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The Influence of Corporate Governance Structure on Corporate Social Responsibility: Empirical Evidence from China

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ABSTRACT

There are a large number of Corporate Social Responsibility ('CSR') deficiency cases in China which trigger the attention by all sector of community from 2011, relating to the fact that some companies chase to maximize the economic interest while ignore their social responsibility. In addition, the Academia deeps the research on the problem of Corporate Governance ('CG') switches from single Corporate Governance factor and structural level to the systematic evaluation and research of Corporate Governance effectiveness.

This paper includes the theoretical reviews and empirical research analysis. In theoretical review, the paper elaborates on the definition of CSR, CG and reviews the previous researches about the influence of CG on CSR. In empirical research, this paper regards the listed 66 companies which consecutively enter into 'Top 100 CSR Development Index of Chinese Company' from 2009-2011 as the research samples and carries out the research on the mutual relationship between Corporate Governance Structure and Corporate Social Responsibility. The research result shows: 1.CSR of State-Owned Company is higher than Non-State-Owned Company. 2. The Corporate Governance Structure has a significant influence on Corporate Social Responsibility, such as **CEO Duality, Number of Board Member and Effective Incentive on the Managerial level.** 3. There is serious deficiency in the Corporate Governance Structure ('CGS') of listed companies in China. According to this actual situation, there is distinctive policy suggestion to modify the Corporate Governance Structure of different kind of companies.

Key words: Corporate Governance, Corporate Social Responsibility, State-Owned Company, Non State-Owned Company

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1 Introduction

1.1 Research Background

This research topic comes from the thinking to a series of Corporate Social Responsibility deficiency cases from 2011, such as 'Slanting Building','Shuanghui Lean meat essence'(Chemical addictive to the feed of pig), 'Davinci Furniture(Counterfeiting original manufacturing country)', 'KFC Soybean Milk'(Use the soybean powder instead of freshly ground soybean), 'Ajisen Noodles'(Use the soup powder instead of bone to cook the soup), 'Oil Spill of China National Offshore Oil Corp', 'Yunnan Company Chromium Waste Pollution'. All these abovementioned cases show the prevalent phenomenon of morality and ethics deficiency. Corporate Social Responsibility is a social problem which attracts great social attention, but at present, the development situation of CSR in China is severe.

1.1.1 The severe development situation of CSR in China

The western developed countries had gradually surged a CSR Movement which mainly included Human Right, Labor and Environment Protection in 1980's. CSR have been an irreversible international trend with this globalization background. Since the opening and reforming, especially after China being the member of WTO, the harmonious social development and sustainable economic development has been new strategic objective and many companies have participated in the international competition, they will be inevitably affected by global CSR movement. The globalization and participation in the international competition set up the requirement for the Chinese companies to face positively CSR Movement and initiatively carry out CSR. Many excellent entrepreneurs has transformed from solely chase material well-being to pay more attention to the realization of self worth and undertake more social responsibility. Within this era background, the Academia and Business Community begins to follow more closely to CSR problem. The company can be recognized, accepted and have more development opportunity only when they pay attention to social progress and development while develop themselves.

The current development situation of CSR in China is severe while the western countries have grown more attention to CSR. In 21th June, the coal mine accident in Pingdingshan, He Nan, led to the death of 49 people due to the lack of government supervision and solely revenue oriented of the miners. In 28th July 2010, the death toll in the gas pipe explosion was 22. In 13th November 2010, the Songhua River has polluted by riverside chemical company. In 15th March 2011, it was reported that the pork which contained the Lean Meat Essence (The chemical addictive which will cause the chromosome distortion and cancer) has purchased by Shuanghui, the famous sausage producer in China without any examination. And the meat products were still in sale when this truth has been reported.

In 11th April 2011, there was the news reporting that the company called Sheng Lu in Shanghai was producing the poisonous steamed bread. In 21th March 2011, the Construction Engineering Management Bureau of Qingdao had announced the treatment result regarding to some companies which have the wage arrears to the workers. In 10th July 2011, CCTV(China Central Television) have exposed that the Davinci Furniture falsified the original manufacturing country. In 14th August 2011, Chromium waste in Yunnan has resulted in great pollution of the agricultural land.

All these cases are closely related to environment, food security, labor right, product quality, business reputation even the life of ordinary folk, which keep reminding the actual situation that the execution of CSR in China is still in the very beginning stage and some CSR deficiency cases are still growing in intensity, such as coal mine accident, environmental pollution, explosion, wage arrears and food security. Thus, paying attention to CSR has the important actual significance.

1.1.2 The influence of Corporate Governance Structure on CSR

In this historical period of building up a better-off society, CSR have become a coordinative factor of economic development and social progress, meanwhile, it will be the important measuring indicator of corporate sustainable development. Carrying out and stimulating the CSR is not only the important strategy of sustainable development and gaining advantage of Chinese companies but also the important channel with which the Chinese companies go globally and participate the global

competition. But what are the factors affecting CSR?

The actual controller of the company is the main body to fulfill the CSR and what regulate and constrain the behavior of the company manager is actually to strengthen the CSR. But the more effective method is to focus on the company itself, it is to say, through modifying the internal corporate governance structure; the company can build up a practical institution for CSR. Under a sound corporate governance structure, the company can better overcome the short sighted or illegal behavior, the rights and interests of the investors can be protected and the market environment can be modified. Meanwhile, the employees and customers can also be protected. Thus, the improvement of corporate governance structure is the conformation to carry out CSR.

1.2 Research Objective and Application Value

1.2.1 Research objective

The public has paid closely attention to CSR, but at present, the development situation of CSR in China is severe. It is not only the company's external reason, but corporate governance structure itself that leads to the deficiency of CSR. What is the real situation of CSR in China? What is the difference of the execution of CSR between State-Owned company and Non-State-Owned company under the differentiated corporate governance structure? What measure should be carried out by the government in order to stimulate and help the company to improve social responsibility awareness? All these questions will be answered in the following research.

1.2.2 Application value

This paper carries out the research about the influence of corporate governance structure on the CSR from the view of CSR and specifies the company classification into State-Owned Company and Non-State-Owned Company in order to study the difference of their corporate governance structure. Up to now, this kind of empirical analysis is very rare. Thus, this paper will have the theoretical value regarding to the empirical research of the relationship between the corporate governance structure and CSR. And the research conclusion and discovery has the important practical value to

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Chinese social and economic development as well as the sustainable development of the listed companies. Besides, it has also positive value on how the government stimulates the company to fulfill the CSR.

Secondly, this paper adopts the 'Top 100 CSR Development Index of Chinese Company' published by Chinese Academy of Social Sciences as the evaluation standard of CSR, which is professional and authoritative. It makes the empirical research more scientific and believable.

1.3 Research Content, Method and Technical Path

1.3.1 Research content

This paper divides into several parts in order to carry out the research about the influence of corporate governance structure on CSR:

First part is Introduction. To elaborate the background of problem, the research objective, research content and method as well.

Second part is Literature Review. To specifically elaborate the relevant conception of corporate governance and CSR, summarize the influence of corporate governance structure on CSR in order to lay the theoretical foundation to the hypothesis of the research.

Third part includes research design, empirical analysis and result analysis, which is the core of this paper. The third part designs and selects the measuring standard of corporate governance structure and CSR. Based on this, it has put forward 10 research hypotheses, which converts the 10 variables to be operational and conducts the data collection and processing. And then it uses the statistical software STATA 10.0 to have the descriptive statistics, correlation analysis and regression analysis on the sample data, testing the hypotheses based on the empirical research result; and analyze the influence of CGS on CSR.

Fourth part is the research conclusions and suggestions, mainly includes the summary of research conclusions. And based on this, propose the corresponding operational suggestions to the companies and government respectively.

1.3.2 Research method

This paper adopts two kinds of research methods, including normative research

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and empirical research.

(1) Normative Research Method. Through the research analysis on existing documents about corporate governance, CGS, CSR and the influence of CGS on CSR, acquire indirectly the information of research object and explore the general rule of the research content.

(2) Empirical Research Method. When this paper analyzes the influence of CGS on CSR, it adopts the Empirical Research Method. Based on the combination of relevant research of the domestic and overseas scholars, it put forward 10 research hypotheses on the correlation between the CGS and CSR of the Chinese listed companies. And then it uses the statistical software STATA 10.0 to have the descriptive statistics, correlation analysis and multiple regression analysis on the 66 sample data to test the hypothesis and carry out the explanation and analysis.

1.3.3 Technical path

Figure 1 shows the technical path of this paper, it is mainly combined with proposing problems, parsing problem and solving problems.

