the sole enterprise winning such an honour among domestic iron and steel enterprises.

By listing the awards, the companies are trying to establish credibility. From a strategic communication viewpoint, it can impress the readers that their good behaviours are recognized by external stakeholders. However, it is interesting that, among these awards, it is the government awards and certificates are mentioned most by companies.

In summary, the sameness in content presents a message that the Chinese government is a very important stakeholder of the Chinese companies when making decisions about what should be disclosed. This suggests that CER is more likely a legitimacy tool used by Chinese companies to ensure compliance with the State's ideological views. This viewpoint will be further elaborated in step 3 and step 4.

While there is sameness appearing both between companies and over time, some new features have appeared in some advanced companies' reports in more recent years.

This provides evidence of some differences for these companies. First, as noted in the quantitative analysis, there is a trend that indicates the influence of the West on CER is becoming more important. This is also evident in the content of the reports, for example, from 2010, the highest disclosing companies in all four groups (SOE, non-SOE, dual listed and non-dual listed) started to disclose their compliance with global guidelines and standards as well as with Chinese policies. In addition, they disclose information on international awards they have received and their international cooperation efforts.

Second, as discussed previously, the Biodiversity and Rehabilitation category has been neglected by most Chinese companies. However, the companies that mentioned international influences, in particular those that have registered with the GRI provide more comprehensive CER than others. China COSCO is an example of a company that mentions the theme of biodiversity in its CSR reports. In its 2009 report, there are only four lines of disclosure related to this theme, but this increased to 12 lines in 2011 with more detailed information being provided.

Moreover, regarding the theme of Management Approach, in more recent years, particularly from 2010, companies do not just focus on new technologies and equipment to facilitate environmental protection, but disclose the management systems they have established. This includes the goals that need to be achieved, the role and the responsibilities of each management layer, incentive and punishment systems, training and cooperation, and supervision and feedback systems. Thus, it can be seen that the influence from the West is likely enhancing the quality of CSR reports over time. These differences that appear to be related to Western influences are discussed further in Section 6.7.5.

Finally, from 2010, a small number of companies started to mention the influence of pressure from the public. For example, Baosteel states that the company is concerned about the pollutants that affect local residents, that they have made efforts to mitigate the effects and, finally, that their efforts have been recognized by the local government and residents.

6.7.2 Step 2. Examining linguistic means

A ‘genre’ is a way of using language in relation to a particular type of activity (Fairclough, 1995). Recently, “social and environmental reporting has been gaining currency in the business world as a genre of external corporate communication” (Paola 2011, p169). In DHA, it is argued that texts can be assigned to genres, and by examining linguistic means, the intention of the companies when they disclose environmental information can be determined. In particular, who the companies consider to be the audience of the environmental reporting can be gleaned. To examine the linguistic means, two questions are used to guide the analysis. First:

- ***Do the companies disclose different environmental information in their Annual Report and CSR Report?***

When comparing the environmental information in the sample companies’ Annual Reports and CSR Reports, there is evidence that Chinese companies prefer to use CSR Reports as the media to communicate with their stakeholders about environmental issues, as more detailed information is disclosed in the CSR Reports. Environmental information in Annual Reports is less systematic and mainly comprises ‘motherhood’ statements. For example, in the China Aluminum’s 2009 annual report, there is only one sentence, which stated that “(the company) actively

implements social responsibility, strives to establish a safe, resource saving and environmentally friendly enterprise.”

In the CSR Reports, all companies have a separate section that discloses their detailed environmental activities, however, in the Annual Reports, environmental information is mainly embedded in the Director’s Report. In addition, the environmental information in Annual Reports is general in nature, using statements which are mainly about the environmental challenges and the opportunities that the company faces. For example, Baosteel states in their 2009 annual report that:

Low carbon economy and environmental operation are serious challenges that are faced by iron industry, but it also provide new development opportunities for those large size iron companies who strive to conduct sustainable development.

As previously mentioned, SOEs focus more on energy savings and emission reduction in their Annual Report, as the Chinese government is the controlling shareholder of these companies. This was described extensively in Step 1 above, so is not elaborated on further here.

The second question used to guide the analysis of linguistic means is:

- ***What type of language is used by the companies in their reports?***

CSR (within which environment is an important part) is the outcome of widespread concern for the environmental impact of corporate activities (O’Donovan 2002; Solomon *et al.* 2011; Tilling & Tilt 2010). It emerged as a genre in the business world in the last few decades but exhibits characteristics of vagueness, tentativeness and broad generalisations (Paola 2011). It is a tool used by companies to communicate with their stakeholders, which helps them gain support from society. Therefore, CER in developed countries is more likely being shaped and controlled by business.

However, CER in China is heavily impacted upon by the Chinese government; evidence of this can be seen not only from the content that is disclosed by the companies (which is discussed above), but also in the language used by the companies in interpreting their environmental activities.

It is argued that the Chinese communist leaders are good at using campaign slogans to convey the Party's policies and their political ideologies. And Four-word (four Chinese Characters) mottos are the main substance of their political ideologies, and these are displayed as slogans on billboards or in public places (Yee 2009). Through these mechanisms it ensures the proliferation of its political ideologies, and these ideologies and government policies become ingrained into the everyday living of the Chinese people (Yee 2009). As discussed earlier, from 2002 to 2010, when Hu Jintao led the Chinese government, he delineated the theme of his period of leadership as being to apply scientific development, and build a harmonious society. Since then, “harmonious society (和谐社会)” and “scientific development (科学发展)” have become the new agenda-framing meta-discourse (Zhang 2012). It is clear from the analysis of the reports that these discursive ideologies have become slogans of Chinese CER. “Harmonious society” and “scientific development” appear frequently in the Chinese CER examined. For example, China COCOS states in its 2008 CSR report that:

In the principles of UNGC and with the construction of a resources-saving and harmonious enterprise as a goal, it has realised the coordinated and sustainable development of enterprise value, humanistic environment and natural environment and made contributions for the building of a *harmonious socialist society*.

Minsheng Bank also stated in its 2009 CSR report that:

A good ecological environment is the foundation of social and economic sustainable development, as well as the important content of *scientific development and harmony society*.

Evidently, Chinese companies adopt the language of political propaganda as a legitimating device that helps them to gain prestige and acceptance.

Consistent with this view, Qian and Tian (2014), who examined the Chinese government's work reports² from 1999 to 2008, found that from 2004 to 2008, energy saving and emission reduction were the most frequent keywords that appeared. They argued that Wen Jiabao's³ conscious choice of keywords reflects new topics and changes in Government Working Papers, as a new discourse, brings about social change through a powerful effect on other social agents. CER is one of the typical examples. As described earlier, in this study energy saving and emission reduction is the most frequent theme that is disclosed by the companies. Again the four-word mottos of energy saving and emission reduction (节能减排) is frequently seen in the reports. Moreover, most of the reports even have a separate section with energy saving and emission reduction as the section title. As energy saving and emission reduction is the main target of the government's work, and the Chinese government is such a powerful social agent in China, it is not surprising to see that the Chinese CER reflects the Chinese government's working goal. This is especially so for the SOEs, as they are the agents of the Chinese government and have the responsibility of putting the government's words into practice but, as noted earlier, the choice of media is important, with greater use of annual reports by SOEs.

In addition, the influence from the State on CER can be seen from the structure of the CER. For example, the 2010 government work paper pointed out the working goal

(which relates to environment protection) for the year includes: 1. Save energy. 2. Reduce pollution. 3. Develop a recycling industry. 4. Address Climate Change. Interestingly, in Baosteel's 2011 CSR report, the same structure is used when describing what was done in 2010 to protect the environment, it first describes what was done to save energy, then it goes to say how the company reduced pollution and recycled solid waste, and ends with the funding the company has invested in addressing climate change. Thus, the inter-discursive relationship between the Chinese CER and the Chinese government's policies and guidelines is clear, which indicates that Chinese CER is critically influenced by the Chinese government. Notwithstanding that, as noted in the previous section, with the increase of globalisation there is evidence that Western influence on Chinese CER is growing, and this is also evident when examining linguistic means.

A typical example is China COSCO. In its CSR report, there is a separate section called Management Approaches and Performance Indicators - this exact same title can be found in G3.1 of the GRI. China COSCO also adopts the structure of G3.1 when they disclose their environmental behaviours. The section starts with the management approach, and then the performance indicators. When they present their environmental performance, the company uses the same order as G3.1, and covers all nine aspects of the performance indicators that required by the G3.1. As a result, China COSCO is one of the few companies that disclosed information on biodiversity and rehabilitation. This suggests that external pressures may manifest themselves as reporting based on global guidelines.

In summary, Chinese CER appears to be mainly shaped by the Chinese government, but the influence of the West has been growing in more recent years. This will be

discussed further below, but the following section will first discuss how the contexts and ideologies construct Chinese CER.

6.7.3 Step 3. Investigating discursive strategies

The first and second steps examine content and linguistic means of Chinese CER resulting in the descriptive representation provided in the two preceding sections. The third step is to find out what is the meaning of the discourse, what is the information the companies try to tell their report readers, and what is the particular social, political, psychological or linguistic goal the companies want to achieve. When investigating the discursive strategies, the analysis is especially interested in revealing the implicit or indirect meaning of the discourse, since such meanings are related to underlying beliefs. As argued by Van Dijk (2009), discourse is the mental representation of the social context, so in order to find out the complex relationship between discourse and context, the implication of the discourse must be analysed. Four Questions are established to investigate the discursive strategies in this study, and are answered in succession below.

- ***What does “environment” mean when referred to by the companies?***

According to the GRI guidelines (G3.1),

The environmental dimension of sustainability concerns an organization’s impacts on living and non-living natural systems, including ecosystems, land, air, and water. Environmental Indicators cover performance related to inputs (e.g., material, energy, water) and outputs (e.g., emissions, effluents, waste). In addition, they cover performance related to biodiversity, environmental compliance, and other relevant information such as environmental expenditure and the impacts of products and services.

It can be seen that environmental sustainability in the GRI covers broad aspects of environmental impact. However, as discussed in the first step of this analysis, the Chinese companies’ treatment of environmental sustainability is rather limited, focussing on energy saving and emissions reduction.

For example, in China Aluminium's 2007 Annual Report, the title of the environmental section is "Developing a recycle economy, the effect of energy saving and emission reduction is remarkable"; in its 2008 Annual Report, the section title is "Further strengthening energy saving and emissions reduction". In the 2008 CSR report, they explicitly state that:

The focal point of the group's social responsibilities are focusing on energy saving and emission reduction, attention and strictly controlling the environmental impact of business operations, strengthening resources recycling, and building up a resource-conserving company.

Moreover, the companies' environmental policies also emphasise energy saving and emissions reduction. An example is the one of Fu Yao Glass:

Promoting environmental protection, preventing pollution, saving energy, recycling resources, complying regulations, reducing waste, increasing effectiveness and developing sustainably is everybody's responsibility.

This kind of emphasis can also be found in the banks' reports. In Mingsheng Bank's 2009 Annual Report, it made a commitment to green finance, and stated that:

The company manages green finance rigorously, supports energy saving and emission reduction, reduces the effect on the environment from its operation, positively responds to climate change, strives to build a green bank.

Evidently, energy saving and emission reduction is the centre of the Chinese companies' understanding of environmental protection. This is probably due to the fact that this theme is emphasised by the Chinese government in their national policy (further discussed in the next section). It is evident that most of the Chinese companies view environmental protection as a response to the Chinese government's call for being a green business.

- *Do the companies positively or negatively talk about the environment?*

It is quickly apparent from reading their reports, that the companies' response to environmental issues is generally very positive. The sample reports show a

remarkable consistency in reporting the environmental information. As discussed earlier, at the beginning of their environmental report companies are eager to show their commitment to be responsible towards the environment. For example, Fu Yao Glass stated in its 2008 CSR report:

From the day of the company's establishment, the company had set environmental protection as its top priority.

In the following year, it claimed in its CSR report:

The company views environmental protection and sustainable development as the central point of realizing corporate social responsibility. It is put it into the prominent position of the company's operation. It fully implements corporate social responsibility.

A similar claim can be found in Mingshen Bank's 2009 CSR Report:

A good Ecological Environment is the foundation of social and economic sustainable development, as well as the important content of scientific development and harmony in society.

In its 2011 CSR report, the bank further developed their commitment as:

The bank sets a high priority to: a low carbon economy, include green philosophy in corporate development strategy, advocate green finance, develop green credit, and implement a green operation.

The above extracts show that the companies want to demonstrate to their readers their awareness of, and concern about, environmental protection. Moreover, words such as "actively", "positively", "strengthen", "attach great importance to", "set high priority to", "strive" and "resolutely implement" frequently appear when the companies describe their commitments. This shows how eager the companies are in trying to impress the reader that they know what they should do, and that they are willing to do so. However, contrary to their claim that they are responsible and accountable companies, their CER seems more like a response to the Chinese government's call for harmonious society, rather than a thought-out response to environmental problems. This is discussed in answering the following question.

- *What arguments are employed in the discourse to support their claims?*

The first two guiding questions established that companies generally start their CER by stating their commitment and describe themselves as proactive practitioners regarding environmental protection. It is clear that the communication strategy of the companies is to show the reader that they know that environmental protection is the correct thing to do. Thus, they indicate that environmental protection is a basic or inherent feature of the companies' business philosophy. They claim they are not just passively responding to demands. By making this kind of claim, the companies are able to impress to the reader that they are doing the right things; that there is no conflict between the companies' business decisions and environmental protection, and more implicitly, that there is no conflict between shareholders and other stakeholders. In doing so, they attempt to prevent criticism of their practices. However, although the companies argue they are not a passive responder, there is evidence that the state significantly influences the companies' CER, based on the political language that has been observed in the reports (discussed in section 6.7.2) and thus that the reporting is ideologically driven.

In the commitment section of their reporting, the companies build a preliminary image that they are a responsible business. Then, all companies in the sample to a greater or lesser extent provides evidence to support the claim. Interestingly, contrary to their claim that they are not just responding to demands, a legitimacy strategy seems to be evident. Legitimation is demonstrated in a number of ways. First, laws, regulations, certifications, standards, guidelines and policies are commonly used as a legitimacy device in the disclosure. Consider the paragraph below quoted from China COSCO's 2011 CSR report:

It has strictly implemented rules and regulations regarding environmental protection in domestic laws and regulations as well as international conventions, actively performed applicable suggesting standards, decrees and related requirements on environment protection home and abroad. It has promised to the United Nations to protect the environment, save global resources and establish a resource-conservative enterprise... Guided by the SASAC and the state council's energy saving and emission reduction principle and policies, China COSCO developed and implement the implementation rules and corresponding program. All subsidiaries have imported ISO14000 environmental management standards, developed and implemented environmental management system. By implementing the corresponding Measures and programs, China COSCO guarantee the company has strictly implemented rules and regulations regarding environmental protection in domestic laws and regulations as well as international conventions.

The report above emphasises compliance with regulations and references global organisations. By referring to laws and regulation, companies are able to impress to the reader that their environmental behaviours are ethical, so that the companies can prevent any criticism from external parties. Especially for those less advanced companies, by disclosing information about their compliance with laws and regulations, they do not need to provide information that describes their detailed activities and behaviours.

Moreover, although the more advanced companies have started to pay more attention to international influences in recent times, it seems that the Chinese government is generally the significant targeted audience of the reporting. The arguments for environmental responsibility are based on the representation of a company's environmental behaviour as a response to the Chinese government's demands and expectations.

The bank has always believed that it is a general trend for the banks to implement the national green credit policy and develop sustainable finance, because it on the one hand promotes implementation of China's sustainable economic and social development strategy, and on the other hand, it encourages the banks to pay more attention to long-term interests rather than short-term interests, to consciously unify self-development goals to the social goals, and to promote the enterprises to change their mode of development through financial leverage, and ultimately to achieve a "win-win" among banks, enterprises, economic, environmental and social development.

In this regard, we earnestly implemented the national green credit policy, established specialized agencies as required, strengthened organizational promotion, and carried out a comprehensive combing and recycling of the entire business processed, strengthened

internal capacity building, introduced specialized talents, developed incentives measures, and established a linkage mechanism between head office and branches, set up a green credit implementation platform, established environmental and social risk management daily monitoring and risk investigation mechanism, and gradually impelled the implementation of the green credit policy.

...

In 2011, the bank actively responded to the national policy, and strictly controlled loan size and adjusted the credit structure in high energy-consuming and high polluting industries, while earnestly implemented the industrial policy and market access standard on new projects of these industries, and firmly refused to credit to project without environmental compliance.

Again, the legitimacy strategy here is evident. The company first argues that complying with the national policy is the trend; thereby establishing common ground with the reader that there is no conflict between the national policy and the company's economic goals, which helps it to create an image of itself as a responsible business, then further describes how firmly they implement the national policy. One possible reason the companies are keen on showing their endeavours to respond to the Chinese government's guidelines and policies is the ideology perceived by the whole country. In particular, the political ideologies of Chinese leaders are highly regarded by the Chinese people. For a long time, "the government has made it an important task to propagate the political ideologies of the Communist leaders and to inform the public about government decisions and policies, with the aim of 'inspiring' and 'directing' the Chinese people in the country's social and economic construction" (Yee 2009, p79). In this way, the Chinese people have been educated that the Chinese government always stands for the public, that there is no conflict with them. Moreover, historically, "the Chinese ruling class often placed importance in the propagation of its political ideologies, so much so that these ideologies become part of the culture of the Chinese people" (Yee 2009, p80). Therefore, by referring to the government's policies or/and guidelines, the company gradually legitimises their behaviour and thus gains approval from society. That is, legitimising strategies, while

aimed at the government as the primary stakeholder of the reporting, also legitimises the companies in the eyes of society as a result of the State's hegemonic promulgation of ideology.

