

The Corporate Governance Structure and Corporate Performance: Empirical Studies of China's Listed Real Estate Companies

Qiulin Ke

A thesis submitted in partial fulfilment of the
requirements of the University of Greenwich
for the degree of Doctor of Philosophy



December, 2005

ACKNOWLEDGEMENTS

I would like to thank the following people for their help and guidance in the production of this thesis:

Professor David Isaac (the School of Architecture and Construction), my supervisor, who gave me the chance to do this research and was always there when I needed help.

Dr. Jian Chen (Business School), my supervisor, who guided me through the whole process of the research to reach this destination.

Dr. Michael Coffey and Dr. Keith Jones (the School of Architecture and Construction) who gave me the critical insight into the research ethos and research methodologies for the PhD research.

Finally, I thank my son, Bowen who motivated me all the way to complete the thesis in time. Without his love and understanding, the study would have been impossible.

There are some other people who ever gave me advice and suggestion when I was writing the thesis. Although they are not named here, I feel equally grateful for them from the bottom of my heart.

ABSTRACT

This study examines the effectiveness of the corporate governance mechanisms and their impact on corporate performance, using the data of one industry sector—China's listed real estate companies. The studies include four parts: (1). the ownership structure, (2). the board structure; (3). the manager compensation and (4). the agency costs measured by asset utilization efficiency and manager discretionary expenses.

The empirical studies cover three years (2000 to 2002). Here I classify the listed real estate companies into the subgroups of state owned enterprises (SOEs), privately owned companies (POEs), SOEs dominated by state shares and state legal person shares for analysis. The conclusions are first, in the real estate industry of China where the market is not fully open and transparent; the land resource is controlled by the government and is transferred by the negotiation or agreement between related parties, rather than the open market price and the government has strong influence on the performance of the listed real estate companies. Although the ownership structure is diversified in the real estate industries and the POEs take part in the property market development with the SOEs, the ownership concentration is positively associated with the firm performance. The companies with highly concentrated ownership structure are state owned companies (SOEs), especially the state shares dominated SOEs. The state shares are positively associated with firm performance, indicating the government influence on the real estate industry. This study does not support the suggestion that SOEs are more inefficient and legal person shares outperform the state shares. The study also shows that under the concentrated ownership structure, the dilution of the controlling power among more than one controlling shareholder would reduce the agency cost and improve the firm performance. The second conclusion is that the board size is positively associated with firm performance, but the relationship is non-linear. The board with an appropriate portion of independent directors may improve the effectiveness of corporate governance. Board size is decided by the ownership structure and the adjustment of the ownership structure, e.g. increasing the number of shares owned by other large shareholders will change the board size and improve the monitoring

function of the board. The third conclusion is that the agency costs rooted in the separation of ownership and management are related with ownership structure. The largest shareholder is significant in improving the assets utilization efficiency but not significant in reducing manager discretionary expense. The presence of the other blockholders would reduce the agency costs. The agency costs POEs are higher than that in SOEs, indicating that the owner/manager in POEs who owns less than 100% of the company stake is likely to extract benefits from the abuse of the controlling right. The fourth conclusion is that the manager's compensation of the China's listed real estate companies includes three elements, i.e. a basic salary, a position allowance and a bonus; they are all paid in cash. The managers own tiny or no equity stake of the company. Stock option is not adopted in China's listed real estate companies. Manager's compensation is not associated with the firm's performance, but is associated with firm size and the turnovers of chairmen and top managers.

The study also discusses the two fundamental issues that the corporate governance reform of China's listed companies are facing. One is the ambiguity of property rights in SOEs and another one is the inefficient managerial incentive system and the two factors are interlinked. The ambiguous property rights in SOEs have resulted in the companies being controlled by insiders in reality. The highly concentrated ownership structure has led to the board of directors being dominated by insiders—directors from the controlling shareholder and executive directors and the illiquidity of majority of shares on stock market makes the market as external governance factor ineffective. I also discuss the factors deterring the wide adoption of managerial stock option on the Chinese stock market.

CONTENTS

Chapter 1. The Introduction	1
1.1. What is corporate governance (1)	
1.2. Why is corporate governance important (5)	
1.3. Fundamental issues of corporate governance reform in China (7)	
1.4. Research objectives (8)	
1.5. Data and methodology (11)	
1.6. The structure of thesis (13)	
Chapter 2. Literature Review	14
2.1. Introduction (14)	
2.2. Ownership structure (16)	
2.2.1. Ownership structure around the world (16)	
2.2.2. Why ownership differs across the countries (24)	
2.2.3. Institutional investors and investor activism (29)	
2.2.4. The major corporate decisions affected by blockholder (32)	
2.2.5. Conclusions (36)	
2.3. Conceptual issues of the measurements of ownership concentration and firm performance (38)	
2.3.1. Measurements of ownership (38)	
2.3.2. Financial Performance Measurement (42)	
2.4. Board structure (46)	
2.4.1. Introduction (46)	
2.4.2. Board size and its impact on firm's performance (48)	
2.4.3. Board composition (51)	
2.4.4. Conclusions (56)	
2.5. Managerial ownership and financial performance (56)	
2.5.1. Introduction (56)	
2.5.2. Incentive alignment argument (56)	
2.5.3. Entrenchment argument and cost of capital argument (59)	
2.5.4. Non-monotonous relations (60)	
2.5.5. Conclusions (64)	
Chapter 3. Characteristics of China's stock market and China's corporate governance	66
3.1. Introduction (66)	
3.2. Evolution of China's stock market (67)	
3.3. Characteristics of corporate governance in China (71)	
3.3.1. Introduction (71)	
3.3.2. Evolution of the corporate governance in China (75)	
3.3.3. Ownership structure (79)	
3.3.4. The imbalance of board structure as a governance mechanism (83)	
3.3.5. Inefficient managerial incentive mechanism (87)	

3.3.6. The market as external governance factor has no function (95)	
3.3.7. The institutional investors in China are small (98)	
3.3.8. Conclusions (100)	
Chapter 4. Characteristics of China's real estate market and listed real estate Companies	103
4.1. Introduction (103)	
4.2. Economic factors (1990-2002) (103)	
4.3. China's real estate market cycles (106)	
4.3.1. 1990-1993: fast growth of real estate market (106)	
4.3.2. 1994-1999: real estate market in recession (108)	
4.3.3. Since 2000: real estate market in rebound (109)	
4.4. Historical review of China's listed real estate companies (111)	
4.5. The type of real estate companies (116)	
Chapter 5. Ownership structure and corporate performance: evidence of China's listed real estate companies	119
5.1. Introduction (119)	
5.2. The definition of study variables (121)	
5.3. Descriptive statistics (124)	
5.3.1. Ownership structure (124)	
5.3.2. Breakdown of controlling shareholders (129)	
5.4. Performance measures (132)	
5.5. Ownership concentration and the effect on firm performance (136)	
5.5.1. Graphical evidence (136)	
5.5.2. Regression analysis (137)	
5.6. The balance of controlling power in closely held listed real estate companies (140)	
5.7. Test of robustness (146)	
5.8. Conclusions (149)	
Chapter 6. Board characteristics and the effects on corporate performance	151
6.1. Introduction (151)	
6.2. Data definition (154)	
6.3. Descriptive statistics (157)	
6.4. Regression analysis (162)	
6.4.1. Univariate test (162)	
6.4.2. Regression analysis (164)	
6.5. Sensitivity check (168)	
6.6. The board composition and its effect on the firm's performance (169)	
6.6.1. Relation of board size and ownership structure (169)	
6.6.2. Relation of board composition and firm performance (173)	
6.7. Conclusions (175)	
Chapter 7. Corporate governance and manager compensation	177
7.1. Introduction (177)	
7.2. Components of manager compensation (180)	

7.2.1. Why the managerial stock option is prevalent in Western economics (180)	
7.2.2. Manager salary (180)	
7.2.3. Annual performance bonus (182)	
7.2.4. Stock (182)	
7.3. Methodological approach and variable descriptions (184)	
7.3.1. Methodological approach (184)	
7.3.2. Measurement of manager compensation (185)	
7.3.3. Economic determinants of the level of manager compensation (186)	
7.3.4. The ownership structure and board structure as governance variables (186)	
7.4. Statistics analysis (188)	
7.4.1. Descriptive statistics (188)	
7.4.2. Regression Analysis (193)	
7.5. Conclusions (197)	
Chapter 8. Corporate governance structure and agency costs	199
8.1. Introduction (199)	
8.2. Methodological approach (202)	
8.2.1. Agency costs (202)	
8.2.2. Ownership structure (203)	
8.2.3. Control variables (204)	
8.3. Univariate tests and analysis (205)	
8.3.1. Descriptive statistics of sample (205)	
8.3.2. Univariate tests of companies with different types of ultimate owners and companies dominated by different types of shares (206)	
8.3.3. Univariate test of the companies with below and above the median of agency costs measured by the assets turnover and SG&A expense (210)	
8.4. Regression analysis (213)	
8.4.1. Agency cost in term of assets turnover and SG&A expense (213)	
8.4.2. Economic significance (219)	
8.4.3. Orthogonalized regression for sensitivity test (220)	
8.5. Conclusions (221)	
Chapter 9. Conclusions	224
References	233
Appendix 1. The responsibilities of shareholders meeting by the Company Law of China	251
Appendix 2. OECD principles of the right of shareholders	255
Appendix 3. Special cases studies: ownership structure and firm Performance	257

TABLES

Table No.		Page
1.1	The selection procedure of China's listed real estate company	12
2.1	Ownership control of medium-Sized publicly traded firms around the world	21
2.2	Ultimate control of publicly traded firms of WesternEurope	22
2.3	Means of enhancing control in East Asian corporations	23
2.4	The ratio of state-owned and controlled shares in China's listed companies (2001)	24
2.5	Classification procedure of directors of board	52
3.1	Share structure of China's listed companies (1994-2002) (%)	70
3.2	The relationship between EPS and cumulative average return	94
3.3	A-Shares and B-Share investors summary on China's stock market in 2002	99
4.1	Real estate investment from 2000 to 2002	110
4.2	Name list of China's listed real estate companies in 2002	115
4.3	Overview of the China's stock market and real estate sector (2002)	116
5.1	Composition of real estate stock (2000-2002)	125
5.2	Ownership concentration by Top 10 large shareholders and correlation with the first large shareholding (2000-2002)	125
5.3	Percentage of shares owned by first large shareholder (2002)	127
5.4	Distribution of assets and share capital of China's listed real estate companies (2002)	128
5.5	Real estate stock composition by firm size (2002)	129
5.6	Breakdown of the controlling shareholders of listed real estate companies in 2002	130
5.7	Descriptive statistics of China's listed real estate companies	132

5.8	Mean comparisons of listed real estate companies dominated by legal person-and state-shares (2000-2002)	133
5.9	Mean comparisons of listed real estate companies (POE and SOE) (2000-2002)	135
5.10	Regressions of ownership structure and corporate performance from 2000 to 2002 (one)	138
5.11	Regression of ownership structure and corporate performance from 2000 to 2002 (two)	139
5.12	Ownership concentration: percentage of shares owned by Top 10 large shareholders (2002)	142
5.13	Mean comparisons of listed real estate companies with one and more than one controlling shareholders	143
5.14	Regressions of ownership structure and corporate performance from 2000 to 2002 (three)	144
5.15	Regressions of ownership structure and corporate performance from 2000 to 2002 (continuous ones)	146
5.16	Ownership structure and corporate performance from 2000 to 2002 (continuous companies, two)	147
5.17	Ownership structure and corporate performance from 2000 to 2002 (continuous companies, two)	148
5.18	Regression of ownership structure and corporate performance in 2000, 2001 and 2002.	149
6.1	Descriptive statistics of governance characteristics of China's listed real estate companies and correlation with board size	158
6.2	Board size and firm performance for China's listed real estate companies in 2002	163
6.3	OLS estimate of the relationship between board size (log) and firm performance	166
6.4	Relationship between board size, board composition and ownership structure	171
6.5	Breakdown of board size and ownership concentration (2002) (2002)	172
6.6	Relationship of board size, board composition and firm	174

	performance in 2002	
7.1	The descriptive statistic results of manager compensation and corporate governance structure of China's listed real estate companies.	191
7.2	Mean comparisons of listed real estate companies (SOE and POE)	191
7.3	Mean comparisons of the listed real estate companies with and without managerial stock	192
7.4	Regression of manager compensation on its economic determinants, ownership structure and board structure	196
7.5	Regression of manager compensation on its economic determinants without ownership structure and board structure	196
8.1	Outcomes of descriptive statistics of agency costs and governance factors	205
8.2	Mean comparisons between SOEs and POEs, SOEs dominated by state shares and legal person shares	207
8.3	Mean comparisons of agency cost measures-analyzing high (above median) versus low (below median) assets turnover and SG&A expense	211
8.4	Regression analysis of agency costs measured by assets turnover ratio and SG&A expense to ownership structure and board structure	214
8.5	Orthogonal regression analysis of ownership structure and board structure on assets turnover and SG&A expense	221
Appendix 3		
3-1	Shenzhen Gintian Industry Ltd. (000003)	258
3-2	Shenzhen Overglobe Development Ltd. (000047)	258
3-3	Shanghai Commercial Real Estate Development Industry Ltd. (600833)	259
3-4	Shanghai Xingye Housing Ltd (600603)	260

FIGURES

Figure No.		Page
2.1	Results of empirical studies of the relation between Tobin's Q and insider ownership.	65
3.1	Ratios of stock market value of listed companies to GDP in the transitional economies and emerging markets	73
3.2	The organizational structure of Chinese listed companies	85
4.1	Growth rate of GDP and RPI of China (1991-2002)	105
4.2	Reduction of interest rate (1996-2002)	106
4.3	Growth rate of investment in real estate industry	107
5.1	Correlation of property share price with profitability ratios and firm size	124
5.2	The listed real estate companies controlled by Shenzhen Construction Investment Controlling Company	130
5.3	Relation of number of shares owned by the first large shareholder and corporate performance of China's listed real estate companies (2000-2002).	137
6.1	The relationship of first large controlling shareholder and its representatives on the board	161

Chapter 1. The Introduction

1.1. What is the corporate governance?

This is a study of corporate governance issues with particular reference to the listed real estate companies of China. The theoretical framework underpinning the study is that ownership structure and inefficient managerial compensation approach which induce issues related to board structure and agency costs. In applying this theory to China's listed real estate companies, it is found that the ambiguous property rights and the inefficient managerial compensation system lead to agency problems: that is the managers of the company, who are the agents of shareholders (the principals), may have private interests that conflict with those of some or all of shareholders. There is thus a need for a sound corporate governance system.

The need for corporate governance arises from the potential conflicts of interest among participants (stakeholders) in the corporate structure. These conflicts of interests, often referred to as agency problems, arise from two main sources. First, different participants have different goals and preferences. Second, the participants have imperfect information as to each other's actions, knowledge, and preference. Berle and Means (1932) address these conflicts by examining the separation of corporate ownership from corporate management—commonly referred to as the separation of ownership and control. They note that this separation, absent other corporate governance mechanisms, provides executives with the ability to act in their own self-interest rather than in the interest of shareholders. There is thus a need for a sound corporate governance system which management can be induced to ensure the maximisation of shareholders' wealth whilst protecting the interests of all parties involved, including the managers, large and small shareholders and creditors.

It is widely accepted that better corporate framework benefits firms through greater access to financing, low cost of capital, better firm performance, and more

favourable treatment of all stakeholders. Numerous studies agree that these channels operate not only at the level of the firms, but in sectors and countries as well - although causality is not always clear. There is also evidence that when a country's overall corporate governance and property rights system are weak, voluntary and market corporate governance mechanisms have limited effectiveness (Lemmon and Lins, 2003; Denis and McConnell, 2003; and Johnson *et al*, 2000).

Corporations work within a governance framework. That framework is set by law, by regulations, by the corporation's own constitution, by those who own and fund them, and by the expectations of those they serve. The framework will differ country by country, since it owes much to history and culture and it involves both rules and institutions. Its effectiveness depends on its coherence and on the degree of reliance which can be placed on its constituent parts. The governance framework also changes shape and develops through time (OECD, 2003).

What is the corporate governance defined as? The corporate governance is viewed in different ways by researchers and there are considerable debates as what the corporate governance entails. Economic theory holds that when a sole proprietor manages a firm, profits and value will tend to be maximised because they are directly linked to the owner-manager's self interest (the value of the owner-manager's investment and income). But when firm ownership is separated from control, the manager's self interest may lead to the misuse of corporate assets, for example through the pursuit of overly risky or imprudent projects (Jensen and Meckling, 1976). Shleifer and Vishny (1997, p.737) define that "Corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment".

The definition of OECD April 1999 is that "Corporate governance is the system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as, the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for

making decisions on corporate affairs. By doing this, it also provides the structure through which the company objectives are set and the means of attaining those objectives and monitoring performance”.

Corporate governance mechanisms may also be seen as economic and legal institutions that can be altered through the political process. For example, Gillan and Starks (2003) define the corporate governance as “the system of laws, rules, and factors that control operations at a company take-overs regulation, legal protection of investors according to the concentration of ownership and nature of investors: bank finance, pension funds, other firms . . . , protection of minority rights and of creditors, legal prohibitions against managerial self-dealing are all essential elements of corporate governance and they rely on the definition and hierarchy of the various interests at stake”.

Over the last decade, corporate governance has risen in prominence. The driving forces behind the heightened interest in corporate governance are

- The spread of capitalism and privatisation. Market-based economic systems dominated by voluntary private sector activity have replaced command and control-based economic system in the vast majority of nations where the governments all over the world are relinquishing to the private sector their ownership interests in firms. This is most apparent in the countries that have emerged from the former Soviet block and is also happening in China.
- Corporate growth. Private sector activity organized through the corporate form played an ever-increasing role in national economies throughout the whole of the 20th century. Corporations have proved to be most efficient organizers of economic activity.
- Deregulation and globalisation. New communication and distribution technologies, and the removal of trade and investment barriers, have created truly global markets with global competition for goods, services and capital and even corporate control. Deeper and broader cross-border business relationships between nations signal significant changes to all aspects of society, from culture to labour markets and political focus.

- Shareholder activism. Equity financing, which has long been important in the US and the UK, is becoming a more important source of investment capital in many European and Asian nations. At the same time, capital available for equity investment in corporations has become concentrated in the hands of sophisticated financial intermediaries such as pension funds and mutual funds. This trend was first apparent in the US and the UK, but is spreading with the rise of private investment vehicle around the globe. For example, in the US, the institutional investment grew from 6.1% of aggregate ownership of equities in 1950 to over 50% by 2002 (Board of Governors of the Federal Reserve System, 2003). Total financial assets held by institutional investors in the European Union grew more than 150% between 1992 and 1999 (Conference Board, 2002). These investors exercise their rights as investors to some degree on the basis of governance quality and exert pressure on corporations to conform to shareholders' expectations on governance. Institutional investors have the potential to influence management's activities directly through their ownership, and indirectly by trading their shares. An institutional investor's indirect influence can be quite strong. For instance, institutional investors may act as a group to avoid investing in a particular company; thereby, increasing that company's cost of capital. Although institutional investors have not played as prominent a role on emerging markets, pension reform and privatisation initiatives have started to influence the financial holdings of institutions and thus the capital market in these economies as well (Gillan and Starks, 2003).
- The Asian crisis "wake-up". The financial crisis in Asia showed that systematic failure of investor protection mechanisms combined with weak capital market regulation, in systems that rely heavily on "crony capitalism, can lead to failures of confidence that spread from individual firms to entire countries. Insufficient financial disclosure and capital market regulation, lack of minority shareholders protection, and failure of board and controlling shareholder accountability all supported lending and investing practices based on relationships rather than on prudent analysis of risk and reward, (Millstein, 1998). The non-surprising result was that

companies over-invested in non-productive and often speculative activities. It has been widely recognised that efforts to strengthen the global financial architecture need to include governance reform (Classens, 2003).

- Rising number of accounting scandals and cases of mismanagement by top level senior executives in major US and UK companies are generally the consequences of unacceptable corporate governance practices (Demirag and Solomon, 2003). Globalisation of financial markets, developments in regional economic integration and cross-country institutional investment have all helped to put corporate governance on the top of the agenda of international business. The Enron and WorldCom accounting scandals have cast the spotlight in an urgent need for corporate governance reform across the globe. At the individual country level, numerous codes of practice have been developed, with governments worldwide recognising the need for corporate governance reform in order to improve their countries' competitiveness and ability to attract international capital.

1.2. Why is corporate governance important?

The role of corporate governance in making sure that board and management are accountable is of broad importance to society for a number of reasons. Effective corporate governance:

- Promotes the efficient use of resources both within the company and the greater economy. Debt and equity capital should flow to those corporations capable of investing it in the most efficient manner for the production of goods and services most in demand and with the highest rate of return. In this regard, effective governance should help protect and grow scarce resources, therefore helping to ensure that society needs are met. In addition, effective governance should make it more likely that managers who do not put scarce resources to efficient use, or who are incompetent or (at the extreme) corrupt, are replaced.

- Assists companies (and economies) in attracting lower-cost investment capital by improving both domestic and international investor confidence that assets will be used as agreed (whether that investment is in the form of debt or equity). Although managers need action if they are to innovate and drive the corporation to compete successfully, rules and procedures are needed to protect capital providers, including:
 1. independent monitoring of management;
 2. transparency as to corporate performance, ownership and control;
 3. participation in certain fundamental decisions by shareholders.
- Assists in making sure that the company is in compliance with the laws, regulations and expectations of society. Effective governance involves the board of directors ensuring legal compliance and making judgements about activities that are technically lawful in the countries in which the company operates.
- Provides managers with oversight of their use of corporate assets. Corporate governance may not guarantee improved corporate performance at the individual company level, as there are too many other factors that impact on performance. But it should make it more likely for the company to respond rapidly to changes in business environment, crisis and the inevitable periods of decline. It should help guard against managerial complacency and keep managers focused on improving firm performance, making sure that they are replaced when they fail to do so.
- Is closely related to efforts to reduce corruption in business dealings. Although it may not prevent corruption, effective governance should make it more difficult for corrupt practices to develop and take root, and more likely that corrupt practices are discovered early and eliminated. Effective governance is a check on power of the relatively few individuals within the corporation who control large amounts of other people's money.¹

¹source: www.lawdepartment.net/global "steering clear of bribery",

1.3. Fundamental issues of corporate governance reform in China

Like the transitional economies of Europe and Central Asia, China has embarked on ambitious privatisation programmes. In China over the past ten years hundred of state owned, and still state controlled companies floated shares on the Shanghai and Shenzhen stock exchanges. Today these exchanges have 1,200 listed companies, with market capitalisation of over 500 billion of US dollar, second only to Japan in Asia. It is estimated that 30-60 million of Chinese own shares. Some of the large Chinese state owned enterprises have also listed in the Hong Kong stock exchange, and now make up 35% of its market capitalisation (Economist 2003).

In China, both valuation and hence privatisation revenues depend on the effective rights of new shareholders. The weak corporate governance is the bottleneck of the sustainable development of China's stock market. Policy makers have recognised this, and have given corporate governance reform increased priority.