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┌─────────────┐        ┌──────────────────────┐
│    Raise    │        │ Review of corporate  │
│   problem   │───┐    │ governance theory    │
│             │   │    └──────────────────────┘
└─────────────┘   │    ┌──────────────────────┐
       │          ├───▶│ Review of CSR theory │
       │          │    └──────────────────────┘
       │          │    ┌──────────────────────┐
       │          └───▶│ Review of the        │
       │               │ influence of CGS on  │
       │               │ CSR                  │
       │               └──────────────────────┘
       ▼                          │
┌─────────────┐                   ▼
│    Parse    │        ┌──────────────────────┐    ┌──────────────────┐
│   Problem   │───────▶│ Empirical research   │◀───│ Indicators of CSR│
│             │        │ about the influence  │    └──────────────────┘
└─────────────┘        │ of CGS on CSR        │    ┌──────────────────┐
       │               └──────────────────────┘◀───│ Indicators of CGS│
       │                          │                 └──────────────────┘
       ▼                          ▼
┌─────────────┐        ┌──────────────────────┐
│    Solve    │───────▶│ Suggestions to       │
│   Problem   │        │ promote the CSR      │
│             │        │ development in China.│
└─────────────┘        └──────────────────────┘
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Figure   1 Technical path

2 Literature Review

2.1 Governance Structure

There is both broad definition and narrow definition for Governance structure. The narrow definition of governance structure refers to a group of linked institution arrangement to standardize the relationship of responsibility, right, and interest among the shareholders, the board and the general manager. The broad definition of governance structure also includes the relationship between the company and other stakeholders, and the relevant law, regulation and listed company rules.

The OECD (Organization for Economic Cooperation and Development) has signed and published 'OECD Corporate Governance Principle' ('The Principle') in 1999 and the revised edition in 2004. The Principle has been world widely recognized as showed in Figure 2.
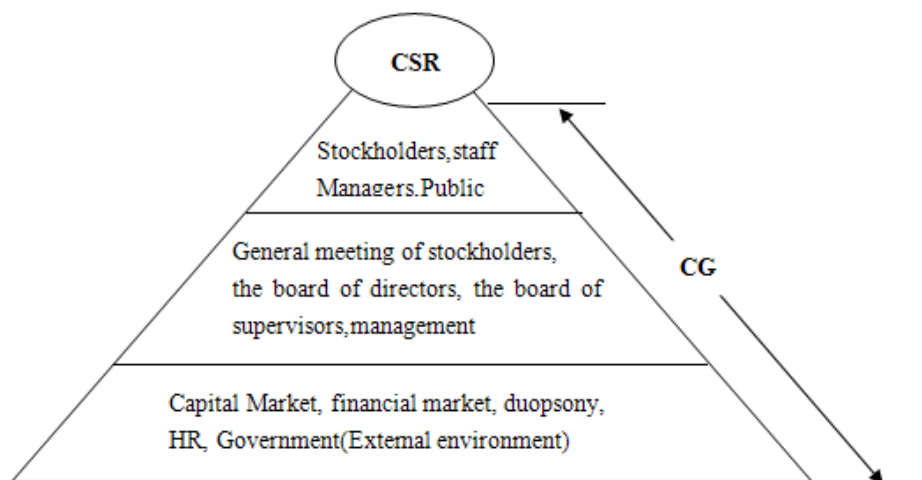
Figure   2 Basic framework of CG(Corporate Governance)

The theories which are closely related to the governance theory are Principal-agent Theory and Stakeholder Theory. The Principal-agent Theory considers that the most important objective of the company is to maximize the investors' profit and the manager should be responsible for the shareholders and regard the maximized profit of shareholder as the objective. But due to the existing of the asymmetry information, it leads to the appearance of the problem that the agent chases their own interest and harms the interest of principal. Thus, the main objective of CGS is to

solve the agent problem.

In the discussion of CGS in western countries, Principal-agent Theory is in the leading position, but the Stakeholder theory emphasizes the importance to protect the interest of stakeholders. The latter theory negates the fact that the shareholders hold the highest position in the company, but only ones of stakeholders.

2.1.1 Corporate Governance Structure model

(1)Anglo-Saxon model.

In the Anglo-Saxon model, CGS is composed by the Shareholders meeting, Board of Directors and Manager, in which the Shareholders meeting is the standing organization, the Board of Directors is the decision-making organization and the Manager is the daily management organization. And within this model, there is no independent Board of Supervisor, which is replaced by the Internal Auditing Committee under the Board of Directors.

The characters of the Anglo-Saxon model can be summarized as following, the company has large scale and the share has high liquidity and dispersibility, which the main source is the investment fund and the dispersed investors. It conducts the single layer governance model without the Board of Supervisor that the Board of Directors is the core part and the external board members are more than 50%. The main part of corporate governance mainly relies on the external governance.
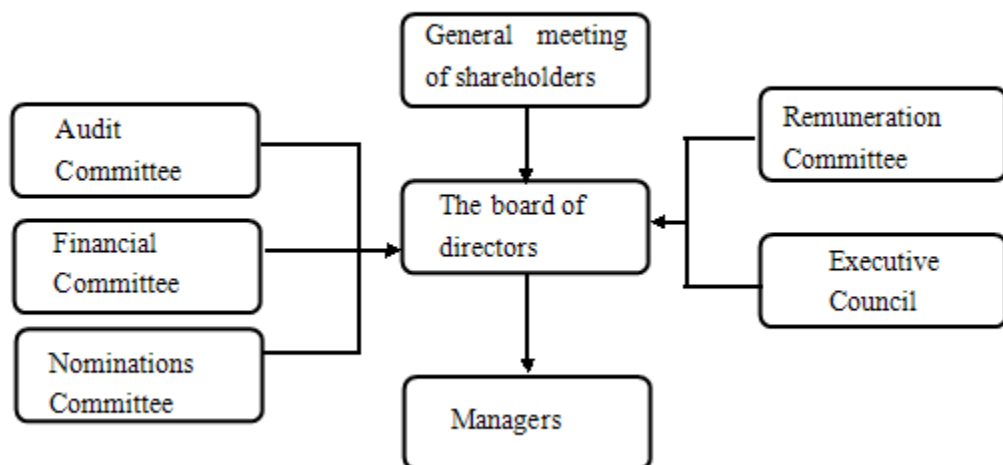
Figure   3 CGS of Anglo-Saxon model.

(2)Japanese-German Model

It is also called Bank-based model. The difference between Anglo-Saxon model and Japanese-German Model is that the latter belongs to co-governance model.

The features of German CGS are listed as following, high share density and in general, financial company, family entrepreneur, insurance company and bank hold the largest percent of shares. Besides, the Board of Directors and Board of Supervisor co-govern the company. The corporate governance of German companies is realized by the internal governance, which is similar to that of the Anglo-Saxon model.

The features of Japanese Model can be concluded as following, the natural person holds very few shares, which means the share is highly dispersed, making the General Meeting of Shareholders almost nonexistent. As for the Board of Directors, its members are always generated internally and the committee led by the president or general manager has the decision-making power and most supervision is executed by the bank.
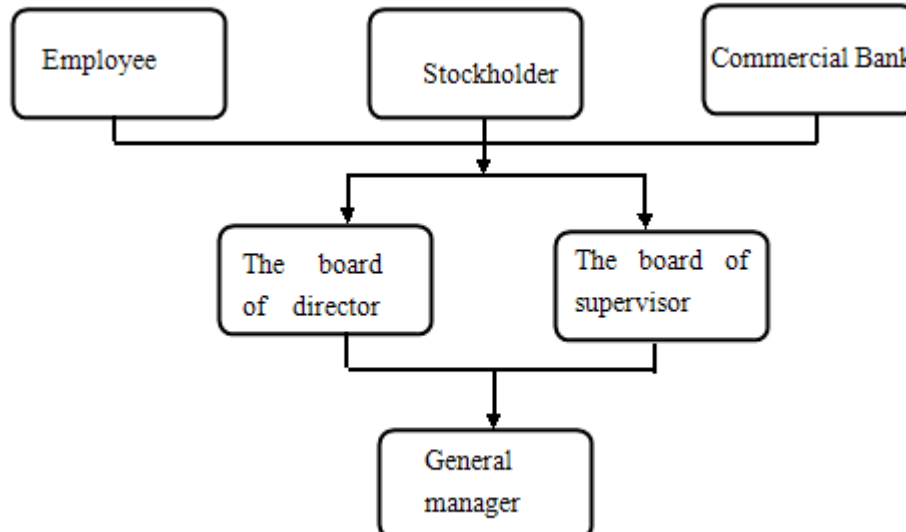
Figure 4 CGS of Japanese-German model

(3)Family-based Governance Model.

The features of Family-based Governance Model have the following three aspects.