Finally, the companies appear to be very much in control of the information they disclose. To legitimate their environmental behaviour, companies tend to disclose only positive information, such as what they have done to achieve their goals and the award they have received. Negative information is seldom disclosed by the companies and, even though there is evidence that some environmental accidents have happened, they only briefly mention the fact, and avoid describing the details. Where this occurs, they emphasise that it was an accident and that the company did not deliberately do the damage. They may also emphasise that the accident was not a serious one, or that it did not negatively affect the environment significantly. Legitimising strategies can also be seen by observing the structure of the reporting. In many of the reports, the negative information is often placed at the end of the report, after fully describing their positive practices. By doing so, the company aims to distract the reader from any negative behaviour by ensuring the reports are structurally skewed towards their positive achievements.

Given this evidence of legitimation to the government, the final guiding question used in this analysis is:

- ***Are there any particular perspectives taken by the companies, in terms of the environment?***

As discussed earlier, the Chinese government's slogans, such as 'harmonious society' and 'scientific development' can be observed frequently in the reports, which indicate that the Chinese companies believe taking environmental responsibility will support

the implementation of the Chinese government's macroeconomic policies, and ultimately facilitate the country to realise a harmonious society. Thus, the Chinese government successfully creates ideology within the Chinese companies, and ultimately influences their decision to provide CER. For example, China COCOS states in its 2008 CSR report that:

In the principles of UNGC and with the construction of a resources-saving and harmonious enterprise as a goal, it has realised the coordinated and sustainable development of enterprise value, humanistic environment and natural environment and made contributions for the building of a harmonious socialist society.

Minsheng Bank also stated in its 2009 CSR report that:

A good ecological environment is the foundation of social and economic sustainable development, as well as the important content of scientific development and harmony society.

Moreover, the perspective of the company being a social citizen is observed. There is a trend in the reporting showing that a company should take its own environmental responsibility. They indicate that taking environmental responsibility is consistent with the company's economic benefit. Baosteel claimed in its 2009 CSR report that:

Baosteel has realised that the recycling, ecological and low-carbon development is an inevitable trend in this field which represents the new direction of steel industry's sustainable development. None of the country or enterprise can be excluded. ... We choose this way not because it's a short cut. On the contrary, we know it is thickly sown with thorns but is the right choice. It will guide the company and its stakeholders to make efforts for a more wonderful world.

Words such as, "obligation" and "mission", that can be observed frequently in the discourse demonstrate how seriously the companies' determination is to claim environmental responsibility. Notwithstanding this, as noted earlier, generally the companies' conception of what environmental responsibility means is limited to environmental protection and there is little reporting on broader issues such as sustainability.

Some more advanced companies, however, declare that environmental protection is an important part of the company's management system. That is, it has been embedded into the companies' business philosophy. For example, in the 2010 Mingsheng Bank CSR report, it stated:

Mingsheng bank always set priority to low-carbon economy, embed green philosophy into the company's development strategy...

Baosteel also claimed in its 2010 CSR report that:

The strategy of environmental operation is throughout Baosteel's development strategy and daily operation...

Thus although much of the emphasis is adherence to National policy, some of the Chinese companies realise that environmental responsibility is a necessary characteristic of being a leading company. In particular, to be competitive in the global market, the company has to be environmentally responsible. A typical example is drawn from Baosteel's 2010 CSR report:

Environmental operation is the company's important strategy to pioneer the company from others.

And Fu Yao Glass concluded in its 2009 CSR that:

(The company) further developed the internal control system, strives to implement corporate social responsibility, and ultimately develop a globally competitive enterprise.

From the analysis thus far, the Chinese companies analysed appear to accept that it is their responsibility to protect the environment and therefore more and more companies report on how they embed environmental responsibility into the company's strategy and operations. As noted earlier, the reporting is very general and 'motherhood' in nature so again it may reflect the government's ideological influence. However, the strength and impact of this influence, and potential moderating effect of Western influences, is discussed in the final section below.

6.7.4 Step 4. Examine the specific, context dependent linguistic realisations

Discourse is not directly related to social structures, but mediated by a cognitive device. Hence, “context is not simply some kind of social environment, situation or structure...rather, it is a subjective mental representation, a dynamic online model, of the participants about the for-them-now relative properties of the communicative situation” (Van Dijk 2009, p66). Examining the specific, context-dependent linguistic realisations is to “reveal connections that usually remain hidden and interrogate the ideological basis of social organization” (Thomas 2003, p782).

The above three sections investigate the special topics, discursive strategy and linguistic means of the Chinese CER examined in this study. The evidence shows that, through its ideological influences, the Chinese government is the most significant source of contextual issues that construct the discourse of Chinese CER. In this section, how the ideology is perceived by the Chinese companies and how the ideology is shaping the Chinese CER is further explored through two guiding questions. First:

- ***Are the difference and the sameness of reporting among different companies affected by the context? How are they affected?***

The details of the complex Chinese context were provided in Chapters 2 and 3, but the main elements of the government’s power are returned to in this section to consider how the impact of that context is observed in the CER analysed.

As discussed previously, the Chinese government provides the original direction for Chinese CER but this study shows that the role of the Chinese government in constructing the CER goes beyond direct control of the agenda through SOEs. The analysis indicates two important and distinct issues.

First, echoing previous studies (such as: Li et al. 2014a; Noronha et al. 2013; Situ et al. 2013) generally, Chinese SOEs undertake substantial CER as the Chinese government controls them. As argued by most prior studies (Du and Wang 2013; Hong and Nong 2013), SOEs play a key role in implementing the Chinese government's policies. SOEs' shares are majority owned and controlled by the SASAC, which is a department of the Chinese government. The Chinese government, as one of the companies' owners, can use its shareholding power to appoint senior managers and thereby promote and develop ideology within SOEs.

Also, according to the Law of the People's Republic of China on the State-Owned Assets of Enterprises, Chapter IV Selection and Evaluation of State-invested Enterprise Managers, Article 22:

A body performing the contributor's functions shall, according to laws, administrative regulations and enterprise by laws, appoint or remove, or suggest the appointment or removal of the following personnel of a state-invested enterprise:

1. Appointing and removing the president, vice-presidents, person in charge of finance and other senior managers of a wholly state-owned enterprise;
2. Appointing and removing the chairman and vice-chairmen of the board of directors, directors, chairman of the board of supervisors, and supervisors of a wholly state-owned company; and
3. Proposing the director and supervisor candidates to the shareholders' meeting or general assembly of shareholders of a company in which the state has a stake, whether controlling or non-controlling. The directors and supervisors of a state-invested enterprise who shall be employee representatives shall be elected democratically by employees according to the relevant laws and administrative regulations.

Notably, key members of the management board of SOEs are appointed and removed by the Chinese government. As agents will be response to these principles, it is not surprising that the SOEs have a common goal, in terms of environmental protection, with the Chinese government.

Moreover, Hong and Nong (2013) argue that SOEs are considered to be an important ruling foundation of the Communist Party of China (CPC). The CPC committee is a

part of the companies' management system (normally embedded in the human resources department), as discussed in Chapter 3. According to the agenda of the CPC, the party committee of a company plays a central role in supervising and ensuring the party and the State's policies and guidelines are fully implemented by the SOEs. The way to realise the role of the party committee in a company is that the party committee should be involved in the company's major decision making, the chairman of the party committee of a company should, at the same time, be a director of the company. Therefore, as has been discussed earlier, SOEs contribute to the implementation of government policies and is an important contextual factor in determining CER. As one of the companies' owners, the Chinese government's voting power enables it to easily develop ideology within SOEs. As protecting environment is a major part of the State's guiding ideology, SOEs are keen on undertaking CER.

The second issue, and one that is interestingly different from other quantitative studies (Li *et al.* 2014; Situ *et al.* 2013) which find the SOEs perform better CER than non-SOE, is that the analysis in this study indicates that both SOEs and non-SOEs disclose information that is desired by the Chinese government (discussed in step 1). This finding is of particular interest. By investigating the background of the non-SOEs examined, the analysis shows that even when SASAC is not the controlling shareholder of the companies, they still have a CPC committee embedded in the companies, their director is at the same time the chairman of the party committee, and most of the senior members of the management board are also members of the CPC committee. In addition, there are strong links between these companies and the Chinese government. For example, the Industrial Bank has over 20% of its shares held by the Financial Ministry of the Fujian Province. Similarly, the other non-SOE in

the sample, FuYao Glass Industry, was previously a local state-owned enterprise, which was privatized in 2007. Now, although the company is 100% a private company, the director of the company is a member of Chinese People's Political Consultative Conference of the Fujian Province, as well as a research fellow of the Fujian Government's Economic Development Centre. Thus, even non-SOEs are deeply involved in the Chinese government's bureaucratic system. Therefore, the government's guiding ideology can influence the companies' decision making even though the Chinese government does not own them.

Moreover, the Chinese government's political power is so strong that it becomes a basic belief in the sphere of political society and of civil society that there is no perceived conflict between the will of the Chinese government and that of the people. Therefore, even if they are non-SOEs, Chinese companies are likely to disclose information that is desired by the Chinese government, and even copy the political language in their CER to gain credence. Thus, the Chinese government not only influences CER with their voting power, but also with their political power.

As a centralized country, it is expected that the government's voting power and political power on CER will be strong. However, as one of the largest practitioners of State Capitalism, the Chinese government has also started to use its economic power to promote a green economy by becoming an important funding source for environmental programs.

According to the requirement of the Eleventh-Five Year Plan of the State's Environmental Protection (hereafter referred to as the Plan) about 1.35 trillion RMB, which counts as 1.35% of each year's GDP, should be invested in environmental protection programs. It also lists 6 areas as the investment focus and, among them,

water pollution treatment and air pollution (mainly Sulphur dioxide) treatment are the priorities. Therefore, to attract government grants and tax benefits, the treatment of water pollution and air pollution is a major theme of Chinese CER. For those who get a grant or tax benefit from the government, CER also provides a review report to the government to indicate the funding has been used correctly and effectively.

The Plan also requires accelerating the industrial reforms and promoting clean production and a recycle economy, which includes elimination of the heavy polluting companies who use out of date technology and equipment. It also includes restricting the entrance standards of new business and new projects into some industries, such as iron, non-ferrous metals, electricity and light industry. These kinds of policies significantly affect the businesses' survival. Especially for the private sector, as discussed in step 1, in order to survive they need to express their efforts in changing the way they operate the business, and focus on the new technology or equipment that has been invested in or developed, or on the new green products that have been produced

In addition to the government, the other important financial resource for environmental protection is the banks. In China, all banks, including commercial banks, are supervised by the government; banks play an important role in directing money to industries or even companies that are favoured by the government. In December 2007, the State Environmental Protection Administration of China, together with the People's Bank of China and China Banking Regulatory Commission, issued the *Opinions of Implementing Environmental Protection Policies and Regulations and Preventing Credit Risks*. It requires credit organisations to follow the State's industry policy, and direct money to government promoted

industries. In particular, the commercial banks should view controlling credit to polluting companies as an important part of implementing their social responsibility. It also emphasises that the commercial banks should restrict credit to polluting companies according to the information provided by the different levels of the Environmental Protection Administration. In order to be picked by the Chinese government as a ‘winner’ in the industry, Chinese companies view the State as their most important stakeholder when producing CER.

According to CDA, social identities of the discourse producer define its communication role, and thus affect what they choose to say or not say. In the examples analysed, there is an obvious link between the discourse actor and the discourse. Overall, the Chinese government has a form of control over all of the companies, hence it seems that CER is directly a response to the government’s Green policy. However, as noted, the story is not as straightforward as it may first appear, as China enters a phase of development where Western influences may begin to have a moderating effect on the strength of the ideology. This is considered in the final section after consideration of the longitudinal context.

- *Are the difference and the sameness of reporting in different years affected by the major events over time?*

As discussed previously, the sameness of the Chinese CER during 2007 to 2011 is clear - energy saving and emission reduction was always the main theme disclosed by the Chinese companies, because this was the main concern of the Chinese government during this period. At the same time however, there are some differences that were influenced by the major events over that time. The following events are used to examine their relationship to the CER in this analysis.

2005	The Eleventh five-year plan started
2008	Measure for Disclosure of Environmental Information (MDEI) enacted
2011	The Twelfth five-year plan started

These events, and the reporting that occurred around them, have been discussed in the descriptive analysis above, so are briefly summarised here in terms of their impact.

Before 2005, there was no CER in China (Moon and Shen 2010). This situation changed when the Eleventh five-year plan started, and a few multinational enterprises started to disclose environmental information in their annual reports. In 2008, the MDEI was enacted, and the descriptive results of the Content Analysis, which was discussed earlier in this chapter, show that there was a dramatic increase in 2008, which then became flat in the following years. This suggests that the MDEI significantly boosted Chinese CER.

In 2011 the Twelfth five-year plan started and international cooperation became one of the focal points of responding to global climate change. As a result, some more advanced Chinese companies started to disclose more environmental information that is related to international cooperation. It is evident that the international cooperation ultimately enhances the quality of CER in China (details will be discussed in the next section). However, it is also clear that the Chinese government was the origin of the push for Chinese companies to provide more and advanced CER.

6.7.5 New features: Western influence

While the evidence presented above indicates that the Chinese government's ideological influence on Chinese CER is strong, there are some new features in some of the advanced companies' reports in more recent years that show evidence of the

increasing influence of the West. From 2010, the highest disclosing companies in all four groups started to emphasise their environmental practices in the global context. They disclose their compliance with global guidelines and standards in addition to Chinese policies. An example of this is China COSCO's 2011 CSR report:

Since July 2, 2008 when Capt. Wei Jiafu announced China COSCO's official joining the Declaration on Climate Change initiated by the United Nations, China COSCO has actively fulfilled the principles and measures put forward in the Declaration to cope with climate changes. In 2010, it has been endeavoured in reduction of greenhouse gas emissions. It has invested on researches of new vessel powers, i.e. winds power and solar energy, and has invested on sustainability, which is taken as the core impetus for growth. It joined the UN Global Compact Project Team on Climate Change, partnered with companies in shipping industry on researches of technological applications, including carbon footprint calculation of supply chain and tracing of implementation situations of green passport.

The Industrial Bank's 2010 CSR report also stated that they adopted the Equator Principles, which apply globally.

On October 31 2008, the Bank became the first Chinese bank in China to announce the adoption of the Equator Principles. Led by the Board and senior management, and through more than two years of exploration and practice, the Bank has basically completed reengineering for the organization, process and capability in the implementation of the Equator Principles. In 2010, upon the foundation of the experience previously garnered, and in accordance with the work execution status at the headquarter and branches, the Bank continued to improve its process, raise its efficiency, promote the implementation and realization of the Equator Principles, effectively controlling the project financing environment and social risks, and upon this foundation, the Bank will gradually refine and expand the concept and practice of sustainable finance. For specific projects, the Bank shall, utilize the implementation of the Equator Principles as an opportunity, actively employ credit means to guide and encourage borrowers to raise their environmental and social performance management capability, prevent risk and perform their social responsibilities.

The companies also disclose their cooperation with international organisations, and the international awards they have received. For example, Baosteel announced in their 2010 CSR report that they beat the other well-known companies and won a project as part of the United Nations Environment Programme.

The companies have also started to evolve in terms of their standard setting processes. Baosteel reports that they are involved in the development of the Greenhouse Gas

Protocol developed by the World Resources Institute and the World Business Council for Sustainable Development. China COSCO reports that they cooperated with the World Business Council for Sustainable Development to develop the standards of sustainable development for the shipping industry. It is evident that the companies are now more actively participating in the global environmental agenda. This Western influence brings a more advanced sustainability philosophy to the companies. Protecting the environment is not only to fulfil the Chinese government's requirements, but is also embedded in the companies' risk management systems. As the Industrial Bank states in their 2011 CSR report:

In our opinion, the Equator Principles is the best for us to comply with the national macro-control policies to restructure its business, changes mode of development, and develop of green finance....

As for the bank, the adoption of Equator Principles was as good as a revolution, it completely revolutionized the values of the bank and promoted the transformation of the business. In the future promotion of economic and social sustainable development, the Equator Principles as necessary and useful complement to the green credit policy in China, will continue to play an irreplaceable role, and adoption of Equator Principles will also be an inevitable trend for commercial banks committed to the sustainable development in the future.

This kind of statement may be a signal that these companies realise that to be green is an important characteristic of leading companies globally. In order to stand out from their competitors, they must accept environmental protection as part of their business.

Unsurprisingly, the dual-listed companies are among those more advanced companies. As they are listed on overseas stock exchanges they are likely to be facing more pressure from Western stakeholders, who are more concerned about environmental issues, and face more rigorous regulations for publishing transparent information in terms of environmental impact. In addition, companies that do not list on overseas stock exchanges, but have foreign shareholders, are also influenced by the West. For example, the Industrial Bank is not listed overseas, however, the Hong Kong based bank, Heng Sheng Bank holds 12.8% of the shares of the Industrial Bank.

As a result, compliance with the Equator Principles becomes a very important part of its CER.

Table 6.9: Background of sample companies

Company Name	Ownership	Register to GRI	Overseas subsidiaries	Overseas degrees and experiences of member(s) in management board
China COSCO	Dual-listed & SOE	Y	Y	Y
China Aluminum	Dual-listed & SOE	Y	Y	Y
JiEn Nickel Industry	Non-dual-listed & SOE	N	Y	N
Bao Steel	Non-dual-listed & SOE	Y	Y	Y
MinShen Bank	Dual-listed & Non-SOE	N	N	Y
Industrial Bank	Non-dual-listed & Non-SOE	Y	Y	Y
Fuyao Glass Industry	Non-dual-listed & Non-SOE	N	Y	N

As show in Table 6.1, there is also a trend in some of the companies that, even though they are not dual-listed, if their directors, supervisors or senior members of the management board have an overseas degree or overseas working experience, the companies may tend towards having more sophisticated CER which relates to global standards and conceptions. Moreover, if the companies have overseas business operations, they tend to disclose more environmental information. Baosteel is one of the typical examples, it is not a dual-listed company, but it has overseas subsidiaries in America, Japan, Germany, Singapore and Hong Kong, as well as the fact that over half of its senior member of management board has overseas degree. As discussed in previous steps, the company therefore provides more advanced CER.