The issues argued to be fundamental to China's corporate governance reform are property rights and managerial incentive system. The two issues are linked with each other (Zhang, 1999). The property rights issue has two meanings in China's economy context. One is the property rights in state owned enterprises (SOEs) are ambiguous and this led to the false placement of state property. The other is that the ownership structure is irrational. Majority of China's listed companies are state owned companies (SOEs). Nominally, the state assets belong to the whole people. In reality, the property rights are not clear. The representatives of the state assets are politicians from the local state assets management offices (companies) or other government departments. The politicians have ownership right, but are lack of the claimant right of the residuals of the companies; therefore, they have no enough incentive to monitor the managers. The companies are controlled by the managers (so called "insider control") who are appointed or nominated by the politicians. The ambiguous property rights led to the absence of real owner of the company and the insider control in reality. The insider usually does not own the company's equity stake, but has great autonomy to the company. The irrational

ownership structure is reflected as the company is controlled by a single controlling shareholder. Many listed companies in China have one single controlling shareholder who is in an absolute controlling position. The other shareholders are too small to exert influence on the management. The highly concentrated ownership structure and the absence of the real owner of the company facilitate the insiders to use (abuse) the control power to expropriate the wealth of the company.

The ownership structure of China's listed companies determines the structure of board of directors to be dominated by the insiders - directors chosen by controlling shareholder and executive directors; such directors are likely to lack integrity obligation and fail to perform their duties industriously (Wu, 2001).

The ineffective managerial incentive system is another fundamental issue in China's corporate governance reform. Under the traditional planned economy, the employees were the master of the enterprise and the managers were civil servants of the government. The motivation of the managers did not come from building up an effective contractual system, but from the political consciousness (Zhang, 1999). There was no effective incentive system which could motivate the managers to work hard to maximize the value of company. The poor incentive system induced the agency costs measured by the irrelevance of manager compensation to firm performance and high manager discretionary expense.

1.4. Research objectives

This thesis takes one industry sector-real estate industry-for analyse. It studies the two fundamental corporate governance issues - ownership and managerial incentive system and the agency problems induced in the listed real estate companies. The reasons to choose the real estate industry are:

1. First of all, it is argued that the certain types of controlling shareholders may have sufficient influence in certain types of industries and may lead to

increased firm performance. Sorensen (1999) argue that certain types of large-block shareholders may have sufficient formal authority, social influence, and expertise to capture property rights to gain control of the firm, giving them a disproportionately large amount of benefit and use rights. He suggests that a contingency theory of corporate governance where the effect of ownership on firm performance is contingent on the “fit” between owner types and the industry context.

The thesis follows this line of study to examine the effect of different types of controlling shareholders in the real estate sector. The real estate market in China is not fully competitive and transparent. The land resource is controlled by the government and is traded by the agreement price or negotiation between the related parties, rather than at the open market bidding price. There is no public disclosure of the land supply information and the transfer price of the land use right. A series of problems occurred in the course of the transfer. The government as the owner of the land plays an important role in the real estate market. The real estate investment is capital intensiveness. The capital flow is essential for the survival of the real estate companies. However, the characteristics of the real estate industry in China are (1). there are large amounts of real estate enterprises dispersed over China (i.e. large in quantity); (2). the economic size of the real estate enterprises is small (i.e. small in size). For example, there are 32,618 real estate enterprises with the average total assets of 0.101 billion of RMB (Statistics Yearbook of China, 2003). The real estate industry is subject to the government policies and macro control such as land supply policy, fiscal policy, and the openness of the real estate market and the company is more exposed to the market volatility. In such market environment, whether the ownership structure and the type of controlling shares have effect on firm performance will be investigated in this thesis.

2. The ownership in the real estate sector is diversified. In the real estate industry, non-state owned enterprises or privately owned enterprises (POEs)² are active in participating in the development of the real estate

market, aside with the state owned companies (SOEs). For example, in 2002, 15.37% of the real estate enterprises are SOEs, and the others are owned collectively, privately or by foreign companies. In 2002 there are 70 listed companies owned by private persons/families or privately owned institutions and 15 of them are classified into the real estate sector. The diversified ownership structure provides a good chance for analysis and comparison of the governance in POEs and SOEs and the effect on the performance of different companies with different ultimate owners.

3. The booming of the real estate market in China since 2000 has put the real estate companies on the spotlight and has called the great attention from investors, enterprisers and researchers. Although there are many companies joining in the real estate market competition, due to the unavailability of the data, my study focuses on the listed real estate companies. The real estate sector is a small sector, but it is often an influential sector on China's stock market. At each sever price fluctuation on China's stock market, some real estate companies could be found among the ones ranked on the top of the price fluctuations, which reflected the industry characteristics and the influence on China's stock market (Chinese Listed Companies Report, 2003).

The specific objectives of the thesis focus on four major topics:

1. The ownership structure and its effect on firm performance. The thesis tests whether the ownership concentration matters in the real estate sector; whether the type of controlling shares - state shares or legal person shares has influence on firm performance and whether the companies with different ultimate owners (state vs. non-state) perform differently.

2. The board structure and its effect on the firm performance. It tests whether the board structure - board size and composition - has effect on

²Privately owned company (POE) refers to non-state company, including the one owned by private person, family, private institutions, collectively owned company. Foreign company is exclusive.

the firm performance and what decides the board structure.

3. The relation of agency costs and governance structure - ownership structure and board structure - to test whether agency costs are induced by poor governance structure and to test whether the agency costs are different in SOEs and POEs in order to test the hypothesis that POEs are more efficient than SOEs.

4. The manager compensation and its relation with firm performance is studied to find out the determinants of manager compensation and the effectiveness of current managerial compensation system of China's listed real estate companies.

This thesis discusses the general characteristics of China's corporate governance in the aspects of ownership structure, board structure, managerial compensation system and the constraints for the adoption of managerial stock option, market as external governance factor, institutional investors before it examines the four major subjects in the real estate companies. Since the real estate companies operate in the same macro corporate governance environment as the other listed companies, they bear the common problems of the current corporate governance system.

So far, majority of the corporate governance research in China's context is addressed to the whole stock market. Little research is focused on a specific industry. The purpose of the thesis is to provide complimentary evidence to the research on China's corporate governance reform.

1.5. Data and methodology

Data

The study period covers three years from 2000 to 2002. The criteria for the listed real estate company selection are that, first of all, it must meet the requirement of “Guidelines of the Industry Sectors Classification for Listed Companies” by Chinese Securities Regulatory Commission (CSRC). It uses a sample selection rule that requires each company has at least two years or more consecutive fiscal years of financial statement data between 2000 and 2002. The two-year requirement represents an attempt to balance two sampling issues: collecting several observations for each company so that the econometric panel data technique can be used, and limiting survivorship bias by allowing companies to enter and exit the panel over time. For the company that was listed in 2002, it uses the data of the previous year before listing on the stock market. One company which was de-listed on the stock market in 2001 is removed from the sample of 2000 due to availability of one year’s data. The data for the study are collected from annual report of the listed real estate companies and the website of www.stockstar.com. Table 1.1 summarises the procedure of selecting the final samples for the study.

Table 1.1 The selection procedure of China’s listed real estate company

Real estate companies listed on two stock exchanges by the end of	
2000	36
Plus	
Three newly listed companies in 2001	
Plus	
Twelve restructured companies in 2001	
Less	
one company de-listed in 2001	
Real estate companies listed on two stock exchanges by the end of	
2001	51
Plus	
one newly listed company in 2002	
Less	
Two companies de-listed in 2002	
Real estate companies listed on two stock exchanges by the end of	
2002	50

Methodology

The methods employed in the thesis include the univariate test, traditional ordinary least square (OLS) technique, as in the other empirical studies (e.g. Morck, *et al.*, 1988, Classens, *et al.*, 2002 and Singh, *et al.*, 2003, etc.). It focuses on the effect of governance structure on changes in firm performance. As such, the analysis potentially avoids some of the issues regarding the endogeneity of static analysis.

1.6. The structure of thesis

The thesis is designed as follow. Chapter 2 reviews the literature of the theory of governance factors such as the ownership structure, board structure, manager incentive arguments. The conceptual issues around the ownership measurement and firm performance measurement are discussed. Chapter 3, discusses the evolution of Chinese stock market and the general characteristics of the China's corporate governance structure, including the irrational ownership structure, imbalance of board structure, inefficient managerial compensation system, market as external governance factor and institutional investors in China. Chapter 4 studies the China's real estate market cycles from 1990 to 2000 and the growth of China's real estate companies. Chapter 5 investigates the ownership structure and corporate performance of China's listed real estate companies. The balance of controlling power and its relation with firm performance is also studied. Case studies of ownership structure are presented in Appendix 3. Chapter 6 examines the board structure and its impact on firm performance. The determinants of board structure are discussed. Chapter 7 investigates manager compensation system and its relation with firm performance. Chapter 8 studies the corporate governance structure and agency costs, and in Chapter 9, the conclusions are made.

Chapter 2. Literature Review

2.1. Introduction

Over the last decade, corporate governance has risen in prominence as the role of the private sector has increased around the world and greater financial integration has led to greater competition for, and risk from, internationally mobile capital flows. In developing and emerging market economies, the experiences of economic transition and all too frequent financial crises have confirmed that a weak institutional framework for corporate governance is incompatible with sustainable financial market development. Significant academic work has also confirmed strong links between financial development, economic performance and corporate governance.

In a 1996 McKinsey survey of the US investors, two-thirds of those surveyed reported that they would pay more for a “well-governed” company (a company responsive to investors, with an independent board), all other factors being equal (Felton *et al.*, 1996). In June 2000, McKinsey replicated this survey in Asia, Europe and Latin America, and the same results hold. Over 200 institutional investors in the US, Europe, Asia and Latin America (representing 3.25 trillion of US dollar in assets) were involved in the survey (McKinsey Investor Opinion Survey, June 2000). The size of the premium investors are willing to pay varies by country. It is lowest in the US and the UK, higher in Asia (Indonesia, South Korea and Japan) and highest in Latin America (Venezuela and Colombia). This suggests that the quality of corporate governance at the company level is perceived as most valuable in situations where both: mandated disclosure and legal protection for shareholders are weaker and investors believe there is the most room for improvement (Coombes and Watson, 2000).

Corporate governance has succeeded in attracting a good deal of public interest because of its apparent importance for the economic health of corporations and society in general. Berle and Means (1932) in their classic thesis, *The Modern*

Corporation and Private Property call attention to the prevalence of widely held corporations in the United States, in which ownership of capital is dispersed among small shareholders, yet control is concentrated in the hands of managers. The managers did not have sufficient equity in the firms they managed to give them the incentive to turn their full attention to profit maximisation. Instead, managers may pursue self-interested initiatives at the expenses of shareholders.

However, executives' activities are potentially constrained by numerous factors that constitute and influence the governance of the corporations that they manage. These factors include the board of directors (who have the right to hire, fire and compensate managers), financing agreements, laws and regulations, labour contracts, the market for corporate control, and even the competitive environment. In general terms, these factors can be thought of as either internal control mechanisms (such as the board) or external control mechanisms (such as the market for corporate control).

Shareholders, as the owners of the firm, have certain rights, including the right to elect the board of directors. The board, as the agent of the shareholders has the responsibility to monitor corporate managers and their performance. If shareholders become dissatisfied with the board's performance (and presumably that of the firm), they have three choices: 1). 'vote with their feet', i.e., sell their shares; 2). hold their shares and voice their dissatisfaction, or 3). hold their shares and do nothing. Hirschman (1971) has characterised these alternatives as: exit, voice, and loyalty. The questions naturally arise: what conditions lead investors to exercise their voice, i.e., engage in monitoring, as opposed to remaining loyal or simply exiting?

In this chapter, first of all, looks at the ownership structure around the world in Section 2.2. In Section 2.3, the conceptual issues round the measurements of ownership and firm performance are reviewed. In Section 2.4, the board structure and the relation with firm performance are reviewed. In Section 2.5, managerial ownership is reviewed.

2.2. Ownership structure

2.2.1. Ownership structure around the world

The notion of diffuse stock ownership is well entrenched among economists. It started with Adam Smith's legendary warning in *Wealth of Nations* about the "negligence and profusion" that will result when those who manage enterprises are "rather of other people's money than of their own". A century and a half later, another lawyer, Adolf Berle, along with a journalist, Gardiner Means, returned to the theme of diffuse stock ownership. Since the dawn of capitalism, Berle and Means reasoned, most production had taken place in relatively small organisations in which the owners were also the managers. Beginning in the nineteenth century with the Industrial Revolution, however, technological change had increased the optimal size of many firms to the point where no individual, family, or group of managers would have sufficient wealth to own a controlling interest. As a result, enterprises faced "the dissolution of the old atom of ownership into its component parts, control and beneficial ownership" (Berle and Means, 1932, p. 8). Ultimately, this separation of ownership from control threatens "the very foundation on which the economic order of the past three centuries has rested".

The arguments of Berle and Means on the dangers of diffuse stock ownership, written during the depths of the American Great Depression, had an immediate and profound impact. Most notably, their arguments helped to shape the federal securities legislation of the 1930s. That legislation was intended to protect diffuse shareholders from professional managers, and it remains the primary federal securities law to this day.

The notion of diffuse ownership has also had a profound influence on contemporary economists. This can perhaps best be seen in one of the pivotal papers of the postwar era, Jensen and Meckling's (1976, p.311) agency paper. Much of the focus of that paper is on the conflict between diffuse shareholders and professional managers:

Since the relationship between the stockholders and manager of a corporation fit the definition of a pure agency relationship, it should be no surprise to discover that the issues associated with the "separation of ownership and control" in the modern diffuse ownership corporation are intimately associated with the general problem of agency. We show ... that an explanation of why and how the agency costs generated by the corporate form are born leads to a theory of the ownership (or capital) structure of the firm.

Researchers began to discover that some public corporations had large-percentage shareholders, many of whom were top managers or directors. Researchers also discovered that some of these corporations were large and well known. Concentrated stock ownership, it appeared, was not limited to a few anomalous firms. Eisenberg (1976), Demsetz (1983), Lehn (1985) and Shleifer and Vishny (1988) show that, even among the large American firms, there is a modest concentration of ownership. Holderness and Sheehan (1988) have found in the United States several hundred publicly traded firms with majority (greater than 51 per cent) shareholders.

Since then, many papers have addressed to the ownership structure and shown that there is striking variation of ownership structure internationally. Majluf, Abarca, Rodriguez, and Fuentes (1998) report that although the large shareholders in Chile control 40% of the shares of the large companies, this drops to 22% for Germany, and 7% for Japan. However, in the US, there is substantially more dispersion in share ownership and the large shareholder often control as little as 5% of voting rights. There can be differences between the large shareholders and large shareholder group. Prowse (1994) provides evidence that the top five shareholders in Japan own over 30% of the shares of publicly traded firms.

The significant contribution of the ownership structure around the world is made by La Porta *et al.* (1998) who document the ownership structure of the ten large non-financial corporations for a cross-section of 49 countries, including nine East Asian countries. The results show that although ownership concentration of East

Asia corporations is high, it is not significantly different from that in other countries at similar levels of economy and institutional development.

La Porta *et al.* (1999) also report that, for a sample of large publicly traded firms around the world (the large 20 firms in each of the 27 wealthy economies), 36% are widely held, 30% are family-controlled, 18% are state-controlled, and the remaining 15% exhibit a variety of other ownership structures (see Table 2.1). In this paper, the authors also establish the identities of the ultimate owners and find that major shareholders primarily use pyramidal structures (multiple layers of corporate ownership which permit control of voting rights with relatively low levels of investment), rather than differential voting rights, to control firms. They find the fact that only slightly more than one third of the firms in the richest countries are widely held suggests that the image of the Berle and Mean's corporation as the dominant ownership structure in the world is misleading. In their selected sample, all the 20 firms in the United Kingdom, 18 out of the 20 in Japan and 16 out of the 20 in the United States fit the widely held description³. And in Argentina, Greece, Austria, Hong Kong, Portugal, Israel, or Belgium, there are hardly any widely held firms. Among corporations with owners, the principal owner types are the families and the state. 70% of the large traded firms in Austria, 45% in Singapore, and 40% in Israel and Italy are state-controlled. Finally, La Porta *et al.* (1999) find little evidence of control by single financial institutions, such as banks (other than in Germany), and little evidence of cross-shareholdings⁴ by other corporations. They conclude that the Berle and Means widely held corporation is only a common organisational form for large firms in the richest common law countries⁵. At the countries with poor shareholder protection, even the large firms tend to have controlling shareholders. Sometimes

³In La Porte (1999) study, the cutoff for control of company is 10% or more of the votes.

⁴Cross-holdings mean company Y directly or indirectly controls its own stock (Faccio and Lang, 2000).

⁵Roe (1994) attributes ownership dispersion in the US to U.S.-specific policies that discourage ownership concentration undertaken under political pressure from the professional corporate manager.

that shareholder is the state; but more often it is a family, usually the founder of the firm or his descendants.

Faccio and Lang (2002) also examine ownership and control of over 5000 corporations in 13 Western European countries. They find that companies are either widely held (36.93%) or family-controlled (44.29%) with little use of multiple class voting shares⁶ or pyramid structures (see Table 2.2.). Widely held firms are more important in the UK and Ireland, family controlled firms in continental Europe. Financial and large firms are more likely widely held, while non-financial and small firms are more likely family controlled. State control is important for large-firms in certain countries.

Claessens *et al.* (2000) investigate the separation of ownership and control for 2,980 corporations in nine East Asian countries and find that more than two-thirds of firms are controlled by a single shareholders (see Table 2.3). Managers of closely held firms tend to be the relatives of the controlling shareholders' family. Older firms are generally family-controlled, dispelling the notion that ownership becomes dispersed over time.

Claessens *et al.* (2002) argue that the separation between voting and cash-flow rights in East Asian between corporations is associated with the potential expropriation of minority shareholders and lower market values. Moreover, Fan and Wong (2002) find that earnings are less informative in the presence of concentrated ownership, pyramidal ownership structures, and cross-holdings.

Faccio, Lang and Young (2001) argue that East Asian capital markets generally appear capable of containing expropriation within tightly controlled groups by requiring that higher dividends be paid by corporations affiliated with such

⁶Firm Y is held through "multiple control chains" if it has an ultimate owner who controls it via a multitude of control chains, each of which includes at least 5% of the voting right at each link (Faccio and Lang, 2000).

groups. The authors argue that these capital markets fail to extract higher dividends from corporations in groups with only intermediate levels of control. Thus, a greater discrepancy between ownership and control is associated with lower dividend rates. Offering a different perspective, Rajan and Zingales (1998) suggest that such relationship-based systems work well in environments with weak legal protection and scarce resources when faced with large external capital inflows.

In China's context, to have a fundamental understanding of the ownership structure, we have to look at the types of shares. Unlike the developed economies and other transitional economies, the ownership of each enterprise is fragmented into subgroups: (1).state shares; (2).legal person shares; (3).tradable shares (A-shares, B-shares or H-shares). The state shares and legal person shares are non transferable on the stock market. The state keeps holding the controlling stakes to avoid the loss of the state assets if all shares float on the market. This special institutional arrangement rooted deeply in China's political system and ideology, as well as in the economic reform strategy.

In a research of Liu *et al.* (2003), "Principal of ultimate ownership", they survey 1,160 publicly traded companies in China in 2001, and report that the government ultimately control 84% of the publicly traded companies, in which 8.5% directly and 75.6% indirectly by "pyramid shareholding schemes" (See Table 2.4). Compared with other emerging economies, in terms of types of large shareholders, China differs from theirs as to the absence of significant ownership by individuals and families, the negligible role of financial institutions and institutional investors, and the state plays an important role.

In sum, the empirical studies of ownership structure around the world show that the ownership is widely dispersed only in most of the large corporations in the UK, the US , Ireland and Japan. In the other economies such as the continental European countries, developing countries and Eastern Asian countries including China, the ownership is highly concentrated. The principle owner types are the

families and the state. The major shareholders primarily use pyramidal structure, rather than differential voting rights to control firms.

Table 2.1 Ownership control of medium-Sized publicly traded firms around the world

Country	20% Cut-off					
	Widely held	Family	State	Widely held financial	Widely held corporation	Miscellaneous
Argentina	0.00	0.65	0.15	0.05	0.15	0.00
Australia	0.65	0.05	0.05	0.00	0.25	0.00
Canada	0.60	0.25	0.00	0.00	0.15	0.00
Hong Kong	0.10	0.70	0.05	0.05	0.00	0.10
Ireland	0.65	0.10	0.00	0.00	0.10	0.15
Japan	0.90	0.05	0.05	0.00	0.00	0.00
New Zealand	0.30	0.25	0.25	0.00	0.20	0.00
Norway	0.25	0.25	0.35	0.05	0.00	0.10
Singapore	0.15	0.30	0.45	0.05	0.05	0.00
Spain	0.35	0.15	0.30	0.10	0.10	0.00
United Kingdom	1.00	0.00	0.00	0.00	0.00	0.00
United States	0.80	0.20	0.00	0.00	0.00	0.00
Austria	0.05	0.15	0.70	0.00	0.00	0.10
Belgium	0.05	0.50	0.05	0.00	0.30	0.10
Denmark	0.40	0.35	0.15	0.00	0.00	0.10
Finland	0.35	0.10	0.35	0.05	0.05	0.10
France	0.60	0.20	0.15	0.05	0.05	0.00
Germany	0.50	0.10	0.25	0.15	0.15	0.00
Greece	0.10	0.50	0.30	0.10	0.10	0.00
Israel	0.05	0.50	0.40	0.00	0.00	0.00
Italy	0.20	0.15	0.40	0.05	0.05	0.10
South Korea	0.55	0.20	0.15	0.00	0.00	0.05
Mexico	0.00	1.00	0.00	0.00	0.00	0.00
Netherlands	0.30	0.20	0.05	0.00	0.00	0.35
Portugal	0.10	0.45	0.25	0.15	0.15	0.05
Sweden	0.25	0.45	0.10	0.15	0.15	0.05
Switzerland	0.60	0.30	0.00	0.05	0.05	0.05
Sample average	0.36	0.30	0.18	0.05	0.05	0.05

Source: La Porta *et al.* (1999), "Corporate ownership around the world", *Journal of Finance*. Vol. LIV, No. 2, April 1999.

Adjustment is made.

Table 2.2 Ultimate control of publicly traded firms of Western Europe

Country	Number of firms	Widely held	Family	Family of which		State	Widely held corporation	Widely held Financial	Miscellaneous	Cross-holdings
				Identified families	Unlisted forms					
Austria	99	11.11	52.86	12.12	40.74	15.32	0.00	8.59	11.11	1.01
Belgium	130	20.00	51.54	7.31	44.23	2.31	0.77	12.69	12.69	0.00
Finland	129	28.68	48.84	16.28	32.56	15.76	1.55	0.65	4.52	0.00
France	607	14.00	64.82	26.11	38.71	5.11	3.79	11.37	0.91	0.00
Germany	704	10.37	64.62	27.03	37.59	6.30	3.65	9.07	3.37	2.62
Ireland	69	62.32	24.63	13.04	11.59	1.45	2.17	4.35	5.07	0.00
Italy	208	12.98	59.61	39.50	20.11	10.34	2.88	12.26	1.20	0.72
Norway	155	36.77	38.55	10.59	27.96	13.09	0.32	4.46	4.54	2.27
Portugal	87	21.84	60.34	5.17	55.17	5.75	0.57	4.60	6.90	0.00
Spain	632	26.42	55.79	6.25	49.54	4.11	1.64	11.51	0.47	0.05
Sweden	245	39.18	46.94	22.65	24.29	4.90	0.00	2.86	5.71	0.41
Switzerland	214	27.57	48.13	22.66	25.47	7.32	1.09	9.35	6.31	0.23
United Kingdom	1,953	63.08	23.68	12.22	11.46	0.08	0.76	8.94	3.46	0.00
Total	5,232	39.93	44.29	16.93	27.36	4.14	1.68	9.03	3.43	0.51

Source: Faccio *et al* (2002), "The ultimate ownership of western European corporations", Journal of Financial Economics 65 (No. 3, Sept.)