Firstly, the ownership or share of this model is mainly controlled by the family member. There are two types of situations, in the first case, the original ownership has solely held by the entrepreneur, but after his retirement, it has been transferred to his son or daughter. In the other case, some companies which are originally at the enclosing state sell some shares to other person and company out of the family or become the listed company benefited from the opening of the company and the pressure from the public, turning into the diversification of ownership, but they are still controlled by the family member.

Secondly, the managerial control is grasped by the family member. There also exist two kinds of specific cases. The first case is that the managerial control of the company is mainly controlled by the siblings and the other type is that the siblings and the relatives grasp the managerial control together.

Thirdly, the process of decision-making is patriarchal. The important decisions in the company such as how to set up new companies or explore the business, personnel appointment and dismiss and the successor is decided by the company founders in the family. Even though they are retired, the decisions made by the successors should be agreed by the head of the family.

2.1.2 CGS and features of State-Owned Company

Since the 1990s, China has gradually popularized and quickly developed the corporate system reform. But a lot of problems appear during the transformation, such as 'Owner Absence',' Insider-Control' , 'strong shareholders deprival' and the corruption of managers, all of these problems restrict the long term development of the State-Owned companies.

Regarding the internal governance structure, the General Meeting of Shareholders is the most important place where the shareholders perform their rights. However, the actual effectiveness of the General Meeting of Shareholders of the listed State-Owned companies in China is not so ideal and standardizing. Instead, they only go through the formality. Thus, the original function of the General Meeting of Shareholders cannot be exerted. It mainly shows in the following two aspects: 1. Low frequency of the General Meeting of Shareholders, most of the listed companies in China seldom convene the interim meeting of the shareholders, even the General Meeting of Shareholders is only to go through the formality. 2. Inferior quality of the

General Meeting of Shareholders. In general, the international common practice is that the shareholders know more important information about the company by posing questions to the Board of Directors, Board of Supervisor and other key auditors. But in the General Meeting of Shareholders in China, the voice of shareholders cannot be listened, especially that of the minor shareholders.

The Board of Directors is the decision-making organization which is composed by the directors, manages the internal company business and stands for the company externally. But in fact, most of the Board of Directors of the listed State-Owned companies adopts the Board of Directors model similar to the Anglo-Saxon model which has the decision-making power to the important issues and generally exerts its fundamental function. But in China, the operators predominate the right of financing, investment and personnel and then easily control the Board of Directors, i.e.' Insider-Control'. Due to this reason, the Board of Directors has the low independency in the decision-making aspect. What's more, there is the common phenomenon that the Substantial Shareholder intervene the Board of Directors and the decision-making process is lack of democracy. The Chairman of the Board has the monstrous power, which will always decide the decision-making process of the Board of Directors with the Substantial Shareholders.

In terms of the State-Owned companies, the managers are the direct executors of the daily business activities in the companies. The core of the improvement of governance structure is to fully exert the enthusiasm and initiatives of the managers. Besides, to some extent, restrict their self-interest behavior. The Board of Supervisor is responsible to the General Meeting of Shareholders and exerts the supervision power as the representative of investors. But in fact, due to the lack of Incentive and Restraint Mechanism that integrates with the market, there is no effective and efficient incentive for the directors and high level managers in the governance structure of listed Chinese State-Owned companies. What is more, most of the directors and managers are assigned by the government but not by the market mechanism, thus, most of the directors and managers in the State-Owned company are not competent entrepreneurs.
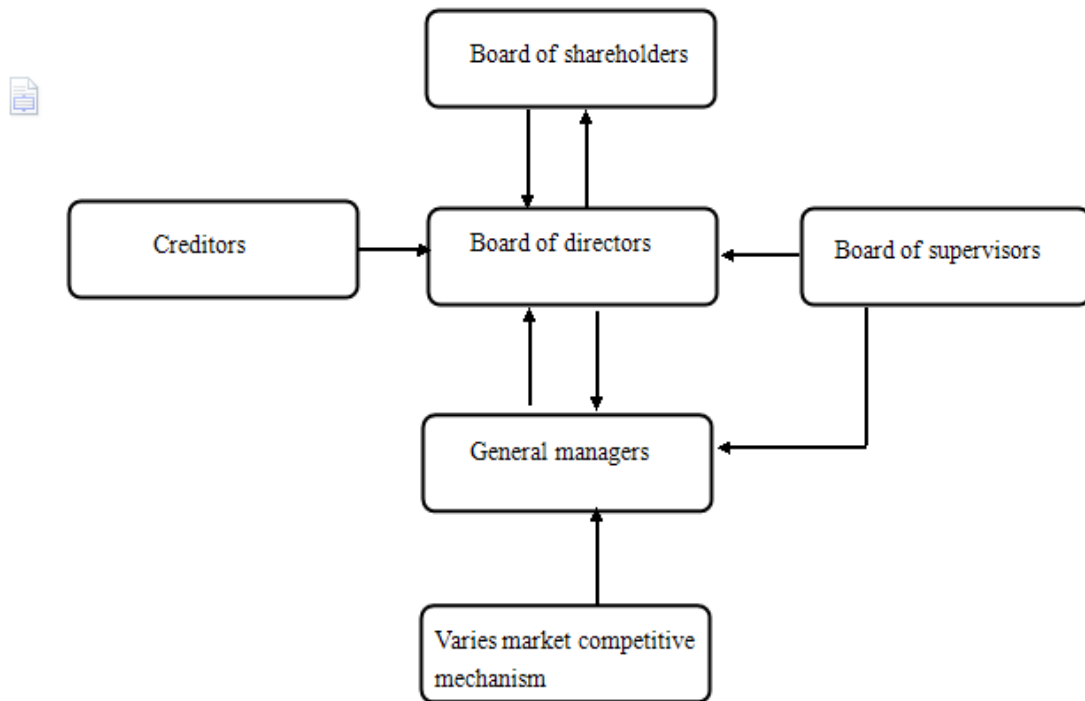
Figure   5 CGS of State-Owned Companies

2.1.3 CGS and features of Non-State-Owned Company

In this paper, Non-State-Owned Company is defined as the privately run corporation.

At present, most of the Non-State-Owned companies in China adopt the Family-based Governance Model, also known as 'Owner Governance Model'. The Family-based Governance Model refers to the model which there is no separation of the ownership and the right of management. The main controlling rights has distributed within the family members. Under this kind of model, the ownership of the company has been controlled by the family members which have the kinship, relative and marriage, which has a high level of centralization. Specifically, the features of Non-State-Owned Company are the following:

(1) High syncretism of Ownership and Management Right.

The private entrepreneur has not only the ownership but also the management right, especially the dynastification and kinship during the appointment or dismiss process of the managers, which arranges the family members to the important

positions, but does not pay attention to the import of highly specialized professional manager, the scientific arrangement of interest distribution and constraint of formal covenant, leading to the result that the competency of the managers cannot match with the company expansion .

(2) High level of ownership concentration.

In the Non-State-Owned company, the entrepreneur is generally the substantial shareholders, as well as the company manager. There is the common phenomenon that the owner is in the monopoly position, which has the hidden danger in terms of scientific decision-making. And it finally results in the oversize influence of the substantial shareholder on the company.

(3) Irregular operation.

The Non-State-Owned company has to improve the standard operation, since at present, the company does not have the strategic planning, but only focus on the short term profitable project without the long term plan. And the company lacks institutional management with high randomness and low execution transparency. Although some companies has found up the institution, they remain to be on the superficial level which cannot be better carried out. Irregular operation will not only restrict the development of the company, damage the internal interest, but also will probably harm the interests of the society, bringing the risk to the company.

2.1.4 The difference of CGS between the State-Owned Company and Non-State-Owned Company

Based on the researches about governance problems of listed companies in China by Shanghai Stock Exchange Research Center, currently, there are two kinds of CGS in the Chinese listed companies, 'Insider-Control Model' and 'Controlling Shareholder Model'. In general, these two models always appear in the same company with cross overlap. In the model of Controlling Shareholder, when the controlling shareholder is the private person or Non-State-Owned company, it always becomes the Family Company. When the controlling shareholder is the government, it is difficult to separate the company from the politics since the government will directly intervene and control the company. The two abovementioned models have been melted into one in the practice as Key-person Control Model, in which the Key person is generally the manager of highest level or the representative of the

controlling shareholder. They have the greatest power, including the controlling, execution, supervision and other random power.

Tong Shenghui and Li Chuntao (2011), the researchers from Central University of Finance and Economics in China consider that compared with the Board of Directors from the Non-State-Owned company, the State-Owned company has a larger Board of Directors, lower frequency of the Board meeting, smaller percentage of independent directors in the Board of directors and fewer shares held by the manager. There is less possibility for the Chairman of the Board of Directors from the State-Owned company to be the CEO at the same time then the Non-State-Owned company. But there are also some private companies that intentionally put aside the independent directors in order to reduce their supervision and absolutely control the Board of directors by themselves.