In conclusion, the analysis indicates that Chinese CER is not ideologically neutral, that the Chinese government significantly influences Chinese CER, but that there is some evidence that it is not the only influence as the impact of the West becomes more noticeable.

6.8 Chapter summary

This chapter discussed and analysed the results of Content Analysis, Statistical Modelling and Discourse Analysis. The mixed method approach provides a detailed and more nuanced understanding of Chinese CER than has been provided by most previous studies as it considers the complexity of the Chinese context, including the dominant ideology, the various means used by the Government to influence companies as it moves towards a State capitalist economy, and the recent influences of the West as more Chinese companies enter the global economy.

Generally, the findings show that the Chinese government strongly influences Chinese CER, particularly the decision to include environment related information in their reports. However, when considered in detail, the Chinese government's influence does not really improve the transparency of Chinese firms in terms of their impact on the environment, nor the quality of the reporting which still appears to be general, declarative and 'motherhood' in nature. CER is more likely used as a tool for the Chinese companies to fulfil the requirements of their major stakeholder, and to legitimise themselves in the eyes of the Chinese government. Western influence on the other hand, while evident to a lesser extent, appears to have greater impact on the type and amount of reporting, and on the content with some evidence of companies embedding environmental principles in their business practices. The next chapter concludes the thesis and presents the implications of these findings.

Chapter 7: Summary and Conclusions

7.1 Introduction

This chapter opens by restating the research problem and research questions. Major findings of the study are indicated, followed by the interpretation of these within the theoretical framework outlined in Chapter 3. The implications arising from these findings are then discussed and contributions of the study follow. Potential limitations of the study are also discussed and, finally, further research is proposed.

7.2 Restatement of research problem and research questions

Although increasing attention has been paid to CER in China, the impact of stakeholders on the reporting process is under-explored, especially in emerging economies (Moon and Shen 2010).

While extensive studies have been done in developed economies, scholars note that the unique characteristics of each country may result in differences in their CER activities; as such, more studies on emerging economies' CER practices are essential (e.g. Gao 2011). It is expected that there is significantly more government influence on CER within China relative to nations with developed capital markets due to the different institutional context (e.g. the different cultural, political and economic system). China is a complex country and the government's actions are more and more driven by the move to state capitalism yet still maintains its ideological stance and approach (Zhang et al. 2009). On the other hand, in an increasingly globalised world, international and Western influences could also be apparent. However, there is little empirical research focusing on the different stakeholders of CER in China, especially that which focuses in detail on the impact of the government. Similarly, while many

studies take for granted that State influence in China is strong, few studies have considered this in the context of China's recent economic reforms. Therefore, this study is an early attempt to reveal which stakeholders Chinese firms are most concerned with when they undertake CER and, in particular, whether and how the Chinese government significantly influences corporate environmental disclosure in the context of its current ideological doctrine.

This research problem is addressed using four research questions:

- RQ1: What is the extent and nature of the Chinese government's commitment to improving environmental protection and reporting undertaken by corporations in China?
- RQ2: What is the extent and nature of environmental reporting provided by Chinese listed corporations?
- RQ3: What is the association, if any, between the increase in Chinese government commitment to environmental issues and environmental reporting by Chinese listed companies; do the commitments influence the reporting?
- RQ4: What is the association, if any, between environmental reporting by Chinese listed companies and pressures faced by Chinese companies from Western stakeholders?

7.3 Summary of major findings

CER in China was largely absent prior to 2005 (KPMG 2008a, 2008b) but has been increasing significantly in recent years (KPMG 2011; Situ and Tilt 2012). However, as influences on the increasing trend are under explored, this study examined the influences on Chinese CER from a stakeholder perspective. In particular, it considered whether the Chinese government and/or the West influences Chinese CER. As discussed in Chapter 1, influences on CER in developed countries, in

particular, free market capitalist countries, are various and are explained from a number of theoretical perspectives, most suggesting a bottom-up, or stakeholder driven approach. However, this study shows that, in a state capitalist country such as China, appeasing the government is still the main influence. In addition however, along with the Chinese market becoming more and more globalised, influence from the West on Chinese CER is becoming more important, and these two influences manifest themselves differently, depending on the type of companies examined.

In order to fully understand these findings it is important to gain an understanding of the types of pressures exerted on companies in China, and in turn the amount and type of reporting undertaken, Therefore, the following sections summarise the findings by considering each of the research questions in turn.

RQ1: What is the extent and nature of the Chinese government's commitment to improving environmental protection and reporting undertaken by corporations in China?

The first element of this study was to conduct a rigorous review of all China's policies, guidelines and laws relating to the environment, and to describe the socio-political context in which these regulations are issued. As discussed in Chapter 2, the Chinese context is complex and, although most prior studies simply assume that the State is the most powerful actor, this study shows that a more nuanced understanding, considering the roles of central versus local governments, is important. In particular, most of the laws, regulations and policies come from the central government, but this often conflicts with immediate local economic benefits, and this contributes to their poor implementation.

The review of the regulatory environment shows that, regarding improving environmental protection and reporting, the Chinese government's commitment is very high. The Chinese government introduced environmental policy as early as the 1970s, then built up their environmental law system in the 1990s, and issued more rigorous regulations in the 2000s. In particular, a new political commitment to building a "Harmonious Society" was introduced by China's chairman Hu Jintao in 2005 (of which the environment is a key element), thus, environmental protection became a priority of the nation's policy. It continued to be the priority policy when Xi Jinping became China's chairman in 2011 and is a prominent element of Chinese doctrine.

Moreover, after the MDEI was issued in 2008, the Chinese government accepted environmental reporting as a new management tool to encourage Chinese companies to be more involved in environmental protection. In response to the policy, a series of guidelines were issued to strengthen the environmental reporting by the Chinese companies.

From these initiatives, it can be seen that the commitment to protecting the environment by the Chinese government is very high. However, implementation has been noted by previous researchers as being quite low (Bina 2010), but little evidence is provided about the reason for this. Therefore, the issue of the level and type of implementation is specifically addressed in this study by RQ2, and is discussed next.

RQ2: What is the extent and nature of environmental reporting provided by Chinese listed corporations?

The second element of this study was to conduct descriptive and statistical analysis of reporting by Chinese companies. On examination of the trends over time, the results showed that, consistent with previous studies (Gao 2011; Situ and Tilt 2012; Situ et al. 2013; Xun 2013; Dong et al. 2014), environmental disclosure by Chinese companies is increasing, both in terms of the number of Chinese companies that disclose environmental information and the extent or level of the disclosure. As noted in Chapter 2, as a country with a relatively high level of power distance and strong uncertainty avoidance, China's culture does not promote voluntary disclosure. However, this situation is changing. Along with the Chinese government's concern on environmental protection grows, the trend of CER is increasing.

In addition, the results show that 84% of the sample companies chose to disclose environmental information in their annual report or CSR report in 2011. Compared to 95% of the G250 that reported on their social and environmental activities (KPMG 2011), this result indicates that CER in China is growing but still lower than in more developed countries.

In terms of the content of the disclosure, the study finds that there are 588 (72%) sample companies that disclosed in the theme of "General Statement", the highest of all themes. Thus, it is observed that companies tend to use more 'motherhood' language rather than providing specific information about their environmental performance. It further indicates that, notwithstanding that more companies are disclosing, CER in China is still emerging, which is again consistent with most previous studies (Dong et al. 2014; Situ et al. 2013).

Where this study provides more insight than previous research, is through an in-depth analysis of the reporting using discourse analysis. The results show that although CER

is accepted by more and more Chinese companies, it is used as a tool by the companies to manage their relationship with one special stakeholder, the Chinese government. While globally the concept of environmental protection and sustainability has a more comprehensive definition, it is relatively limited in China. As discussed in Chapter 6, the company implicitly identifies energy saving and emission reduction as equal to protecting the environment. As energy saving and emission reduction is the main target of the government's work, it can be seen that Chinese CER reflects the Chinese government's working goal. Thus, it is evident that most of the Chinese companies view environmental protection as a response to the Chinese government's call for being a green business and therefore this comprises the bulk of their reporting. Evidence can be seen not only from the content of disclosure, but also from the language used in interpreting environmental activities. The results of this study show that Chinese companies adopt the language of state doctrine and political propaganda, such as "harmonious society" and "scientific development" in their reports, which indicates that CER is used as a legitimacy device that helps the companies to gain support and approval of the Chinese government.

Given that Chinese CER is still at an emergent stage, yet more and more Chinese companies are using CER to communicate environmental information to their stakeholders, it is important to consider the audience of the reporting more carefully. The definition of stakeholders in China is much narrower than in western economies, therefore, the final two research questions in this thesis addressed the influence of stakeholders on Chinese CER.

RQ3: What is the association, if any, between the increase in Chinese government commitment to environmental issues and environmental reporting by Chinese listed companies; do the commitments influence the reporting?

As noted above, the results of the analysis undertaken in this study indicate that the Chinese government significantly influences Chinese CER.

First, the trends over time show that a dramatic increase occurred in 2008, but then show little further change. As discussed in Chapter 2, 2008 is the year that the MDEI was enacted. The MDEI encourages companies to disclose a list of environment-related information and, although it is not a mandatory requirement, most companies are following this guideline.

The results also show that resource and energy saving and pollutant emission reduction are the themes which are disclosed most by Chinese listed companies. This result matches the voluntary requirements of the MDEI, and again indicates that Chinese companies disclose environmental information that is desired by the Chinese government's regulations. Thus, the results suggest that the Chinese government significantly influenced the decision to produce CER at that time through its regulatory powers.

Second, the results of the comparative analysis by state ownership show that there are many more SOEs than non-SOEs that choose to disclose environmental information in both the annual report and CSR report. This initial finding supports most prior studies that use state ownership as a proxy for government influence. However, in this study the Probit modelling shows that, via shareholdings in SOEs, the Chinese government significantly influences companies' decision about whether to disclose environmental information in their annual report, but importantly not in their CSR report. This result provides preliminary evidence that state ownership influences the *quantity* rather than the *quality* of CER. While more advanced companies use CSR reports to communicate with their stakeholders with detailed environmental

information, the annual report is still the main tool for companies to communicate with their shareholders. The finding also indicates that SOEs treat disclosing environmental information in the annual report as a response to the Chinese government's commitment to environmental protection. Moreover, this finding is confirmed by the results of the extent of reporting model where, for companies which chose to disclose environmental information, neither central SOEs nor local SOEs provided a greater extent of reporting than non-SOEs.

Finally, the Discourse Historical Analysis undertaken shows that the Chinese government's power is so strong that it can significantly affect all Chinese companies' decision-making in terms of CER, whether or not they are state owned. Thus, disclosing environmental information that fulfils the Chinese government's concerns is considered as patriotism that can raise the companies' image, and facilitate them to be picked by the government as an industry winner and therefore gain more opportunity to obtain the crucial resources they need. As such, there is a strong legitimacy argument for Chinese CER. However, there is evidence that some companies have chosen to adhere to international standards, such as the GRI, which impact on both the quantity and the quality of their reporting which is discussed further below.

In summary, it can be seen that the Chinese government's emphasis on the environment significantly increases the quantity of CER. However, it does not improve the quality of CER, that is, the concept of what constitutes environmental reporting remains quite narrow. Also, as the Chinese government is such a strong stakeholder of CER in China, the companies tend to disclose information that is desired by the government, and this does not facilitate improved transparency of the

firms (details will be discussed in the next section where the implications of theory are covered).

RQ4: What is the association, if any, between environmental reporting by Chinese listed companies and pressures faced by Chinese companies from Western stakeholders?

While this study found evidence that CER is strongly influenced by the Chinese government, there is also some evidence that the impact of the West has become more noticeable in recent years.

First, the results of the comparative analysis by dual listing show that there are many more dual-listed companies than non-dual-listed companies that provide CER, especially in terms of CER in their CSR report.

Second, in the sample analysed, all dual-listed companies, and companies that are registered with the GRI, chose to provide CER. This finding is consistent with the findings of the comparative analysis by dual listing. Along with the Chinese economy becoming more and more globalised, it is apparent that western influences (such as foreign ownership and global initiatives) on CER in China are becoming more noticeable.

Third, the results of the extent of CER model show that both foreign investment in the company (overshareD) and registration with the GRI are statistically significant in influencing the extent of CER. The results provide further evidence that influence from the West not only influences more companies to choose to provide CER, but also may enhance the quality of the CER as reporting by these companies covered a

broader range of environmental issues, as well as disclosing a greater amount of information.

Finally, the results of the Discourse Analysis confirm the above findings that companies that have foreign ties are among those more advanced companies, especially dual-listed companies. As they are listed on overseas stock exchanges they face more pressure from Western stakeholders who are more concerned about environmental issues, and they also face more rigorous regulations for publishing transparent information about their environmental impact. Therefore, they tend to disclose more comprehensive CER. The in-depth analysis of the reporting response shows that these companies recognise and engage with international guidelines, awards and programs.

In summary, the results of this research not only show that the Chinese government's commitments on environmental protection significantly influences the CER in China, but that there is also preliminary evidence that it is not the only influence as the impact of the West becomes more noticeable, particularly as the Chinese market becomes more open. The competing influences have the potential to together improve the transparency of CER. As resources are limited, when companies make decisions about what to disclose, both stakeholders' needs must be considered in appropriate balance. In particular, global environmental norms bring to the Chinese companies a more sophisticated sustainability philosophy whereby CER cannot solely be a response to the Chinese government's call for environmental protection, but they also need to embed sustainability in their daily business operations. As such, the competing influences ultimately lead Chinese companies towards more accountable business practices.

The implications of these findings are interpreted in light of the theoretical framework in the next section.

7.4 Theoretical discussion

Managerial Stakeholder Theory suggests that when a stakeholder's power is weak, that is, when the firm has a low level of dependence on the stakeholder, the firm need not be as responsive to stakeholder demands. Conversely, when a stakeholder's power is strong, that is, when the firm depends heavily on the stakeholder for survival, stakeholders can express their demands directly to the firm (Elijido-Ten et al. 2010). Thus, power is a central theme in arguing firms' strategy choice. Applying the theory to CER, the more powerful the stakeholders are, the more the CER will address their specific requirements.

Much of the stakeholder theory literature employs analysis of corporations in the Western context where there are multiple stakeholders. Different stakeholders play their own role and exert different stakeholder power on the provision CER. Therefore, there is at least some balance in the levels of power held by various groups. In addition, the power is dynamic depending on the legitimacy and urgency of the claims of stakeholder groups as perceived by the companies (Mitchell et al. 1997) and this leads to an increased likelihood of reporting and hence transparency. However, this study finds that, in a non-Western context, considering the government as a stakeholder in the usual sense is not sufficient. In a state capitalist country, such as China, the government's power on CER is more complicated and widespread. The State not only directly, but also indirectly influences CER and, in contrast to previous studies, this study finds that the State influences not only SOEs, but also non-SOEs. Therefore, the powers of the Chinese government, in particular, those that are

frequently hidden can be better explained by a combination of Managerial Stakeholder Theory and State Capitalism.

State Capitalism is “a system in which the state dominates markets primarily for political gain” (Bremmer 2010, p250), where the government tries to combine the power of the state with the power of capitalism (The Economist 2012). Although the government does not direct supplies of scarce resources and attach values to goods and services, it still has considerable control over companies. For example, the Chinese government can shape the overall market by managing its currency, directing money to favoured industries and working closely with Chinese companies abroad. Therefore, the Chinese government has sufficient power to be essential to Chinese companies’ survival. In order to gain support and approval from the government, Chinese companies disclose environmental information that meets the requirements set out by State doctrine.

While Managerial Stakeholder Theory explains how the Chinese government plays a very important role in motivating Chinese companies to adopt CER, using State Capitalism in the analysis of that influence provides a potential addition to one of the tenets of Managerial Stakeholder Theory. While previous studies in Western context equate power with different stakeholders (Mitchell et al. 1997), in China the number of stakeholders is relatively limited. In this context, there is a single major stakeholder, the Chinese government, that plays different roles in motivating Chinese companies to adopt CER, and these manifest themselves as three different types of stakeholder power (voting, political and economic power) on CER.

7.4.1 State voting power

Similar to previous studies, the findings of this study show that the Chinese government (including both central and local governments) can influence the decision making of SOEs through shareholding in SOEs. In China, SOEs play a key role in helping the Chinese government to implement its policies. As green policy became a priority of the nation, it is expected that SOEs will be more likely to undertake CER. The comparative analysis shows that SOEs, especially central SOEs produce a greater amount of CER than non-SOEs in both annual reports and CSR reports. However, as noted above, the results of the probit regression model show that being an SOE only increases the likelihood that the company will have CER in their annual reports. In addition, a negative yet insignificant relationship was found between the non-tradable state-owned shares and the choice to provide CER (the selection model). Therefore, there is evidence that the Chinese government, as the most powerful stakeholder of Chinese companies, influences CER using its voting power, but this power is limited in its impact on reporting. This probably because the Chinese government's control over Chinese firms via voting power has been declining in recent times with the number of SOEs under the SASAC's control halving over the last decade (Mattlin 2009). Similarly, since 1999, the share of SOEs in the economy has declined from 37 percent to less than 5 percent in terms of numbers, and from 68 percent to 44 percent in terms of assets. These have been largely seen as a result of the SOE reform strategy, carried out since the early 2000s (Xu 2010).