Table 2.3 Means of enhancing control in East Asian corporations (full samples, percentage of total)

Country	Own=20% Con(%)	Pyramids with ultimate owners	Cross-holdings	Controlling owner alone	Management
Hong Kong	19.71	25.1	9.3	69.1	53.4
Indonesia	19.17	66.9	1.3	53.4	84.6
Japan	20.00	36.4	11.6	87.2	37.2
Korea	20.00	42.6	9.4	76.7	80.7
Malaysia	19.14	39.3	14.9	40.4	85
The Philippines	18.71	40.2	7.1	35.8	42.3
Singapore	20.00	55	15.7	37.6	69.9
Taiwan	19.61	49	8.6	43.3	79.8
Thailand	19.82	12.7	0.8	40.1	67.5
East Asia nine	19.76	38.7	10.1	67.8	57.1

Source: Claessens, *et al.* (2000), "The separation of ownership and control in East Asian Corporations", *Journal of Financial Economics*, Vol. 58, Issue 1-2, 2000.

Table 2.4 The ratio of state-owned and controlled shares in China's publicly traded companies (2001)

Large shareholder	Ratio as of the total		Ratio of large shareholder as of the outstanding (%)
	number of publicly traded companies (%)	Nr. Of companies	
State as ultimate controlling shareholder			
Direct control	8.50	94	39.6
Indirect control			
State owned enterprises	75.60	836	47.3
State-controlled	1.40	15	52.3
Total companies controlled by the State	84.1	930	46.5
Total companies controlled by the non-State	15.9	175	34.8
Total	100	1105	44.6

Source: Liu *et al* , (2003), "Principle of ultimate ownership, ownership structure and corporate performance", Journal of Economic Research (Chinese), Vol. 4.

2.2.2. Why ownership differs across the countries

Traditional comparisons of corporate governance systems focus on the institutions financing firms. Some authors classify the types of ownership into two models or two systems. Bank-centred corporate governance system, such as those of Germany and Japan (or "German-Japanese" Model, or "control-oriented" model) (e.g. Prowse, 1994 and Aoki and Kin, 1995) are compared to market-centred system, such as those of the United States and the United Kingdom (or "Anglo-American" Model" or "arm-length" model) (e.g. Allen and Gale, 2000). Relatedly, relationship-based corporate governance, in which a main bank provides a significant share of finance and governance to each firm, is contrasted with market-based governance, in which finance is provided by large numbers of investors and in which takeovers play a key governance role.

These institutional distinctions have been central to the evaluation of alternative corporate governance regimes and to policy proposals for improvement. In the 1980s, when the Japanese economy could do no wrong, bank-centered governance was widely regarded as superior because, as Aoki and Patrick (1993) and Porter (1992) argue, far-sighted banks enable firms to focus on long term investment decisions. According to Hoshi *et al.* (1991), banks also deliver capital to firms

facing liquidity shortfalls, thereby avoiding costly financial distress. Finally, banks replace the expensive and disruptive takeovers with more surgical bank intervention when the management of the borrowing firm underperformed.

In the 1990s, as the Japanese economy collapsed, the pendulum swung the other way (La Porta, *et al*, 1998). Kang and Stulz (1998) show that, far from being the promoters of rational investment, Japanese banks perpetrate soft budget constraints, over-lending to declining firms that require radical reorganisation. And according to Weinstein and Yafeh (1998) and Morck and Nakamura (1999), Japanese banks, instead of facilitating governance, collude with enterprise managers to deter external threats to their control and to collect rents on bank loans. In the assessments by Edwards and Fischer (1994) and Hellwig (1999), German banks are likewise downgraded to ineffective providers of governance. Market-based systems, in contrast, rode the American stock market.

Prowse (1994) argued that the differences in the two models are a result of striking differences in the firm's legal and regulatory environment which affects the degree to which the concentration holding of the firm's financial claims is achieved. Regulatory restrictions on investors' (particularly financial institutions') holding of large debt and equity stakes in individual firms in the Anglo-American countries have led to relatively dispersed holdings. They documented the legal and regulatory constraints on corporate control. The U.S. and U.K. laws are in general much more hostile to investors taking large, influential stakes in firms. Whereas, financial institutions in Japan and Germany are generally given much more latitude to own shares and exert control over large firms.

In the U.S. for example, banks are simply prohibited from owning any stock on their own account by the Glass-Steagall Act of 1933 (which has been recently phased out). Bank holding companies cannot own more than 5% of any one firm and their holdings must be passive. Other financial institutions such as insurance companies also face strict rules governing their equity investment. There are also impediments to non-financial firms taking large stakes in firms. The U.S. antitrust laws have been hostile to the inter-corporate ties that would be implied by large

inter-corporate shareholdings. In the United Kingdom, there are fewer formal restrictions on concentrated shareholdings in firms, but those that exist still appear substantial. Banks' links with non-financial firms have been subject to strict prudential rules. Exposure in excess of 10% of a bank's capital must be approved by the Bank of England. Pension funds and insurance companies have self-imposed limits on shareholding, and do not invest more than 2%-5% of their assets in any one company. Mutual funds have similar rules.

In Japan, however, financial institutions are subject to few regulations regarding shareholdings (La Porta, *et al.* 1998). Japanese commercial banks are not prohibited from owning corporate stock, except that they are subject to anti-monopoly regulations which until 1987 limited a single bank's holdings of a single firm's shares to 10% (the limit has since been lowered to 5%). On paper, Japanese antitrust laws and insider trading regulations look similar to those in the United States. It is however widely recognized that they are not enforced by the government. In Germany, relationship between banks and industry is not burdened at all by regulations. German financial system is based on the principle of universal banking. Universal banks can hold whatever share of equity they like in any non-financial firm. Antitrust laws have not been used to discourage inter-corporate shareholdings as they have in the U.S. There is no explicit legislation against insider trading. (Prowse, 1994).

Other authors have also pointed to legal and institutional factors that determine the degree of concentration and corporate control mechanisms in a particular country. Shleifer and Vishny (1995) analyse the cost and benefit of ownership concentration, and argue that weak legal protection of minority shareholders' interests in continental European countries may explain why ownership is more concentrated there. They conclude that, "The principal advantage of concentrated ownership is that it relies on relatively simple judicial interventions, which are suitable for even poorly informed and motivated courts. Concentrated ownership puts a much smaller burden on the legal enforcement system than does the protection of minority investors or the adjudication of multiple creditor disputes. For this reason, perhaps, concentrated ownership is so prevalent in most countries

in the world, where courts are much less equipped to meddle in corporate affairs than they are, for example, in the United States (p.32)”.

Jensen and Meckling (1976) recognise the role of the legal system when they write:

This view of the firm points up the important role which the legal system and the law play in social organisations, especially, the organisation of economic activity. Statutory law sets bounds on the kinds of contracts into which individuals and organisations may enter without risking criminal prosecution. The police powers of the state are available and used to enforce performance of contracts or to enforce the collection of damages for non-performance. The courts adjudicate contracts between contracting parties and establish precedents which form the body of common law. All of these government activities affect both the kinds of contracts executed and the extent to which contracting is relied upon (p. 311).

La Porta *et al.* (2000) challenge the conventional classification of financial systems into bank-and-market centred is neither straightforward nor particularly fruitful and suggest that legal approach is a more fruitful way to understand corporate governance and its reform. They investigate the differences in laws and the effectiveness of their enforcement across countries, discuss the possible origins of these differences and argue that the legal approach is a more fruitful way to understand corporate governance and its reform than the conventional distinction between bank-centred and market-centred financial systems. “*Strong investor protection may be a particularly important manifestation of the greater security of property rights against political interference in some countries. The Common Law countries such as the US, and the UK, have the strongest protection of outside investors - both shareholders and creditors where the ownership is widely dispersed. The French civil law countries have the weakest protection where the ownership is more concentrated, while German civil law and Scandinavian countries fall in between, although comparatively speaking they have stronger protection of creditors, especially secured creditors*” (p.58). Empirically, strong investor protection is associated with effective corporate

governance, as reflected in valuable and broad financial markets, dispersed ownership of shares, and efficient allocation of capital across firms.

The available evidence on corporate ownership patterns around the world supports the importance of investor protection. This evidence was obtained for a number of individual countries, including Germany (Edwards and Fischer, 1994, and Gorton and Schmid, 2000), Italy (Barca, 1995), and seven Organisation for Economic Cooperation and Development countries (European Corporate Governance Network, 1997). La Porta, *et al.* (1998) describe ownership concentration in their sample of 49 countries, while La Porta, *et al.* (1999) examine patterns of control in the large firms from each of 27 wealthy economies. The data show that countries with poor investor protection typically exhibit more concentrated control of firms than do countries with good investor protection. In the former, even the large firms are usually controlled either by the state or by the families that founded or acquired these firms. In the latter countries, the Berle and Means' corporation - with dispersed shareholders and professional managers in control - is more common.⁷

In sum, the evidence has proved to be broadly consistent with the proposition that the legal environment shapes the value of the private benefits of control and thereby determines the equilibrium ownership structures. Perhaps the main implications of this evidence for the study of corporate governance are the relative irrelevance of the Berle and Means' corporation in most countries in the world and the centrality of family control. Indeed, La Porta, *et al.* (1999), and Claessens, Djankov and Lang (2000) find that family-controlled firms are typically managed by family members so that the managers appear to be kept on a tighter leash than what Berle and Means describe. As Shleifer and Vishny (1997) have argued, in large corporations of most countries, the fundamental agency problem is not the

⁷The evidence also reveals that control is valued, and specifically that voting premiums increase as shareholder protection deteriorates (see, for example, Modigliani and Perotti, 1998; Nenova, 1999; and Zingales, 1994).

Berle and Means conflict between outside investors and managers, but rather that between outside investors and controlling shareholders who have nearly full control over the managers.

2.2.3. Institutional investors and investor activism

Ownership concentration has been increasing over time in all member countries of Organisation For Economic Co-operation Development (OECD). There has been a marked shift from shareholding by individuals to shareholding by the financial sector, i.e. banks, securities firms and institutional investors (mutual funds, insurance companies, and pension funds) since the 1960s (OECD 1995). In Britain, the financial sector now holds over 60 percent of all equity. The total financial assets held by institutions in the European Union grew more than 150% between 1992 and 1999 (Conference Board, 2002). Whereas, in Germany and Japan, the banks and insurance companies have enlarged their role as shareholders. It is noteworthy that the non-financial enterprises sector is a major holder in most major OECD countries, except for the United States and United Kingdom. In particular, French non-financial enterprises now hold the major part of all equity outstanding in France (59 per cent), due mainly to the privatisation of public enterprises. In Italy and Sweden, non-financial enterprises hold 32 to 34 per cent of all outstanding shares respectively (OECD 1995).

Although institutional investors have not played as prominent a role in emerging markets, pension reform and privatisation initiatives have started to influence the financial holdings of institutions, and thus the capital markets in these economies as well. The appropriate role for institutional shareholders in any economy is the subject of continuing debates.

In addition to increased ownership concentration, there has also been a trend of an increased shareholder activism since the 1980s and 1990s. Institution, whether the financial institution or non-financial corporation, is playing more important role in the monitoring and control of management. These investors, who view themselves

as corporate “owners”, see a link between sound corporate governance and lowered investment risk. They exercise their rights as investors to some degree on the basis of governance quality.

Recently, the role of the institutional investor as monitor has been studied. Empirical evidence on the monitoring role played by large shareholders has provided mixed results. For example, Bethel, Liebeskind, and Opler (1998) report that company performance improves after an activist investor purchases a block of shares. Kang and Shivdasani (1995) and Kaplan and Minton (1994) find that the presence of large shareholders is associated with increased management turnover, suggesting that these shareholders provide a monitoring function. Moreover, Bertrand and Mullainathan (2000) find that the presence of a large shareholder on the board is associated with tighter control over executive compensation. Agawal and Mandelker (1990) find that firms with greater institutional ownership have larger stock price reactions upon the announcement of anti-takeover amendment adoption. Grier and Zychowics (1994) find an inverse relation between institutional investor ownership and corporate leverage and suggest that the two potential monitoring mechanisms play substitute roles. In contrast, Duggal and Millar (1999) conclude that active institutional investors do not play a significant monitoring role in the takeover market in that they find no association between institutional ownership and gains to bidders.

Empirical evidence on whether institutional investors do indeed provide effective monitoring is somewhat mixed. For example, Hartzell and Stark (2003) provide empirical evidence suggesting that institutional investors serve a monitoring role with regard to executive compensation contracts. First, they find a positive association between institutional ownership concentration and the pay-for-performance sensitivity of a firm’s executive compensation. Second, they report a negative association between institutional ownership concentration and excess salary. One implication of these results, consistent with the theoretical literature regarding the role of the large shareholder, is that institutions have greater influence when they have larger proportional stakes in firms.

Difference exists between the monitoring abilities and incentives of institutional investors and those of large non-institutional blockholders. Gorton and Kahl (1999) argue that institutional investors might be imperfect monitors due to their own internal agency problem. Because there are not enough individual large blockholders to provide better monitoring, even the impact monitoring provided by the institutional investors is welcomed by shareholders. Thus, in the Gordon and Kahl model, large institutional investors and large non-institutional blockholders coexist as monitors of firms.

Although a large institutional shareholder could receive benefits from monitoring, it could also bear costs. For example, concentrated ownership could reduce the level of trading activity or affect the price at which shares are sold, thus reducing market liquidity and adversely affecting the ability of the investors to sell their shares (Holmstrom and Tirole, 1993). This link between liquidity and monitoring (or control) has been addressed by several studies, including Coffee (1991); Bhide (1994); Maug (1998) and Kahn and Winton (1998). One view is that liquidity and control are antithetical (Coffee, 1991 and Bhide, 1994). Historically, institutional investors have preferred liquidity to control because the ability to exercise control over corporate management entails a sacrifice of liquidity—an unacceptable cost to many institutional investors (Coffee, 1991). For example, in the US, while extensive regulation has promoted liquidity, it has also promoted diffuse, arm-length stock holding (Bhide, 1994). This, in turn, has discouraged owners and managers from establishing close relationships.

Their view contrasts with the more recent work of Maug (1998), Kahn and Winton (1998) and Noe (2002). Maug argues that the alleged trade-off between liquidity and control does not exist. Liquid markets in which shares can be traded easily without adverse price effects make it less costly to sell a large stake, but make it easier for investors to accumulate large stakes and to capitalize on shareholder activism. He concludes that the impact of liquidity on corporate control is unambiguously positive. Kahn and Winton (1998) study the firm characteristics that affect an institutional shareholder's decision to intervene in a corporation's decision-making process and what this implies for firm ownership

structure. They show that institutions choose to intervene depending on the benefits they receive from the increasing value of their existing stake in the firm and the effects on their trading profits. Finally, Noe (2002) demonstrates that a core group of institutional investors can naturally develop with the goal of monitoring the corporation and preventing managers from engaging in opportunism. In his model a whole range of institutions exist, from small to large, not all of which will be motivated to monitor. Some will choose to be passive, but there is not a monotonic relation between size of shareholdings and incentives. Noe also shows that there is not a monotonic relation between concentration of institutional ownership and liquidity.

The previous studies shows that institutional investors are the predominant players in some countries' financial markets and are therefore important in corporate governance. Yet, ownership structure and other governance characteristics differ across markets. These differences are attributable in part to legal and regulatory systems and in part to the manner in which the markets have evolved. Despite these differences across markets, due to the growth of institutional ownership and influence worldwide, institutional investors have the potential to play an important role in many markets. Previous researchers have shown that because of the costs involved, only large shareholders have the incentive to provide extensive monitoring of management. Whether institutions as large shareholders should, or will provide such monitoring depends in part on the constraints to which they are subjected, their objectives, and their preferences for liquidity. These characteristics will continue to vary across countries, leading to differences in the role and influence of institutional investors in corporate governance.

2.2.4. The major corporate decisions affected by blockholder

It now turns to whether major corporate decisions are different in the presence of a large-percentage shareholder. Obviously, not all major corporate decisions can be considered; indeed, the relationship between ownership concentration and many major corporate decisions has not yet been addressed. The discussion is

limited to three areas: executive compensation, leverage, and the incidence of a firm being acquired.

Executive Compensation

Although one can think of a host of issues concerning executive compensation and ownership concentration, two questions jump to the forefront. First, what happens to the level of management compensation in the presence of a blockholder? Second, what happens to the relationship between pay and performance in the presence of a blockholder? One can ask these questions with reference to managers who are blockholders. Thus, do blockholder-managers pay themselves more? One can also ask these questions with reference to external blockholders. Thus, do external blockholders help implement incentive-based compensation for professional managers?

Holderness and Sheehan (1988) investigate whether top executives owning majority blocks of common stock receive higher salaries and bonuses than do top executives in similar-size but diffusely held firms. (Thus, in the comparison firms, the executives do not own large blocks nor are there any large shareholders.) They find that the majority shareholders in fact receive larger salaries, but the extra amount is only between U.S Dollar 23,000 and 34,000. The authors conclude that “it is hard to imagine that excess annual compensation (of this amount) would motivate individuals to invest an average of U.S Dollar 66 million to achieve majority ownership”. I am not aware of any other study that addresses the relationship between cash compensation and an executive's stock ownership. This would seem to be an area ripe for future investigations.

Mehran (1995) examines the relationship between both managerial and external block ownership and the form of executive compensation. Studying a random sample of 153 manufacturing firms between 1979 and 1980, he finds that use of incentive-based compensation (specifically, the percentage of executive compensation that comes from new stock options, restricted stocks, phantom stocks, and performance shares) declines with the percentage of stock held by

those executives. He interprets this finding as evidence that a firm's board considers an executive's stock ownership when negotiating compensation contracts. The use of incentive-based compensation also declines with the percentage of stock held by outsider blockholders. This he interprets as evidence of the blockholders' monitoring substituting for incentive-base compensation.

Bertrand and Mullainathan (2000) investigate whether compensation of top executives in the oil industry increases for reasons that are beyond their control, what the authors term "pay for luck". An example would be a pay increase for top executives following an increase in the world price of oil. They report that pay increases in such situations are lower when a large-block shareholder (who is not the chief executive officer) sits on the board of directors. They also find that there tends to be greater pay for luck as a manager's tenure with the firm increases, but this is not true when a large shareholder is on the board. Both findings are interpreted as monitoring by external blockholders.

Bertrand and Mullainathan also investigate how much chief executive officers are charged for their options. Here again they appear to find a monitoring role for external blockholders, as the presence of one on the board of directors is associated with an increase in how much CEOs are charged for their options.

Thus, the literature is consistent in terms of a role for external blockholders in monitoring the compensation of top executives. There is little evidence that managers use their own voting power to extract higher salaries.

Leverage

Some theoretical models posit a relationship between managerial stock ownership and leverage. In one of the most influential of these models, Stulz (1988) argues that high inside ownership should be associated with higher leverage. He reasons that greater leverage allows managers to increase their voting control for a given level of equity investment. Debt is thus one way to relax the wealth constraints

that are inherent when a single individual or small group of individuals seek to gain voting control of a large public corporation.

There is little empirical support, however, for the proposition that leverage increases with ownership concentration. In fact, some studies suggest the opposite. Holderness and Sheehan (1998) find that firms with individual majority shareholders tend to have lower debt-to-asset ratios than similar-size firms with diffuse ownership. Firms with corporate majority shareholders have debt-to-asset ratios that are indistinguishable from those associated with similar-size firms with diffuse ownership. Holderness, Kroszner, and Sheehan (1999) report that although managerial stock ownership increased substantially between 1925 and 1995, the average leverage ratio did not increase. They also find a negative relationship between inside ownership and leverage for 1995. Finally, Mikkelson and Partch (1989) find no relationship between leverage and managerial stock ownership.

Takeover Activity

Ownership concentration could affect the frequency with which a firm is acquired in several ways. For instance, the frequency would decrease if management uses its block voting power to resist external overtures in an effort to preserve its jobs and any attendant private benefits of control. This is a key assumption of Stulz (1988), who predicts that the incidence of acquisitions will decline as managerial stock ownership increases. Conversely, the frequency of an acquisition would increase with inside ownership if management is personally motivated to realize the gains by selling its stock at a premium. Broadman (1989), in fact, finds that the probability of an initial offer succeeding is positively related to the potential dollar gains for top management.

The evidence on the relationship between block ownership and the frequency with which a firm is acquired is mixed. Morck, Shleifer, and Vishny (1988) find that the probability of a Fortune 500 firm being acquired between 1981 and 1985 increased with the percentage of common stock owned by its top two managers.

Walkling and Long (1984) have a similar finding for a different sample and a different time period.

Holderness and Sheehan (1988) report that some types of majority-owned firms are acquired more frequently than their paired, diffusely held firms.

Mikkelson and Partch (1989), in contrast, find that for 240 randomly selected corporations over the 1973-83 period, the probability of a change in control - which they define as a merger, delisting, or bankruptcy - is unrelated to managerial ownership. This finding apparently is driven by two conflicting tendencies. When managerial ownership is low, the probability that a firm will receive an offer is higher, but the probability that the offer will be accepted is lower. That is to say, with lower inside ownership, the probability of both an offer and managerial resistance increases.

Mikkelson and Partch (1989) also find that the presence of an external blockholder on a firm's board of directors increases the likelihood of a change in control. In contrast, blockholders who do not serve on the board of directors have no discernable impact on either the probability of a firm receiving an offer or the probability that a proffered offer will be accepted.

2.2.5. Conclusions

This section discusses the ownership structure around the world. Empirical studies show that there is a striking variation in ownership structure internationally. The disperse ownership structure prevails in the large corporations of the US, the UK, Japan and Ireland. In the other economies, ownership is more concentrate. The principal ownership types are family and state.

Traditionally, the corporate governance systems are classified into two models: bank-centred model (or “control-oriented” financing or “German-Japan” model) and market-centred model (or “arm-length” financing or “Anglo-American”

model). In the first model, corporations have core investors who own significant stakes or shares, management will be under more scrutiny by the core investors, be it a bank, a non-bank financial institution, or other corporations. Concentration of ownership provides the investors with both the incentive and the ability to monitor and control the management. In the second model, share ownership is widely dispersed, and shareholder's influence on management is weak. Unsatisfactory performance is often sanctioned by shareholders selling shares ("voting by feet") and by subsequent hostile takeovers. Shareholders' interest, in this model, is protected largely by a liquid equity market, by regulations on information disclosure, on insider-trading and minority shareholder rights.

This classification has been challenged by La Prot *et al.* (2000) who argue that this approach is not straightforward and fruitful and suggest that legal approach is a more fruitful way to understand corporate governance and its reform.