2.2 Corporate Social Responsibility (CSR)

2.2.1 Definition

The idea of CSR originates from USA. In 1924, the American Scholar Oliver Sheldon initially put forward the conception of 'CSR'.

Since the year of 1950s, many scholars have elaborated CSR from two points of view, social objective and social influence. Howard. R. Bowen who is honored as 'Father of CSR' has given the preliminary definition of Social Responsibilities of the Businessman. He raised idea that the businessman should have the compulsory to make the decision and carry out the activities based on the social objective and values in his *Social Responsibilities of the Businessman* . W. C. Frederick (1960) emphasizes that the social responsibility means that the businessman should supervise the operation of the economic institution in order to satisfy the social expectation and make for the social development. He insists that the economic value of the production is that the production and distribution should have the objective to improve the overall social welfare because the public expects that the social economy and human resources should be used in the wide social purpose but not purely for the interest of limited individual and company. In 1967, Walton elaborated that social responsibility can make the public recognize the close relationship between the company and society in his *CSR*. The company behavior does not only affect other people but also

the entire social system. Thus, when the company runs after the business objective, the managers should consider this kind of relationship.

In the early stage, the research emphasis of CSR is the definition discussion and whether the company should undertake and what kind of social responsibility they should undertake. But due to the vague and abstract definition and lack of internal consistency, the researchers intended to take CSR as the starting point and enrich the defination of CSR through the extended method after 1970s.

Among them, the elaboration of CSR from the US Committee for Economic Development is the most famous one. In June 1971, AEDA has published the report of *Social Responsibilities of Business Corporations,* which lists 58 behaviors that stimulate the social progress and practices require the company to carry out, including the following 10 aspects: 1. Economic develop and efficiency 2. Education.   3. Employment and Training 4. Equal Civil Right and Opportunity 5. Urban Reconstruction and Development 6. Pollution Prevention and Control 7. Resource Protection and Renewal 8. Culture and Art 9. Health Care Service 10. Support the Government.

But until now, the scholar research has seldom considered the organization and practice problem when a company or an organization is undertaking the CSR（Lindgreen et al. 2009）. Although CSR is the indispensable aspect for the company strategy, there is almost no comprehensive model to analyze how to adapt the existing strategy and policy, corporate culture and practice from the perspective of CSR.

Combining the previous studies, the definition of CSR in this paper is that the company can not only chase the maximization of the shareholder capital, but also consider the interest of other stakeholders, including the interest of government, employee, creditors, suppliers, clients and the public.

2.2.2 Relevant Theory

(1) Stakeholder Theory. The conception of stakeholder originates from the Strategic Management of Igor Ansoff (1965). Because of the accurate description and effective standard, the Stakeholder Theory has been absorbed by Donaldson and Preston (1995) and become the important tool to understand and describe the relationship and structure between the company and society（Carroll，1993; Wood and Jones 1995）It can help to differentiate the various group and individual related to the company. Thus, although the Stakeholder Theory itself is not sufficient, the

application of this theory has been the indispensable procedure to the operation process of CSR (Matten et al. 2003)

(2)Social Contract Theory. The Social Contract Theory stems from the political theory of Homas Hobbes, John Locke and Rousseau. In 1982, Thomas Donaldson was the first person that quoted this theory to explain the CSR. And then, Thomas Dunfee advocated that take the existing contract relationship among different people into the analysis framework,   and proposed the Actual Social Contract Theory. In 1994, Thomas Donaldson and Thomas Dunfee merged their theories into the comprehensive Social Contract Theory.

(3)Sustainable Development Theory. In 1962 the American female Biologist Rachel Carson firstly put forward the conception of Sustainable Development in her environmental scientific work *Silent Spring*. In 1987, the report of *Our Common Future* from The World Commission on Environment and Development pointed out the sustainable development means that it can satisfy the needs of existing generation but also will not harm the future generation to satisfy their needs. After this, the conception of sustainable development was introduced   into the company research and the researchers raised the issue of company sustainable development.

2.3 The Influence of CGS on CSR

2.3.1 Relevant overseas research development

(1)The research of the relationship between the Board of Directors governance and CSR.

Coffey (1998) believes that the effective governance of the Board of Directors can stimulate the company to fulfill the social responsibility, which means that they have the positive correlation.

Johnson (1999) found that the Board of Directors and CSR are positively correlated and the percent of share held by executive manager is also positively correlated with the product quality and production environment, which means that the higher percent of share held by the executive manager, the better for the product quality and production environment and it is irrelevant with the other factors such as workers and community.

Monk and Minow (2004) found that the scale of the Board of Directors has positive correlation with the CSR. The larger scale of the Board, the higher decision making quality. What's more, it is conducive to decrease the percentage of controlling shareholders in the board of directors and then prevent their interest preying behavior.

(2)The research of the relationship between the salary of executive manager and CSR.

Deckop (2006) has carried out the research on the relationship of company executive and CSR. The result shows that the salary of CEO is negatively correlated with CSR in the short term, but positively correlated in the long term.

After carrying out the research on dozens of listed companies in Canada, Lois Schafer Mahoney and Linda Thorn(2006) also found that the salary level and structure of executive managers is extremely important for the listed companies to fulfill the social responsibility. The scholars have found that the incentive and salary of the executive manager is positive correlated with CSR, which is the same as the relationship between the percentage of shares held and CSR.

But on the contrary, Jean McGuire (2003) examined the relationship between executive incentive and social responsibility performance.They found that executive incentive did not affect the fulfillment of social responsibility significantly.

(3)The research of the relationship between the ownership structure and CSR.

The research result of Burak, Monrante(2007) showed that in general, the CSR of listed companies held by the Sweden government is generally better than others.

CostanZa 、 Paola 、 Jaiswal(2008) carried out the sampling analysis on the European listed company and introduced the conception of ownership concentration. It showed that the ownership concentration is negatively correlated with the fulfill of CSR. That's to say, the more concentrated of the ownership, the worse of the CSR fulfillment.

Delphine、Evans (2009) studied the ownership structure of the listed companies in Sweden. They have compared the ownership structure of various companies and through this, they found that the listed companies held by government or group had a better execution and sense of CSR. On the contrary, the family-based companies paid more attention to the economic interest and tried their best to save the budget relating to CSR.

2.3.2 Domestic relevant theory development

(1) The relationship between stake holder and CSR.

The Chinese scholars started lately on the research of the relationship between CSR and corporate governance and most of the research results are focus on the theories. Lu Daifu (2002) believes that some measures should been taken to promote the execution of CSR. For example, create a suitable Marketing condition for CSR and let more stakeholders besides shareholders   participate in the corporate governance. And it should change the tradition that only regarding the shareholders as the internal governor, which is not conducive to   make the interests of various parties be realized.

(2) The relevant factors which affect CSR.

Tan Honglin (2009) uncovered the granger causality which affects the corporate performance, the percentage of share held by government, financial performance and scale of the company are negatively correlated with CSR, while the percentage of independent directors, the share held by executive manager, debt ratio is not correlated with CSR. Wang Jianqiong (2009) used the sample of the manufacture companies in Shanghai and Shenzhen Stock Exchange in 2005 and exposed that CSR is correlated with the percentage of independent directors and it is not correlated with the separation of ownership and control, ROE. And meanwhile, the fulfillment of CSR by the governmental company is not quite good.

(3)The relationship between the company supervision mechanism and CSR. Zeng Xiaoqing (2009) considered that the independent third party should play a decisive role in the oversight mechanisms. The auditors and independent directors as the main supervisors has many advantages. Under the supervision of the third party, the managers of the company will ensure the legal rights of the stakeholders and fulfill the CSR better.

3 Design of Empirical Study

Through the elaboration of the theories and relevant researches about the influence of governance structure on the CSR, this paper will take advantage of the domestic and overseas research method to have the empirical study on CGS and CSR. Meanwhile, design the feasible measuring indicators.

3.1 Dependent variable: Indicators of CSR

Designing the measuring indicators of CSR is the important basis of this paper to carry out the relevant empirical study. In some countries and regions, there are already some indicator systems for the measurement. Besides, some professional evaluation organizations have provided the evaluation reports of CSR, but until now, there is not any uniform measurable indicator systems for CSR in China.

'Evaluation of professional Database Method' is one of the most widely used methods. At present, there are dozens of professional organizations which focus on the evaluation of CSR and provide the professional evaluation reports of CSR to the customers, government and investors, even some of them have set their own evaluation system. Some high level researches rely on this kind of professional database such as KLD in USA and ARESE in France. Both Preston and Sapienza(1990) contributed to this kind of method. It mainly use its database to carry out the research.