However, the results further find that through shareholdings in SOEs the Chinese government can influence not only the decision-making of SOEs, but also that of the private sector. As discussed in Chapter 3, after SOE reforms in the 1990s, while private enterprises became the predominant form of organisation in the country, SOEs

are still the backbone of the Chinese economy. Through monopolising upstream industries (which provide intermediate goods or services that the downstream sectors need as necessary input for their business operations), SOEs, the agent of the Chinese government, are able to help the government shape the overall market. SOEs can direct resources (which is essential to the downstream industries' survival) to their favoured industries according to the nation's development strategy. Therefore, in order to get the resources, the private sector must adhere to the government's policies when making decisions. This process is reflected in the CER as well. As discussed in Chapter 6, the state owned company Baosteel gives preference to suppliers that fulfil green procurement policies, and thus successfully helps the Chinese government to shape the decision-making of the private sector firms. It is evident that through shareholdings in SOEs, the Chinese government also has influence on non-SOEs, and this is reflected in CER.

Although the probit regression results show that the impact of the state ownership is limited to whether or not companies choose to provide CER in their annual reports, the Chinese government's voting power is widespread and this is the most likely reason why state ownership is not significant in the panel data models for extent of CER. Therefore, this leads to the conclusion that while the direct influence of the voting power (via shareholdings) of the Chinese government on CER is reducing, it still influences CER indirectly.

7.4.2 State political power

The Chinese government issued a series of regulations and guidelines in the mid-2000s and it reached a peak in 2008 when the MDEI was enacted. The results of this study show that a dramatic increase in reporting took place in 2008, and then the trend

became flat. The descriptive results also show that management approach, resource and energy saving and pollutant emission reduction, which are explicitly required by the MDEI, are the main themes disclosed by Chinese companies. Moreover, all companies who claimed that they comply with state issued guidelines when preparing their reports chose to disclose environmental information in either their annual report or CSR report. This indicates that the Chinese government influences Chinese companies through its political power.

As well as issuing regulations and guidelines, the political power in China has more complex forms. First, the CPC exercises power over the appointment of the senior leadership of all SOEs through the party's Organisation Department, which determines all senior executive positions in SOEs (Landry 2008). According to the agenda of the CPC, all SOEs must have a CPC committee embedded in their management board and involved in their major decision-making, in particular, the chairman of the CPC committee of a SOE, at the same time, must be the director of the SOE. In that way, the CPC committee is able to ensure the state's policies are fully implemented by SOEs. As agents will be accountable to their principals, it is not surprising that the SOEs have common goals with the Chinese government.

At the same time, as discussed in Chapter 6, although the Chinese government does not determine all senior executive positions in non-SOEs, a number of senior members of non-SOEs' management boards are currently, or were previously, government officers. The links between government and the non-SOEs are strong and, in order to gain support from the Chinese government, the non-SOEs desire involvement in the bureaucratic system. As a result, the Chinese government can

exercise political power over senior leadership in the private sector, and influence their decision-making regarding CER.

More importantly, in China, traditionally “the ‘correctness of language’ has always been considered a source of moral authority, official legitimacy and political stability...The political language has been vested with an intrinsic instrumental value: its control represents the most suitable and effective way first to codify, and then widely convey, the orthodox state ideology” (Marinellin 2012, p26). As shown in this study, there is evidence that this type of process is also reflected in Chinese CER. Along with economic reform, the excessive high cost of environmental pollution and resource shortage has become the bottleneck in Chinese economic development, and is potentially damaging to social stability. As a result, the new political commitment of building up a “Harmonious Society” was introduced by Hu Jintao in 2007. It is argued that “[t]he ‘newspeak’ developed and used by party officials is a restricted code. It consists of ‘correct’ formulation, aims to teach the ‘enlarged masses’ how to speak and, how to think” (Marinellin 2012, p26). In Mao Zedong’s period, the market was viewed as the symbol of capitalism, and therefore evil. With the recent economic reforms, the market is no longer seen as evil, however, the guiding ideology of socialism with specific Chinese characteristics is emphasised by the government; the Harmonious Society is the “re-contextualized discourse in response to the emergent issues in the changing social stratification order” (Zhang 2012, p33), and has become the meta-discursive ideology throughout China, which significantly impacts Chinese companies’ perceptions. As a result, Chinese companies have quickly adopted environmental protection language, which is one of the major parts of the Harmonious Society. As discussed in Chapter 6, evidence shows that “Harmonious Society” and “scientific development” are frequently used in Chinese CER. Therefore, ideology is

a crucial tool used by the Chinese government to exert its political power over businesses.

7.4.3 State economic power

The Chinese government can also influence Chinese CER by directing money to its favoured industries. The debt market and stock market are underdeveloped in China, and thus the Chinese government is the major avenue for firms to mobilise external finance (Du & Wang, 2013). As a result, Chinese companies try to fulfil the Chinese government's objectives when making decisions. The results of the probit regression show that if a company received a governmental grant, especially one that related to the environment, it is more likely the company would choose to disclose CER, most often in the annual report. Even though the relationship between grants and disclosure in CSR reports is not statistically significant, the result provides preliminary evidence that the Chinese government influences CER using its economic power.

In addition to the government grants, banks are the other important financial resource for environmental protection. In China, all banks, including commercial banks, are supervised by the government; banks play an important role in directing money to industries, or even companies that are favoured by the government. According to *Opinions of Implementing Environmental Protection Policies and Regulations and Preventing Credit Risks* (issued by the State Environmental Protection Administration of China, together with the People's Bank of China and China Banking Regulatory Commission in December 2007), credit organisations, in particular commercial banks, should restrict the amount of credit provided to polluting companies, according to the information provided by the different levels of the Environmental Protection Administration. In order to get the capital that is vital for the company's development,

it is not a surprise to see that Chinese companies view the State as their most important stakeholder when producing CER. The results of the Discourse Analysis show that CER is directly a response to the government's green policy, providing evidence that the Chinese government can use its economic power to influence CER.

7.4.4 Other stakeholders

From a stakeholder perspective companies in China regard the State as the primary stakeholder. However, stakeholders cannot be considered in the same way as in a free-market capitalist system where power is dynamic depending on the legitimacy and urgency of the claims of stakeholder groups as perceived by the companies (Mitchell et al. 1997). As noted earlier, the definition of stakeholders in China, is much more narrow in terms of who wields any level of power and the Chinese government is the major and dominant stakeholder. The Chinese government's power is so strong and widespread that it exerts its power to influence CER in a variety of ways. While this promotes the adoption of CER in China, this study argues that the emphasis of the government may not improve the accountability of corporations. Thus, Stakeholder Theory suggests that, in a state capitalist country such as China, stakeholder power is less likely to be dynamic among different stakeholders. As there are few competing stakeholders the influence is limited to ensuring compliance rather than facilitating transparency. As such, CER in China is more like a legitimacy tool.

However, the situation in China is changing, as China is entering a phase of globalisation, the influence of Western stakeholders is beginning to become apparent. The comparative analysis undertaken shows that there are substantially more dual-listed companies that provide CER. In addition, when running the probit regression, overseas shares could not be included in the model, because all dual-listed companies

have CER in their annual reports or CSR reports. The results of the extent of CER model also show that the influence of the West is strong, with both overseasD and GRI being statistically significant at the 1% level. The findings of the Discourse Analysis confirm that the West is emerging as an important stakeholder of Chinese CER.

Along with more open economic policy, the Chinese economy is involved more in globalisation. CER is now part of modern corporate governance and therefore the West plays a major role in promoting CER in China. As suggested by Managerial Stakeholder Theory, the West should significantly influence Chinese CER. Moreover, a State Capitalism argument suggests that governments try to harness the market for their own purposes, and embrace globalisation as one of the capitalist tools they can use to achieve their political aims (The Economist 2012). Hence, the combination of these two influences could promote greater amounts of CER in the future.

The changes to the dynamics of stakeholder influence in China, specifically how the State deals with potential competing stakeholder requirements, will be an important development for future consideration and research.

7.5 Implications

The findings of this study have implications for both the Chinese government and for Chinese companies, as well as making important contributions to the literature and knowledge of CER in China.

For the Chinese government, the findings indicate that, as a state capitalist economy where public environmental awareness is low, the Chinese government's emphasis on environmental protection appears to be having the desired effect, as more and more

Chinese companies are using environmental reporting to communicate with their stakeholders. However, the findings of the study also show that although the quantity of CER in China keeps increasing, there are still gaps to be filled before Chinese CER reaches the reporting standards of Western companies. CER in China is largely driven by the government, the stakeholder power of the Chinese government is so strong that CER in China becomes a legitimacy tool for Chinese companies to demonstrate their adherence to the requirements of the Chinese government. This ultimately leads to low comprehensiveness and poor transparency. It can be seen that the lack of other competitive stakeholders does not facilitate high quality CER. Therefore, when determining policy, the Chinese government should consider encouraging more stakeholders to take note of CER, such as through increasing the awareness of the issue by the public, promoting green products to consumers, and encouraging more local NGOs to act as watchdogs.

For companies, the study suggests that they need to improve their accountability. CER should not merely be a tool to please the Chinese government. Environmental reporting is a useful tool for companies to communicate with various stakeholders, including overseas consumers and investors. To be environmentally responsible is the trend of global competitions and, as such, Chinese companies need to consider this in order to be globally competitive.

Moreover, in order to stand out from the crowd in terms of global competition, it is important for Chinese companies to improve their environmental reporting abilities. The findings of this study show that companies who sign up to international agreements tend to provide more comprehensive and transparent CER. Therefore, companies may benefit from registering with international organisations, such as the

GRI. A good company's management has the ability to assess the importance of stakeholder demands in achieving the firm's objectives, and to match corporate resources as best it can with its environment. Stakeholder power is dynamic, so along with globalisation there may be more competing stakeholder interests that appear for Chinese companies, therefore, they will need to address other stakeholders' interest besides that of the Chinese government.

7.6 Contribution of the thesis

This thesis makes a number of contributions to knowledge in the research field of environmental reporting. First, this is one of the few comprehensive reviews conducted on the regulatory environment in China and it provides an important contribution to understanding the complex nature of China's environmental protection.

Second, while corporate social and responsibility reporting is becoming a more and more popular research topic in China, stakeholders of the reporting are under-explored (Moon and Shen 2010). Therefore, the research contributes to the current literature as it is the first comprehensive study to consider State influence from both a quantitative and qualitative perspective and confirms the conclusions of prior studies that often make assertions about state influence without empirical evidence. Notwithstanding this confirmation, the study also provides evidence that the influence is not straightforward, showing that a nuanced understanding of the government system provides greater insights about why the implementation of environmental reporting is low. In addition, the study shows that the State is not the only influence on CER, that is, influences from the West are emerging suggesting potential changes to CER may appear in the future.

Third, the study provides contributions around the themes of the different types of power wielded by the government that influence not only SOEs but also firms in the private sector. In contrast to previous research that has largely focused on the influence of the Chinese government on SOEs, this study provides new evidence that the Chinese government influences not only SOEs, but also non-SOEs, in terms of CER. In order to better understand, and potentially improve, CER in China it is important to understand the complexities of State power.

Fourth, while most prior literature find that the Chinese government has significant influence on reporting by Chinese companies, this study contributes further in that it provides a more sophisticated understanding of how stakeholders influence the decision-making process beyond simply whether or not they have an influence. By treating companies' environmental reporting process as a two-stage decision, this study finds that the Chinese government significantly influence the first stage decision, that is, companies' decision about whether to disclose any environmental information or not. Once a company has decided to undertake CER, the second stage of their decision making process is to determine what, and how much, to disclose. Importantly, the results of this study show that the Chinese government has no influence on the second stage. It can be seen that the Chinese government's emphasis can only increase the frequency of CER, but may not improve the extent or quality of CER. This is one of the most significant contributions of the thesis.

Fifth, regarding the contribution the study makes to theory, while previous studies in free-market capitalist contexts have found diversity in the composition of stakeholders, and how the competing interests of different stakeholders can ultimately improve the companies' accountability in CER, this study provides an important

contribution to understanding how Stakeholder Theory is manifested in the context of a strong ideology-based political system. The study finds that, in a state capitalist country such as China, there is one dominant stakeholder, but the influence of that stakeholder expresses itself through three types of power.

Finally, the lack of competing interests between different stakeholders significantly impacts the comprehensiveness and transparency of CER. Therefore, CER in China is more a legitimacy tool used by the companies to gain favour with political authorities, but there is evidence of competing forces acting on companies as they move towards a market economy.

7.7 Limitations

As with all research, there are a number of limitations of this study.

First, this study only uses SSE 180 companies as the sample. As a result, the sample comprises large sized companies, and larger companies are believed to be more advanced in providing CER. Large companies also experience more influence from the Chinese government. Therefore, it may be inappropriate to generalize the results of this study to the CER of a wider group of Chinese listed companies.

Second, as a qualitative method, Discourse Analysis has been critiqued concerning its validity, reliability and objectivity. However, it is argued by Wodak and Meyer (2009, p31) that “the classical concepts of validity, reliability and objectivity used in quantitative research cannot be applied in unmodified ways. The real issue is how our research can be both intellectually challenging and rigorous and critical”. Therefore, in this study, the triangulation procedures of DHA are followed to ensure validity.

Moreover, it should be noted that rigorous objectivity cannot be reached in Discourse Analysis, as the discourse is examined as potentially embedding the beliefs and ideologies of the analysts (Wodak and Meyer 2009), thus it is inevitable that the analysis in this thesis may reflect the author's own perception to an extent.

7.8 Future Research

There are a number of important areas for future research that arise from the findings of this thesis.

First, as happened with economic reform, the new ideological theme of environmental protection has the potential to have a positive influence on companies' environmental impact. There is limited evidence of this to date, however, detailed analysis of performance is an important area for further research.

Similarly, it is difficult to determine whether protecting the environment has really become an ideological view within the companies themselves, or whether the 'ideology' is actually patriotism, which manifests itself as reporting that mimics state policies. Either way, looking at it positively, the recent economic reforms have significantly changed the level of environmental commitment and the levels of reporting. However, things such as transparency of CER and verifying outcomes take a long time to change in China. Therefore, further research will need to track the changing nature of ideological discourse in China, especially in the environmental management area, and also whether this exercise of such ideological power translates

into tangible results in correcting the deteriorating state of the natural environment in China through positive environmental impact and sustainability.

Second, the study shows that CER is mainly considered as a tool for firms to legitimatise themselves in the eyes of the Chinese government, strongly reflecting state views. However, there is also strong preliminary evidence that Western influence has started to have an impact on Chinese CER, and this is also an important area for further examination in the future, as China's economy continues to develop.

Third, this study only examined reports in Chinese version, and found that CER in China is more a legitimacy tool. When collecting reports, it is found that some companies provide reports in both Chinese and English version. Therefore, future research can investigate whether there is a difference between the target audiences for reports produced in Chinese versus those produced in English. By comparing Chinese versus English reports, with regard to the differences in the main themes that appear, the study can provide further evidence to refute or confirm that CER in China is more a legitimacy tool than accountability mechanism.

Finally, this study focuses on the environmental aspect. However, environment is only a part of sustainability. Social accounting and social disclosure is an important aspect that should be looked at in future studies. Especially, as the Chinese government emphasizes environmental protection, the research is likely to provide interesting findings.

7.9 Conclusions

This study is an early attempt to reveal the influences on the increasing trend of CER in the context of an emerging economy from a stakeholder perspective. The findings

of the research indicate that, in contrast to free-market capitalism where it is believed that the “invisible hand” is sufficient to regulate the market, the power of government in a State capitalist society is much stronger.

The major conclusion of the thesis is that while prior literature has almost predominantly used State ownership as a proxy for State influence, the nature of that influence is much more complex. In particular:

- State influence is not limited to influence over SOEs.
- State influence manifests itself as three types: voting (shareholding), economic, and political (ideological).
- Voting power only influences choice to disclose in annual reports, not the extent of reporting or the use of CSR reports.
- As SOEs decline, political & economic power becomes more important.
- Recent Chinese doctrine includes environmental protection, but it is conceptualised in a narrow way.
- Western influences that mitigate State influence are being detected, particularly on the extent of reporting and the use of CSR reports.

The combination of Western influence, and the fact that the new Chinese ideology includes environmental protection, could provide an important impetus to help reduce China’s impact on the environment, and their accountability for that impact. In a context where public environmental awareness is low, the government’s emphasis on environmental issues could encourage companies to pay more attention to their environmental activities and reporting. However, there are two major obstacles: the conception of what environment means being limited to issues of energy saving and resource reduction; and the difficulties with implementation of environmental initiatives, including reporting, given the complex Chinese bureaucracy.

As such, it is also noted that, even though the number of companies that have CER keeps increasing, the comprehensiveness and transparency does not appear to have improved. Therefore, it also raises the possibility that the lack of competing interests between different stakeholders may diminish the reliability of CER, as companies are ultimately responsible to the government and not to a variety of stakeholders. This finding indicates that CER in China is currently more of a legitimacy device rather than an accountability mechanism. As such, the government's objective to change the economy to include a more environmentally sustainable approach may be hard to achieve.

Moreover, while the study finds evidence that CER is strongly influenced by the Chinese government, it is promising to see that recent Western influence brings a more advanced and sophisticated concept of corporate responsibility to Chinese companies. Some of the more advanced companies realise that protecting the environment is not just to respond to the Chinese government's policy, but more importantly, it is a part of modern business. The prevailing government power is thus mitigated by the changing economic circumstances. To operate within the competitive global environment, companies must provide comprehensive CER. The Chinese context will continue to provide a fruitful research ground to observe this phenomenon in the future.