Institutions, whether the financial institutions or non-financial corporations, are playing more important roles in the monitoring and control of management. Although their roles can overlap, there is only modest evidence that corporations change when an institutional investor takes in the role of an activist blockholder. On the other hand, there is evidence that corporate performance improves after an activist share block purchase. The implication of the previous research shows that the presence of institutional investors should lead to more informative process, and consequently lower monitoring costs for all investors. Therefore, the outcome should be better monitoring of managers and better corporate governance.

Block ownership is motivated both by the shared benefits of control: blockholders have the incentive and the opportunity to increase a firm's expected cash flows that accrue to all shareholders; and by the private benefits of control: blockholders have the incentive and the opportunity to consume corporate benefits to the exclusion of smaller shareholders.

Surprisingly few major corporate decisions have been shown to be different in the presence of a blockholder. One exception is that external blockholders appear to

monitor the firm and level of managerial compensation. Conversely, there is little evidence that blockholders affect leverage.

2. 3. Conceptual issues of the measurements of ownership concentration and firm performance

2.3.1 Measurements of ownership

The measurements of ownership structure used in the empirical studies are based on the fraction of shares owned by a firm's most significant shareholders, with most attention being given to the fraction owned by the five large shareholders (e.g. Demsetz and Lehn, 1983 and 1985 and Demsetz and Villalonga, 2001) and the fraction of shares owned by a firm's management. Management holdings include shares owned by members of the corporate board, the CEO, and top management. Exclusive reliance on this measure to track the severity of the agency problems suggests that all shareholders classified as management have a common interest. This is not likely to be true. A board member, for example, may have a position on the board because he has, or represents someone who has, large holdings of the company's stock. Board members like this do not have interests identical to those of professional management. More likely, their interests are more closely aligned with those of outside investors. Inside board members that really are, or that really represent, outside investors' interests may not be rare. A high level of management shareholdings, therefore, is not so reliable an index of the strength of professional management's representation in the firm's operations as most studies using this measurement assumes it to be.

An analogous potential problem is associated with the measurement of ownership structure in some empirical studies (e.g. Demsetz and Lehn, 1985). The fraction of shares owned by a corporation's large shareholders is not a reliable measurement of the degree to which investors are protected from abuse by management if professional management often holds enough shares to put them in this category

of shareholders. However, this is less likely to be so serious a problem as that which arises from the use of the fraction of shares held by management. The empirical reality is that a person who is a professional member of the management team hardly ever holds enough shares to make him one of the five most important shareholders of a corporation.

The oldest and most traditional kind of ownership measurement in the empirical studies is manager-controlled and owner-controlled. According to this definition, a firm is being categorized as owner-controlled if some shareholder or group of cohesive shareholders owns more than a particular threshold percentage of the stocks, e.g., 5%, 10% and there is evidence of active control by these shareholders, or this threshold is large, e.g. , above 20%. By comparison, if they own less than the low threshold, they are categorized as manager-controlled. The point is that it could be argued that owner-controller so defined compares to high managerial ownership, where manager-controller compares to low managerial ownership. In other words, manager-controller compares to a situation in which the manager is in control because the stocks are dispersed. This situation shall not to be confused with a situation in which the manager is in control because manager owns many stocks.

This method has been widely used by many of the cross-sectional studies from 1965 to 1980 and these studies are mainly investigating the incentive argument by testing whether manager-owner performs less well than owner-controller.

This approach is favored because at that time it was difficult to obtain data on managerial ownership, but data on the concentration of stocks (or their voting power) could be used to make the distinction between manager-controller and owner-controlled. Thus, in the earlier empirical studies, some authors use non-metric measurement in their studies to measure owner-controlled and manager-controlled. For example, Monsen *et al.* (1968); Larner (1970) and Radice (1971) define that owner-controlled dummy equals 1 if a shareholder (or block of cohesive shareholders) has more than 5% stock ownership (or voting power) and there is evidence of active control, or owns more than 20% of the stocks.

Manager-controller dummy equals 0 otherwise. Leech and Leahy (1991) and Nickell, Nicolitsas and Dryden (1997) define in their studies that owner-controlled dummy equals 1 if large cohesive stockholding has a 90% (or 95% or 99%) chance of winning a majority vote. Manager controlled dummy equals 0 otherwise. It should be noted that the above definition of manager-controlled and owner-controlled only is a rough description of this group of studies.

Most of the studies use a specification that is unique for their studies. The difference between the definitions are sometimes justified by the environmental circumstances, for instance, if the average corporate is large, it can be argued that one should use a lower minimal threshold percentage to define owner-controller (Radice, 1971). The reason is that larger corporations typically have more dispersed ownership than smaller corporations and, therefore, it takes a smaller percentage of votes to control a large corporation than a small corporation.

The alternative measure of ownership is concentration rates. Such rates are normally defined as the percentage of stock or voting ownership by the large, the five large, or the twenty large stockowners of the firm. This percentage is not converted into dummies and is used for the regression analysis. One could claim that a high percentage of ownership compares to high managerial ownership and that a low percentage compares to high stock dispersion and therefore low managerial ownership. Note that, although a low concentrated percentage will guarantee low managerial ownership, there is no guarantee that a high ownership percentage indeed is evidence of high managerial ownership because non-managers may be the source of the high concentration of ownership, Herfindahl⁸

⁸Herfindahl index is based on a normal distribution property that results from central limit theorem if all the individual shareholders ($S_1=1, \dots, N$, where N is the total number of cohesive shareholder blocks not including the large block S_0) apart from the large shareholder large block S_0 are small. Under these assumptions,

N

$$\text{Herfindal index } (H) = \sum_{i=0} P_i^2 = P_0^2 + \sum_{i=1} P_i^2$$

$P_i = S_i/T$, where T is the total number of shares.

index is used also to calculate the concentration rate. This ownership measurement is applied in the empirical studies such as Demsetz and Lehn (1985); Pedersen and Thomsen (1999); and Demsetz and Villalonga (2001).

Board ownership is defined as the combined stock ownership by all the directors of the board, whereas executive ownership is defined as combined ownership by all the officers. In many legal regimes of different countries, this distinction between directors and officers may be somewhat artificial because a large part, if not all, of the officers may also function as directors. Morck *et al.* (1988) investigate ownership data by the combined holdings of the board of directors. However, they also gather ownership data for the top two officers. They use US data so the top two officers are normally also members of the board. They furthermore calculate ownership by the board not including the top two officers. They do not find any qualitative differences between these alternative measures and their original measure, although the ownership measurement not including ownership by the top two executives is less significant. In general, it is difficult to find any evidence or theory about the possible differences of using either board ownership or executive ownership. The reason may be that it does not matter since the board members and the executives could be equally influential despite of their different roles in the corporate decision process. Alternatively, the reason could be that it simply has not been investigated enough.

Another solution to this problem of having to choose between officers or directors ownership is to merge them into one measure, namely 'insiders' ownership. One may distinguish between narrow insider ownership and wide insider ownership. The narrow insider ownership only includes direct legal stock ownership by all executives and directors, whereas wide insider ownership furthermore includes some indirect stock ownership by family and close business relatives to the directors and the officers. The wide insider ownership is defined in the US corporate law as insider ownership by Section 16 of the Securities and Exchange Act of 1934. This act distinguishes between direct ownership by board members and officers and indirect ownership.

Holderness *et al.* (1999) suggest that “indirect” ownership means that the individual does not personally hold title to the shares, but exercises some control over the voting rights associated with those shares, albeit not directly. If, for example, a director of one company also is a partner in an organisation with an ownership interest in that company, the SEC (1936) (Securities and Exchanges Commission that administrates the Securities Act) lists shares personally owned by the individual as the director’s “direct” ownership and the shares owned by the partnership as “indirectly” owned by the individual. Shares held in trust for a family member or organisation are also reported as indirect ownership. The legal definition of insider ownership may be blamed for being too wide because it allows for indirect ownership by executives and directors. However, this may not be the cause because the legal definition is limited only to include the ownership by non-managers, if these persons’ voting rights are significantly captured or controlled by the managers. In any case, the institutionalisation of the measurement of managerial ownership is attractive for at least two reasons. Foremost is the reason that the legal definition provides a uniform standard for measuring managerial ownership. This means more reliable and comparable ownership measures. Second, because the law requires that such measures are gathered and reported, it is easier to obtain the data thereby saving time that can be used for further analysis of data. These attractions help to explain why many of the more recent studies on managerial ownership and financial performance are using insider ownership. These studies include Agrwal and Knoeber (1996); Boyle, Carter and Stover (1998); Cho (1998); Demsetz (1986); Denis and Denis (1994); Eccbo and Smith (1998); Holderness, Kroszner and Sheehan (1999); McConnell and Servaes (1990); McConnell and Servaes (1995); Stulz, Walking and Song (1990) and Wruck (1989), etc.

2.3.2. Financial Performance Measurement

The performance measurements that are discussed here may usefully be divided into those that are based on accounting values and on the combination of market- and accounting-based value. Three accounting-based measurements are discussed,

that is return on equity (ROE), return on assets (ROA), and earning per share (EPS). Two kinds of performance measurements are based on the market and accounting value, namely Tobin's Q ratio and the market-to-book ratio which have been applied extensively in the literature of corporate governance mechanisms and performance.

A. Accounting-based measures

Return on assets (ROA): earnings after interest expenses and taxes divided by total assets. This ratio is used in the studies of Denis and Dennis (1994); Mehran (1995) and Kole (1995).

Return on equity (ROE): earning after interest expenses and taxes divided by the total equity. This ratio is used in the studies of Monsen *et al* (1968); and Demsetz and Lehn (1985).

Earning per share (EPS): earning after interest expense and taxes divided by total number of outstanding shares.

The first two measures are classic accounting measures and have been used on the relation between ownership and performance. The popularity of these performance measures is partly to be a consequence of their widespread availability. Moreover, they are fairly easy to interpret. So far, the last ratio has not been applied in the empirical studies of corporate governance. There are several areas of concerns in using earnings per share as a performance measure. The most obvious problem is that EPS scales differ from firm to firm depending on the firm's policies regarding stock issuing. In other word, nominal EPS from one firm may not be directly comparable with nominal EPS from another firm because they may have different attitudes towards the issuing of stocks.

B. Measures of market-and-accounting based value

Market-to-book ratio: market values of the total liabilities divided by book values of assets that represent these liabilities. This measure is applied in the studies of Holderness, Kroszner and Sheehan (1999); and Wang and Xu (1997).

Tobin's Q ratio: market values of liabilities divided by the minimum cost of replacing the assets that represent these liabilities. This method is used by Mock, Shleifer and Vishny (1988), etc.

C. Comparison of financial performance measurement approaches

The market-to-book ratio is typically specified in one of two ways: either as the market value of the firm's stocks divided by the shareholders' equity or as the combined market value of stocks and debt divided by total assets. These definitions make it clear that the market-to-book ratio measures how much market value the firm generates on its existing stock of invested capital. This ratio therefore, is a direct measure of financial performance because high market-to-book ratios in general mean that investors are expected to earn high returns on their invested capital, whereas low market-to-book ratios imply the opposite.

Tobin's Q is a measure of financial performance that is closely related to the market-to-book ratio discussed above, but it is important to stress that Tobin's Q is not the same as a market-to-book ratio. Theoretically, Tobin's Q is defined as above as market values of the firm's outstanding financial claims divided by minimum cost of replacing assets represented by the firm's outstanding financial claims. Tobin's Q is not to measure the financial performance of an enterprise's existing stock of assets such as the previously described market-to-book ratio. It rather measures the financial performance of new investment assuming that it is possible to reproduce the entire existing production capacity. For instance, the higher Tobin's Q is for a company the more profitable it is to invest in the reproduction of the entire production capacity of that company. More to the point, provided that Q is measured accurately and therefore is unbiased, it is profitable to invest in the reproduction of the entire production capacity as long as Q is above one and to put on hold such investment when Q is below one. It is precisely for

this logic that Tobin and Brainard have advocated that Tobin's Q is an important determinant of corporate investment.

However, there are two important different respects in the measures of accounting-based ratios and Tobin's Q . One is in time perspective, backward-looking for accounting profit rate and forward-looking for Q . In attempting to assess the effect of ownership structure on firm performance, is it more sensible to look at an estimate of what management *has* accomplished or at an estimate of what management *will* accomplish? The second difference is in who is actually measuring performance. For the accounting profit rate, this is the accountant constrained by standards set by his profession. For Q , this is primarily the community of investors constrained by their acumen, optimism, or pessimism. The proclivity of economists, most of whom have a better understanding of market constraints than of accounting constraints, is to favour Q . But caution is needed here. Accounting profit rate is not affected by the psychology of investors, and it only partially involves estimates of future events, mainly in the valuations it places on goodwill and depreciation. Tobin's Q , however, is buffeted by investor psychology pertaining to forecasts of a multitude of world events that include the outcomes of present business strategies (Demsetz and Villalonga, 2001).

It is true that accounting profit rates are affected by accounting practices, such as the different methods applied to valuations of tangible and intangible capital, but Tobin's Q also suffers from accounting artifact problems, and perhaps more severely. In fact, variations in Q are better explained by variables that control for accounting artifact than are variations in accounting profit rate. The numerator of Q , being the market value of the firm, partly reflects the value investors assign to a firm's intangible assets, yet the denominator of Q , the estimated replacement cost of the firm's tangible assets, does not include investments the firm has made in intangible assets. The firm's future revenue stream is treated as if it can be generated from investments made only in tangible capital. This distorts performance comparisons of firms that rely in differing degrees on intangible capital (Telser, 1969; Weiss; 1969; and Demsetz, 1979). Moreover, recent studies that use Tobin's Q do not attempt to measure the replacement cost of tangible

capital when calculating the denominator of Q . Instead, they use the depreciated book value of tangible capital (Demsetz *et al*, 2001). This incorporates into Q a goodly portion of the accounting problems that make accounting profit rate calculations suspect, for many of these problems have to do with whether the depreciated value of intangible capital, as this is calculated by accountants, accords with the true economic rate of depreciation of capital. The numerator of Q , to some significant degree surely, reflects accounting profit rates. Investors do not ignore the past in their attempts to determine reasonable expectations for the future profitability of firms. High accounting profit rates are usually accompanied by high stock prices, whereas the denominator of Q , when this is measured by the book value of tangible assets rather than by replacement cost, is much like that used by accountants when estimating the firm's capital investment. Hence, accounting profit rate and Tobin's Q is expected to be correlated. It is not my intent to argue for or against one of these measures of performance. Each carries its own bag of advantages and disadvantages.

2.4. Board structure

2.4.1. Introduction

Boards are charged with monitoring management to protect shareholders' interests. The monitoring role of corporate boards in public corporations has become a central issue in both the financial and the academic press. Berle and Means's (1932) seminal work suggested that managers did not have sufficient equity in the firms they managed to give them the incentive to turn their full attention to profit maximisation. Instead, managers may pursue self-interested initiatives at the expense of shareholders. One monitoring mechanism that may temper that tendency is the oversight by the board of directors; this oversight, or control, function of a board is often described as the most crucial of directors' roles (Fama, 1980; Mizruchi, 1983; and Zahra and Pearce, 1989).

Board of directors is the body defined in company by-laws and appointed by shareholders to exercise control over insiders between shareholders meetings. Creating a board of directors helps to address the free-rider problem associated with monitoring by all shareholders by creating individuals with the specific task of monitoring management. When boards include members with expertise about the firm and industry, the board is well-positioned to solve the problem arising from the withholding of poor information. The board of directors is also well positioned to provide accountability, being responsible for executive recruitment, for setting compensation policy and having rights over dismissal.

Boards are important governance agents, but they are not enough. For a board to operate effectively in improving information flows and accountability to shareholders it has to have the right incentives. The prime mechanisms to improve the functioning of boards have been stated to make board members independent of top management. Building on research on board composition in developed markets, recommendations by standard setting bodies such as the OECD corporate governance guidelines (1999) focus on separating the role of board chairman and top executive and including more outsiders on boards of directors and on sensitive committees that get to the issues of information and accountability such as audit and compensation committees.

The monitoring function of board of directors is also criticised by some authors. Lipton and Lorsch (1993) state that...“norms of behaviour in most boardrooms are dysfunctional”, because directors rarely criticize the policies of top managers or hold candid discussions about corporate performance. Believing that these problems increase with the number of directors, Lipton and Lorsch recommend limiting the number of directors to ten people with a preferred size of eight or nine. The proposal amounts to a conjecture that even if boards’ capacities for monitoring increase with board size, the benefits are outweighed by such costs as slower decision-making, less-candid discussion of managerial performance and biases against risk-taking. Jensen (1993) takes up this theme, pointing out the “great emphasis on politeness and courtesy at the expense of truth and frankness

in boardrooms” and stating that “when boards get beyond seven or eight people they are less likely to function effectively and easier for the CEO to control”.

The board effectiveness in its monitoring function is determined by its independence, size and composition (Jensen, 1993). In Subsection 2.4.2, the board size is discussed. In Subsection 2.4.3, the board composition is discussed. In Subsection 2.4.4, the conclusions are made

2.4.2. Board size and its impact on firm’s performance

A. Advantages of larger board size:

The literature addressing the advantages associated with larger boards includes that:

- Resource dependence theory. It has been the primary foundation for the perspective that larger boards will be associated with higher levels of firm performance (e.g. Alexander, Fennel and Halpern, 1993; and Goodstein, Gautam, and Boeker, 1994.). In this view, board size may be a measure of an organisation’s ability to form environmental links to secure critical resources (Goodstein *et al.*, 1994). According to Pfeffer and Salancik, “The greater the need for effective external linkage, the larger the board should be” (1978, p.172). Consistent with the tenets of resource dependence, Birnbaum (1984) reported that environmental uncertainty (lack of information and volatility) led to increased board size.
- The board interlocks may also provide a rationale for expecting larger boards to be associated with positive corporate outcomes. There is some evidence, for example, that board interlocks are associated with effective capital acquisition (e.g. Mazruchi, 1988; and Stearns and Mizruchi, 1983). It may be that larger boards provide more possibilities for such interactions.
- Another advantage associated with the larger board is the expertise-counsel account of board service which suggests that directors may

provide CEOs with advice of a quality unobtainable from other corporate staff (e.g. Zahra and Pearce, 1989). Lorsch and MacIver reported that many directors are themselves CEOs: “CEOs have the most relevant experience and expertise to be effective directors. CEOs understand the complex problems of running a major enterprise and, it is argued, provide the best counsel and advice” (1989, p.174).

- Another possible explanation of the advantage of board size relates to board composition. The proportion of outside director is likely to be positively correlated with board size (Yermack, 1996) and outside directors mostly own negligible equity stakes in firms. Outside directors thus bear a reputation cost if project fails and the firm encounters financial difficulties, while their share of the gains is limited. This asymmetry suggests that outside directors have a bias against projects with a high variance that increase the probability of bankruptcy, even when the net present value of the projects is positive. Bhagat and Black (1996) find that the median outside director stock ownership is only 1% for a sample of 780 public US companies, suggesting that outside directors often want to avoid risk.

B. Disadvantages of larger board size

Lipton and Lorsch (1992) and Jensen (1993) and other advocates of small boards content that board size effects corporate governance independent of other board attributes. These arguments focus on the productivity losses that arise when work groups grow large, an insight borrowed from organisational behaviour research such as Steiner (1972) and Hackman (1990).

The discussion of the disadvantages of larger board size or the advantages associated with smaller boards is focused on:

- Increased problems of communication and coordination as group size increases, and decreased ability of the board to control management, thereby leading to agency problems stemming from the separation of management and control (Jensen, 1993 and Yermack, 1996). Jensen suggests that larger boards

lead to less candid discussion of managerial performance and to greater control by the CEO. Thus larger board size can reduce the board's ability to resist CEO control. Yermack (1996, p.210) suggests that "CEO performance incentives provided by the board through compensation and the threat of dismissal operate less strongly as board size increases". And he concludes that whatever benefits may be associated with board largeness may be overwhelmed by poor communication and decision-making processes.

- Group cohesiveness is another construct that may have application for boards of directors. Cohesiveness, which may be facilitated by having fewer group members, has been related to performance. Evens and Dion (1991), for example, relying on a meta-analysis, report a positive association between group cohesion and performance. Arguably, smaller boards would, on average, have more group cohesiveness (Lipton and Lorsch, 1992, and Jensen, 1993).
- Mintzberg (1983) suggests that board members' assessments of top management are more easily manipulated when boards are larger and diverse. It might be reasonably expected that large boards would tend to be more diverse, more contentious, and more fragmented than small boards. In such cases, CEOs may gain advantage in power relations with board members through tactics like "coalition building, selective channelling of information, and dividing and conquering" (Alexander, Fennel, and Halpern, 1993).

Researchers have not achieved consensus on the idea that optimal board size should be. Jensen, for example, suggests that "when boards get beyond seven or eight people they are less likely to function effectively and are easier for the CEO to control" (1993, p.865). This view is consistent with that of Firstenberg and Malkiel (1994), who argue that a board with eight or fewer members "engenders greater focus, participation, and genuine interaction and debate" (1994, p.34). Lipton and Lorsch (1992) suggest an optimal board size between seven and nine directors, while Yermack (1996, Fig. 1) suggests that the greatest loss in value occurs for board sizes in the range of five to ten members, the small end of his board size.

The evidence on the role of board size is inconclusive. Yermack (1996) and Eisenberg *et al.* (1998) demonstrate that smaller boards are associated with better firm performance. However, in a meta-analysis of 131 different study-samples with a combined sample size of 20,620 observations, Dalton *et al.* (1998) document a positive and significant relation between board size and financial performance. They investigate the relationship between board of directors and firm's financial performance. Moderating variables include firm size, board composition (external vs. Internal members), and performance indicators (market-based vs. Accounting-based indicators). The results for the overall meta-analysis of the board size—financial performance association strongly suggests a nonzero, positive relationship. Also these relationships are consistent for market-based and accounting based firm performance measurement. Likewise, board composition does not moderate the board size—financial performance relationship.

2.4.3. Board composition

A. Measurement of board composition

The composition of a firm's board is typically a surrogate for the extent to which the board is independent of the firm's CEO (e.g., Daily, Johnson, and Dalton, 1999; Dalton *et al.*, 1998; and Seward and Walsh, 1996). Although more than 20 measurements of board composition can be found in relevant research - for example, the proportion of inside directors, outside directors, affiliated directors, or interdependent directors (Daily *et al.*, 1999) - these measures are all designed to capture some aspects of board independence. Table 2.5 summarizes the general classification procedure of directors into inside directors, affiliated outside directors and independent outside directors.

The existing empirical evidence relating board composition to performance is mixed. For example, Hermalin and Weisbach (1991) find no significant relationship between performance and outsiders' proportion on the board. But Baysinger and Butler (1985) find a positive relationship. Outside directors may

contribute to the value of firms through their evaluation of strategic decision (Brickley and James, 1987; Byrd and Hickman, 1992; and Lee *et al.*, 1992) and through their role in the dismissal of inefficient and poorly performing management (Weisbach, 1988). Thus, there exists the evidence that board composition may significantly influence corporate performance by reducing agency cost. The relation between the proportion of outside directors and long-term financial performance, however, has not been supported in empirical research (Bhagat and Black, 1996; and Klein, 1998).