Thus, this paper chooses 'Evaluation of professional Database Method' as the evaluation method of CSR. It adopts 'Top 100 CSR Development Index of Chinese Company' from CSR Research Center of Chinese Academy of Social Sciences as the measuring standard of CSR, i.e. explained variable. That research center is the unique research organization of national level, its theory research platform is of highest level in Chinese CSR field. The calculation of CSR Development Index is based on 'Four-in-One' social responsibility model. Based on the traditional 'Triple Bottom Line' and Stakeholder Theory, it composes a 'Four-in-One' social responsibility model, which considers management responsibility as the core, market responsibility as the foundation, social responsibility and environmental responsibility as the two wings. Through analyzing the international social responsibility index, domestic

social responsibility proposal document and the CSR reports of Fortune 500 companies, it designs the social responsibility evaluation indicator system for the single industry. The information comes from the CSR reports, companies' annual reports, companies' official website. Based on this, it evaluates the construction situation of social responsibility management system and information disclosure level of Top 100 companies in China.

Choosing 'Top 100 CSR Development Index of Chinese Company' as the indicators to measure the CSR is not only professional, but also good for improving the reliance and scientificalness. At present, within the existing empirical study, it is the first time in China to adopt this indicator as the measurement standard of CSR.

The dependent variable in this paper is CSR. Based on the above analysis, the measurement of the CSR adopt the'Evaluation of professional Database Method' , which is widely used at present. It adopts 'Top 100 CSR Development Index of Chinese Company' from CSR Research Center of Chinese Academy of Social Sciences as the measuring standard of CSR. This CSR development index has four dimensions, they are Responsibility Management, Market Responsibility, Social Responsibility and Environmental Responsibility.

3.2 Independent variables: Indicators of Governance Structure

In the Chapter 2, the writer has delimited the governance structure definition and relevant theory of this paper. Combining with this difference between the State-Owned company and Non State-Owned company, this paper is based on the research results of domestic and overseas scholars, elaborates the following component factors of governance structure: the General Meeting of Shareholders, Board of Directors, Board of Supervisor, CEO Duality, managerial ownership and manager incentive.

(1) Ownership concentration degree. According to *Research Report of Listed Company Governance in Mainland China* published by Deloitte, the listed company has the phenomenon of dominant shareholders,and the voice of minor shareholder has been omitted and their right cannot be protected. And most of the substantial shareholders are from the government or controlled by the government. All the internal CGS has been the spokesperson of the substantial with the administrative intervenes. And then there are problems such as 'Insider-Control', invalid internal supervision and invasion of the minor shareholders interest.

In addition, the largest shareholder is generally the entrepreneur in the Non-State-Owned company, and they are also the manager. No matter what kind of Non-State-Owned company it si, the personal investment of the owner occupies more than half of the total investments. Although there are some other investors, the owner is always the dominant shareholder.

Thus, the phenomenon of dominate shareholder is the common feature of the State-Owned and Non-State-Owned company. The author will use the share percentage of the substantial shareholder to measure the ownership concentration degree and predicts that the ownership concentration degree is negatively correlated with CSR.

（**2**）**The Board of Directors.** In terms of the feature of the Board of Director, the paper chooses the scale of the Board of Directors, the frequency of the General Meeting of Shareholders, the percentage of independent directors as the indicators.

The Board of Directors is the outcome of modern company institution development. With the increasing scale of the company, the company business is becoming complicated. But it cannot allow all the shareholders to participate in the daily management of the company, in this situation, it has the separation of ownership and management, that's to say, the ownership belongs to the shareholder, but the daily management belongs to the manager. The objective of the Board of Directors is to allow the Board to stand for the shareholder and make the decision regarding the important business during the adjournment of the General Meeting of Shareholders and carry out decisions of the General Meeting as well. The frequency of the General Meeting of Shareholder, to some extent, can reflect the real controllability of the Board in the company. Moreover, the independent directors are completely independent to the shareholders and managers. The function of the independent directors is to maintain the overall interest and long term profitability of the company, especially when the company does not obey the regulations and harm the social interest. The independent directors should be responsible to warn the misconduct of the company so as to avoid harming the reputation and interest of the company. In this way, it can protect the stakeholders such as the minor shareholders, employees, creditors and clients in a great way.

Most of the directors in the state-owned companies are appointed by the administration departments of higher level and the managers are appointed by the administrative in-charge department. Thus, there is no restrict balance mechanism

between the Board members, managers and shareholders, it leads to the fact that the incompetent managers cannot be dismissed in time and the competent managers cannot be appointed. Then the corporate governance structure cannot exert its function. In the State-Owned company in China, the General Meeting of Shareholders and the Board of Directors only go to the formality but not fundamentally have the supervision and constraint function. Regarding to the Non-state-owned Company, the most important decisions are mainly made by the principal investors. As for the independent directors, the Academia believes that most of the companies select the independent directors only in order to counter the requirement of China Securities Regulatory Commission instead of exerting its original function.

This paper has used the number of the Board of Directors to measure its size and predicts that the Board Size is not correlated with CSR and it used the times of the General meeting of shareholders to measure its frequency, predicting that the frequency is not correlated with CSR. And similarly, it has used the number of independent directors in the Board of Directors to measure the percentage and predicts that the independent director is irrelevant to CSR.

（3）**Supervisory Board.** This paper chooses the scale of the Supervisory Board and the frequency of Meeting of the Supervisory Board as the indicators to describe the feature of Supervisory Board.

Supervisory Board is the company's internal supervision organization, which as the representative of the owner, is responsible to the General Meeting of Shareholder and conducts the supervision. But in China, especially in the Non-State-Owned companies, the Supervisory Board also only goes to the formality but not the real supervision. Thus, the frequency of the meeting of the Supervisory Board will not make a substantial influence on the company's performance.

This paper uses the number of supervisors to measure the scale of Supervisory Board and predicts that the size is not correlated with the company's performance. It also uses the time of Annual Meeting of Supervisory Board to measure its frequency and predicts that the frequency of the Supervisory Board meeting is not correlated to CSR.

(4) **CEO Duality.** Theoretically speaking, the responsibility of the Chairman of the Board is to host the Board meeting, supervise the appointment, discharge, evaluation and compensation of the CEO. The position of the Chairman and General Manager should be undertaken by one person or two, on one hand, reflects the

independence of the Board of Directors and on the other hand, shows the supervisory extent to the executive directors. Dual Role of Board Chairman goes against the Board to exert its own governance function, thus, the Chairman and the General Manager should be separated. The company which has the CEO Duality lacks of the restrict balance institution and weaken the supervisory function of the Board. And if the General Manager is too powerful, he or she will chase the best interest of Non-shareholders or even he himself. This is unfavorable to the company's development.

In China, in the report of *The Fundamental Norm of Set Up the Modern Company Institution and Regulation by the Large State-owned Company* from the State Economic and Trade Commission has required that there should be less overlap between the Board of Director and the Executive Manager, and The Chairman of the Board and the General Manager should not be the same person. Thus, CEO Duality is rare in the State-Owned company. But in Non-State-Owned Company, especially at the initial stage of the development, the founder of the company is always both the owner and the manager. Although in some Non-State-Owned Company, the Chairman and the General Manager is not the same person, they have the close relationship, like the family relationship.

Thus, even if many companies have the separated the positions of Chairman and the Manager, they only aim at adapting to the norm of the listed companies. This kind of separation does not have any fact significance.

Based on this point of view, this paper predicts that CEO Duality is negatively correlated with the CSR.

(5) Managerial Ownership. Principal-agent Relationship is one of the important problems for the corporate governance. The principal, i.e. the shareholder likes to maximize its capital while the agent, i.e. the manager pays more attention to the maximization of the salary income, subsidy, degree of concerned and spare time. If we hypothesize that there is no effective restrict and incentive mechanism, the behavior of the agent such as shirk of the responsibility, neglect of the duty, chase the personal interest will eventually harm the Principal's interest. And the Managerial Ownership is binding together with the interest of manager and shareholder, which will reduce the interest contradiction of them.

In terms of the Executive Manager Ownership, there are two kinds of ideas in Academia. One idea believes that the Executive Manager Ownership can modify the

governance structure, aligning their interests and reducing the agent problem. In this kind of situation, the company will reduce the stock incentive to the executive manager. But on the contrary, there is another idea that when the manager holds more share, the Board cannot effectively restrict them, meaning that the manager have more power in the company and will be not dismissed. This deteriorates the corporate governance in the company and the company will not likely use the stock option incentive.

This paper predicts that Managerial ownership is not correlated to the CSR.

(6) Effective Incentive to the Manager. The reasonable salary system is the second mechanism to assure that the Manager can set up the objective to maximize the interest of shareholder. Although most of the empirical study has been limited by the data, some of them show that in USA, Germany and Japan, the salary of the manager is positively correlated to the company performance.