Appendices

Appendix 1: Descriptive statistics

Table A1.1: Dependent variables - frequencies

Year of the report		Is there any environmental information in Annual report or CSR report		Is there any environmental information in CSR report		Is there any environmental information in Annual report		
		N	Percent	N	Percent	N	Percent	
2007	Valid	No	68	47.6	135	94.4	69	48.3
		Yes	75	52.4	8	5.6	74	51.7
		Total	143	100	143	100	143	100
2008	Valid	No	22	14.7	57	38	60	40
		Yes	128	85.3	93	62	90	60
		Total	150	100	150	100	150	100
2009	Valid	No	25	15.2	58	35.2	64	38.8
		Yes	140	84.8	107	64.8	101	61.2
		Total	165	100	165	100	165	100
2010	Valid	No	28	15.8	63	35.6	64	36.2
		Yes	149	84.2	114	64.4	113	63.8
		Total	177	100	177	100	177	100
2011	Valid	No	28	15.6	57	31.7	73	40.6
		Yes	152	84.4	123	68.3	107	59.4
		Total	180	100	180	100	180	100

Table A1.2: Ownership classification

Year of the report		N	Percent	
2007	Valid	N-SOE	41	28.7
		C-SOE	48	33.6
		L-SOE	54	37.8
		Total	143	100
2008	Valid	N-SOE	43	28.7
		C-SOE	50	33.3
		L-SOE	57	38
		Total	150	100
2009	Valid	N-SOE	42	25.5
		C-SOE	62	37.6
		L-SOE	61	37
		Total	165	100
2010	Valid	N-SOE	43	24.3
		C-SOE	65	36.7
		L-SOE	69	39
		Total	177	100
2011	Valid	N-SOE	48	26.7
		C-SOE	65	36.1
		L-SOE	67	37.2
		Total	180	100

N-SOE: Non state-owned enterprise

C-SOE: Central state-owned enterprise

L-SOE: Local state-owned enterprise

Table A1.3: Dual listing companies

Year of the report			N	Percent
2007	Valid	No	116	81.1
		Yes	27	18.9
		Total	143	100.0
2008	Valid	No	121	80.7
		Yes	29	19.3
		Total	150	100.0
2009	Valid	No	133	80.6
		Yes	32	19.4
		Total	165	100.0
2010	Valid	No	143	80.8
		Yes	34	19.2
		Total	177	100.0
2011	Valid	No	144	80.0
		Yes	36	20.0
		Total	180	100.0

Table A1.4: Dependent variables - descriptive statistics

Year of the report	N	Min	Max	Mean	Std. Deviation
Total_Extent	143	0	7954	436.04	1227.33
2007 AR_Extent	143	0	3931	208.04	415.88
CSR_Extent	143	0	7566	228	1076.9
Total_Extent	150	0	12190	1292.03	1747.2
2008 AR_Extent	150	0	4161	218.24	450.74
CSR_Extent	150	0	11874	1073.79	1619.73
Total_Extent	165	0	23018	1488.85	2369.66
2009 AR_Extent	165	0	1451	185.01	262.63
CSR_Extent	165	0	21567	1303.84	2240.75
Total_Extent	177	0	18163	1637.64	2461.82
2010 AR_Extent	177	0	2802	237.55	355.11
CSR_Extent	177	0	17014	1400.04	2297.89
Total_Extent	180	0	15328	1724	2383.09
2011 AR_Extent	180	0	2259	212.96	325.06
CSR_Extent	180	0	14528	1511.03	2297.38

Total_Extent is the word counts that related to environmental information in both Annual report and CSR report.

AR_Extent is the word counts that related to environmental information in Annual reports only.

CSR_Extent is the word counts that related to environmental information in CSR reports only.

Table A1.5: Independent variables - descriptive statistics

Year of the report	N	Min	Max	Mean	Std. Deviation	
2007	ROA	143	0.02	5.38	0.65	0.68
	Total assets	143	504.99	8684288	253010.73	1057990.35
2008	ROA	150	0.02	4.74	0.62	0.62
	Total assets	150	502.35	9757654	281806.95	1182904.65
2009	ROA	165	0.02	3.73	0.55	0.52
	Total assets	165	591.7	11785053	326959.67	1402516.63
2010	ROA	177	0.02	3.29	0.57	0.52
	Total assets	177	688.6	13458622	428514.93	1737761.5
2011	ROA	180	0.01	3.31	0.6	0.54
	Total assets	180	932.03	15476868	494359.56	1974292.7

Table A1.6: Descriptive statistics - theme

	N	Min	Max	Mean	Std. Deviation
Management Application	442	0	14221	449.61	1084.16
Energy Saving & Emission Reduction	426	0	5990	435.25	827.21
General Statement	588	0	7298	297.31	449.42
Others	263	0	4273	66.94	207.25
Compliance-Chinese	339	0	4165	56.09	177.74
Biodiversity & Rehabilitation	98	0	868	31.65	109.61
Compliance-Global	118	0	1160	15.28	73.622
Total	815	0	23018	1352.15	2170.79

Appendix 2: Correlation matrix

Pearson Correlation Matrix

Year of the report		Total_Extent	CSR_Extent	AR_Extent	Total assets	ROA
2007	Total_Extent	1				
	CSR_Extent	.943**	1			
	AR_Extent	.509**	.194*	1		
	Total assets	.388**	.434**	0.021	1	
	ROA	0.011	-0.009	0.057	-.177*	1
2008	Total_Extent	1				
	CSR_Extent	.967**	1			
	AR_Extent	.401**	0.155	1		
	Total assets	.289**	.293**	0.068	1	
	ROA	0.038	0.036	0.017	-.182*	1
2009	Total_Extent	1				
	CSR_Extent	.995**	1			
	AR_Extent	.533**	.446**	1		
	Total assets	.298**	.302**	0.114	1	
	ROA	-0.052	-0.07	0.124	-.187*	1
2010	Total_Extent	1				
	CSR_Extent	.991**	1			
	AR_Extent	.518**	.401**	1		
	Total assets	.301**	.302**	0.13	1	
	ROA	-0.021	-0.034	0.075	-.202**	1
2011	Total_Extent	1				
	CSR_Extent	.991**	1			
	AR_Extent	.327**	.198**	1		
	Total assets	.266**	.260**	0.109	1	
	ROA	-0.038	-0.055	0.111	-.209**	1

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Appendix 3: Details of selection models

Calculating robust standard errors:

```

Random-effects probit regression      Number of obs   =      760
Group variable: ID                   Number of groups =      177
Random effects u_i ~ Gaussian        Obs per group:
                                      min =           1
                                      avg =           4.3
                                      max =           5
Integration method: mvaghermite      Integration pts. =       12
                                      Wald chi2(14)   =       73.50
Log pseudolikelihood = -228.91551    Prob > chi2     =       0.0000
                                      (Std. Err. adjusted for 177 clusters in ID)

```

Total	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
highprofile	1.20889	.384197	3.15	0.002	.4558777	1.961902
staowned1	1.055645	.570809	1.85	0.064	-.0631203	2.17441
staowned2	.6591795	.4495094	1.47	0.143	-.2218426	1.540202
stashareD	-.0565949	.3187713	-0.18	0.859	-.6813752	.5681853
envgraD	.4902763	.2817601	1.74	0.082	-.0619635	1.042516
totgraD	.4678415	.3077354	1.52	0.128	-.1353087	1.070992
loglagtotass	.7521241	.3270748	2.30	0.021	.1110694	1.393179
lagroa	.7932486	.6691237	1.19	0.236	-.5182098	2.104707
loglagtotassmm	-.348798	.3197841	-1.09	0.275	-.9755633	.2779672
lagroamm	-.0167283	.6541534	-0.03	0.980	-1.298845	1.265389
year						
2008	1.614824	.3285296	4.92	0.000	.9709173	2.25873
2009	1.28481	.371662	3.46	0.001	.5563661	2.013255
2010	1.131351	.3818686	2.96	0.003	.3829027	1.8798
2011	.8866122	.430238	2.06	0.039	.0433612	1.729863
_cons	-5.464313	1.108119	-4.93	0.000	-7.636186	-3.29244
/lnsig2u	.882821	.3299437			.2361432	1.529499
sigma_u	1.554899	.2565146			1.125325	2.148456
rho	.7074065	.0682926			.558763	.821933

Calculating robust standard errors:

```

Random-effects probit regression      Number of obs   =      760
Group variable: ID                   Number of groups =      177
Random effects u_i ~ Gaussian        Obs per group:
                                      min =           1
                                      avg =           4.3
                                      max =           5

Integration method: mvaghermite      Integration pts. =       12
                                      Wald chi2(15)    =      65.72
Log pseudolikelihood = -346.99205    Prob > chi2     =      0.0000
                                      (Std. Err. adjusted for 177 clusters in ID)

```

AR	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
csrD	-.0456156	.2852913	-0.16	0.873	-.6047763	.513545
highprofile	1.448341	.3145038	4.61	0.000	.8319245	2.064757
staowned1	.8418647	.4285858	1.96	0.049	.0018519	1.681877
staowned2	.9478994	.3617236	2.62	0.009	.2389341	1.656865
stashareD	-.2112435	.2475233	-0.85	0.393	-.6963802	.2738931
envgraD	.5463852	.2110736	2.59	0.010	.1326885	.9600818
totgraD	.0447321	.2623378	0.17	0.865	-.4694406	.5589048
loglagtotass	.0612325	.2210293	0.28	0.782	-.371977	.4944419
lagroa	.4009716	.3909122	1.03	0.305	-.3652023	1.167145
loglagtotassmm	.1303795	.2269561	0.57	0.566	-.3144462	.5752052
lagroamm	.5252659	.4419322	1.19	0.235	-.3409052	1.391437
year						
2008	.297033	.2838199	1.05	0.295	-.2592438	.8533099
2009	.1696479	.3172928	0.53	0.593	-.4522346	.7915304
2010	.3656001	.3445188	1.06	0.289	-.3096443	1.040844
2011	-.0018627	.3623672	-0.01	0.996	-.7120894	.708364
_cons	-3.802789	.8554136	-4.45	0.000	-5.479369	-2.126209
/lnsig2u	.6387267	.2690218			.1114537	1.166
sigma_u	1.376251	.1851208			1.057309	1.791404
rho	.6544656	.0608367			.5278346	.7624212

Calculating robust standard errors:

```

Random-effects probit regression      Number of obs      =      760
Group variable: ID                   Number of groups   =      177
Random effects u_i ~ Gaussian        Obs per group:
                                      min =           1
                                      avg =           4.3
                                      max =           5
Integration method: mvaghermite      Integration pts.   =      12
                                      Wald chi2(15)     =      15.77
Log pseudolikelihood = -159.61483    Prob > chi2       =      0.3978
                                      (Std. Err. adjusted for 177 clusters in ID)

```

CSR	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
arD	-.7219896	.6119925	-1.18	0.238	-1.921473	.4774937
highprofile	-.1933536	1.20643	-0.16	0.873	-2.557913	2.171206
staowned1	2.803207	2.257329	1.24	0.214	-1.621077	7.22749
staowned2	-1.10583	1.309418	-0.84	0.398	-3.672243	1.460582
stashareD	-.8256956	.5576106	-1.48	0.139	-1.918592	.267201
envgraD	.4898172	.4656358	1.05	0.293	-.4228122	1.402447
totgraD	-.4945695	1.060221	-0.47	0.641	-2.572564	1.583425
loglagtotass	1.607188	1.090759	1.47	0.141	-.5306608	3.745036
lagroa	.6295543	.8415294	0.75	0.454	-1.019813	2.278922
loglagtotassmm	2.225245	1.689392	1.32	0.188	-1.085903	5.536393
lagroamm	-.4902367	1.106562	-0.44	0.658	-2.659059	1.678586
year						
2008	24.51486	15.45639	1.59	0.113	-5.779119	54.80883
2009	24.93845	15.49831	1.61	0.108	-5.437671	55.31457
2010	24.41263	15.37894	1.59	0.112	-5.729536	54.5548
2011	25.24804	15.56244	1.62	0.105	-5.253783	55.74987
_cons	-57.46771	32.1722	-1.79	0.074	-120.5241	5.588637
/lnsig2u	4.000479	.4253365			3.166834	4.834123
sigma_u	7.390824	1.571794			4.871575	11.21286
rho	.9820222	.0075091			.9595669	.9921091

Appendix 4: Details of extent of reporting models

Random-effects GLS regression	Number of obs	=	602
Group variable: ID	Number of groups	=	162
R-sq:	Obs per group:		
within = 0.3459	min =		1
between = 0.5753	avg =		3.7
overall = 0.5073	max =		5
	Wald chi2(21)	=	431.30
corr(u_i, X) = 0 (assumed)	Prob > chi2	=	0.0000

Total	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
loglagtotass	.3385613	.1415438	2.39	0.017	.0611405	.6159821
lagroa	.2604809	.1802434	1.45	0.148	-.0927896	.6137515
gri	1.13152	.1879231	6.02	0.000	.7631978	1.499843
sse	.3131132	.1031384	3.04	0.002	.1109656	.5152608
cass	.1336582	.1476635	0.91	0.365	-.155757	.4230734
highprofile	.1599762	.1415057	1.13	0.258	-.1173699	.4373223
staowned1	-.3055378	.2784975	-1.10	0.273	-.8513829	.2403073
staowned2	-.2296973	.2704104	-0.85	0.396	-.7596918	.3002973
oveshareD	.6840263	.1938983	3.53	0.000	.3039927	1.06406
stashareD	.2153033	.091223	2.36	0.018	.0365096	.394097
envgraD	.29474	.088359	3.34	0.001	.1215596	.4679204
totgraD	-.1604755	.2207302	-0.73	0.467	-.5930986	.2721477
grantsstaown	.2302563	.2557792	0.90	0.368	-.2710617	.7315743
griosshare	-.8466338	.2423483	-3.49	0.000	-1.321628	-.3716398
gov	.4129949	.1328677	3.11	0.002	.152579	.6734107
loglagtotassmm	-.1826584	.1483496	-1.23	0.218	-.4734184	.1081015
lagroamm	-.2397235	.2111367	-1.14	0.256	-.6535438	.1740968
year						
2008	.6303781	.1193021	5.28	0.000	.3965503	.864206
2009	.741815	.1350491	5.49	0.000	.4771235	1.006506
2010	.747537	.155685	4.80	0.000	.4424001	1.052674
2011	.69239	.1803081	3.84	0.000	.3389927	1.045787
_cons	3.691094	.5089193	7.25	0.000	2.693631	4.688558
sigma_u	.66241681					
sigma_e	.66263691					
rho	.49983389	(fraction of variance due to u_i)				

```

Random-effects GLS regression           Number of obs   =       453
Group variable: ID                     Number of groups =       136
R-sq:                                  Obs per group:
    within = 0.0763                      min =           1
    between = 0.1341                     avg =           3.3
    overall = 0.1325                     max =           5
                                         Wald chi2(22)   =       45.14
corr(u_i, X) = 0 (assumed)              Prob > chi2     =       0.0025

```

AR	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
csrD	-.1578853	.1268061	-1.25	0.213	-.4064206	.0906501
loglagtotass	.2446585	.1453729	1.68	0.092	-.0402671	.5295841
lagroa	.0863289	.1693966	0.51	0.610	-.2456824	.4183402
gri	.4430189	.219531	2.02	0.044	.012746	.8732919
sse	.0945653	.1133599	0.83	0.404	-.127616	.3167466
cass	-.1480623	.1590675	-0.93	0.352	-.4598289	.1637043
highprofile	.2898533	.1673547	1.73	0.083	-.0381558	.6178624
staowned1	-.3586377	.3091692	-1.16	0.246	-.9645982	.2473228
staowned2	-.3244464	.294777	-1.10	0.271	-.9021987	.2533059
oveshareD	.4551095	.2225832	2.04	0.041	.0188546	.8913645
stashareD	.1483903	.0966155	1.54	0.125	-.0409727	.3377533
envgraD	.2456821	.0895679	2.74	0.006	.0701322	.421232
totgraD	-.2765423	.236994	-1.17	0.243	-.741042	.1879574
grantsstaown	.4262289	.274048	1.56	0.120	-.1108954	.9633532
griosshare	-.6111854	.2782715	-2.20	0.028	-1.156588	-.0657832
gov	-.1769196	.1553671	-1.14	0.255	-.4814335	.1275944
loglagtotassmm	-.1710549	.1541969	-1.11	0.267	-.4732752	.1311655
lagroamm	-.0567436	.2087518	-0.27	0.786	-.4658896	.3524023
year						
2008	-.1953308	.1282623	-1.52	0.128	-.4467202	.0560587
2009	-.2366622	.1473227	-1.61	0.108	-.5254095	.052085
2010	-.0673082	.1665431	-0.40	0.686	-.3937266	.2591102
2011	-.2276631	.1914041	-1.19	0.234	-.6028082	.1474821
_cons	4.6362	.5754448	8.06	0.000	3.508348	5.764051

sigma_u	.70908411
sigma_e	.5813719


```

Random-effects GLS regression           Number of obs   =       421
Group variable: ID                     Number of groups =       125
R-sq:                                  Obs per group:
    within = 0.1028                      min =           1
    between = 0.5426                     avg =           3.4
    overall = 0.4693                      max =           5
                                         Wald chi2(22)   =    179.94
corr(u_i, X) = 0 (assumed)              Prob > chi2     =     0.0000

```

CSR	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
arD	.1892223	.0870247	2.17	0.030	.0186571	.3597875
loglagtotass	-.048536	.1765102	-0.27	0.783	-.3944897	.2974176
lagroa	.2261114	.2513635	0.90	0.368	-.2665521	.7187749
gri	.8152226	.1683893	4.84	0.000	.4851856	1.14526
sse	.0543837	.0911321	0.60	0.551	-.124232	.2329993
cass	.1603644	.1239105	1.29	0.196	-.0824957	.4032245
highprofile	.184126	.1365029	1.35	0.177	-.0834147	.4516668
staowned1	-.1204338	.2813255	-0.43	0.669	-.6718217	.430954
staowned2	.0573495	.2807618	0.20	0.838	-.4929335	.6076326
oveshareD	.2099146	.1756769	1.19	0.232	-.1344059	.5542351
stashareD	.1096894	.0870467	1.26	0.208	-.0609191	.2802979
envgraD	.137061	.0921323	1.49	0.137	-.043515	.317637
totgraD	.0296877	.2392763	0.12	0.901	-.4392852	.4986606
grantsstaown	-.0290076	.2733424	-0.11	0.915	-.5647487	.5067336
griosshare	-.2830137	.2223397	-1.27	0.203	-.7187915	.1527641
gov	.0624867	.1298268	0.48	0.630	-.1919692	.3169427
loglagtotassmm	.2140252	.1802045	1.19	0.235	-.1391691	.5672195
lagroamm	-.0349604	.2764884	-0.13	0.899	-.5768677	.5069469
year						
2008	-.4839836	.3128811	-1.55	0.122	-1.097219	.1292522
2009	-.2706044	.3193136	-0.85	0.397	-.8964476	.3552388
2010	-.2589105	.3301299	-0.78	0.433	-.9059533	.3881323
2011	-.2186114	.3437159	-0.64	0.525	-.8922821	.4550594
_cons	4.907837	.6077476	8.08	0.000	3.716674	6.099
sigma_u	.52099434					
sigma_e	.51606808					