Table 2.5 Classification procedure of directors of board

Panel A: Inside directors:

- Senior Management
- Junior Management
- Employee of common stock ownership plan

Panel B: Outside directors affiliated with the firm (or “grey” outside directors):

- Member of an inside stockholders’ group or significant shareholder not employed by the firm (where insider group includes those with stakes of 10% or more of the company’s total voting shares).
- Part of an interlocking directorship (defined here as directors sitting on each other’s boards, e.g. two CEOs sitting on each other’s boards).
- Former employees of the firm.
- Related to an officer of the company (first cousin or closer).
- Member of a professional firm providing services to the company (e.g. law firm, consulting firm, investment bank, commercial bank.).
- Officer of a firm that has a significant supplier/customer relationship to the company (significant is defined as 1% or more of the suppliers annual sales).

Panel C: Independent outside directors:

- All other outside directors.

Source: Booth *et al.* (2002), “Boards of directors, ownership, and regulation” *Journal of Banking & Finance* 26 (2002).

One potential explanation for these findings may be the endogenous relation between firm performance and board structure (Hermalin and Weisbach, 2001). The financial performance of a firm may be affected by existing board structure or

composition, but the performance of a firm may influence subsequent director selection. Hence, the results on the relation between board structure and financial performance may be difficult to interpret. Klein's study (1998) demonstrates a linkage between firm performance and board composition by examining the committee structure of boards and directors' roles within these committees. He finds little association between firm performance and overall board composition. But by going into the inner workings of the board via board committee composition, he finds significant ties between firm performance and how board is structured. A positive relation is found between the percentage of inside directors on finance and investment committees and accounting and stock market performance measures.

A board comprised of members with dependent relationship with a firm (that is, inside directors, affiliated directors and/or interdependent directors) is less likely to provide a dispassionate assessment of the firm's CEO. Meyers, *et al.* (1997) investigate the role of outside directors in the corporate-control process by exploiting variation in ownership structure within the insurance industry. In mutuals, ownership rights are not transferable. This inalienability restricts the effectiveness of control mechanisms like external takeovers, thus increasing the importance of monitoring by outside directors. Consistent with this hypothesis, they find that mutuals employ more outside directors than stocks and firms that switch between stock and mutual characters make corresponding changes in board composition; mutuals' bylaw frequently stipulates the participation by outside directors; and mutuals with more outside directors make lower expenditures on salaries, wages and rent.

Overall, findings generally support the view that outside directors are important for both monitoring management and providing relevant complementary knowledge. Additionally, they support the notion that the potential for agency problems between the management and the shareholders plays a role in the motivation for adding outside directors. The results from previous research on the role of outside directors in monitoring management and controlling agency

problems suggest that relatively large percentages of independent directors serve as a substitute for other types of monitoring mechanisms.

B. Board committees

John and Senbet (1998) survey the empirical and theoretical literature on corporate boards of directors and their role in ameliorating various classes of agency problems arising from conflicts of interest. In addition to inside versus outside directors on the board, insider ownership and CEO/Chair duality, John and Senbet point out that board size and committee structure can alter board effectiveness.

The perspective that board monitoring is a function of not only the composition of the board as a whole but also of the structure and composition of the board's subcommittees is a relatively recent one. Kesner (1988) maintains that most important board decisions originate at the committee level, and Vance (1983) argues that there are four board committees that greatly influence corporate activities: audit, executive, compensation, and nomination committees. While a typical committee includes only a subset of the board, it influences topics seen and discussed by the entire board. This may be particularly true for the executive committee; the executive committee acts for the full board when immediate actions are required. It hears from the CEO on proposals prior to full board debate and may heavily influence the board's agenda. Given this committee's role, independent and financially sophisticated outsiders on the executive committee may provide valuable monitoring that could constrain the extent of earnings management.

The executive committee may only play an indirect role, but the audit or finance committee may have a more direct role in controlling earnings management. Its function is to monitor a firm's financial performance and financial reporting. In a survey of the practitioner and academic literature on audit committee effectiveness, Spira (1999) concludes that these committees are largely ceremonial and that they are largely ineffective in improving financial reporting.

His survey does not address the issue of the background and experience of audit committee members, however, which is precisely the issue raised by the Blue Ribbon Panel.

Arthur Levitt, Chairman of the SEC of America, has pushed for improvements in the structure and function of audit committees. In September 1998 the SEC, the New York Stock Exchange and the National Association of Security Dealers convened a Blue Ribbon Panel “to make recommendations on strengthening the role of audit committee in overseeing the corporate financial reporting process” (SEC Press Release, 1998). In February 1999, the panel released its Report and Recommendations, affirming that a board must provide “active” and “independent” oversight for investors. It also argued that the audit committee’s role is “oversight and monitoring” of a firm’s financial reporting, and that the audit committee is “first among equals” in this monitoring process that also includes management and external auditors (p.7).

The panel’s recommendations focus on the independence of the board members who serve on the audit committee and on the active and formal role of the audit committee in the oversight process. It further recommends that audit committee members be “financially literate”, presumably so that the committee functions properly.

It is expected that more active audit committees will be more effective monitors. An audit committee that seldom meets may be less likely to monitor earnings management. A more active audit committee that meets more often should be in a better position to monitor issues such as earnings management.

Klein (1998) finds that overall board composition is unrelated to firm performance but that the structure of the accounting and finance committees does impact performance. Similarly, Davidson, *et al.* (1998) find that the composition of a firm’s compensation committee influences the market’s perception of golden parachute adoption. The insight in these works is that outside directors may be more important on committees that handle agency issues (e.g., compensation and

audit committees), and insiders may best use their company knowledge on committees that focus on firm-specific issues (e.g. investment and finance committees).

2.5. Managerial ownership and financial performance

2.5.1 Introduction

The objectives of this section are first to survey the main theories of relevance for the relation between managerial ownership and financial performance. These theories have grown considerably in number and some of them have undergone serious refinements. This is perhaps the most outspoken with regard to the classic incentive alignment theory that is now available in numerous of very abstract and mathematical versions. Another objective of this section is to emphasize the features of the theories that are relevant in connections with the empirical testing.

This section is designed as follows. In Subsection 2.5.2, the incentive alignment argument is discussed. In Subsection 2.5.3, the arguments of entrenchment and cost of capital are discussed. In Subsection 2.5.4, the non-monotonic relation of managerial ownership and firm performance is discussed and in Subsection 2.5.5, the conclusions are made.

2.5.2. Incentive alignment argument

As mentioned earlier, Adam Smith was among the first to recognize it: “The directors of such (joint-stock) companies, however, being the managers rather of other people’s money than of their own. it cannot well be expected, that they should watch over it with the same anxious vigilance with which the partners in a private co-partnery frequently watch over their own. Like the stewards of a rich man, they are apt to consider attention to small matters as not for their master’s

honour and very easily give themselves a dispensation from having it. Negligence and profusion, therefore, must always prevail, more or less, in the management of the affairs of such a company” (Adam Smith, 1776, *“The Wealth of Nations”*, p.700). In more modern terms the argument is that the more a manager owns of a company, the more his incentives will be aligned with the non-manager-owners who should be expected only to care about the maximisation of profits. The perfect incentives (that is 100% economic punishment for mismanagement and 100% reward for prudent management) require the manager to be the sole residual claimant of the firm’s income. In other word, the manager must be the sole owner in order to have perfect incentives. The less he owns, the more the cost of mismanagement will be born by others and the more the benefit of prudent management will be captured by others. As a result, the manager will be more inclined to pursue non-profit maximizing strategies (e.g. excessive corporate growth) provide that the aspects of such strategies are able to give the manager more utility than he loses from reduced pecuniary income resulting from his choice of a non-profit-maximizing strategy.

The incentive alignment argument has been formalized by the principal-agency theory. A classic example of this theory is Hart and Holmström (1987, Part 1). They present four agency models representative of the agency literature that are focusing on managerial incentive alignment. They have made the story more interesting by analyzing the optimal managerial compensation scheme under various assumptions about managerial risk aversion and information asymmetry between shareholders and managers.

It is more interesting, because, given that ownership has been separated completely from control (zero management ownership), the problem is to design a wage contract that maximizes the owners’ profit. It turns out that the manager only renders the maximum effect (maximize corporate profit) if he can be monitored perfectly or if he can be made the residual claimant of the firm’s profit, which creates exactly the same pecuniary incentives as if he were also the owner of the firm. The latter case assumes asymmetric information and a risk-neutral manager.

The optimal compensation scheme is to pay the manager the entire corporate profit, less a fixed amount equal to the expected total profit as optimal managerial effect, less the manager's reservation salary (the salary the manager could get by redeploying his labour at the best alternative use). The result is that the manager on average will get his reservation salary if, and only if, he chooses the efficient level of effort; and otherwise, he gets less than his reservation salary. The two models by the Hart and Holmström (1987) are good as a point of reference because they are clear and concise about all assumptions. However, they do not describe realistic situations because they either assume that the manager can be perfectly monitored or that he is completely risk neutral.

This is remedied by two other versions of the agency model assuming that the manager is either indefinitely risk-averse or 'normally' risk-averse. With regard to the case of an indefinitely risk-averse manager the outcome is that the owners can do no better than paying the manager his reservation wage evaluated as the minimum effort level. In other words, this solution results in the most inefficient economic outcome.

The problem is that incentive payment does not work in this case because it introduces risk and the manager will avoid the slightest risk at any cost in the mean value of his salary. The final case is the most realistic since it assumes a normally risk averse manager and asymmetric information between the manager and the owners. In this case, the owners pay the manager according to an incentive contract but, because of risk aversion, they are restrained from using perfect incentives (paying the manager entirely by residual profits as if the manager owned the firm). The result is that the maximum effort level (and thereby profit level) is unattainable. However, because the managerial compensation involves a certain degree of incentive pay it renders more managerial effort (and thereby enhance financial performance) than a purely fixed managerial remuneration.

Several other authors have discussed the incentive alignment argument. Noteworthy are the theoretical papers by Mirrless (1976) and Jensen and Meckling (1976) that initiated the formalisation of the incentive alignment argument and these papers also help to create common terminology in the field. Furthermore, the books by Berle and Means (1932) and Milliamson (1964) have paved the way for the surge of interest and awareness about the problem.

2.5.3. Entrenchment argument and cost of capital argument

The opposing argument to the incentive alignment is entrenchment. It is only quite recently (the past more than 20 years or so) this it has attracted substantial interest. Mock, Shleifer and Vishny (1988) argue that managers may become entrenched at sufficiently high levels of managerial control. For instance, the more the manager is in control (e.g. through ownership of shares), the less he needs to care about other parties' interests because these parties would be too weak to take action against him should he not consider their interest. From an efficient point of view, the entrenchment effect is only interesting if a manager uses his control power to pursue non-profit-maximizing strategies. Then why should a manager use his power to pursue non-profit-maximizing strategies? If he is a major owner, then according to the incentive alignment argument, he should be very interested in profit maximisation. According to one of the most basic principles in micro-economics is the principle of diminishing marginal rate of substitution and according to this principle it should be expected that the manager becomes increasingly less motivated by the money as his wealth increases (less motivated relative to other factors of motivation). The manager with large ownership stakes ought to be extremely wealthy. Therefore, it may be reasonable to believe that such persons still put money as their primary source of motivation. Other issues such as "power" and "prestige" may be equally or possibly more, important for an extremely wealthy person. The pursuing of these goals might harm the non-manager owners, as they in general should be expected to care only for corporate profits.

By the way, another argument is also worth mentioning, that is the increased concentration (by manager ownership or other types of ownership) decreases financial performance because it raises the firm's cost of capital. One explanation is that more concentration means less market liquidity, and to compensate equity investors for less liquidity, the firms will have to pay higher returns. Another explanation is that, the portfolios of large owners of large corporations are poorly diversified and therefore, such owners may require better returns in compensation (Fama and Jensen, 1983).

Both the incentive argument and the cost of capital argument are classics in contemporary economics and it would therefore be interesting if they could be integrated into a single theory of managerial and financial performance. To date, I have not been able to find a paper that combined these arguments in one model.

2.5.4. Non-monotonous relations

Non-monotonous relations refer to that performance increases and decreases for different levels of ownership. Then, what levels of managerial ownership produce increasing and decreasing performance. The empirical studies have not reached unanimous results (See Figure 2.1). Stulz (1988) has made a formal model predicting a bell-shaped relation between management ownership and financial performance. Starting from zero management ownership, performance is expected to increase as ownership increases, and then, after a certain high level of ownership, performance starts to decrease when further increases in ownership occur, and finally it reaches a minimum when the managers own 50% or more of the firms. The idea is that managers with higher levels of ownership are more capable of opposing a takeover threat from the market for corporate control, and as a result the raiders in this market will have to pay higher takeover premiums to increase the likelihood that they actually succeed in acquiring the firm. However, higher levels of managerial ownership also decrease the likelihood of successful takeovers and therefore, performance starts to decrease after a sufficiently high level of ownership. The minimal performance is reached at 50% or higher

managerial ownership because with majority ownership it is impossible to raid the firm no matter how high the takeover premiums offered by the raider. In other word, Stulz's theory explains the increase in performance from low levels of managerial ownership by increasing takeover premiums, whereas the decrease in performance for higher levels of ownership is explained by managerial entrenchment somewhat similar to the entrenchment argument made by Morck *et al.* (1988).

The Morck *et al.* (1988) argument does not predict a "clean" bell-shaped relation between performance and ownership since performance starts to increase again with a sufficiently high level of managerial concentration (see Figure 2.1). Morck *et al.*'s interpretation of their findings is that the entrenchment effect will dominate the incentive effect only for medium concentrated levels of managerial ownership. This is so because for low levels of managerial ownership it might not be reasonable to think that the manager is entrenched at all since his ownership stake is too small to give him any control whatsoever. Furthermore, for very high levels of managerial ownership it seems reasonable that the manager may be 100% entrenched since he will be 100% in control for all very high levels of ownership. As a result, the entrenchment effect will only have an impact on performance for changes in the medium-concentration levels of ownership.

The following lists some of the empirical studies of the non-monotonous relation between managerial ownership and firm performance. Most of these studies emphasize managerial shareholdings as a measure of ownership structure and rely chiefly on Tobin's Q as a measure of firm performance, although a few also examine accounting profit rate. These studies include:

- McConnell and Servaes (1990) examine the relation between Tobin's Q and insider and blockholder ownership in two different cross-sectional samples, one for 1976 and the other for 1986, using slightly more than 1000 Compustat firms. Q is regressed on different variations and combinations of measures of insider and blockholder importance in the ownership structure of the firm. They find a positive relation for insider ownership, but diminishingly so as ownership becomes more important,

and a positive but insignificant relation for blockholders. The relation between Q and insider ownership slopes upward until insider ownership reaches 40% to 50% and then slopes slightly downward. Their results are robust to the inclusion of the same control variables used by Morck *et al.* and to the use of accounting profit rate as an alternative performance measure. After adjusting their sample to make it more comparable to the sample used by Morck *et al.*, they attempt to replicate Morck *et al.*'s piecewise linear regression, but they cannot. They find a significantly positive relation for insider ownership between 0% and 5%, but fail to confirm the findings of Morck *et al.* for insider ownership beyond 5%. No significant relation is found beyond 5%. Ownership structure is not endogenized.

- Hermalin and Weisbach (1988) estimate the effect of managerial ownership and board composition on Q . Managerial ownership is measured by the fraction of shares held by the present CEO and all former CEOs still on the board. Board composition is measured by the fraction of the firm's directors who are outsiders. They treat ownership and composition as endogenous, using their lagged values as instruments; panel data for 5 years are used. They find no relation between board composition and performance, but find a significant non-monotonic relation between managerial ownership and performance, a positive relation between 0% and 1%, a decreasing relation between 1% and 5%, an increasing relation between 5% and 20%, and decreasing beyond 20%.
- Loderer and Martin (1997) use acquisition data to estimate a simultaneous equation model in which Q and insider holdings are endogenous. Q , log of sales, daily standard deviation of the firm's stock returns, and daily variance of the firm's stock returns are used to explain insider holdings. Insider holdings, log of sales, and a dummy for whether the acquisition is financed with stock are used to explain Q . Insider ownership fails to predict Q , but Q is a (negative) predictor of insider ownership.

- Cho (1998), using cross-sectional data and ownership information from value line, first replicates Morck *et al.*'s study and finds a similar non-monotonic relation between Q and management share holdings. However, he then estimates a system of three equations in which insider ownership depends on Q , investment, and a set of control variables, Q depends on insider ownership, investment and a set of control variables, and investment depends on insider ownership, Q , and a set of control variables. His estimate for this system of equations indicates that Q affects ownership structure but not vice-versa.
- Himmelberg *et al.* (1999) extend the Demsetz and Lehn study by adding new variables to explain the variation in ownership structure. They also use a fixed effects panel data model and instrumental variables to control for various possible unobserved heterogeneities. Ownership structure is measured by shareholdings of insiders (officers plus directors) secured from proxy statements. Their performance measure is Q although they claim that similar results are produced if return on assets is the measure of performance. They fit both the quadratic and linear piecewise forms that had been adopted in previous studies for the performance equation. They find that insider ownership is negatively related to the capital-to-sales and R&D-to-sales ratios, but positively related to the advertising-to-sales and operating income to sales ratios. Controlling for these variables and fixed firm effects, they find that changes in ownership holdings have no significant impact on performance. When they control for endogeneity of ownership by using instrumental variables, they find a quadratic form of the effect of ownership on performance.
- Holderness *et al.* (1999) replicate for 1935 and 1995 central aspects of the Morck *et al.* study and the Demsetz and Lehn study. As in Morck *et al.*, they find a significant positive relation between firm performance and managerial ownership with the 0–5% range of managerial shareholdings but, unlike Morck *et al.* they do not find a statistically significant relation beyond 5% managerial shareholdings. They also confirm the endogeneity

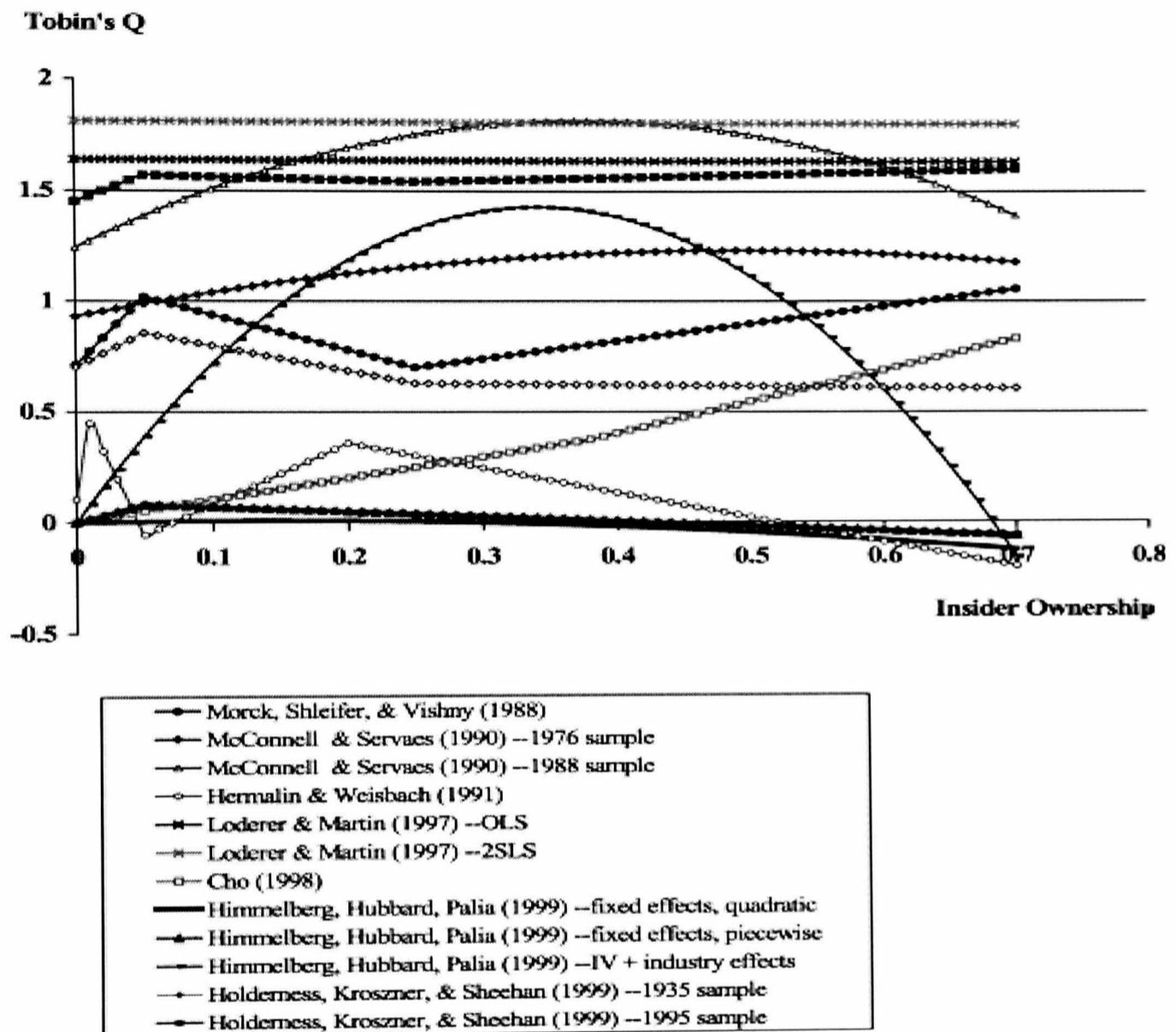
of managerial shareholdings, which they find depends negatively on firm size, performance volatility, volatility squared, regulation, and leverage.

Kole (1995) suggests that the different findings of Morck *et al.* and McConnell and Servaes are attributable to differences in the size of the firms analyzed. Specifically, Morck *et al.*'s sample contains only large firms (371 firms from the Fortune 500), while McConnell and Servaes' sample consists of 1173 firms in 1976 and 1093 firms in 1986. Similarly, McConnell and Servaes (1995) extend their earlier work by adding a sample of 1943 firms for 1988. Hence, the samples of McConnell and Servaes' obviously contain firms which are smaller than those contained in the Morck *et al.* sample. Kole argues that:

on average, the positive relationship between Tobin's Q and managerial ownership is sustained at higher levels of ownership for small firms than it is for large firms (p.426).

Thus, in summary, using Tobin's *Q* as the main measure of the performance of firms, the US studies have found the relationship between the performance of firms and managerial ownership to be, generally, non-linear—with a movement from alignment to entrenchment and then, possibly, to alignment as management ownership increases. The precise functional form of the relationship is, however, open to debate.

Figure 2.1 Results of empirical studies of the relation between Tobin's Q and insider ownership.



Source: Demsetz and Villalonga: "Ownership structure and corporate performance", Journal of Corporate Finance, 7, 2001.