The ultimate controller is the private or state will pose the important influence on corporate governance model, compared with the non-monetary income of the manager in State-Owned Company and the future political career, the Non-State-Owned company has more motives to lower the agent cost between the shareholder and manager through stock right incentive.

This paper uses the total salary amount of the top three executive managers to measure the effective incentive of the manager, predicting that the effective incentive to the manager will be positively correlated to the CSR.

3.3 Control variable

An obvious fact is that CSR is closely related with the industry sector, turnover and other factors. CSR implementation of companies that belong to different industries is not the same. For example, manufacturing, coal chemical industry and other secondary industry should pay more attention to pollution limitation and environmental protection. While, for those companies belong to tertiary-industry like education, medical treatment, finance etc, pay more attention to customer satisfaction rather than environment protection .In addition, turnover statement of the companies also impacts the CSR performance. Generally speaking, companies of high turnover lay more emphasis on CSR than these of low turnover, because they have the ability to undertake CSR better. Specifically as shown in table 1.

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<div align="center">Table　1 Definition of control variables</div>

Name of variable	Symbol	Definition
Industry	INDU	Secondary industry=0,tertiary-industry=1, mixed industry=2
Turnover	TURN	Business income yearly

3.4 Hypothesis and Model

<div align="center">Table　2 Definition of the variables</div>

Variable	Symbol	Definition	Explanation
Dependent Variable	Y	CSR Development index	
Independent Variables	so_top1	State-Owned or not	Yes=1，No=0
	CEO_dual	CEO Duality	Yes=1，No=0
	own_conc	Ownership Concentration	Stake of the largest stockholder
	boa_size	Size of the board	Number of members
	ind_dire	The proportion of independent directors on the board	Number of members
	#boa_meet	Number of board meetings	Number of meetings
	siz_supe	Size of the Supervisory Board	Number of members
	#sup_meet	The number of meetings of the supervisory board	Number of meetings
	man_own	Managerial ownership	Yes=1，No=0
	eff_inc	Effective incentive to general managers	Total remuneration of top three Executives
Control Variables	Indu	Industry category	2^{nd}industry=0, 3^{rd}industry=1, mixed industry=2
	turn	Turnover	Business income yearly

Hypothesis1. State-Owned company is correlated to CSR positively.

Hypothesis2. CEO duality is correlated to CSR passively.

Hypothesis3. Ownership Concentration is correlated to CSR passively.

Hypothesis4. Size of the board is correlated to CSR positively.

Hypothesis5. Number of board meetings is correlated to CSR positively.

Hypothesis6. The proportion of independent directors on the board is correlated to CSR positively.

Hypothesis7. Size of the supervisory board has no relationship with CSR.

Hypothesis8. The number of meetings of the supervisory board has no relationship with CSR.

Hypothesis9. Managerial ownership has no relationship with CSR.

Hypothesis10. Effective encouragement to general managers is correlated to CSR positively.

Research Model

$Y=\alpha+\beta_1$ so_top1$+\beta_2$ CEO_dual$+\beta_3$own_conc$+\beta_4$boa_size
$+\beta_5$ind_dire$+\beta_6$#boa_meet$+\beta_7$size_supe$+\beta_8$size_supe$+\beta_9$man_own $+\beta_{10}$eff_inc$+$
rcontrolvariables $+\varepsilon$

4 Research Sample, result and analysis

4.1 Research Sample

This paper chose the companies which were selected in 'Top 100 CSR Development Index of Chinese Company' published by Chinese Academy of Social Sciences for three consecutive years as the sample. And in terms of the Corporate Governance, all the data comes from CSMAE (China Stock Market Accounting Research) database.

4.2 Research Results and Analysis

4.2.1 Overall sample analysis

Table 3 is sorted out according to *Listing Corporation industry classification guidance* that published by China Securities Regulatory Commission in accordance with the industry categories of the 66 samples (including 42 State-Owned enterprises and 24 private enterprises).

Table 3 Classified statistics of companies according to industry categories

Industry	Transportation and warehousing industry	Water, electricity and gas industry	Extractive industries	Wholesale and retail trade	Real estate
No. S-O C	4	4	5	1	0
No. N-S-O C	0	0	0	2	1
S-O C %	10%	10%	12%	2%	0%
N-S-O C %	0%	0%	0%	8%	4%
Total	4	4	5	3	1
Overall %	6%	6%	8%	5%	2%
Industry	Building industry	Manufacturing	Insurance	Comprehensive	
No. S-O C	5	11	6	8	
No. N-S-O C	0	7	6	6	
S-O C %	12%	26%	14%	19%	

N-S-O C %	0%	29%	25%	25%	
Total	5	18	12	14	
Overall %	8%	27%	18%	21%	

4.2.2 Descriptive statistical analysis

The following Tables are the descriptive statistics of the samples, they describe the overall samples in three years and in 2009, 2010, 2011 respectively, including CSR Development Index, nature of companies, CEO Duality, Ownership Concentration, number of directors, proportion of independent directors, frequency of board meetings, size of the supervisory board , managerial ownership, effective incentive to the general managers and other ten indicators.

Table   4 Descriptive statistical analysis

	N	Min	Max	Mean	Std. Dev.
Y	190	-1	84.8	42.237	19.707
So_top1	200	0	1	0.64	0.481
CEO_dual	192	0	1	0.089	0.285
Own_conc	196	7.82	86.35	46.499	18.863
boa_size	195	5	20	11.031	3.124
ind_dire	195	0.17	0.8	0.372	0.076
#boa_meet	196	3	56	9.969	5.669
size_supe	195	3	13	4.872	2.125
#sup_meet	196	1	12	5.184	1.839
man_own	197	0	1	0.584	0.494
eff_inc	196	37000	4.93e+07	4301710	5407141
INDU	201	0	2	0.537	0.670
Turn	157	3.52e+07	2.51e+12	1.42e+11	3.44e+11

Table   5 Descriptive statistical analysis (State-Owned companies)

	N	Min	Max	Mean	Std. Dev.
Y	122	-1	84.8	47.542	18.495
CEO_dual	120	0	1	0.067	0.250
Own_conc	124	14.93	86.35	54.774	14.783
boa_size	123	5	18	10.756	2.723
ind_dire	123	0.17	0.8	0.385	0.0880
#boa_meet	124	3	56	9.847	5.838
size_supe	123	3	13	4.878	1.990
#sup_meet	124	1	12	4.960	1.773
man_own	125	0	1	0.544	0.500
eff_inc	124	533500	1.57e+07	3209025	2484479
INDU	129	0	1	0.256	0.438

Turn	104	2.01e+09	2.51e+12	2.01e+11	4.10e+11

Table 6 Descriptive statistical analysis (Non-State-Owned companies)

	N	Min	Max	Mean	Std. Dev.
Y	68	3	72.3	32.721	18.293
CEO_dual	72	0	1	0.125	0.333
Own_conc	72	7.82	75	32.245	16.522
boa_size	72	6	20	11.5	3.685
ind_dire	72	0.22	0.44	0.349	0.039
#boa_meet	72	4	38	10.181	5.398
size_supe	72	6	20	11.5	3.685
#sup_meet	72	3	11	5.569	1.898
man_own	72	0	1	0.653	0.479
eff_inc	72	37000	4.93e+07	6183558	7995584
INDU	72	0	2	1.042	0.795
Turn	53	3.52e+07	9.4e+10	2.56e+10	2.85e+10

The statistical value of the dependent variable shows that the mean of the CSR development index of the overall sample is 42.24, while that of the State-Owned companies and Non-State-Owned companies is 47.54and 32.72 respectively. It indicates that the CSR development index of the State-Owned companies is higher than that of the Non-State-Owned companies.

The statistical value of the independent variables shows that there are very few CEO Duality situations. In other words, chairman of the board also serve as the general manager are rare in China's listed companies.　Among them, the mean of State-Owned companies is 0.067 and that of Non-State-Owned companies is 0.126. It indicates that CEO Duality are fewer in State-Owned companies than that in Non-State-Owned companies.

In terms of ownership concentration, the minimum value of the overall sample is 7.82%, and the maximum one is 86.35%, mean value is about 46.5%, this shows that "absolute ration share" is still widespread in China's listed companies. Among them, the mean value of State-Owned companies is 54.77%, and that of Non-State-Owned companies is 32.25%, it shows that ownership concentration is higher in State-Owned companies than that in Non-State-Owned ones.