References

- Adams, C. A. 2002. Internal Organisational Factors Influencing Corporate Social and Ethical Reporting: Beyond Current Theorising. *Accounting, Auditing and Accountability Journal* 15 (2):223-250.
- Adams, C. A., W. Hill, and C. Roberts. 1998. Corporate Social Reporting Practices in Western Europe: Legitimizing Corporate Behaviour. *British Accounting Review* 30 (1):1-20.
- ADB, A. D. B. 2012. *Improving Corporate Governance and Enhancing Institutional Capacity of Environmental and Social Management* 2008a [cited 09/Apr 2012]. Available from <http://pid.adb.org/pid/TaView.htm?projNo=43026&seqNo=01&typeCd=2>.
- . 2012. *Support for Establishing a Clean Development Mechanism Fund* 2008b [cited 09/Apr 2012]. Available from <http://pid.adb.org/pid/TaView.htm?projNo=39656&seqNo=01&typeCd=2>.
- Aligica, P. D., and V. Tarko. 2012. State Capitalism and the Rent-seeking Conjecture. *Constitutinoal Political Economy* 23 (4):357-379.
- Azzone, G., M. Brophy, G. Noci, R. Welford, and W. Young. 1997. A Stakeholders' View of Environmental Reporting. *Long Range Planning* 30 (5):699-709.
- Belal, A. R., and M. Momin. 2009. Corporate Social Reporting (CSR) in Emerging Economies: A Review and Future Direction. *Research in Accounting in Emerging Economies* 9:119-143.
- Berg, B. L. 2004. *Qualitative Research Methods for the Social Sciences, 5th Edition*. edited by 5. Toronto: Pearson.
- Berthelot, S., D. Cormier, and M. Magnan. 2003. Environmental Disclosure Research: Review and Synthesis. *Journal of Accounting Literature* 22:1-44.
- Bina, O. 2010. Environmental Governance in China: Weakness and Potential from an Environmental Policy Integration Perspective. *China Review* 10 (1):207-240.
- Blumberg, B., D. R. Cooper, and P. S. Schindler. 2011. Sampling Strategies - Steps in Sampling Design. In *Business Research Methods*. Berkshire, UK: McGraw-Hill Education.
- Brammer, S., and S. Pavelin. 2008. Factors Influencing the Quality of Corporate Environmental Disclosure. *Business Strategy and the Environment* 17 (2):120-136.

- Bremmer, I. 2008. The Return of State Capitalism. *Survival* 50 (3):55-64.
- . 2010. The End of the Free Market: Who Wins the War between States and Corporations. *European View* 9 (2):249-252.
- Bryman, A., and E. Bell. 2007. Content Analysis. In *Business Research Methods*. New York: Oxford University Press Inc.
- Buhr, D., and R. Frankenberger. 2014. Capitalism Inc.—Empirical Evidence of Theoretical Findings. In *IPSA 23rd World Congress of Political Science*. Montreal, Quebec, Canada.
- Burns, J. 2000. The Dynamics of Accounting Change Inter-play between New Practices, Routines, Institutions, Power and Politics. *Accounting, Auditing & Accountability Journal* 13 (5):566-596.
- Burns, J., and R. W. Scapens. 2000. Conceptualizing Management Accounting Change: An Institutional Framework. *Management Accounting Research* 11 (1):3-25.
- CCIC, C. C. f. I. C. 2015. *President Xi Jinping Pledges not to Sacrifice Environment* 2013 [cited 15/Oct 2015]. Available from http://www.cciced.net/encciced/newscenter/latestnews/201305/t20130528_252803.html.
- Chamberlain, G. 1980. Analysis of Covariance with Qualitative Data. *The Review of Economics Studies* 47 (1):225-238.
- Chen, P. S. J. 1978. The Power Elite in Singapore. In *Studies in ASEAN Sociology*, edited by P. S. J. Chen and H.-D. Evers. Singapore: Chopmen, 78-82.
- Chen, S., and P. Bouvain. 2009. Is Corporate Responsibility Converging? A Comparison of Corporate Responsibility Reporting in the USA, UK, Australia, and Germany. *Journal of Business Ethics* 87 (Supplement 1):299-317.
- Chen, S., G. H. Jefferson, and J. Zhang. 2011. Structural change, productivity growth and industrial transformation in China. *China Economic Review* 22 (1):133-150.
- Cheng, H. 2003. Chapter 1: Introduction. In *Analysis of Panel Data*. Cambridge, United Kingdom: Cambridge University Press.
- Chilton, P., H. Tian, and R. Wodak. 2012. *Discourse and Socio-political Transformations in Contemporary China*: John Benjamins Publishing Co.

- China Securities Index Co., L. 2011. *SSE180 and SSE50 Index Methodology* 2012 [cited 11/Jul 2011]. Available from http://www.sse.com.cn/sseportal/cs/zhs/xxfw/flgz/temp/Index_Methodology_EN_000010n16.pdf.
- China WTO Tribune. 2009. Report of Chinese Enterprises' CSR (2001-2009).
- Chinese Central Government. 2011. *The 11th Five-year Plans of People's Republic of China* (中华人民共和国国民经济和社会发展第十一个五年规划纲要) 2006 [cited 20/Aug 2011]. Available from http://news.xinhuanet.com/misc/2006-03/16/content_4309517_1.htm.
- . 2011. *China's National Framework* 2011 [cited 03/May 2011]. Available from http://www.gov.cn/gjjg/2005-08/28/content_27083.htm.
- Cho, C. H., M. Laine, R. W. Roberts, and M. Rodrigue. 2015. Organized Hypocrisy, Organizational Facades, and Sustainability Reporting. *Accounting, Organizations and Society* 40 (January 2015):78-94.
- Clarkson, M. 1995. A Stakeholder Framework for Analyzing and Evaluating Corporate Social Performance. *Academy of Management Review* 20 (1):92-118.
- Clarkson, P. M., Y. Li, G. D. Richardson, and F. P. Vasvari. 2008. Revisiting the Relationship between Environmental Performance and Environmental Disclosure: An Empirical Analysis. *Accounting, Organizations and Society* 33 (4/5):303-327.
- Cowen, S. S., L. B. Ferreri, and L. D. Parker. 1987. The Impact of Corporate Characteristics on Social Responsibility Disclosure: A Typology and Frequency-Based Analysis. *Accounting, Organizations and Society* 12 (2):111-122.
- Cox, C. A., and E. B. Douthett, Jr. 2009. Further Evidence on the Factors and Valuation Associated with the Level of Environmental Liability. *Academy of Accounting and Financial Studies Journal* 13 (3):1-26.
- Cui, Z., Z. C. Yu, and G. F. Yin. 2007. The Show of Responsibility (责任之秀:在华跨国公司企业社会责任调研访谈). *China WTO Tribune* 7:32-33.
- Damak-Ayadi, S. 2010. Social and Environmental Reporting in Annual Reports of Large Companies in France *Contabilitate si Informatica de Gestione* 9 (1):22-44.

- de Abreu, M. C. S., F. de Castro, F. de Assis Soares, and J. C. L. da Silva Filho. 2012. A Comparative Understanding of Corporate Social Responsibility of Textile Firms in Brazil and China. *Journal of Cleaner Production* 20 (1):119-126.
- De Villiers, C., V. Naiker, and C. Van Staden. 2009. Good Corporate Governance Makes for Good Environmental Performance. In *AFAANZ Conference*. Gold Coast, Australia.
- Deegan, C. 2002. Introduction: The Legitimising Effect of Social and Environmental Disclosures - A Theoretical Foundation. *Accounting, Auditing & Accountability Journal* 15 (3):282-311.
- Deegan, C. 2008. Towards the Implementation of Environmental Costing to Inform Capital Investment Decisions: The Case of Australian Electricity Distributors and Their Choice of Power Poles. *Australian Accounting Review* 18 (44):2-15.
- Deegan, C. 2009a. Extended Systems of Accounting - the Incorporation of Social and Environmental Factors within External Reporting. In *Financial Accounting Theory*. Sydney: McGraw-Hill, 378-425.
- . 2009b. Unregulated Corporate Reporting Decisions: Systems-Oriented Theories. In *Financial Accounting Theory*. Sydney: McGraw-Hill, 318-377.
- Deegan, C., and C. Blomquist. 2001. Stakeholder Influence on Corporate Reporting: An exploration of the interaction between the World Wide Fund for Nature and the Australian Minerals Industry. In *3rd Asian Pacific Interdisciplinary Research in Accounting Conference Proceedings (APIRA)* Aelaide, Australia, July 2001.
- Deegan, C., and G. Carroll. 1993. An Analysis of Incentives for Australian Firms to Apply for Reporting Excellence Awards. *Accounting and Business Research* 23 (2):219-227.
- Deegan, C., M. Rankin, and P. Voght. 2000. Firms' Disclosure Reactions to Major Social Incidents: Australia Evidence. *Accounting Forum* 24 (1):101-130.
- Dekle, R., and G. Vandenbroucke. 2012. A quantitative analysis of China's structural transformation. *Journal of Economic Dynamics and Control* 36 (1):119-135.
- Deng, X. 1985. Build socialism with Chinese characteristics. *Selected Works of Deng Xiaoping* 3:1982-1992.
- Dobbs, S., and C. van Staden. 2011. Motivations for Corporate Social and Environmental Reporting: New Zealand Evidence. In *The 10th Australasian Conference on Social and Environmental Accounting Research*. Tasmania, Australia.

- Dobers, P., and R. Wolff. 2000. Competing with 'Soft' Issues - from Managing the Environment to Sustainable Business Strategies. *Business Strategy and the Environment* 9 (3):143-150.
- Dong, S., R. Burritt, and W. Qian. 2014. Salient Stakeholders in Corporate Social Responsibility Reporting by Chinese Mining and Minerals Companies. *Journal of Cleaner Production* 84 (1):59-69.
- Du, J., and Y. Wang. 2013. Reforming SOEs under China's State Capitalism In *Unfinished Reforms in the Chinese Economy*, 1-38.
- Elijido-Ten, E., L. Kloot, and P. Clarkson. 2010. Extending the Application of Stakeholder Influence Strategies to Environmental Disclosures: An Exploratory Study from a Developing Country. *Accounting, Auditing & Accountability Journal* 23 (8):1032-1059.
- Energy Bulletin.net. 2011. *China: Severe Energy Shortage Warned 2011* [cited 10/Aug 2011]. Available from <http://www.energybulletin.net/node/604>.
- Enquist, B., and M. Johnson. 2006. Adoption of corporate social responsibility - incorporating a stakeholder perspective. *Qualitative Research in Accounting and Management* 3 (3):188-207.
- Environmental Protection Law (trial) 1979. Environmental Protection Law (trial) edited by N. P. s. Congress. Beijing.
- Ernst, and Ernst. 1979. Social Responsibility Disclosure. 1978 Survey. Ernst and Ernst, Cleveland, OH.
- EU-China Environmental Governance Programme. 2013. Chinese Corporate Social Responsibility and Corporate Environmental Information Disclosure Policy.
- Fairclough, N. 2009. A Dialectical-Relational Approach to Critical Discourse Analysis in Social Research. In *Methods of Critical Discourse Analysis (2nd Edition)*: SAGE Publication Ltd., 163-186.
- Fairclough, N., and R. Wodak. 1997. Critical Discourse Analysis. In *Discourse as Social Interaction* edited by T. A. van Dijk. London: SAGE, 258-284.
- Faisal, F., G. Tower, and R. Rusmin. 2012. Legitimising Corporate Sustainability Reporting Throughout the World. *Australasian Accounting, Business and Finance Journal* 6 (2):19-34.
- Ferguson, J. 2007. Analysing Accounting Discourse: Avoiding the "Fallacy of Internalism". *Accounting, Auditing & Accountability Journal* 20 (6):912-934.

- Ferguson, M. J., K. C. K. Lam, and G. M. Lee. 2002. Voluntary Disclosure by State-owned Enterprises Listed on the Stock Exchange of Hong Kong. *Journal of International Financial Management & Accounting* 13 (2):125-152.
- Fligstein, N., and J. Zhang. 2011. A New Agenda for Research on the Trajectory of Chinese Capitalism. *Management and Organization Review* 7 (1):39-62.
- Forbes. 2015. *2015 Global 2000: The Largest Companies In China* 2015 [cited 24/Nov 2015]. Available from <http://www.forbes.com/sites/liyanchen/2015/05/06/2015-global-2000-the-largest-companies-in-china/>.
- Freeman, R. 1984. *Strategic Management: A stakeholder Approach*. Marshall, MA: Pitman.
- Friedman, M. 1962. *Capitalism and Freedom*. Chicago: University of Chicago Press.
- Gallego, I. 2006. The Use of Economic, Social and Environmental Indicators as a Measure of Sustainable Development in Spain. *Corporate Social Responsibility and Environmental Management* 13 (2):78-97.
- Gao, y. 2009. Corporate Social Performance in China: Evidence from Large Companies. *Journal of Business Ethics* 89 (1):23-35.
- . 2011. CSR in An Emerging Country: A Content Analysis of CSR Reports of Listed Companies. *Baltic Journal of Management* 6 (2):263-291.
- Gibson, K., and G. O'Donovan. 2007. Corporate Governance and Environmental Reporting: An Australian Study. *Corporate Governance* 15 (5):944-956.
- Gilbert, S. 2012. *The Importance of Corporate Social Reporting in Supply Chain (关注报告在供应链中的作用)*. China WTO Tribune 2011 [cited 03/Jan 2012]. Available from http://www.wtoguide.net/html/2011-04/272_1.html.
- Global Sustainable Investment Alliance. 2015. 2014 Global Sustainable Investment Review.
- Glynos, J., D. Howarth, A. J. Norval, and E. Speed. 2014. *Discourse Analysis: Varieties and Methods*. ESRC National Centre for Research Methods NCRM/014 2009 [cited 10/Aug 2014]. Available from <http://eprints.ncrm.ac.uk/796/>.
- Gray, R., R. Kouhy, and S. Lavers. 1995. Corporate Social and Environmental Reporting : A Review of the Literature and a Longitudinal Study of UK Disclosure. *Accounting, Auditing and Accountability Journal* 8 (2):47-77.

- Gray, R., D. Owen, and C. A. Adams. 1996. *Accounting and Accountability: Changes and Challenges in Corporate Social and Environmental Reporting* London: Prentice Hall, 250.
- Gray, S. J., and H. M. Vint. 1995. The Impact of Culture on Accounting Disclosures: Some International Evidence. *Asia-Pacific Journal of Accounting* 2 (1):33-43.
- Green, S. B. 1991. How Many Subjects Does It Take To Do A Regression Analysis? . *Multivariate Behavioral Research* 26 (3):499-510.
- Greenpeace China. 2011. *Greenpeace Exists Because This Fragile Earth Deserves a Voice* 2011 [cited 12/Feb 2011]. Available from <http://www.greenpeace.org/eastasia/about/>.
- GRI, G. R. I. 2015. *Sustainability Disclosure Data base* 2015 [cited 07/Jan 2015]. Available from <http://database.globalreporting.org/>.
- Guan, J., and C. Noronha. 2013. Corporate Social Responsibility Reporting Research in the Chinese Academia: A Critical Review. *Social Responsibility Journal* 9 (1):33-55.
- Guenther, E., H. Hoppe, and C. Poser. 2006. Environmental Corporate Social Responsibility of Firms in the Mining and Oil and Gas Industries: Current Status Quo of Reporting Following GRI Guidelines. *Greener Management International* 53 (March):7-25.
- Gujarati, D. N. 2003. *Basic Econometrics*: New York: McGraw-Hill.
- Gunawan, J., H. Djajadikerta, and M. Smith. 2009. An Examination of Corporate Social Disclosures in the Annual Reports of Indonesian Listed Companies. *Journal of the Asia-Pacific Centre for Environmental Accountability* 15 (2):13-34.
- Guo, P. 2009. *Corporate Environmental Reporting and Disclosure in China*. Tsinghua University 2005 [cited 05/Mar 2009]. Available from <http://www.csr-asia.com/upload/environmentalreporting.pdf>.
- Guthrie, J., and L. D. Parker. 1989. Corporate Social Reporting: A Rebuttal of Legitimacy Theory *Accounting and Business Research* 19 (76):343-352.
- . 1990. Corporate Social Disclosure Practice: A Comparative International Analysis. *Advances in Public Interest Accounting* 3:159-175.
- Guthrie, J., and R. Petty. 2000. Intellectual Capital: Australian Annual reporting Practices. *Journal of Intellectual Capital* 1 (3):241-251.