Chapter 3. Characteristics of China's stock market and china's corporate governance

3.1 Introduction

In 1990, China became the first communist nation in the world to have a stock exchange with the formal establishment of Shanghai Stock Exchange. Five Chinese companies became the first ones listed on the stock market. This was the result of China's determination to establish a market-oriented economic system through economic reform (www.csrc.gov.cn). As part of the overall programme of Chinese economic reform, the reform of the financial system has the four main objectives:

- To provide additional finance channels through which the government might raise capital for investment projects.
- To address the bad loans/banking problem inherited from the central planning era.
- To address the issues of control and ownership as the Chinese authorities hoped to establish a 'modern enterprise system', which 'clarified property rights, designated authorities and responsibilities, separated government and enterprise functions, and establish scientific management' (State Economic Reform Commission, 1994). The authorities believed that the introduction of a joint stock system, and more specifically the corporatization of SOEs, was the main vehicle to achieve this objective.
- To build an institution that can undertake the role of financial intermediation, which is essential to a market economy (Chen, 2004, p. 31)

This chapter details the evolution of China's stock market in Section 3.2. In Section 3.3. the characteristics of China's corporate governance are discussed.

3.2. Evolution of China's stock market

The development of China's stock market is one of the most important elements of China's reform in the financial system.

From 1981, the central government began to issue treasury bonds to finance deficits. Since then, various provincial and local governments, financial institutions, and enterprises have also come to issue bonds. In 1986, the Shanghai Branch of People's Bank of China set up the first over-the-counter market in Shanghai. The first stock sale in Shenzhen market was by the Shenzhen Development Bank in 1987. By the end of 1989, thousands of shareholding companies were set up all over the country and issued RMB 3.8 billion (U.S Dollar 700 Million) worth of shares. However, 70-80 per cent of the shares were from conversion of existing state owned assets, and relatively little new capital was raised by issuance of stocks. Most of the stocks were issued to related companies or to employees in the companies and fewer than 2 per cent were public issues to general investors (www.stat.gov.cn).

In December 1990 and July 1991, two stock markets, the Shanghai Stock Exchange (SSE) and the Shenzhen Stock Exchange (SZSE) were established. By the end of 1991, 14 companies were listed on the two stock exchanges. This marked the stock market's entry into the China's economic system officially and China's capital market's entrance into its formative stage (www.csrc.gov.cn).

Since China's two stock exchanges were established, two main types of shares are offered by China's companies: A-shares and B-shares. A-shares are exclusively sold to Chinese nationals. B-shares are denominated in RMB but traded and purchased in foreign currency exclusively by foreigners. However, due to the continuous slim trading and small capitalisation of the B-share market, the Chinese Securities Regulatory Commission (CSRC) decided to open B-shares to domestic investors in February 2001. Besides the two shares, H-shares are issued by Chinese companies and traded on the Hong Kong Stock Exchange. N-shares- American Depositary Receipts (ADRs) are issued by Chinese companies and

traded on the New York Stock Exchange in the form of American Depositary Receipts. S-shares are floated by Chinese companies and traded on the Singapore Stock Exchange. The relative sizes of the last two types of shares are small.

The state-owned enterprise shares are compartmentalised to ensure state control while diversifying shareholding in an effort to modernize state-owned enterprises. Share capital of incorporated state-owned enterprises is segregated into several compartments, including the state shares, which are owned by the state and legal person shares and are held by state companies or institutions as well as individual shares. In general, the state shares and the legal person shares are subject to restrictions on transfer. As the result, 67.5% of the total share capital of the listed companies is non-tradable, leaving only around 32.5% of the listed companies' shares that are traded on the stock exchanges. The tradable shares are basically owned by individual shareholders and only account for a small part of A-shares (www.ssrc.gov.cn).

In a socialist society, a shareholding system is utilized to conduct large-scale, modern production to preserve public ownership of means of production as the mainstay of the national economy, through distribution of shares in such proportions as to result in the dominance of state ownership. Table 3.1 shows the overview of share structure of China's stock market from 1994-2002.

The state shares are in a predominate position over the time, from 43.3% in 1994 to 47.2% in 2002. The ratio of legal person shares has diminished from 22.44% in 1994 to 17.32% in 2002, the same to the tradable A-shares from 33.02% in 1994 to 25.68% 2002. In October, 1998, CSRC promulgated a notice to suspend the issuance of employee shares, the employee shares have decreased greatly from 0.98% in 1994 to 0.27 % in 2002.

After years of inactive transactions during the late 1980s, the stock markets became quite active in Shenzhen and Shanghai in the early 1990s. Because very limited stocks were available on the markets, prices rose very quickly. By August 1993, stock prices in both Shenzhen and Shanghai reached the highest level in

terms of the records of past two years and then dropped dramatically. The markets then experienced more than two years stagnation and recovered only after early 1996. From April to mid December 1996, the stock index rose by 120% in Shanghai and over three times in Shenzhen. The government then took measures to cool the markets. On December 16, People's daily openly warned the great risk investors were facing with the speculation in the form of the special comments—Understanding correctly of current stock markets. The stock prices fell considerably after that day. But, contrary to some experts' predictions, the market did not stagnate for long and soon recovered and even reached a record high in April 1997, making the government find it necessary to cool it down again. The quota of stock issuance of 30 billion Yuan in 1997 was announced. Then, the market didn't recover from more than two years of bearish behaviour until May 19, 1999 (www.csrc.gov.cn).

In 2000, the Chinese stock market developed rapidly. By the end of 2000, there were 1,088 companies listed on the stock exchanges. The market value was 4,809 billion of RMB and the tradable share market value was 821.4 billion of RMB (CSFS, 2001). In 2002, there were 1,224 listed companies, 64 more than in 2001. The market value and the tradable share market value were 3,832.9 billion of RMB and 1,248.5 billion of RMB. Due to the fall of share price, the market value and tradable share market value dropped 12% and 14%, although the total number of shares and tradable shares increased 13% and 12% (CSFS, 2003).

In sum, since the stock exchanges were established, the China's stock markets experienced several cycles of boom and bust and turnover levels on the markets also experienced several ups and downs.

China's stock market developed quite rapidly. Compared to the initial 8 listed companies on the Shanghai Stock Exchange and 6 on the Shenzhen Stock Exchange in 1991, 1224 companies had been listed on the two stock exchanges by the end of 2002, with a total market capitalisation of RMB 3,832.9 billion (about 37% of China's GDP) and a tradable market capitalisation of RMB1, 247.34 billion. The total output of the publicly traded companies amounted to 18% of

China's GDP and distributed in a variety of key industries across the whole country (CSRS, 2003).

It is worth noting that the development of the stock market is accompanied with the reform of state-owned enterprises' ownership and corporate governance structure, namely, the reform of the shareholding system and incorporation of state-owned enterprises. The stock market played a very important role in promoting the reform of state-owned enterprises. At the beginning, due to the stock quota system and a limit of market capacity, many of the listed companies were relatively small. Since 1996, the government expanded the scale of stock issuance so as to support the capital demand of the large-, and medium-sized state-owned enterprises. Since then, a great number of key state-owned enterprises, especially enterprises related to the strategic and pillar industries began to issue their own stocks.

Table 3.1 presents the overview of share structure of China's stock market from 1994 to 2002.

Table 3.1 Share structure of China's listed companies (1994-2002) (%)

Classes	Brief description	1994	1996	1998	2000	2002
State shares	Held by the state and its varied ministries, bureau and regional governments, in exchange for the capital contribution made by the stat. Non-tradable; transferable to other institution, under the approval of CSRC	43.31	35.42	34.25	38.9	47.20
Legal person shares	Owned by domestic institutions, defined as non-individual legal entity; commercial banks, excluded by law; non-transferable; transferable to other institutions under the approval of CSRC	22.44	27.18	28.35	23.82	17.32
Tradable A-shares	Held and traded mostly by domestic individuals and institutions; in IPOs, tradable A-shares should account for no less than 25% of total outstanding shares.	33.02	35.25	34.11	35.72	25.68
Employee shares	Offered to workers and managers of the listed companies, usually at a substantial discount.	0.98	1.2	2.05	0.64	0.27
Shares denominated in foreign currency	Including B-Shares and H-shares. Till 2000, B-shares available exclusively to foreign investors, separated from A-shares market; H-shares are listed and traded on Hong Kong market.	12.02	13.33	10.05	7.28	8.98

Sources: *China Securities and Futures Statistics Yearbook, 2003*

The state shares are in a predominate position over the time, from 43.31% in 1994 to 47.2% in 2002. The ratio of legal person shares has diminished from 22.44% in 1994 to 17.32% in 2002, the same to the tradable A-shares from 33.02% in 1994 to 25.68% in 2002. In October, 1998, CSRC promulgated a notice to suspend the issuance of employee shares, the employee shares have decreased greatly from 0.98 % in 1994 to 0.27 % in 2002.

3. 3. Characteristics of corporate governance in China

3. 3.1. Introduction

From the early 1990s, China has shifted the focus of its reform of SOEs from delegation of decision-making authority to the reform of ownership and corporate governance. Two strategies have been adopted: privatisation and corporatisation (Zhu,1999).⁹ The reform was propelled by the fact that SOEs financial performance steadily deteriorated during the 1990s after a period of improved productivity in 1980s (Lardy, 1998).¹⁰ Privatisation is mostly used to sell some

⁹ Researchers appear to have different definitions of privatisation and corporatisation. Sometimes any divestiture of state share is taken to imply privatisation. Here, we follow the World Bank (1995) and Shirley (1999) who define privatisation as “the sale of state-owned assets” such that “management control (measured as the right to appoint the managers and board of directors) passes to private investors”. Corporatisation, on the other hand, is defined as diversification of ownership structure, especially through inclusion of non-state parties as shareholders, “to make SOEs operate as if they were private firms facing a competitive market or, if monopolies, efficient regulation” (Shirley 1999, p.115).

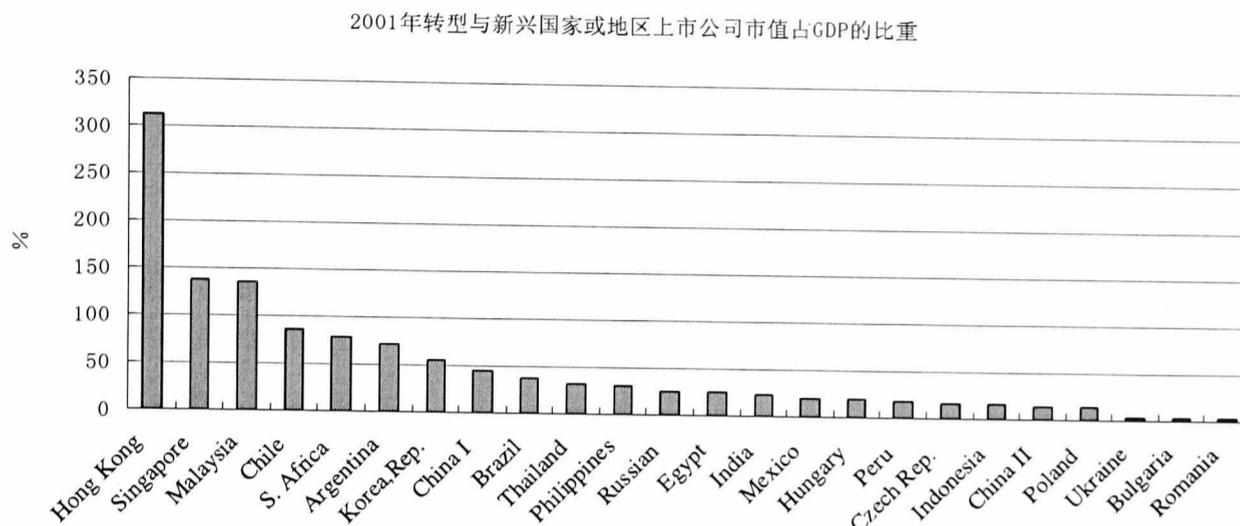
¹⁰Small-scaled ownership reform of SOEs, which is often referred to as shareholding reform in China, began in the mid-1980s; systematic experimentation with the shareholding system began in 1992 (SCESR 1997). In December 1993, the Company Law was passed, and SOE reform entered a state in which privatisation or corporatisation of SOEs could, in principle, be gilded by law. Large-scale ownership reform started in mid-1990s. By the end of 1998, some 24,000 or 10.1% of SOEs had either privatized or corporatised (People’s Daily, August 7, 1999).

small-and medium-sized SOEs. Strategy, however, is corporatisation. This is intended to transform most SOEs into three types of shareholding companies: limited liability companies, limited liability stock companies, and employee-owned stock cooperatives (Lin and Zhu, 2001). A reformed firm's shares are classified into five categories: state-owned, legal-person-owned (i.e., shares owned by any institution that has a legal person status such as an investment company), individual-owned, collective-owned, and foreign-owned.

Corporatisation aims to turn SOEs from sole state proprietorship controlled by industry-specific government agencies at various administrative levels to modern-form corporations with a Western-style corporate governance structure without serious erosion of dominant public, but not necessarily state, ownership. In most corporatised enterprises, the majority of shares are held by the state, large business entities controlled or fully owned by the state, and employees. In view of the fact that it is impossible for financially constrained private entrepreneurs to take on large stakes in significant numbers of SOEs, some degree of public ownership in corporatised enterprises is to be expected in the early stage of reform, even without ideological constraints on private ownership of enterprises.

After more than ten years' development of China's stock market, the corporate governance has been an important issue to maintain a sound and sustainable growth. The listed companies are standing on the front position of the economic reform. The effective corporate governance is a key factor to determine whether the listed companies can improve the corporate performance, grow continuously and become into the driving force to propel the China's capital market development. The poor corporate governance would slow down the capital market. Although China's stock market has grown fast in the past decades, the market value of the stock was 37% of the GDP in 2001, in the lower range compared with other emerging economies (see Figure 3.1). The reform of corporate governance is essential for the sustainable development of China's stock market.

Figure 3.1 Ratios of stock market value of listed companies to GDP in the transitional economies and emerging markets



Source: China Economy Database

The issues of China's enterprise system are (1) property rights and (2) managerial incentive. The two are interlinked closely (Zhang, 1997). Majority of the enterprises are owned by the state and the state ownership in theory represents nominally the ownership of the whole people. The representatives of the state assets are the politicians.¹¹ They have the ownership of the state owned enterprises (SOEs) but are not the residual claimants. They have no enough incentive to monitor the management of the enterprises. In reality, there is absence of real owner of SOEs. China's enterprise reform that delegated many of the decision-making rights to SOEs managers in the 1980s (Naughton, 1995) can be viewed as allocating some of the formal authority to the managers. As implied by Aghion and Tirole's (1997) theory, managerial autonomy then motivated SOEs managers to become more informative about business decisions; as a result, they enjoyed more real authority. However, as agents of the state, SOEs managers have a strong incentive to use (i.e., abuse) their newly acquired power in their own self-interest. In reality, they become the "real owner" of the enterprise (so called "insider control"). On the other hand, politicians still maintained formal authority over key personnel, asset deployment and investment decisions.

¹¹I follow Shleifer and Vishny (1994) in using the term "politicians" instead of "bureaucrats", the term used by, e.g., Bai and Wang (1998), Li (1998) and Shirley (1999), to refer to government officials in charge of enterprises in a socialist or transition economy.

As for the incentive system, the problems are not only the weak incentive system but also the misplaced incentive system, and the two are highly correlated. The incentive has nothing to do with the managers' contribution and performance. Especially, the incentive is more focused on the employees rather than the managers, and on short-term incentive than on long-term incentive, because in theory, the employees are regarded as the master of the state and the enterprise as well. The managers are the government officers and their performance depends on their political consciousness and moral instruction, not the power of the corporate system. This can be reflected on the employee shares in China's listed companies. The employee share of China's listed companies is one type of company's common shares, not the employee shares system in the real sense. The manager's salary in SOEs is composed mainly of fixed income, low nominally and regulated by the government. This compensation system can not motivate the managers to work hard to maximize the value of the company. They pursue to maximize their own interest such as perking, rent-seeking, on-the-job consumption at the expense of the company. Therefore, the fundamental issues of China's corporate governance reform are to resolve the ambiguous property rights in SOEs and poor managerial incentive system.

This section focuses on the two fundamental issues of China's corporate governance structure and discusses the characteristics of internal and external devices of the corporate governance in Chinese institutional framework. The evolution of China's corporate governance is looked at in Subsection 3.3.2. In Subsection 3.3.3, the irrational ownership structure is discussed. In Subsection 3.3.4, the structure of two-tier board is examined. In Subsection 3.3.5, the poor managerial incentive system is analysed. In Subsection 3.3.6, the stock market as external control is studied. In Subsection 3.3.7, the institutional investors in China are discussed and in Subsection 3.3.8, the conclusions are made.

3.3.2. Evolution of the corporate governance in China

Before the economic reform and openness in China, under the traditional planned economy system, the production, supply, sales, personnel, finance and profits in the state owned enterprises were allocated and controlled by the government. Under the planned economy, the managers of the state owned enterprises (SOEs) had no autonomous right and no incentive to manage the enterprises' business.

From 1979, the corporate governance structure started to take the shape focusing on handling the relationship between the owner and the managers of SOEs and clarifying the mutual rights and duties. From 1979 to 1984, the reform characterised by delegating the autonomous rights of SOEs to the professional managers and returning the profits earned by the enterprise to the enterprise was aimed to expand the autonomous managing rights of SOEs. From 1984 to 1987, the reform of SOEs focused on converting the profits of the enterprise to the form of corporate taxes, i.e. the profits of SOEs previously submitted to the state were reformed for the enterprises to be levied corporate taxes to the state based on the different tax categories and tax rates. From 1987 to 1992, the reform focused on developing contractual system in SOEs (Zhang, 1997).

After the Third Plenary Session of the Twelfth Central Committee of the Communist Party of China in 1984, there was a breakthrough in the theory of the separation of ownership and management and the deregulation of enterprises from the government (Zhang, 1997). "Law of Ownership by the Whole People in Industrial Enterprises" was issued in 1988 and it was the first time to confirm the "independent legal person" status of the state owned enterprises in the form of the law. It stipulates therein that the director of an enterprise is the legal person of the enterprise who has the management decision-making right.

From 1980s to 1990s, with the trend of incorporating the modern corporations across the country, regulating and standardizing the corporation was essential to the Chinese government. In May, 1992 the State Economic Restructuring Committee issued two documents: "Suggestion on Standard of Joint Stock

Limited Companies” and “Suggestion on Standard of Limited Companies”. It was the first time to define the different types of corporate organisation under modern corporate system by means of the government documents, with detailed description and stipulation of the corporation establishment and operation. This is the basic standard for the formation of corporate governance structure with Chinese characteristics.

On the Third Plenary Session of the Fourteenth Central Committee of the Communist Party of China, in 1993, “Decision of Establishing Socialist Market Economy System by the Central Committee of the Communist Party of China” was passed through, pointing out clearly that “to further transform the management mechanisms in the state owned enterprises, set up the modern corporation system with clarification of rights and duties, separate the enterprises from the government and manage the enterprise with scientific method to meet the market economy requirement” (China Economic Times, 2004). The “Decision” also points out that “the modern corporation can be classified into various forms according to the composition of its assets (Zhang, 1997). The state owned enterprise taking the form of modern corporation system is a significant experiment to establish the modern corporation system. The corporation incorporated is the one who shall separate the ownership and management clearly and de-regulate the enterprise from the government, reform the management mechanisms so that the enterprises can free themselves from the reliance on the government administration department, and the state can relieve itself from the unlimited duties to the enterprises; it also helps the enterprises raise the financing and diversify the risk”.

On the Fifth Meeting of the Standing Committee of the Eighth National People’s Congress on December 29th 1993, the “Company Law” was issued. This Law is formulated in accordance with the Constitution of the People’s Republic of China in order to meet the needs of establishing a modern enterprise system, to standardize the organisation and activities of companies, to protect the legitimate rights and interests of companies, shareholders and creditors, to maintain the

socio-economic order and to promote the development of the socialist market economy.

From the early 1990s, the reform of the large and medium sized key state owned enterprises to modern corporations spread through the country. According to the requirements of Company Law, some state owned enterprises were transformed into limited companies or joint stock limited companies, working out the corporate charter, setting up the shareholders meeting, board of directors and supervisory board and engaging the senior managers (Sun and Tang, 2003). However, since most of the large and medium sized joint stock companies were transformed from the previous state owned enterprises, the state owned enterprises were in a predominate position. What is more, these new stock companies were still bearing the management concept and mechanisms of the traditional state owned enterprises and they were going through the learning process of how to privatise the SOEs.

On the Fourth Plenary Session of the Fifteenth Central Committee of the Communist Party of China in September, 1999, an important document was passed through, “The Important Decision of Reform and Development of State Owned Enterprises”, pointing out that “Diversified ownership structure shall facilitate the establishment of the standardized corporate governance structure and it should be recommended to establish the corporation with various investors except for the few enterprises which must be monopolized by the state” (China Economic Times, 2004). An important method to realise the diversified ownership is to let some qualified large and medium sized SOEs go public on the stock market and expect them to attract more social financing from the stock market and standardize the corporate governance structure by the market mechanisms.

By the end of 2002, with the total number of listed companies surpassing 1200, the corporate governance becomes a pressing issue for the Chinese Securities Commission (CSRC).

Two breaking-through documents on corporate governance were released in 2001 and in 2002 by the Chinese Securities Regulatory Commission (CSRC) and the State Economic and Trade Commission. They are “Guidelines for Introducing Independent Directors to the Board of directors of Listed Companies” (2001) and “Code of Corporate Governance for Listed Companies in China” (2002). The code of corporate governance is formulated on the commonly accepted standards in international corporate governances and in accordance with the basic principles of the Company Law, Securities Law and other relevant laws and regulations. It stipulates the code of conduct of all the following parties in the listed companies: shareholders and shareholders’ meeting, directors and board of directors, and the supervisors and the supervisory board. The code sets out both rules for establishing performance assessment and incentive and disciplinary systems and the rules for disclosing information and maintaining transparency. In particular, listing companies that are more than 30% owned by controlling shareholders are required to adopt a cumulative voting system.

“Guidelines for Introducing Independent Directors to the Board of directors of Listed Companies” sets the qualifications for an independent director and requires the independent directors be free of conflict of interest. Under the Guidelines, the independent director enjoys special rights especially in the major related party transactions. Major related party transactions whose value exceeds a certain level should be approved by the independent director before being submitted to the board of directors for discussion. Before the independent director makes his or her judgement, an intermediary agency can be employed to produce an independent financial advisory report, which will serve as the basis for his or her judgement. The independent directors can also put forward the proposal to the board of directors relating to the appointment or removal of the accounting firm.

Due to the insufficient legal structure, it is still difficult to hold parties violating the practice of the code accountable for their wrongdoings. In the case of insider trading, related party transactions, and material false statement, investors can only sue in those closed cases in which the party has already been punished by CSRC.

Class action is still not in practice in the legal system, generally hindering the incentive of the market to punish the wrongdoers.

3.3.3. Ownership structure

From the point of market liquidity, the shares of China's listed companies are classified into transferable shares and non-transferable shares. The non-transferable shares are legal person shares and state shares. The transferable shares are the classic stocks which can float freely on the stock exchanges. By the end of 2001, on China's stock market, about 60.5% of shares are non transferable state shares and legal person shares (CSFS, 2002). 946 of 1,101 listed companies (81.6%) have more than 50% of the non-transferable shares. The number of shares owned by the first large shareholder is as high as 44.26% of the total outstanding shares on average and 40.93% of the listed companies have the first large shareholder owning more than 50% of the total shares. However, the number of shares owned by the second large shareholder is averagely 8.22%, amounting to less than one fifth of the number of shares owned by the first large shareholder, indicating that many of the listed companies have a single controlling shareholder who has an absolute controlling right. Among the controlling shareholders in the listed companies, over 80% of them are state shareholders and majority of them are state owned controlling group companies. 376 listed companies (32.4%) have the state shares in excess of 50% of total outstanding shares (Huang and Li, 2002). It is noteworthy that in the listed non-state owned companies, it is quite common that the large shareholder is in a predominantly controlling position.