In terms of the size of the board, mean value of the overall sample is about 11 members, the maximum value is 20 members, and minimum value is 5 members. This shows that the board of directors of the listed companies in China is set in compliance

with the Chinese regulations which require at least five members for the Board of Directors. In addition, size of the board of the State-Owned companies is smaller than that of the Non-State-Owned ones. Their mean value is 10.8 and 11.5 respectively. The mean value of the overall sample is 37.16% in terms of the proportion of independent directors. According to the related laws published by China Securities Regulatory Commission in 2001, the number of independent directors should reach 1/3. It can be seen that the present situation is consonant with the regulations. In addition, the mean value of the proportion of independent directors in State-Owned companies is 38.5% and that of Non-State-Owned companies is 34.9%. It shows that the proportion of independent directors is higher in State-Owned companies than that in Non-State-Owned companies.

When it comes to the size of the supervisory board , mean value of the overall sample is about 5 members, maximum is 13 members, and minimum is 3 members. It is in compliance with the regulations that the size of the board of supervisors should not be less than 3 members. What's more, the mean value of this indicator is 4.9 and 11.5 for State-Owned companies and Non-State-Owned companies respectively. This shows that the size of the supervisory board for State-Owned companies is about twice as that of the State-Owned companies. When it comes to the frequency of meetings, minimum value of the overall sample is 1 time, and maximum value is 12times, mean value is 5 times. However, Company Law of the People's Republic of China provides that the annual meeting of the board of supervisors should be convened not less than 2 times. It can be find in table5 that the minimum value of State-Owned companies is 1 time and that of the Non-State-Owned companies is 3 times. It shows that some State-Owned companies do not act in conformity with the law. And in terms of the mean value, this indicator of Non-State-Owned companies is higher than that of the State-Owned companies.

When it comes to whether the managers hold stocks, mean value of the overall sample is 58.38%. It shows that more than half of the companies allow managers to hold stocks. Among them, mean value of the State-Owned companies is 54% and that of the Non-State-Owned companies is 65%. This indicates that the possibility of managerial ownership is lower in State-Owned companies than in Non-State-Owned companies.

When it comes to the effective incentive for the managers, mean value of the overall sample is 4301710 RMB that of the State-Owned companies and

Non-State-Owned companies is 3209025RMB and 6183558RMB respectively. It shows that the salary of general managers is about one time higher in Non-State-Owned companies than in State-Owned companies. That's to say, there is more effective incentive for managers in Non-State-Owned companies than in State-Owned ones.

The difference between State-Owned companies and Non-State-Owned companies in terms of CSR development index and corporate governance indicators can be concluded through the analysis above (Table 7).

Table　7 Difference between S-O company and N-S-O company regarding CGS

	S-O company	N-S-O company
Y	Higher	Lower
CEO_dual	Lower	Higher
Own_conc	Higher	Lower
boa_size	Smaller	Larger
ind_dire	Higher	Lower
#boa_meet	Less	More
size_supe	Smaller	Larger
#sup_meet	Less	More
man_own	Smaller	Larger
eff_inc	Lower	Higher

Table　8 Descriptive statistics for years 2009-2011

年度	2009				2010				2011			
	Mean	**N**	**Min**	**Max**	**Mean**	**N**	**Min**	**Max**	**Mean**	**N**	**Min**	**Max**
Y	40.38	67	-1	84.5	45.26	56	15.8	84.8	41.56	67	1.5	82
So_top1	0.642	67	0	1	0.636	66	0	1	0.642	67	0	1
CEO_dual	0.094	64	0	1	0.092	65	0	1	0.079	63	0	1
Own_conc	46.02	64	8.43	86.2	46.07	65	8.1	86.2	47.38	67	7.82	86.35
boa_size	11.13	64	6	20	11.09	64	5	19	10.88	67	6	18
ind_dire	0.37	64	0.22	0.57	0.37	64	0.17	0.8	0.38	67	0.3	0.75
#boa_meet	8.92	64	3	25	10.94	65	5	56	10.03	67	4	30
size_supe	4.84	64	3	11	4.94	64	3	13	4.84	67	3	13
#sup_meet	4.77	64	2	10	5.43	65	2	11	5.34	67	1	12
man_own	0.57	65	0	1	0.57	65	0	1	0.61	67	0	1
eff_inc	427061	64	37000	4.9e+07	4384544	65	40000	2.7e+07	4251052	67	455000	1.92e+07
Sect	0.537	67	0	2	0.537	67	0	2	0.537	67	0	2
Turn	1.0e+11	51	3.5e+7	1.4e+12	1.4e+11	52	1.7e+9	1.9e+12	1.8e+11	54	1.8e+9	2.5e+12

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Table 9 Descriptive statistics for years of 2009-2011(State-Owned companies）

Year	2009				2010				2011			
	Mean	N	Min	Max	Mean	N	Min	Max	Mean	N	Min	Max
Y	44.82	43	-1	84.5	50.05	36	16	84.8	48.17	43	1.5	82
CEO_dual	0.075	40	0	1	0.073	41	0	1	0.051	39	0	1
Own_conc	55.05	40	15.19	86.2	54.29	41	14.93	86.2	54.98	43	21.69	86.35
boa_size	11.05	40	7	18	10.78	40	5	17	10.67	43	6	17
ind_dire	0.38	40	0.27	0.57	0.38	40	0.17	0.8	0.39	43	0.33	0.75
#boa_meet	9.03	40	3	24	10.9	41	5	56	9.6	43	4	18
size_supe	4.83	40	3	11	4.98	40	3	13	4.84	43	3	13
#sup_meet	4.58	40	2	8	5.12	41	2	10	5.16	43	1	12
man_own	0.51	41	0	1	0.54	41	0	1	0.58	43	0	1
eff_inc	288243	40	610300	1.39e+07	3444455	41	626200	1.33e+07	3288350	43	533500	1.57e+07
Sect	0.256	43	0	1	0.256	43	0	1	0.256	43	0	1
Turn	1.4e+11	34	2.0e+9	1.4e+12	2.1e+11	34	2.1e+9	1.9e+12	2.5e+11	36	4.2e+9	2.5e+12

Table 10 Descriptive statistics for years of 2009-2011（Non-State-Owned companies）

Year	2009				2010				2011			
	Mean	N	Min	Max	Mean	N	Min	Max	Mean	N	Min	Max
Y	32.44	24	12.5	64	36.65	20	15.8	64.5	29.73	24	3	72.3
CEO_dual	0.125	24	0	1	0.125	24	0	2	0.125	24	0	1
Own_conc	30.97	24	8.43	62.69	32.02	24	8.1	74.88	33.75	24	7.82	75
boa_size	11.25	24	6	20	11.63	24	8	19	11.63	24	7	18
ind_dire	0.35	24	0.22	0.44	0.34	24	0.22	0.42	0.36	24	0.3	0.44
#boa_meet	8.75	24	4	25	11	24	5	38	10.79	24	5	30
size_supe	4.88	24	3	11	4.88	24	3	11	4.83	24	3	11
#sup_meet	5.08	24	3	10	5.96	24	3	11	5.67	24	4	9
man_own	0.67	24	0	1	0.63	24	0	1	0.67	24	0	1
eff_inc	658425	24	37000	4e+7	599052	24	40000	2.66e+07	597589	24	455000	1.92e+07
Sec	1.042	24	0	2	1.042	24	0	2	1.04	24	0	2
Turn	1.9e+10	17	3.5e+7	6e+10	2.4e+10	18	2e+9	7.6e+10	3.4e+10	18	1.8e+9	9.4e+10

4.2.3 The empirical results

(1) Correlation test between the variables

If there was significant correlation between variables, it would be negative to the

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results of the regression. Thus, before we did regression of the sample, correlation test between variables was carried out.

<p align="center">**Table 11 Pearson correlation test**</p>

	So_top	Own_conc	CEO_dual	boa_size	ind_dire	size_supe	man_own	eff_inc	#boa_meet	#sup_meet	Sect	Turn
So_top1	1											
Own_conc	0.534	1										
CEO_dual	-0.14	-0.201	1									
boa_size	0.10	-0.085	-0.04	1								
ind_dire	0.263	0.212	0.176	-0.366	1							
size_supe	0.294	0.247	-0.00	0.463	-0.11	1						
man_own	-0.16	-0.191	-0.22	-0.090	-0.05	-0.048	1					
Eff_inc	-0.15	-0.311	0.152	0.166	-0.04	0.043	0.053	1				
#boa_meet	-0.07	-0.121	-0.08	-0.081	0.05	-0.089	-0.001	0.002	1			
#sup_meet	-0.12	-0.078	-0.08	-0.051	-0.08	0.005	0.060	0.123	0.368	1		
Sect	-0.56	-0.467	-0.07	-0.047	-0.22	-0.194	0.146	-0.003	0.054	0.151	1	
Turn	0.242	0.425	-0.10	0.348	0.090	0.628	-0.101	-0.013	-0.075	-0.056	-0.2	1

According to the statistical provisions, the way to judge multicollinearity is to judge whether the correlation coefficients between the variables reach 0.5. If the correlation coefficients reach 0.5 or more, it will lead to multicollinearity.