- Hackston, D., and M. J. Milne. 1996. Some Determinants of Social and Environmental Disclosures in New Zealand Companies. *Accounting, Auditing and Accountability Journal* 9 (1):77-108.
- Hall, P. A., and D. Soskice. 2001. *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford University Press.
- Harashima, Y. 2000. Effects of Economic Growth on Environmental Policies in Northeast Asia. *Environment* 42 (6):28-40.
- Hasnas, J. 1998. The Normative Theories of Business Ethics. *Business Ethics Quarterly* 8 (1):19-42.
- Heyser, N. 1983. International Production and Social Change: An Analysis of the State, Employment and Trade Unions in Singapore. In *Singapore: Development Policies and Trends*, edited by P. S. J. Chen. Singapore: Oxford University Press, 105-128.
- HKICPA, H. K. I. o. C. P. A. 2012. *Rights to Interests Arising from Decommissioning, Restoration and Environmental Rehabilitation Funds 2010* [cited 01/Oct 2012]. Available from [http://app1.hkicpa.org.hk/ebook/HKSA_Members_Handbook_Master/volumeII/hk\(ifric\)-int5.pdf](http://app1.hkicpa.org.hk/ebook/HKSA_Members_Handbook_Master/volumeII/hk(ifric)-int5.pdf).
- Ho, S. S., and K. S. Wong. 2001. A study of the relationship between corporate governance structures and the extent of voluntary disclosure. *Journal of International Accounting, Auditing and Taxation* 10 (2):139-156.
- Hofstede, G. 1994. The Business of International Business is Culture. *International Business Review* 3 (1):1-14.
- Holcomb, J. L., R. S. Upchurch, and F. Okumus. 2007. Corporate Social Responsibility: What Are Top Hotel Companies Reporting? *International Journal of Contemporary Hospitality Management* 19 (6):461-475.
- Hong, s., and Z. Nong. 2013. *China's State-Owned Enterprises: Nature, Performance and Reform*. edited by Yang Mu and F. Gang. Singapore: World Scientific Publishing Co. Pte. Ltd.
- Hossain, M., K. Islam, and J. Andrew. 2006. Corporate Social and Environmental Disclosure in Developing Countries: Evidence from Bangladesh. In *the Asian Pacific Conference on International Accounting Issues*. Hawaii, 1-22.
- Hsu, S. 2015. *Xi Jinping Pledges Cap-and-Trade Scheme for China*. The Diplomat 2015 [cited 15/Oct 2015]. Available from <http://thediplomat.com/2015/09/xi-jinping-pledges-cap-and-trade-scheme-for-china/>.

- Hu, j. 2005. Building up a Socialism Harmonious Society. In *Provincial Officer Symposium*. Beijing.
- . 2007. Hold High The Great Banner of Socialism with Chinese Characteristics in Order to Win New Victories In Building A Moderately Prosperous Society in The Struggle. In *17th CPC Congress*. Beijing.
- Huang, P. C. C. 2012. Profit-Making State Firms and China's Development Experience: "State Capitalism" or "Socialist Market Economy"? *Modern China* 38 (6):591-629.
- ICAEW. 2004. Sustainability: The Role of Accountants. London: Institute of Chartered Accountants in England and Wales.
- Islam, M. A., and C. Deegan. 2008. Motivations for An Organisation within A Developing Dountry to Report Social Responsibility Information. *Accounting, Auditing & Accountability Journal* 21 (6):850-874.
- Jamali, D. 2008. A Stakeholder Approach to Corporate Social Responsibility: A Fresh Perspective into Theory and Practice. *Journal of Business Ethics* 82 (1):213-231.
- Jamali, D., and R. Mirshak. 2007. Corporate Social Responsibility (CSR): Theory and Practice in a Developing Country Context. *Journal of Business Ethics* 72 (3):243-262.
- Jones, M. 2007. Hofstede - Culturally Questionable? In *Oxford Business & Economics Conference*. Oxford, UK.
- Jose, A., and S. M. Lee. 2007. Environmental Reporting of Global Corporations: A Content Analysis Based on Website Disclosures. *Journal of Business Ethics* 72 (4):307-321.
- Jose'-Manuel, P.-L., R. g.-D. n. Luis, G.-A. l. Isabel, and G. a.-S. n. Isabel-Mari'a. 2009. Factors Influencing The Disclosure of Greenhouse Gas Emissions in Companies World-Wide. *Management Decision* 47 (7):1133-1157.
- Kabir, H. M., and D. M. Akinnusi. 2012. Corporate Social and Environmental Accounting Information Reporting Practices in Swaziland. *Social Responsibility Journal* 8 (2):156-173.
- Keller, G., B. Warrack, and H. Bartel. 1988. *Statistics for Management and Economics: A systematic Approach*. Belmont, California: Wadsworth publishing company.

- Klaver, I., and M. Mulkey. 2006-2007. Panel: Regulating China's Water Resources: Perspectives, Concerns And Responsibilities Of Government, Business And The Community. *Vermont Journal of Environmental Law* 8 (2):456-472.
- Kmenta, J. 1986. *Elements of Econometrics*. New York, USA: Macmillan Publishing Company.
- Kolk, A., S. Walhain, and S. van de Wateringen. 2001. Environmental Reporting by The Fortune Global 250: Exploring The Influence of Nationality and Sector. *Business Strategy and the Environment* 10 (1):15-28.
- Kotz, D. M., and A. Zhu. 2010. *China's Growth Model: Problems and Alternatives* 2008 [cited 2/Sep 2010]. Available from <http://networkideas.org/networkideas/editorfiles/file/Andong.pdf>.
- KPMG. 2002. International Survey of Corporate Sustainability Reporting: Universiteit van Amsterdam.
- . 2008a. KPMG International Survey of Corporate Responsibility Reporting 2008, 55.
- . 2008b. Sustainable Reporting: A Guide in China, 36.
- . 2011. KPMG International Survey of Corporate Responsibility Reporting 2011, 34.
- . 2013. KPMG International Survey of Corporate Responsibility Reporting 2013, 82.
- KPMG, and Universiteit van Amsterdam. 2005. KPMG International Survey of Corporate Sustainability Reporting 2005: Universiteit van Amsterdam.
- Krippendorff, K. 1980. *Content Analysis: An introduction to its Methodology*. London.
- Krueger, A. 1974. The Political Economy of the Rent-Seeking Society. *American Economic Review* 64 (3):291-303.
- Krugman, P. 1999. *What happened to Asia*: Springer.
- Landry, P. F. 2008. *Decentralized authoritarianism in China*. New York: Cambridge University Press.

- Lázaro, P. C., and A. José. 1995. The Transformation of the State Extensive Growth Model in Cuba's Sugarcane Agriculture. *Agriculture and Human Values* 13 (1):59-68.
- Leeuwen, T. V. 2009. Discourse as the Recontextualization of Social Practice: A Guide. In *Methods of Critical Discourse Analysis (2nd Edition)*: SAGE Publication Ltd., 144-162.
- Li, F., B. Xiong, and B. Xu. 2008. Improving Public Access to Environmental Information in China. *Journal of Environmental Management* 88 (4):1649-1656.
- Li, J., D. Sutherland, L. Ning, and Y. Wang. 2014a. Firm ownership, industrial structure, and Regional Innovation Performance in China's Provinces. *Technology Analysis & Strategic Management* 26 (9):1001-1022.
- Li, J. S. 2003. Relation-based versus Rule-based Governance: an Explanation of the East Asian Miracle and Asian Crisis. *Review of International Economics* 11 (4):651-673.
- Li, M. H., L. Cui, and J. Lu. 2014b. Varieties in state capitalism: Outward FDI strategies of central and local state-owned enterprises from emerging economy countries. *Journal of International Business Studies* 45 (8):980-1004.
- Li, S., and J. Xia. 2008. The Roles and Performance of State Firms and Non-State Firms in China's Economic Transition. *World Development* 36 (1):39-54.
- Li, W., and R. Zhang. 2010. Corporate Social Responsibility, Ownership Structure, and Political Interference: Evidence from China. *Journal of Business Ethics* 96 (4):631-645.
- Li, X., X. Liu, and Y. Wang. 2012. A Model of China's State Capitalism
- Lieber, A. 2013. The Chinese Ideology: Reconciling the Politics with the Economics of Contemporary Reform. *Journal of Chinese Political Science* 18 (4):335-353.
- Lim, K. F. 2014. 'Socialism with Chinese characteristics': Uneven development, variegated neoliberalization and the dialectical differentiation of state spatiality. *Progress in Human Geography* 38 (2):221-247.
- Lin, L.-W., and C. J. Milhaupt. 2013. We are the (national) champions: Understanding the mechanisms of state capitalism in China. *Stanford Law Review* 65:697.

- Lin, N. 2011. Capitalism in China: A Centrally Managed Capitalism (CMC) and Its Future. *Management and Organization Review* 7 (1):63-96.
- Lin, Y., and T. Zhu. 2000. The Restructuring of Ownership and Governance in China: An Empirical Study of the Shareholding Reform. *Seoul Journal of Economics* 13 (3):279-300.
- Lindblom, C. K. 1994. The Implications of Organizational Legitimacy for Corporate Social Performance and Disclosur. In *Critical Perspectives on Accounting Conference*. New York.
- Link, J. 1983. Was ist un was bringt Diskurstaktik. *kulturRRevolution* 1 (6).
- Liu, G. S., P. Sun, and W. Wing Thye. 2007. What motivates and constrains politicians to privatize? The case of China. *Economics Letters* 97 (1):81-86.
- Liu, G. S., P. Sun, and W. T. Woo. 2006. The Political Economy of Chinese-Style Privatization: Motives and Constraints. *World Development* 34 (12):2016-2033.
- Liu, R. 2006. Reflection Regarding the Wave of Chinese Companies Listed Overseas (中国企业赴海外上市热潮反思). *Theoretical Exploration* 5 (161):90-92.
- Low, P. K. C. 2006. Father leadership: the Singapore case study. *Management Decision* 44 (1):89-104.
- Lu, X. 1997. Business Ethics in China. *Journal of business ethics* 16 (14):117-127.
- Lu, Y. J. 2008. A Study of Environmental Disclosures Made by Chinese Mineral Extraction Corporations. Master, School of Accounting and Finance, University of Wollongong, Wollongong.
- Lu, Y. J., and I. Abeysekera. 2014. Stakeholders' Power, Corporate Characteristics, and Social and Environmental Disclosure: Evidence from China. *Journal of Cleaner Production* 64 (1):426-436.
- Ma, L., and Y. Zhao. 2007. Determinants of Corporate Social Reporting in Chinese Listed Companies (上市公司社会责任信息披露影响因素研究). *Securities Market Herald* 3:4-10.
- Ma, Y. 2011. Market Capitalism, State-Style. *Policy Review* (165):102-108.
- Maddala, G. S. 1988. *Introduction to Econometrics*. New York, USA: Macmillan Publishing Company.

- Magness, V. 2006. Strategic Posture, Financial Performance and Environmental Disclosure. *Accounting, Auditing & Accountability Journal* 19 (4):540-563.
- Marinellin, M. 2012. Disembodied Words: The Ritualistic Quality of Political Discourse in the Era of Jiang Zemin. In *Discourse and Socio-political Transformations in Contemporary China*, edited by P. Chilton, H. Tian and R. Wodak: John Benjamins Publishing Co.
- Mathews, M. R. 1997. Twenty-five Years of Social and Environmental Accounting Research - Is there a Silver Jubilee to Celebrate? *Accounting, Auditing and Accountability Journal* 10 (4):481-531.
- Mattlin, M. 2009. Chinese Strategic state-owned enterprises and ownership control. *BICCS Asia paper* 4 (6):1-28.
- Mautner, G. 2009. Checks and balances: How Corpus Linguistics can Contribute to CDA. In *Methods of Critical Discourse Analysis (2nd Edition)*: SAGE Publication Ltd., 122-143.
- McNally, C. A., Boy Lüthje, and T. t. Brink. 2013. Rebalancing China's Emergent Capitalism: State Power, Economic Liberalization and Social Upgrading *Journal of Current Chinese Affairs* 32 (4):3-16.
- Milne, M. J., S. Walton, and H. Tregidga. 2009. Words not actions! The ideological role of sustainable development reporting. *Accounting, Auditing & Accountability Journal* 22 (8):1211-1257.
- Mitchell, R. K., B. R. Agle, and D. J. Wood. 1997. Toward A Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts. *Academy of Management. The Academy of Management Review* 22 (4):853-886.
- Modell, S. 2012. Strategy, Political Regulation and Management Control in The Public Sector: Institutional and Critical Perspectives. *Management Accounting Research* 23 (4):278-295.
- Modell, S., K. Jacobs, and F. Wiesel. 2007. A Process (Re)turn?: Path Dependencies, Institutions and Performance Management in Swedish Central Government. *Management Accounting Research* 18 (4):453-475.
- Mohammad, A., A. Shaila, and I. Md. Shahidul. 2009. Corporate Social Responsibility Reporting: Illustrations from a Less-Developed Country. *Journal of The Asia-Pacific Centre for Environmental Accountability* 15 (2):2-12.
- Moon, J., and X. Shen. 2010. CSR in China Research: Salience, Focus and Nature. *Journal of Business Ethics* 94 (4):613-629.

- Moore, S., and J. J. Wen. 2006. Reform of State Owned Enterprises and Challenges in China. *Journal of Technical Management in China* 1 (3):279-291.
- Mulvad, A. 2014. Competing Hegemonic Projects within China's Variegated Capitalism: 'Liberal' Guangdong vs. 'Statist' Chongqing. *New Political Economy* 20 (2):199-227.
- Mundlak, Y. 1978. On the Pooling of Time Series and Cross Section Data. *Econometrica* 46 (1):69-85.
- Munilla, L. S., and M. P. Miles. 2005. The Corporate Social Responsibility Continuum as a Component of Stakeholder Theory. *Business and Society Review* 110 (4):371-387.
- Musacchio, A., S. Lazzarini, and R. Aguilera. 2015. New Varieties of State Capitalism: Strategic and Governance Implications. *The Academy of Management Perspectives* 20 (1):115-131.
- Musacchio, A., and S. G. Lazzarini. 2014. *Reinventing State Capitalism*: Harvard University Press.
- Musteen, M., J. Francis, and D. K. Datta. 2010. The Influence of International Networks on Internationalization Speed and Performance: A Study of Czech SMEs. *Journal of World Business* 45 (3):197-205.
- Nee, V., S. Opper, and S. Wong. 2007. Developmental State and Corporate Governance in China. *Management and Organization Review* 3 (1):19-53.
- Nelson, R. 2008. Water Pollution in China: How Can Business Influence for Good? *Asian Business & Management* 7:489-509.
- Niskanen, J., and T. Nieminen. 2001. The Objectivity of Corporate Environmental Reporting: A Study of Finnish Listed Firm's Environmental Disclosures. *Business Strategy and the Environment* 10 (1):29-37.
- Noronha, C., S. Tou, M. I. Cynthia, and J. J. Guan. 2013. Corporate Social Responsibility Reporting in China: An Overview and Comparison with Major Trends. *Corporate Social Responsibility and Environmental Management* 20 (1):29-42.
- O'Donovan, G. 2002. Environmental Disclosures in the Annual Report: Extending the Applicability and Predictive Power of Legitimacy Theory. *Accounting, Auditing and Accountability Journal* 15 (3):344-371.
- Paola, C. 2011. Social and Environmental Reports: A short-term Diachronic Perspective on an Emerging Genre. In *Discourse, Communication and the*

- Enterprise. Genres and Trends*, edited by G. Garzone and M. Gotti. Bern, 169-191.
- Parker, L. D. 1986. Polemical Themes in Social Accounting: Scenario for Standards Setting *Advances in Public Interest Accounting* 1:67-93.
- Parmar, B., R. E. Freeman, J. Harrison, A. Wicks, L. Purnell, and S. De Colle. 2010. Stakeholder Theory: The State of the Art. *The Academy of Management Annals* 4 (1):403-445.
- Patten, D. M. 1992. Intra-Industry Environmental Disclosures in Response to The Alaskan Oil Spill: A Note on Legitimacy Theory. *Accounting, Organizations and Society* 17 (5):471-475.
- Peck, J., and J. Zhang. 2013. A variety of capitalism ... with Chinese characteristics? *Journal of Economic Geography* 13 (3):357-396.
- Petras, J. 1977. State Capitalism and the Third World. *Development and Change* 8 (1):1-17.
- Pew Charitable Trust. 2010a. Clean Energy Economy. Washington D.C.
- . 2010b. Who's Winning the Clean Energy Race? Growth, Competition and Opportunity in the World's Largest Economies. Washington D.C.
- Phillips, N., and C. Hardy. 2002. *Discourse analysis: Investigating processes of social construction*. Vol. 50: Thousand Oaks, CA: Sage.
- Porter, M. E. 1996. Capital choices: national systems of investment. In *As if the future mattered: Translating social and economic theory into human behavior*, edited by N. Goodwin. Ann Arbor: university of Michigan Press, 15-44.
- Prado-Lorenzo, J.-M., I. Gallego-Alvarez, and I. M. Garcia-Sanchez. 2009. Stakeholder Engagement and Corporate Social Responsibility Reporting: The Ownership Structure Effect. *Corporate Social Responsibility and Environmental Management* 16 (2):94-107.
- Qian, W., and J. Zhu. 2015. Understanding Environmental Disclosure through the Lens of Stakeholder Salience: an Exploratory Case Study in China. Paper read at 14th Austrealian Centre on Social and Environmentl Accounting Research Conference - ACSEAR 2015, at Macquarie University, Sydney, Australia.
- Qian, Y., and H. Tian. 2014. A Decade of Change in China: A Corpus-Based Discourse Analysis of Ten Government Work Reports. In *Discourse, Politics and Media in Contemporary China*, edited by Q. Cao, H. Tian and P. Chilton. Netherland: John Benjamins Publishing Company, 77-95.