The ultimate owners of the China's listed companies can be categorized into two subgroups: state owned and privately owned (including private person, family, collectively owned enterprise, foreign investor). Since majority of the listed companies are restructured from SOEs, they are owned and controlled by the state. Based on the information disclosed in the annual report, the controlling shareholders are classified into the following categories: (1). the group company (state versus no- state); (2). the state assets management company or bureau; (3).

the government line industry administrative department; (4). the local government finance department (Zhang, 2001). In recent years, with the reform of the state assets management system, the companies responsible for the management of the state assets and state shares have been established in many places across the country to manage the local state owned shares. The state assets initially managed by the state assets management bureau or other local government departments have been transferred to the state assets management company.

A series of principal-agent problems have arisen from this institutional setting. The agency problem may behave differently in the companies with different ultimate owners in China's listed companies. In SOEs, the ultimate owner is the state and the state assets belong to the whole people nominally; thus, the property rights are ambiguous. The representatives of the state assets are politicians from the local state assets management companies/bureaus or other government departments as the agents of the state assets. The politicians have the ownership right but no claimant right of the residuals of the company; therefore they have not enough incentive to monitor the managers. In reality, the owner of the company is absent. The company is controlled by top manager who is appointed by the government. This type of governance model is called "insider control" model (Hu, 2000).

"Insider control" is characterized as manager controlling right mechanism in the transitional economy. Compared with the enterprises in the traditional planned economy, the "insider control" gives the managers the autonomous managing power which releases the great motivation of the managers to work hard to improve the efficiency of the enterprise. At the same time, compared with the corporate governance structure in the modern corporation system, the "insider control" model can not produce the necessary disciplinary power to the self-interested managers who may use (abuse) the control power to deviate from the target of maximizing the owner's interest and devalue the state assets. The principal-agency problem in these companies is the expropriation of insiders to the wealth of the company (La Porte, *et al*, 1999). The root of the problem is the absence of the real owner of the company due to the ambiguous property rights.

and the standardized corporate governance structure which can adjust the controlling power of the managers as a decision-making mechanism is not available in SOEs.

In the non-state owned companies or privately owned companies (POEs), the corporate governance model is the “controlling shareholder” model (Hu, 2000). The controlling shareholder in POEs is the owner/manager of the company. The owner-manager in POE who usually owns less than 100% of company shares has the incentive to improve the firm performance and also has the power to expropriate the interest of minority shareholders when the benefit of the expropriation outweighs the benefit he/she can gain from his/her proportional interest of the company (Jensen and Meckling, 1976). The principal-agency problem in POEs is the expropriation of controlling shareholder to the minority shareholders.

In practice, these two models are combined into one model, called “key person” model. After analysing the present corporate governance structure of China’s listed companies, Hu Ruyin (2000) points out that the corporate governance structure can be summarized as “key person” model. The “key person” is the top manager or /and the representative of the controlling shareholder who has great discretionary power. He has controlling right, executive right and monitoring right in one hand. The corporate governance is to assure the inside controller or key person to maximise the firm value not at the expense of any investor and/or shareholder’s interest.

Another problem derived from the property rights is the ownership structure. The ownership is highly concentrated and majority of listed companies have a single controlling shareholder. This ownership structure makes it likely for the shareholders meeting to be controlled by the controlling shareholder. Since the law has no stipulation of the protection of the minority shareholders interest, the minority shareholders are not active in participating in the shareholders’ meeting and cumulative voting system that allow minority shareholders to elect some board members at the shareholders’ meeting is not widely adopted; therefore, the

controlling shareholders can decide all the candidates of the board of the directors in most of the companies. So the shareholders' meeting is only a format.

Ownership structure is widely perceived to affect performance.¹² Theoretically, the existence of blockholders can solve the free-rider problem. Shleifer and Vishny (1997) argue that ownership concentration is, along with legal protection, one of two key determinates of corporate governance. Since the benefits of monitoring are shared by all shareholders while the costs are borne completely by the monitoring party, large shareholders internalize to a greater extent the costs and benefits of monitoring, and therefore exert more monitoring efforts (Shleifer and Vishny, 1986). The empirical studies on China's listed companies are consistent with this suggestion. Sun and Huang (1999) find that the Tobin's Q rises with the number of shares owned by the first large shareholder. When the number of shares owned by the first large shareholder amounts to about 50%, the company has large Tobin's Q . Xu and Wang (1997) find that market-to-book ratio is positively associated with Herfindal index and the number of shares owned by 10 large shareholders and significantly, but not significantly associated with return on equity and return on assets. Chen and Xu (2001)'s empirical study shows that in the unprotected industries, the number of shares owned by the first large shareholder is positively associated with the firms' performance.

Ownership concentration has benefits and costs. Controlling shareholders have strong incentives to closely monitor the company and its management, and can have a positive impact on the governance of the company. However, their interests may also conflict with the interests of other shareholders—minority shareholders. This conflict is most destructive when the controlling shareholders extract private benefits at the expense of minority shareholders. Large shareholders can themselves engage in expropriation. Claessens *et al.* (2000) argue that large shareholders could be more likely to pursue objectives that are inconsistent with those of minority shareholders if they are involved with

¹²See Shleifer (1998) and Megginson and Netter (2001) for excellent summaries of theories and evidence on the performance effect of ownership.

management of the firm or if their voting rights exceed their cash flow rights. Shleifer and Vishny (1997) discuss several ways by which insiders can divert funds including outright theft, dilution of outside investors through share issues to insiders, share offerings, excessive salaries, asset sales to themselves or other corporations they control at favourable prices, or transfer pricing with other entities they control.

Since July, 1999, the Securities Law was issued, the Chinese Securities Regulatory Commission (CSRC) investigated 236 cases of the violation of law and regulations on China's stock market and the future market. 88 institutions and 142 individuals have been punished, fined, the illegal income confiscated and the business licence cancelled. Some cases have been transferred to judicial court.¹³

Preventing from the expropriation of the controlling shareholder and protecting the interest of minority shareholders have great significance to the sustainable development of China's stock market. With the development of China's stock market, the problems in the corporate governance have turned out, highlighted as weak protection of the minority investors' interest and the lag of the relevant law and regulations. The protection of the interest of minority investors is a key factor for the development of the stock market. The better the investors are protected, the more they will pay for the stocks, the less the blockholder is motivated to expropriate the minority shareholders (La Porte *et al.*, 2000). Therefore, how to prevent the expropriation of the controlling shareholder and inside controller is the major issue of the corporate governance to solve in China.

3.3.4. The imbalance of board structure as a governance mechanism

China takes two-tier boards system (see Figure 3.2). The Company Law in China requires that: “A *joint stock limited company shall have a supervisory board representatives of the staff and workers of the company..... Directors, managers*

¹³The statistic figure is sourced out from the website of [www. wind.com.cn](http://www.wind.com.cn).

and responsible persons in charge of the financial affairs of the company may not composed of no less than three members..... The supervisor board shall be composed of shareholders' representatives and an appropriate proportion of serve concurrently as supervisors" (Article 124).

The duties of the supervisory board are to “*supervise the corporate finance, the legitimacy of directors, managers and other senior management personnel's performance of duties, and shall protect the company's and the shareholders' legal rights and interests" (Article 59).*

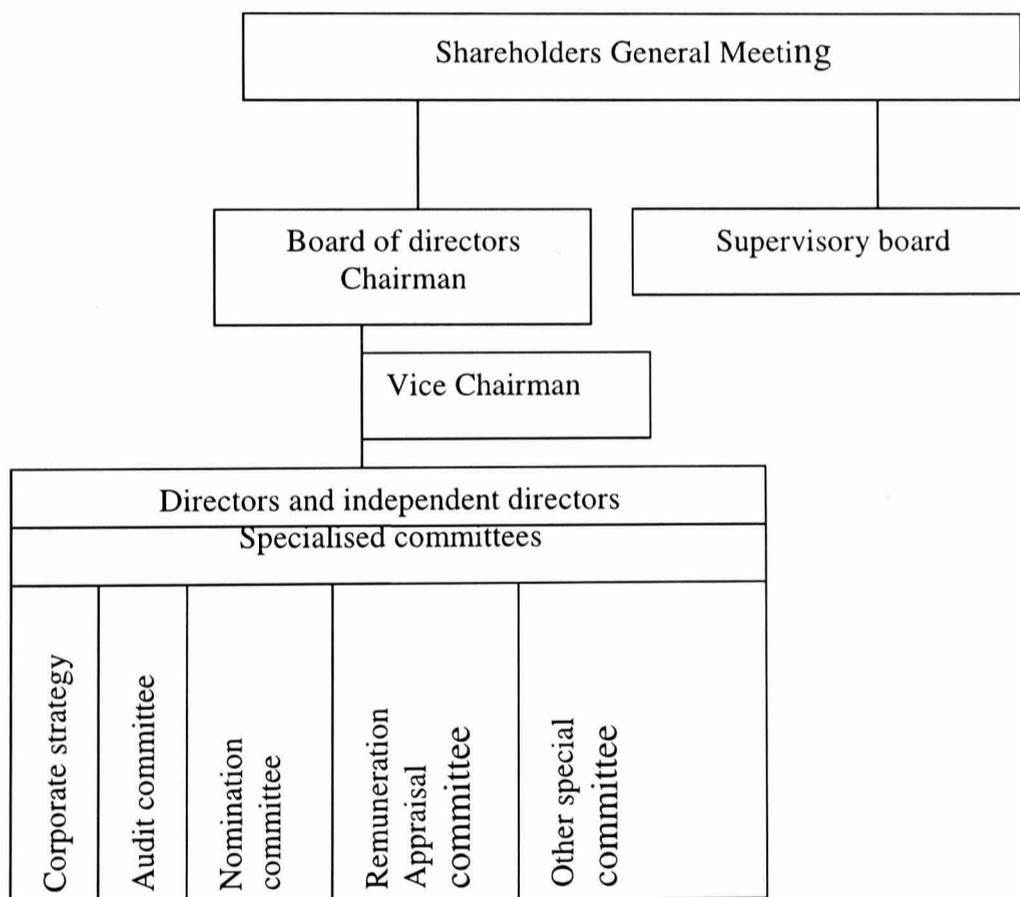
The Company Law stipulates the specific responsibilities of the supervisory board and board of directors (see Appendix 1), but it fails to differentiate the priority of the responsibilities of these two boards. According to Company Law, both the board of directors and supervisory board are nominated by the shareholders general meeting. However, they have no right to dismiss or appoint the members on the other board. The members of supervisory boards are often the party secretary, employee representative, or the division manager of another enterprise or external auditor. The nomination of them is controlled by the controlling shareholder. The members of the board of directors and supervisory board and senior managers often came from the same company—the controlling shareholder and they used to be colleagues in the controlling company. So this type of relationship makes the members of the supervisory board unlikely to supervise the directors and the managers.

Another problem is that the representatives of the employee on the supervisory board are the staffs of the listed company who get the salaries from the listed company. At the daily work, they are supervised by the senior managers. This relationship discounts the supervisory role these members should play. Generally speaking, the China's listed companies pay more attention to the board of directors and ignore the supervisory role of the supervisory board. In fact, in many companies, the supervisory board is only an organ controlled by the board of directors and does not conduct the dispassionate supervisory function. The introduction of independent directors to the board is expected to strengthen the

monitoring function as a supplementary and improve the independence of the board of directors.

The discussion of board independence has focused on the role of outside directors in limiting the potential for agency costs when decision making and decision control are separated. It is argued that by monitoring management, outside directors can limit the exercise of managerial discretion, thus lowering contracting costs between shareholders and management (see Fama, 1980; Fama and Jensen, 1983 and Williamson, 1981, 1984).

Figure 3.2 The organisational structure of listed companies of China.



In most of the China's listed companies, the board of directors is controlled by the insiders - the representatives of the controlling shareholders and executive directors. The empirical studies show that 50.1% of the directors are from the controlling shareholder and 80% of the board members are insiders - executive directors and representatives of the controlling shareholder (Dong and Gao, 2002). The controlling shareholder is in a position to choose most of the members of the

board and the management team. These board members in turn feel obliged to act in the interests of that controlling shareholder. They may even go so far as to see themselves as the delegate of the controlling shareholders (OECD, 2003). A board composed of members with dependent relationship with a firm (that is, inside directors, affiliated director.) is less likely to provide dispassionate assessment of the firm's top manager. It is common that the chairman of the board in the listed company, especially in SOE, takes an important position in the controlling shareholder's company and doesn't get the pay from the listed company. Therefore, he represents the interest of the controlling shareholder, rather than all shareholders.

The board is themed to control the management so that they do not act opportunistically or show a self interested behaviour at the expense of the owners and the survival of the company.

Research on the role of the board of directors in the modern corporation has focused on board effectiveness in monitoring management (Fama and Jensen, 1983). The benefit of management monitoring by the board is related to the degree to which the incentives of managers and shareholders diverge. It is argued that to be effective monitors, boards must be independent.

The empirical studies on the importance of outside directors yield mixed results. For example, Rosenstein and Wyatt (1990) provide evidence that shareholder wealth is affected by the proportion of outside directors by documenting a positive stock price reaction at the announcement of the appointment of an additional outside director. In contrast, Yermack (1996) finds no association between the percentage of outside directors and firm performance.

According to OECD's statistics in 1999, 62% of board members in the US, 34% in the UK, 29% in French are independent directors. America is one of the first countries who introduced independent directors to the board. The National Association of Corporate Directors in 1996 pointed out that majority of director members should be independent directors.

Majority of China's listed companies started to introduce independent directors onto the board since 2001 as required by CSRC. According to the survey on the effectiveness of corporate governance of the companies listed on Shenzhen Stock Exchange chaired by He (2003), by the end of 2002, 61% of the sample companies have two independent directors on the board. 9% of these companies have more than one third of the independent directors. About 25% of the sample companies have subcommittees on director board. The companies who set up subcommittees outperformed the ones without setting up the subcommittees.

The independent director system in China has also problems. The relation between the independent directors and supervisory board in China's listed companies is not clear and the responsibilities of the independent directors and the supervisory board are overlapping and repetitive in monitoring function. There is no specific stipulation of the rights and the duty of the independent directors. The co-existence of the two systems is criticized to lead to large and complicated decision-making team and increased the management cost of the company.

The highly concentrated ownership structure determines the board structure. The board of directors and supervisory board in China's listed company are controlled by the insiders; therefore, it is unlikely to implement the monitoring function effectively. The independent director system is a new thing and at the trial stage. It is expected that with the increase in the number of independent board members, the board is less likely to be dominated by the controlling shareholder and more capable of acting in the interest of the company and the shareholders as a whole.

3.3.5. Inefficient managerial incentive mechanism

The conflict between managers and shareholders has been studied extensively by researchers seeking to understand the nature of the firm. When shareholders are too diffuse to monitor managers, corporate assets can be used for the benefit of managers rather than for maximizing shareholder wealth. The incomplete

alignment of the agents and owner's interests is brought to attention by the seminal contributions of Jensen and Meckling (1976) on agency costs. The solution to this problem is to give managers an equity stake in the firm. Doing so helps to resolve the moral hazard problem by aligning managerial interests with shareholders' interests.

A large amounting of literature addresses to the relationship of managerial ownership and firm's performance. The well-known studies include Stulz (1988) bell-shaped relation between managerial ownership and financial performance. Morck, *et al.* (1988) found a non-linear relation between managerial ownership and corporate value.

Manager compensation generally consists of several components such as salary, bonus, stock option. Bonus is used as reward for past performance and the stock option is usually designed to provide the correct incentive for future performance (Murphy, 1985) and is becoming a standard part of both executive and non-executive compensation package. A 1998 Towers Perrin study finds that 78% of US companies provide stock options (Orr, 1999). Over a similar time period, a survey by Share Data finds that, of companies with stock options plans and more than 5,000 employees, the percent that grant options to all employees increased from 10% to 45%. In addition, 74% of companies with less than \$50 million in sales grant options to all their employees (Morgenson, 1998).

The study by China Realizing Consulting Co (2003) shows that in 2002, 435 chairmen (36%) and 368 general managers (34%) of 1197 sample listed companies own equity stake of their companies. More than 60% of the 1,197 sample companies have no managers and directors to own any equity stake of the companies. The managerial equity stake is an important indicator to evaluate the corporate governance of a company. If the managers of the company do not want to own any equity stake of the company, the outside investors have enough reason to doubt about the potential perspective of the company.

According to the survey on the effectiveness of the corporate governance of the companies listed on Shenzhen Stock Exchange (He, 2003), the companies with the directors and managers to own in excess of 5% of total outstanding shares perform better. However, 92% of the sample companies have the directors and managers owning less than 5% of the total outstanding shares. Cash salary is the main compensation of the directors and the managers in the listed companies. In most of the China's listed companies, the manager compensation includes basic salary, position allowance and bonus and all of them are paid in cash. The efficient managerial labour market is not available. Besides, the government soft budget constrain make it very difficult to measure the manager's performance. Manager compensation in SOEs is regulated by the government. Intuitively, monetary income only accounts for a small part of SOEs managers' total income, of which most of parts are not easily observable, liking perking, rent-seeking, promotion, government secret bonus. Also the listed companies are not required to disclose the details of incentive plans.

The limitation of using salary as the only component of the compensation plan includes limited incentives for both short-term and long-term performance. An annual bonus is an award for performance during a pre-determined time period, typical one year. The bonus usually is used to provide an incentive for employees to focus on short-term performance, sometimes, the focus on short-term performance is at the expense of long-term performance, resulting in sub-optimal operation. The relation of the manager compensation and firm performance of China's listed companies is not significant. Wei's (2000) empirical study shows that the top manager compensation of Chinese listed companies has no association with the firm performance, but it is positively associated with firm size.

Majority of China's listed companies do not adopt the managerial stock option as an incentive. Jensen and Meckling's 'convergence of interest' hypothesis contends that, as managerial ownership in a firm increases, a firm's performance increases uniformly, as managers are less inclined to divert resources away from value maximization. The following reasons may explain why the stock option as managerial incentive is not widely adopted in China's listed companies.

A. Unavailability of law and regulation in favor to the stock option

The stock option adoption will engage the legal issues. Currently, the execution of stock option is conflicting with relevant law and regulations in China.

The stock required for stock option comes normally from two sources: the new issue of the company and the treasure stock. The stock company in China when registering with the industrial administration department, is required that its registered capital shall be the same amount as its paid-up share capital, thus, the company can not have treasure stock. The Company Law defines that “A company may not purchase its own shares except where, for the purpose of reducing its capital, shares need to be cancelled, or where the company merges with another company which holds its shares. A company must cancel the shares purchased by the company itself within ten days, and register the change of its capital in accordance with laws and administrative rules and regulations and make a public announcement thereafter” (Article 149).

At the same time, there are strict requirements for the new issue.¹⁴ Therefore, the access to the stock for stock option is blocked. Before the Securities Law and Company Law, the individual person could not own in excess of 0.5% of the company’s outstanding shares. Such a low level of the equity stake was unlikely to act as incentive to align the interest of the managers to the interests of shareholders.

There is no tax policy such as US’s Internal Revenue Code favorable to the stock

¹⁴The Company Law defines that the conditions for the new share issue are “(1). shares of the previous issue must have fully been subscribed for and at least one year has elapsed since the previous issue of shares; (2). the company has been continuously profitable for the last three years and is able to pay dividends to its shareholders; (3). the company is not found to have false records in the financial accounting documents in the last three years; and (4). the forecast profit rate of the company can reach the interest rate of bank deposit for the same period of time”, (Article 137).

option. The tax law has no clear explanation for the income generated from the stock option. There is only one class of income tax levied on the personnel income. The income tax defines that the gains retained from exercising the stock ownership purchase or stock transfer shall be levied tax. The tax is levied on the related tax rate set on the income level. Under the progressive income tax rate, if the gains achieved for one time are high, the tax rates are also high. The incentive function of the stock option will be declined or even offset.

According to the Company Law, “the directors, supervisors and managers shall report to the company the number of company shares they hold. The shares they own can not be transferred during the period of their tenure” (Article 147). These shares can be transferred within the six months since they leave the job. The Securities Law says that “no person with knowledge of inside information on securities trading of a company or other person who has illegally obtained such inside information may purchase the securities of the company or sell such securities he is holding, divulge such information or counsel another person to purchase or sell such securities.....” (Article 70). The Securities Law defines the persons with knowledge of inside information on securities trading are “directors, supervisors, managers, deputy managers and other senior management persons concerned of companies that issue shares or corporate bonds.....” (Article 68). If the managers of the listed company can not purchase the company’s stock, the incentive stock option has no way to be executed. Therefore, how to integrate the current law and regulations with the stock option in China’s listed companies is another issue that needs investigation further.

So far, most of the managerial equity stake in China’s listed companies is converted from previous employee shares. According to the related regulation, the employee shares can not be transferred within 3 years of offer and can transfer among the employees of the company after 3 years, but can not float on the stock market. The shares purchased by the employee in the company incorporated by means of private placement shall not exceed 2.5% of the total number of shares of the company and can float on the stock market after 3 years of the share offer. In October, 1998, the CSRC issued a document to cease issuing the employee shares

and employee shares are not approved to float on the stock market. If the option of the employee shares is exercised, but the shares can not float on the stock market, the employees can not cash their capital gains.

B. Valuation of company

The methods used to evaluate the value of stock option have been argued all the time. According to the request of American Stock Exchange Commission, a company can use one of the two methods to evaluate the value of the stock option. One is to calculate the value of the stock option based on the stock's annual return to the whole shareholders at the fixed rate, for example, 5% or 10%. Another method is called Black-Scholes Option Pricing Model—a valuation equation that assumes the price of the underlying assets changes continuously through the option's expiration date by a statistical process known as geometric Brownian motion.

Since China's stock market is not a developed market, there is no proper method to evaluate the value of the stock companies. The conventional method of the fixed assets depreciation in the fixed term may not evaluate the companies properly, especially the fast growing high-tech company whose value is the intangible assets, and the conventional valuation method may devalue the company. Many SOEs have heavy historical burden and the internal mechanism problems. The business perspective is not optimistic. The value of the stock option must be low. To achieve the motivation, the managers in the SOEs may have to be granted more stock option, which may result in the losses of the state assets. What is more, under the current macro economic situation in China, the economic losses of SOEs are not all blamed the managers. If the stock option system is executed in SOEs, the performance assessment has to be reformed. If the company has any loss, the managers in the company will either not be able to get any stock option or they will get the deduction of the salary. The managers are likely to be demotivated.

C. Assessment of manager

The quota of stock option granted to managers is based on the precise evaluation of the company's assets and business performance. The fairness of the evaluation depends on two elements: the internal assessment and external check by the professional bodies of accounting and auditing.