As it shows in table 11, they are two variables whose correlation coefficients are more than 0.5 within the overall sample; they are 0.534 and 0.628, which presents for ownership concentration and turnover respectively. Multicollinearity problem may occur due to the significant correlation between the variables. Thus, the following will adopt Robust Regression to solve this problem.

(2) Robust Regression

Here we use Stata 10.0 to do the Robust Regression of the Overall equation, and the result is as showed in table 12.

<p align="center">**Table 12 Goodness of fit test for the model**</p>

Model	N	F	Prob>F	R-Squared
1	144	F(12,131)=7.52	0.000***	0.408

Refer to table 12, we can analyze the explanatory degree of the regression model. According to R-square, we can conclude that the interpretation of the independent

variable (CSR development index) in this regression model is 40.8%

Table   13 Analysis of the Regression Result

	Expected Direction	Coef.	Std. Err.	t	|p>t|	[95% Conf. Interval]	
So_top1		19.650	4.150	4.73	0.000***	11.440	27.860
Own_conc	-	-0.011	0.129	-0.09	0.930	-0.266	0.243
CEO_dual	-	-15.001	5.313	-2.82	0.005***	-25.511	-4.491
boa_size	+	1.539	0.893	1.72	0.087*	-0.228	3.306
ind_dire	+	-15.424	26.009	-0.59	0.554	-66.877	36.029
size_supe	/	-0.454	1.398	-0.33	0.746	-3.221	2.312
Man_own	/	0.873	3.208	0.27	0.786	-5.475	7.220
Eff_inc	+	1.95e-06	6.32e-07	3.08	0.003***	6.98e-07	3.20e-06
#boa_meet	+	0.426	0.260	1.64	0.103	-0.088	0.940
SUMP	/	0.202	0.906	0.22	0.824	-1.590	1.994
Sect		-1.423	2.585	-0.55	0.583	-6.537	3.690
Turn		8.84e-12	5.83e-12	1.52	0.132	-2.7e-12	2.04e-11

*，**，***presents the significance in 0.1,0.05,0.01 level respectively

As it shows in table 13, the regression results indicate that the impact of So-top1, CEO_dual and eff_inc are significant to CSR development index at level 0.01. And the impact of boa_size is significant to CSR development index at level 0.1. However, other characteristics are not significant.

4.3 Result and Conclusions

We can draw the conclusions according to the hypothesis and results. First of all, State-Owned Company is correlated to CSR positively. State-Owned companies are different from those Non-State-Owned ones that consider profit as the priority or the only purpose. Because the assets of State-Owned companies are owned by the state, the primary target of the State-Owned companies is to meet the public needs. The social responsibility that State-Owned companies should assume is equal to the power conferred by the public. In addition, compared with Non-State-Owned companies, State-Owned ones occupies more social resources, State-Owned enterprises has been widely criticized because of monopoly, corruption as well as luxury. State-Owned companies are considered to assume more social responsibility than

Non-State-Owned ones to return the money to the community. Thus hypothesis 1 is true. Secondly, CEO Duality is correlated to CSR passively. This hypothesis is true. Third, Ownership Concentration is not correlated to CSR significantly. The reasons may be as following. There exists serious special phenomenon "absolute ration share" in Chinese listed companies, at the same time, there is also inside control phenomenon. In addition, such concept as CSR has not sunk deeply into the hearts of the entrepreneurs in China. On one hand, some companies still put profit maximization at the first place, ignoring the interests of shareholders. They put undue emphasis on official regulations and forms in fulfillment of corporate social responsibility, while ignoring the essence of CSR. On the other hand, some companies lack a sense of self-governance; they cannot carry out self-monitoring and self-restraint effectively in the process of profit maximization purchasing. Corporate governance still remains in the mandatory stage which was conformed to the standard, but they cannot fulfill the social responsibility effectively. Fourthly, boa_size is correlated to CSR development index positively. In the first place, board of directors is the core of governance structure. If the size of board is relatively large, it will be conducive for different stakeholders to coordinate their interests. In addition, knowledge structure and management experience of the board is important to a company. Relatively speaking, those board members who have senior professional background can play a better role. Thus it can be concluded that the larger the size of the board, the better the board members coordinate their interests.

Fifthly, proportion of the independent directors within the board is not correlated to the CSR. This result may be due to the following reasons. One point is this proportion of independent directors within the board is too small; it has just reached the statutory proportion. And this is far away from the requirements in the developed countries. Moreover, in fact, great decisions of the companies are often decided by the shareholders' meeting instead of the board meeting. The voice of independent directors is always submerged.

Sixth, size_supe, Man_own and #sup_meet are all not correlated to CSR. That means that hypothesis 7,8,9 are true. This further confirmed the views above, that is in China, board of supervisor performs practically no function, it cannot play a role to take actions as supervision and restraint. Thus, size_supe and man_own make no influence on CSR. In terms of #sup_meet, most of the general managers hold relatively low stake, especially those in State-Owned companies, there is a limitation

for the proportion of stake that managers can hold. Therefore, #sup_meet cannot play its due role in China.

Last but not least, Effective incentive to general managers is correlated to CSR positively. That's to say, hypothesis 10 is true.

5 Suggestions

According to the conclusions, here we raise some suggestions to improve the corporate governance and promote the companies to fulfill their social responsibilities better than before.

5.1 Reduce the Intervention of the Government or the Family Forces

From the empirical research we can see that, ind_dire, size_supe, man_own and other characteristics of the corporate governance which are closely correlated to CSR in foreign samples shows no correlation in the samples of Chinese listed companies. Obviously, there are some problems in the corporate governance of Chinese companies. It makes the rules and regulations of the corporate governance difficult to operate that the organizers, decision-makers, operators and supervisors of the companies cannot be fully in place.   And the factors of the corporate governance have not form a relationship of both balance and collaboration.

Thus, the author believes that reduce the intervention of the government or the family forces, and improve the independence of the board of directors and the supervisory board as well is conducive to the rapid development of the companies. Separate the right of organization and personnel from the government or the authority of the family. Under this premise, the board of directors, the board of supervisors and operators of the company shall be conducted in strict compliance with prescribed procedures. In other words, the board no longer dispatched by the government or appointed by the authority of the family. However, the board masters the power of appointment and removal of key management personnel.

5.2 Perfect the Related Regulations and Laws

It has been mentioned in Chapter 2 that some scholars found that the current company law is seriously flawed. More important, it is the basic reason that leads to the failure of the corporate governance. Therefore, perfect the related regulations and laws is a must to improve the CSR development.

(1) To increase the independence of the board of supervisors, strengthen its superintendence; make it really play a role. Therefore, it is necessary for the

government to strengthen the power of the supervisory board through legislation. (2)Optimize the composition of the board of directors, improve the proportion of independent directors in particular to protect the interests of small shareholders. In addition, certain criteria should be set for the selection of independent directors. For example, the internal staff of the company, including managers and the direct relatives of the managers cannot be selected as the independent directors.

Currently, regulations or laws related to corporate governance are widely scattered through Company Law of the People's Republic of China or Stock Act. However, from the view of further development, government should formulate regulations or laws especially for corporate governance. Meanwhile, the government should also supervise and check the implementation of the regulations and law, to improve the implementation of these laws. Take effective punitive measures to these violations. Thus, create a favorable legal environment for corporate governance.

5.3 Introduce Banks to Participate in Corporate Governance

Another suggestion to improve the structure of corporate governance is to introduce banks to participate in corporate governance as the stockholders of the listed companies.

Particularly, we can draw lessons from Japanese-German model which has been mentioned in Chapter 2, introduce banks to join the corporate governance. On the international capital market, competition of the corporate governance is often largely driven by the competition between exchanges. However, the securities trading business in China has now been politicized, work with a high degree of centralization. Exchange is a subordinate agency of the China's Securities Regulatory Commission instead of a true self-regulatory organization. Therefore, It will be a positive measure to increase the competition between exchanges, relax control step by step and enable exchanges provide better regulatory services than before.

Another subject that plays an important role in corporate governance in developed countries is financial institutions. Take Japanese-German model as an example, commercial banks are major stockholder of the companies. Financial institutions, especially commercial banks, are of priority importance in the corporate governance system. On one hand, whether the commercial institutions they

themselves have good corporate governance impact the safety operation of the whole economic system. On the other hand, there is natural supervision on "cash flow" of other social unit within the business of commercial institutions.

Especially for manufacturing enterprises, commercial banks take on the role of monitoring and participated governance. However, the status of commercial institutions in the corporate governance in China is still not worth mentioning.

6 Bibliography

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