- Qu, W., and P. Leung. 2006. Cultural Impact on Chinese Corporate Disclosure - a Corporate Governance Perspective. *Managerial Auditing Journal* 21 (3):241-264.
- Rao, K., and C. Tilt. 2015. Board Composition and Corporate Social Responsibility: The Role of Diversity, Gender, Strategy and Decision Making. *Journal of Business Ethics*:1-21.
- Rao, K. K., C. A. Tilt, and L. H. Lester. 2012. Corporate Governance and Environmental Reporting: an Australian Study. *Corporate Governance: The International Journal of Business In Society* 12 (2):143-163.
- RCCSR, R. C. f. C. S. R. o. t. A. o. S. S. 2011. Survey of Corporate Responsibility Reporting of Chinese Listed Companies 2011 (2011 中国上市公司社会责任信息披露研究报告).
- Reverte, C. 2009. Determinants of corporate social responsibility disclosure ratings by Spanish listed firms. *Journal of Business Ethics* 88 (2):351-366.
- Roberts, R. W. 1992. Determinants of Corporate Social Responsibility Disclosure: An Application of Stakeholder Theory. *Accounting, Organizations and Society* 17 (6):595.
- Roca, L. C., and C. Searcy. 2012. An analysis of indicators disclosed in corporate sustainability reports. *Journal of Cleaner Production* 20 (1):103-118.
- Rohde, R. A., and R. A. Muller. 2015. Air Pollution in China: Mapping of Concentrations and Sources. Berkeley: Berkeley Earth.
- Rowe, A. L., and J. Guthrie. 2009. Institutional Cultural Norms of Chinese Corporate Environmental Reporting. In *nterdisciplinary Perspectives on Accounting Conference*. University Innsbruck, Austria.
- Royse, D. 2008. *Research Methods in Social Work, 5th edn*. Belmont, CA: Thomson Higher Education.
- Sachs, J. D., and W. T. Woo. 2001. Understanding china's economic performance. *The Journal of Policy Reform* 4 (1):1-50.
- Scapens, R. W. 1994. Never Mind the Gap: Towards an Institutional Perspective on Management Accounting Practice. *Management Accounting Research* 5 (3-4):301-321.
- . 2006. Understanding Management Accounting Practices: A Personal Journey. *The British Accounting Review* 38 (1):1-30.

- SCIOC, T. S. C. I. O. o. t. P. s. R. o. C. 2008. *White paper: China's Efforts and Achievements in Promoting the Rule of Law* (《中国的法治建设》白皮书).
- . 2011. *White Paper on the Socialism With Chinese Characteristics Legal System* (《中国特色社会主义法律体系》白皮书).
- Seet, P.-S. 2009. Power Paradoxes in National Innovation Systems - An Exploratory Study Among Singapore's Technocrats and Technopreneurs. *International Journal of Foresight and Innovation Policy* 5 (4):260-276.
- SEPA. 2011. *2005 Report on the State of the Environment in China* 2006 [cited 09/Sept 2011]. Available from http://english.sepa.gov.cn/standards_reports/soe/soe2005/200706/t20070622_105622.htm.
- . 2014. 2013 report on the State of the Environment in China. Beijing, China: the State Environmental Protection Administration of China
- Shan, Y. G. 2009. Corporate Disclosures of Related-party Relationships and Transactions in China: Agency, Governance, Legitimacy and Signalling Influences, School of Commerce, University of South Australia, Adelaide.
- Sharma, U., S. Lawrence, and A. Lowe. 2010. Institutional Contradiction and Management Control Innovation: A Field Study of Total Quality Management Practices in a Privatized Telecommunication Company. *Management Accounting Research* 21 (4):251-264.
- Shatkin, G. 2012. The True Meaning of the 'Singapore Model': State Capitalism and Urban Planning. Paper read at Association of American Geographers Annual Meeting, at Washington, USA.
- Shen, H., and T. Jin. 2006. Analyzing Corporate Social Responsibility Reporting of Listed Companies in Chian (我国上市公司社会责任信息披露的现状分析). *Audit and Economic Research* 3:84-87.
- Shen, H., and L. Yang. 2008. The Value of Corporate Social Reporting: Evidence from Chinese Listed Companies (公司社會責任信息披露的價值相關性研究—來自我國上市公司的經驗證據). *Contemporary Finance & Economics* 3:5.
- Sim, S.-F. 2001. Asian Values, Authoritarianism and Capitalism in Singapore. *Javnost - The Public* 8 (2):45-66.
- sina. 2011. *35 Years' History of the Development of the Ministry of Environment Protection : Give Way to Environment Protection* (解析环保总局升部 35 年

历程：发展为环保让路) 2008 [cited 12/Nov 2011]. Available from <http://news.sina.com.cn/c/2008-03-17/092515164141.shtml>.

- Situ, H., and C. A. Tilt. 2012. Chinese Government as a Determinant of Corporate Environmental Reporting: a Study of Large Chinese Listed Companies. *Journal Asia-Pacific Centre for Environmental Accountability* 18 (4):251-286.
- Situ, H., C. A. Tilt, S. Pi-Shen, and S. Max. 2013. Understanding the Impact of Chinese Government and Other Stakeholders on Corporate Environmental Reporting in China. In *7th Asia Pacific Interdisciplinary Research in Accounting Conference (APIRA)*. Kobe, Japan.
- Skouloudis, A., K. Evangelins, and F. Kourmoussis. 2009. Development of an Evaluation Methodology for Triple Bottom Line Reports Using International Standards on Reporting. *Environmental Management* 44 (2):298-311.
- Solomon, J., A. Solomon, S. Norton, and N. Joseph. 2011. Private Climate Change Reporting: An Emerging Discourse of Risk and Opportunity? *Accounting, Auditing & Accountability Journal* 24 (8):1119-1148.
- Song, X., and M. Gong. 2007. Assessing Quality and Decision-making Value of Corporate Social Reporting: A Content Analysis of Listed Companies' Annual Report (社会责任信息的质量与决策价值评价—上市公司会计年报的内容分析). *Accounting Research* 2:37-43.
- Song, X., and J. Li. 1992. *Accounting for Social Responsibility*. Beijing: China Financial Economics Publisher.
- Tan, C. H. 1989. Confucianism and nation building in Singapore. *International Journal of Social Economics* 16 (8):5-16.
- Tang, Y. 2015. *Green Environment Investment to Top \$3.7t in Next Five Years*. China Daily 2015 [cited 22/Oct 2015]. Available from http://www.chinadaily.com.cn/china/2015-06/17/content_21034171.htm.
- Taylor, D., and Y. G. Shan. 2007. What Drives the Fledgling Practice of Social and Environmental Reporting by Chinese Companies Listed in Hong Kong? *Accounting, Accountability & Performance* 13 (2):55.
- Ten Brink, T. 2013. Paradoxes of Prosperity in China's New Capitalism. *Journal of Current Chinese Affairs* 42 (4):17-44.
- Tenorio, E. H. 2014. Critical Discourse Analysis, An overview, 183-210.
- The Climate Group. 2015. *China on Track to Spend US \$817 Billion in Environmental Protection* 2014 [cited 22/Oct 2015]. Available from

<http://www.theclimategroup.org/what-we-do/news-and-blogs/china-announces-us-817-billion-investment-in/>.

- The Economist. 2012. State Capitalism. *The Economist* January:1-14.
- . 2015. *Norway: The rich cousin* 2013 [cited 17/Dec 2015]. Available from <http://www.economist.com/news/special-report/21570842-oil-makes-norway-different-rest-region-only-up-point-rich>.
- Thomas, P. 2003. The Recontextualization of Management: A Discourse-based Approach to Analysing the Development of Management Thinking. *Journal of Management Studies* 40 (4):775-801.
- Thompson, P., and Z. Zakaria. 2004. Corporate Social Responsibility Reporting in Malaysia: Progress and Prospects *Journal of Corporate Citizenship* 13 (March):125-136.
- Tilt, C. A. 1997. Environmental Policies of Major Australian Companies: Australian Evidence. *British Accounting Review* 29 (4):367-394.
- . 2001. The Content and Disclosure of Australian Corporate Environmental Policies. *Accounting, Auditing and Accountability Journal* 14 (2):190-212.
- Tong, S. Y. 2009. Why privatize or why not? Empirical evidence from China's SOEs reform. *China Economic Review* 20 (3):402-413.
- Tregidga, H., K. Kearins, and M. Milne. 2013. The Politics of Knowing “Organizational Sustainable Development”. *Organization & Environment* 26 (1):102-129.
- Tregidga, H., M. Milne, and K. Kearins. 2014. (Re)presenting ‘Sustainable Organizations’. *Accounting, Organizations and Society* 39 (6):477-494.
- Tregidga, H., M. Milne, and G. Lehman. 2012. Analyzing the Quality, Meaning and Accountability of Organizational Reporting and Communication: Directions for Future Research. *Accounting Forum* 36 (3):223-230.
- Tregidga, H., and M. J. Milne. 2006. From Sustainable Management to Sustainable Development: a Longitudinal Analysis of a Leading New Zealand Environmental Reporter. *Business Strategy and the Environment* 15 (4):219-241.
- Trotman, K. T., and G. W. Bradley. 1981. Associations Between Social Responsibility Disclosure and Characteristics of Companies. *Accounting, Organizations and Society* 6 (4):355-362.

- Ullmann, A. A. 1985. Data in Search of a Theory: A Critical Examination of the Relationships among Social Performance, Social Disclosure, and Economic Performance of U. S. Firms. *The Academy of Management Review* 10 (3):540-557.
- Unerman, J. 2000. An Investigation into the Development of Accounting of Social, Environmental and Ethical Accountability: A Century of Corporate Social Disclosures at Shell, Sheffield University Management School, University of Sheffield.
- Unerman, J., and M. Bennett. 2004. Increased Stakeholder Dialogue and the Internet: Towards Greater Corporate Accountability or Reinforcing Capitalist Hegemony. *Accounting, Organizations and Society* 29 (7):685-707.
- van den Burg, S. W. K. 2008. Environmental Information Disclosure in China. In *International Sociological Association*. Barcelona, Spain, 1-16.
- Van der Laan, S. 2015. *The Role of Theory in Explaining Motivation for Corporate Social Disclosure: Voluntary Disclosures vs 'Solicited' Disclosures*. University of Wolongong 2009 [cited 20/Jun 2015]. Available from <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1062&context=aabfj>.
- Van der Laan Smith, J., A. Adhikari, and R. H. Tondkar. 2005. Exploring Differences in Social Disclosures Internationally: A Stakeholder Perspective. *Journal of Accounting and Public Policy* 24 (2):123-151.
- Van Dijk, T. A. 1993. Principle of Critical Discourse Analysis. *Discourse & Society* 4 (2):249-283.
- Van Dijk, T. A. 2009. Critical Discourse Analysis: A Sociocognitive Approach. In *Methods of Critical Discourse Analysis (2nd Edition)*: SAGE Publication Ltd., 62-86.
- Van Leeuwen, T., and R. Wodak. 1999. Legitimizing Immigration Control: A Discourse-Historical Analysis. *Discourse Studies* 1 (1):83-118.
- Vitell, S. J., and E. R. Hidalgo. 2006. The Impact of Corporate Ethical Values and Enforcement of Ethical Codes on the Perceived Importance of Ethics in Business: A Comparison of U.S. and Spanish Managers. *Journal of Business Ethics* 64 (1):31-43.
- Waddock, S. A., and S. B. Graves. 1997. The Corporate Social Performance–Financial Performance Link. *Strategic Management Journal* 18 (4):303-319.
- Wang, H., J. Bi, J. wang, D. Cao, G. Lu, and Y. Wang. 2002. Environmental Performance Rating and Disclosure: China's Green-Watch Program. World Bank Policy Research Working Paper 2889.

- Wang, K., S. O, and M. C. Claiborne. 2008. Determinants and Consequences of Voluntary Disclosure in An Emerging Market: Evidence from China. *Journal of International Accounting Auditing & Taxation* 17 (1):14.
- Wang, L., and H. Juslin. 2009. The impact of Chinese Culture on Corporate Social Responsibility: The Harmony Approach. *Journal of Business Ethics* 88 (Supplement 3):433-451.
- Wang, W. 2011. Social Responsible Investment: the New Investment Area for China (社会责任投资：中国未来投资新领域). *China WTO Tribune* 10.
- Wang, Y., P. Liu, Y. Xun, and Y. Wang. 2012. *Influence of Social Responsibility and Relevant Certification on Chinese Enterprises (社会责任及其标准认证对我国企业的影响与对策分析报告)*. Global Compact Promotion Office of China Enterprise Confederation 2012 [cited 10/Jan 2012]. Available from http://gcp.cec-ceda.org.cn/files/info_166.html.
- Wodak, R., and M. Meyer. 2009. *Methods of Critical Discourse Analysis (2nd Edition)*: SAGE Publication Ltd.
- World Bank. 2011. *Polluters in China Face Public Scrutiny*. World Bank 2006 [cited 25/May 2011]. Available from <http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:20913964~pagePK:64257043~piPK:437376~theSitePK:4607,00.html>.
- . 2010. *World Development Indicators (WDI) Database* 2008 [cited 07/Apr 2010]. Available from <http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20535285~menuPK:1192694~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html>.
- World Bank, and State Environmental Protection Administration. 2011. *Cost of Pollution in China: Economic Estimates of Physical Damage* 2007 [cited 09/Sep 2011]. Available from <http://www.worldbank.org/research/2007/02/7503894/cost-pollution-china-economic-estimates-physical-damages>.
- Xiao, G. 1998. Reforming the Governance Structure of China's State-Owned Enterprises. *Public Administration and Development* 18 (3):273-280.
- Xiao, H., and J. Yuan. 2007. Ownership Structure, Board Composition and Corporate Voluntary Disclosure. *Managerial Auditing Journal* 22 (6):604-619.
- Xiao, S. F., and W. Hu. 2005. A Study on Environmental Information Disclosure System of Chinese Enterprises (关于中国企业环境信息披露系统的研究). *Accounting Research* 3:47-52.

- Xiao, S. F., and H. Y. Mi. 2004. Analysis on the Survey of Enterprises' Environmental Protection and Accounting -Views on Necessity and Feasibility of Establishing Environmental Accounting in China. *Green China* 22:51 – 54.
- Xinhua News. 2011. *It Time to End the Extensive Economic Growth Modle* 2005 [cited 20/Aug 2011]. Available from http://news.xinhuanet.com/politics/2005-10/18/content_3641685.htm.
- Xu, G. 2015. *State-Owned Enterprises in China: How Big are They?* 2010 [cited 07/May 2015]. Available from <http://blogs.worldbank.org/eastasiapacific/state-owned-enterprises-in-china-how-big-are-they>.
- Xue, L., U. E. Simonis, and D. J. Dudek. 2006. Environmental Governance in China, edited by Report of the Task Force on Environmental Governance to the China Council for International Cooperation on Environment and Development. Beijing, 78.
- Xun, J. 2013. Corporate Social Responsibility in China: a Preferential Stakeholder Model and Effects. *Business Strategy and the Environment* 22 (7):471-483.
- Yamak, S., and O. Suer. 2005. State as A Stakeholder. *Corporate Governance* 5 (2):111-120.
- Yang, F. 2011. *China Political System (in Chinese)*. China.org.cn 2011 [cited 04/May 2011]. Available from <http://www.china.com.cn/ch-zhengzhi/index.htm>.
- Yee, H. 2009. The re-emergence of the public accounting profession in China: A hegemonic analysis. *Critical Perspectives on Accounting* 20 (1):71-92.
- Yin, G. F., and Z. X. Guan. 2009. Corporate Social Responsibility of Multinational Corporations in China, Status and Trends (在華跨國公司社會責任實踐現狀與趨勢). *China WTO Tribune* 3:72-75.
- Zamir, F., A. Hasan, and G. A. Mirza. 2012. Trend of Corporate Environmental Reporting in Pakistan. *International Proceedings of Economics Development and Research* 57:117.
- Zhang, B., J. Bi, Z. Yuan, J. Ge, B. Liu, and M. Bu. 2007. Why do Firms Engage in Environmental Management? An Empirical Study in China. *Journal of Cleaner Production* 16 (10):1036-1045.
- Zhang, D., and O. Freestone. 2013. China's unfinished state-owned enterprise reforms. *Economic Round-Up* (2):77-99.

- Zhang, J., H. Guo, B. Li, and W. Wang. 2009. The Influence of Financial Factors on Environmental Information Disclosure in China Chemical Industry. *International Journal of Global Environmental Issues* 9 (3):272-286.
- Zhang, L., A. P. J. Mol, G. He, and Y. Lu. 2010. An Implementation Assessment of China's Environmental Information Disclosure Decree. *Journal of Environmental Sciences* 22 (10):1649-1656.
- Zhang, Q. 2012. The Discursive Construction of the Social Stratification Order in Reforming China. In *Discourse and Socio-political Transformations in Contemporary China*, edited by P. Chilton, H. Tian and R. Wodak. Amsterdam: John Benjamins Publishing Co., 19-37.
- Zhang, S. 1993. Relation between Economic Development and Corporate Social Accountability (经济发展与社会责任会计). *China Agriculture Accounting* 2:22-30.
- Zhao, J. 2011. Funding Energy Industry: International Finance Corporation Invest in Chinese Green Energy (为能源业提供融资动力：国际金融公司投资中国绿色能源). *China WTO Tribune* 10.
- Zhao, Y. 2009. Assessing the Environmental Impact of Projects: A Critique of the EIA Legal Regime in China. *Natural Resources Journal* 49 (2):485-524.
- Zheng, Y. 2010. *China Model: Experience and Dilemma (中国模式：经验与困局)*. Vol. 1. Zhengzhou, China: Zhengzhou People Publishing House.
- Zhu, J., and H. Xue. 2008. Corporate Characteristics and Voluntary Environmental Reporting: Evidence from Manufacture Companies Listed in Shanghai A Stock Market (公司特征与自愿性环境信息披露关系的实证研究—来自沪市 A 股制造业上市公司的经验数据). *Forecasting* 5:58-63.
- Zhu, J. F., and H. F. Xue. 2007. Research on Environmental Accounting in China: History, Status quo and Future. *Journal of Modern Accounting and Auditing* 3 (1):41-46.