The stock option shall be linked to the pre-determined total return to the whole shareholders or the earning per share, the effective internal performance assessment is essential. One of the responsibilities of board of directors is to monitor and assess the performance of the managers. So far, most of the listed companies have not set up independent remuneration subcommittee on the board. The board dominated by the insiders is unlikely to assess dispassionately the performance of the managers and design a reasonable managerial equity stock scheme. If the company adopts the stock option, the managers can oversubscribe themselves the stock or decide a favourable price of stock option to destroy the wealth of the shareholders.

The fairness of the assessment data will be checked by the professional bodies of accounting and auditing. Currently, the professional bodies in China are not well regulated and their fairness and objectiveness are all always questioned. Thus it does not facilitate the wide adoption of the managerial stock option.

D. Inefficient market

A market is considered to be efficient if share prices reflect all the known information. The China's stock market is not efficient market and the share price can not reflect the true value of the company. Often there is asymmetry of the share price and the corporate performance. According the research by Hu (2001), the relation between the share price and corporate performance on Shanghai Stock Exchange and Shenzhen Stock Exchange is insignificant and even there are some inverse association (see Table 3.2). The share prices of the companies suffering from economic losses outperformed the profitable companies.

The quality of disclosed information and the market monitoring for the information disclosure is another factor deterring the stock option. The poor quality and time-lag of the information disclosure can lead to mispricing of the company's stock. The stock holders can either gain the abnormal return (the abnormal return is not linked to the efforts of the managers) or lose the rational return (the return is linked to the efforts of the managers). If the stock option is executed in an inefficient and not transparent market environment where the information disclosure is of sub-standard and time-lagged, the share price is mispriced, the contracting stock option is unlikely to function as incentive to motivate the managers; instead it will lead to the inverse incentive.

Table 3.2 The relationship between EPS and cumulative average return

EPS	Cumulative average return (Shenzhen Stock Exchange)	Cumulative average return (Shanghai Stock Exchange)
EPS \leq 0	0.0004119	0.001099
ST com.	0.0010046	0.0010046
0<EPS \leq 0.1	0.0004414	0.001004
0.1<EPS \leq 0.2	-0.0002573	0.000547
EPS>0.2	0.00039287	0.000966
All stocks	0.00039287	0.00085

Source: "Design and oversee of stock option system of the China's listed companies", research report, Shenzhen Stock Exchange, Nr. 0029, 2001.

Therefore, in such environment, the managerial stock incentive system is not feasible for most of China's listed companies.

The problems arising from the current manager compensation system in China's listed companies are: (1). a large amount of cash outlay from the company will constrain the company's cash flow and further constrain the growth of the company. (2). Only cash compensation limits the incentive for both short-term and long-term performance. It can encourage the manipulation of the accounting numbers and a focus on short-term performance at the expense of long-term performance, resulting in sub-optimal operating decisions. (3). This compensation

system can not retain the high quality managers and employees who are essential for the survival and growth of the company.

The weaker governance is argued to exist (Morck, *et al.*, 1988) where managerial ownership is low. To develop the performance-based compensation including share-based compensation system in the corporation to motivate the managers and retain the employees is another fundamental issue of the corporate governance reform in China.

3.3.6. The market as external governance factor has no function

The value created by corporate takeovers comes from various sources. In addition to the gains produced by operating or strategic synergies, potentially important gains come from the replacement of managers who deviate too far from value-maximizing policies. Central to many of the arguments in favor of takeover efficiency is the belief that takeovers correct for poor firm performance and consequently takeover targets are likely to be firms who are perceived to underperform their non-target counterparts (Schleifer and Vishny, 1977). Jensen (1986) emphasizes the disciplinary influence exerted by takeovers over top management, characterizing the takeover market as the “court of last resort” to replace ineffective management. That is, the takeover market provides a source of external discipline to top management. In other words, the effectiveness of board oversight of managers is enhanced by an active takeover market.

Traditionally, the governance literature has categorized takeovers on the basis of management’s reaction to the bid implying that managerial opposition (hostile) represents a takeover with a governance motive while an unopposed bid (friendly) represents a takeover lunched for strategic motives (Shleifer and Vishny, 1988). The empirical evidence shows that increases of firm value followed, and higher shareholder returns were the norm (Bradley *et al.*, 1988; Morck *et al.*, 1988; and Milgrom and Roberts, 1992).

There are some other factors affecting the takeovers. Stulz (1988) develops a model to show that the probability for a hostile takeover to succeed decreases as managerial equity ownership increases. At 50% of managerial ownership, the probability of a hostile takeover is zero. Weston (1979) [quoted by Morck *et al.* (1988, p. 294)] provides further evidence of a 25% threshold. He finds that hostile takeovers have not been observed for firms with more than 30% insider ownership.

According to Schleifer and Vishny (1986), large external shareholders may facilitate takeovers by selling their shares to bidding firms when incumbent managers are under-performing and unwilling to implement reforms. A number of studies have also examined whether board composition influences target management's decisions around a takeover bid. O'Sullivan and Wong (1998a) report that boards resisting takeover bids are typically larger and comprise a higher proportion of non-executive directors compared to boards of friendly targets. Furthermore, O'Sullivan and Wong (1998b) find that resisting takeovers are more likely to have different individuals occupying the positions of company chairman and CEO. In the U.S, Cotter *et al.* (1997) also find that larger board and boards with a majority of non-executive directors are more likely to resist takeover bids. They also report that resistance by boards with a majority of non-executive directors generates higher returns for shareholders. These studies suggest that independent boards seek to pursue shareholder interests by resisting certain takeover approach and they point out that this phenomenon is possible where wide and efficient capital markets exist and the disciplining mechanism is frequently used. In the context of a non-market oriented corporate governance system, the hostile takeover is unlikely and the market for corporate control is underdeveloped compared to the market-oriented governance systems like the U.K. and the U.S.

The high ownership concentration by the first large controlling shareholder owning on average, 44.26% of the total shares and the existence of 61% of non-transferable shares seem to make the market for corporate takeovers as alternative device to monitor and control the performance of the management impossible on

China's stock market. However, according to a survey by CSRC (quoted by Yao and Wang, 2003), since 1993 when the stock companies started to float on the stock market, about 30% of the listed companies ever changed the controlling shareholders. It seems that this is an active takeover market with frequent changes of controlling equity owners. However, most of the listed companies had low ratio of tradable shares which are widely dispersed and the changes of the controlling shareholders were conducted through the transfer of the non-tradable legal person shares or the state shares. The transfer of the legal person shares and state shares needs to be approved by the related government department. It can not take place via transparent market competitive bidding price, but at the prices negotiated between the related parties or arranged by the government departments. This ownership structure determines that the takeover as an external factor of the corporate governance mechanism could not take the effect on China's stock market.

Chinese researchers examined the takeover motivations and the impact on the subsequent firm performance on China's stock market and found the following identical results. On the whole, in the year and subsequently the first year of the takeover, the firm performance was improved. Then, the firm performance turned downside (Gao and Chen, 2000 and Feng and Wu, 2001). These empirical studies show that the frequent takeover activities on China's stock market can not be explained by the market factor. Yao and Wang (2003)'s empirical study shows that the takeover for the governance factor does not exist on China's stock market. The controlling shareholder in pursuit of the controlling power to maximize their own private interest is the main driving force of the takeover. The weak monitoring and the investor protection system facilitate the controlling shareholder to retain high controlling profits (more than 40%) from the takeovers. The governance factor as the takeover motivation has no impact on the behaviour of the takeover. Through the takeover, the managers of the company can enhance their salaries by expanding the size of the company, ignoring the company's performance. So the managers' pursuit of the increase in their own interest is argued to be an important factor to motivate the takeovers. Another purpose of the takeover is to get the "shell" resource of the listed company and channel to be

listed on the stock market. Such takeovers happen frequently in the non-state owned companies and have nothing to do with improving the corporate governance.

3.3.7. The institutional investors in China are small

The improvement of corporate governance requires more effective involvement by shareholders. This includes both controlling shareholders, who may benefit from taking a longer-term point of view, and making greater use of voluntary measures to improve corporate governance; and institutional investors, who can influence corporate governance both through their choice of investments and in monitoring and voting after the invest .

Historically, the role of institutional investors in developing and emerging markets has been limited. However, in recent years their presence has increased significantly and looks likely to continue to grow in the years to come. Two trends have contributed to this greater role. One is globalisation and the growth of foreign investment in emerging market economies. In 1990, foreign investment in equities in many of the developing countries was close to zero. Now foreign investors, and in particular foreign institutional investors, are important capital market participants. They are not limited to the more advanced capital market. Funds backed by bilateral and multilateral agencies like the International Finance Corporation (IFC), the European Bank for Reconstruction and Development (EBRD) and the United States Agency for International Development (USAID) are some of the most important market participants in countries with less developed capital market (OECD, 2003).

The general growth has and will continue to come from domestic institutional investors. The more important is the domestic pension fund. Since 1995, the developing and emerging market economies have required workers to save in pension funds that can invest some fraction of their portfolios in private securities.

In China, the pension funds were introduced in 1997, but are administrated by individual state owned enterprises.

The domestic institutional investors are small in China. Table 3.3 presents the summary of A-Shares and B-Share investors in 2002. On average, 99.49% of the investors of A-Share are individual and 0.51% of investors are the institutional investors who are based either in Shanghai or Shenzhen. There are slightly more institutional investors holding B-share (1%), but 98.86% of B-share investors are individuals. Obviously, the institutional investors in China are indeed in a weak and insignificant position on the stock market.

Table 3.3 Summary of A-Shares and B-Share investors on China's stock market in 2002

Unit: 10K

	Total	Shanghai	Shenzhen
Total investor			
A-Share	6,727.50	3,470.19	3,257.31
B-Share	154.26	96.42	57.84
Institutions			
A-Share	34.52 (0.51%)	18.10 (0.52%)	16.42 (0.51%)
B-Share	1.76 (1.14%)	0.96 (1.01%)	0.80 (1.38%)
Individual			
A-Share	6,692.98 (99.49%)	3,452.09 (99.48%)	3,240.89 (99.50%)
B-Share	152.49 (98.86%)	95.46 (99%)	57.03 (98.62%)

Source: China Securities Depository and Clearing Corporation Ltd.

Since 1999, the Chinese Securities Regulatory Commission (CSRC) put forward the issue to develop the institutional investors and expected them to play an active role in the corporate governance. The securities investment institutions have developed quickly in recent years on China's stock market, but compared with the developed market, they have lower market value. By the end of 2000, there were 10 fund management companies, managing 34 closed funds, worth RMB 84.7 billion, (i.e. 10.32 billion of USD), only 1.8% of the total market value (CSFB, 2002). In 2002, the CSRC put it on the top of the agenda to develop the institutional investors to improve the corporate governance system and the

policies taken include: to activate the open funds as soon as possible, as defined in the “Provisional Measures of Open Fund” promulgated by the State Council; and transform the pension fund and financial assets management companies to institutional investors. The financial assets management companies refer to the four companies established specially to deal with the non-performing loans of the state owned banks. The policies also include introducing the qualified foreign investment institutions into China. In 2002, it is the year that the institutional investors grew. There are 18 fund managements incorporated by IPO and 14 of them are open funds (CSFB, 2003). In June, 2002, CSRC promulgated two documents, defining the requirements that foreign institutional companies enter the China’s stock market by setting up the joint venture with the Chinese domestic securities companies. In December, 2002, People’s Bank of China and Chinese Securities Regulatory Commission promulgated jointly the “Provisional Measures of Qualified Foreign Investment Institutions Investing and Managing Domestic Securities in China” (called as “QFII”). The enforcement of QFII means that Chinese domestic stock market (i.e. A-shares market) is opened officially to the foreign investors. Introducing the qualified foreign investors onto China’s capital market will facilitate to expand the capital supply scale and introduce the standardized investment concept to improve the corporate governance (Annual Report of China’s Listed Companies, 2003)

3.3.8. Conclusions

The overview of the environment of China’s corporate governance in this section includes such various aspects as property rights in SOEs, ownership structure, board structure, managerial compensation system, market as external factor and institutional investors. They are summarised as follows.

- For historical reason, majority of China’s listed companies are SOEs. In SOEs, the property rights are ambiguous and the companies are controlled by the managers (insider control). The ownership is highly concentrated by the first large shareholder and many companies have one single controlling shareholder. The delegation of managing power to the

managers as a reform of SOEs has released the great power for the managers to improve the efficiency of the companies, at the same time the managers may use (abuse) the controlling power.

- The controlling shareholder controls the shareholders general meeting and influences the selection of the candidates of the board of directors and in the end, controls the board of directors through nominating and appointing chairman and top manager and nominating its agents as directors. The board of directors with majority of insiders—executive directors and the representatives of the controlling shareholder and minority of the independent directors may not improve the effectiveness of corporate governance. The supervisory board plays a role of “rubber stamp” in most of the circumstance and make minor contribution to the effectiveness of corporate governance.
- The managerial stock option as an incentive is not prevalent in China’s listed companies and the managers get fixed income, which is not associated with firm performance. The current environment of China is not in favour to the wide adoption of the stock option. The poor manager compensation system in China’s listed companies can not align the interest of the managers to the interest of the companies and the shareholders. The managers have no incentives to maximize the wealth of the shareholders; instead, they pursue the maximisation of their private interest.
- The external disciplinary mechanism comes from the professional manager market competition and equity market behaviour such as takeover, acquisition, and merger. The hostile takeover as corporate governance factor does not exist, although there are active takeover activities on China’s stock market. It seems that the motivation of the takeover is for the controlling shareholder or the managers of the company to pursue the maximisation of their own wealth rather than to improve the corporate governance.

Notwithstanding the fact that there is no perfect corporate governance mechanism, and the development of an appropriate mechanism for China is a gradual and path-dependent process, there is still an imperative to move forward as quickly as

possible in order to minimise the associated costs. However, maturity of a sound corporate governance system that sustains long-term development is linked to the success of economic, legal and culture development in Chinese society as whole.

Chapter 4. Characteristics of China's real estate market and the listed real estate companies

4.1. Introduction

The real estate industry is one of the key industries of China's domestic economy and has been playing an important role in maintaining the sustainable development of China's economy. The real estate industry of China started after the economic reform (Annual Report of China's Listed Companies, 2003). In the planned economy time, the property had no commercial attribute and was social welfare affiliated to the working units. The real estate market did not exist, neither did the real estate industry. After the economic reform, with the establishment of socialist market economy, the real estate industry emerged, especially after 1990s, it grew and developed fast. The flourishing of the real estate industry was accompanied by the fast growth of China's economy. For some reasons, the development of China's real estate industry has fluctuated and showed the clear periodical cycles.

This chapter will look at the economic factors from 1990 to 2002 in Section 4.2 and examine China's real estate market cycles in Section 4.3. Section 4.4 reviews the history of China's listed real estate companies and Section 4.5 discusses the types of real estate companies.

4.2. Economic factors (1990-2002)

After the adjustment and rationalisation of 1988-90, further acceleration of reform and opening and speeding-up the economic development occurred from 1991. The general Asian economy was growing fast and was in favour to China's economy development. Taiwan, South Korea, Singapore and other south eastern Asian countries broke the economic blockage set up by the Western World to China, setting up a new upsurge of investment in China. What is more important, in

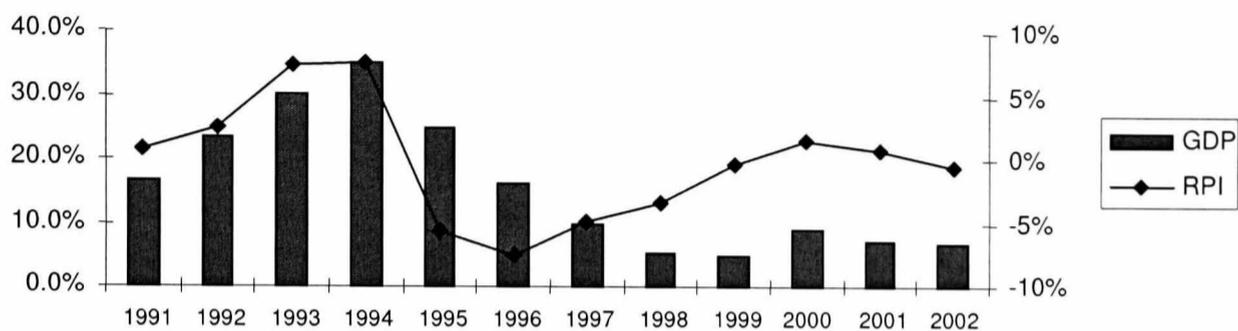
1992, Deng Xiaoping, the chief reform designer, during his inspection tour to the South of China, said that China should seize the opportunity, and quicken the pace of the reform, opening-up and economic construction. After that, the Party Central Committee made a series of decisions on accelerating reform, opening-up and economic construction, and clearly put forward the goal of establishing the system of a socialist market economy at the Communist Party Congress that was of great historical significance. Since then, China's reform, opening-up and modernisation drive entered a new stage. The first few years saw the rapid growth of China's economy and the GDP had the high increase rate and a great demand for investment and consumption had occurred. The high growth rate of GDP and increase in people's living standards attracted the attention of the world. Within the improving sectors, the real estate industry became the most obvious.

During this period, followed with the inflow of the foreign investment and the foreign enterprises and personnel, the investment in real estate, especially in the office buildings was rising greatly. Many office building were set up speculatively and large vacancy resulted. The high growing economy resulted in high inflation. In 1994, the inflation rate reached the peak. To control the overheating economic development, the government started to control the pace of the development, reduce the inflation, and take the tight fiscal policies. The overheating of investment in non-productive, especially in real estate such as offices, shops and hotels went down. From 1995, the economy went into slow growth.

The period of 1996 - 2000 was called the "Ninth Five-Year Plan" period. During the "Ninth Five-Year Plan" period, the average GDP growth rate was 8%, from 5,749.5 billion of Yuan in 1995 to 8,940.4 billion of Yuan in 2000 (much higher than the world average growth rate of 3.8%) and since then the GDP maintained the growth rate of about 7% till 2002 (see Figure 4.1). In 1997, the Asian financial crisis had a sever impact on China's economy, since 65% of export and 85% of overseas fund came from Asia, plus the flood strike in 1998, the growth rates of GDP in these years were below 8%, averagely. By the end of the "Eighth Five-Year Plan" period (1995), the inflation rate was above 20%. The first target of the "Ninth Five-Year Plan" period for the government was to tighten the

macroeconomic control, adjust the investment and cool down the overheating economy. The total fixed assets investment increased at the average rate of 9%.

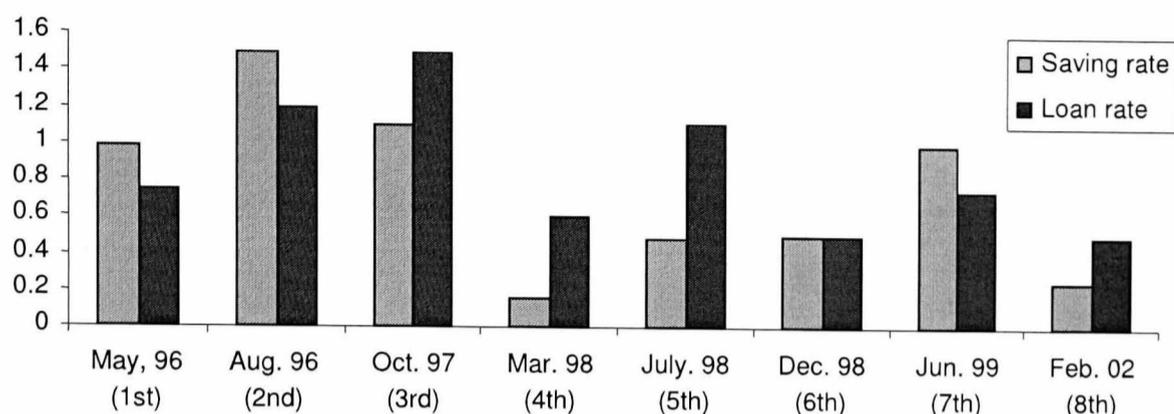
Figure 4.1 Growth Rates of GDP and RPI of China (1991-2002)



Source: *China's statistics Yearbook (2003)*

The last 5 years of the last century (1996-2000) experienced the inflation first, then deflation starting from 1998 and insufficient domestic demand. To reflate the economy and stimulate the domestic demand, the interest rates were reduced eight times from 1996 to 2002 (see Figure 4.2). The “Ninth Five-Year Plan” period was a transitional period in China and the further economic reform required the mechanism reform. By the end of 1999, an agreement was signed with US concerning China’s accession to the World Trade Organisation (WTO) and optimism prevailed throughout the economy (www.stat.gov.cn).

Figure 4.2 Reduction of Interest Rate from 1996-2002



Source: *China's statistics Yearbook (2003)*

4.3. China's real estate market cycles

The real estate industry is one of the key industries in China's domestic economy and plays an important role in the sustainable growth of the economy. The real estate industry is highly related with the development of other industries such as construction, construction material, transportation, energy, metallurgy, chemistry, electronics and communication etc. According to Annual Report of China's Listed Companies, 2003, 25% of steel, 70% of cement, 40% of timber, 70% of glass and 25% of plastic products were consumed by the real estate development and construction in 2002 and the real estate industry contributed 1-1.5% to the growth of GDP.

4.3.1. 1990-1993: fast growing period of real estate market

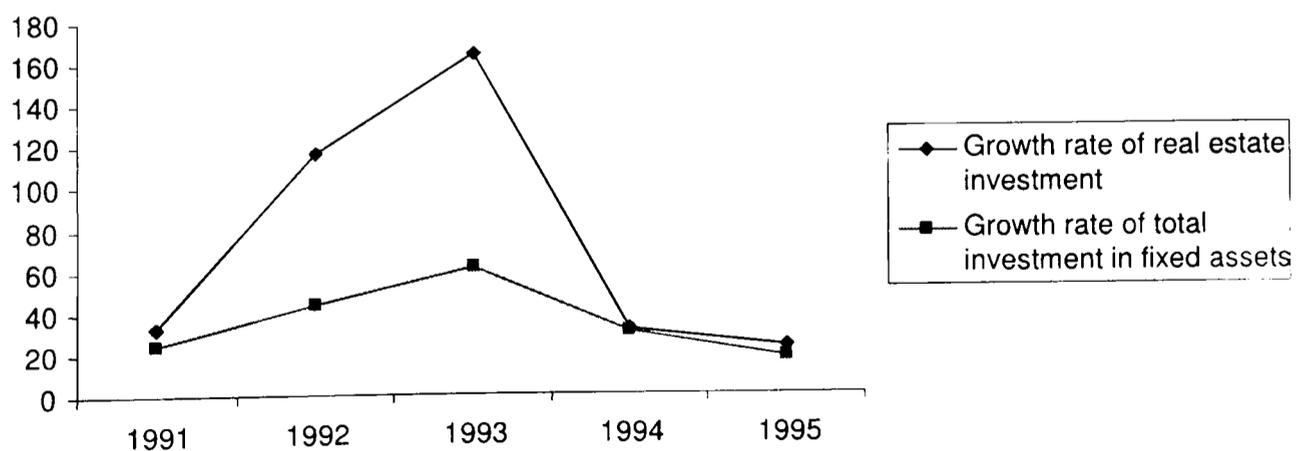
The early 1990s was the golden times for the China's real estate industry. In 1990, the State Council issued "The Provisional Regulation in Urban State-owned Land Use Right Transfer" and "Provisional Regulation in Foreign Investment, Development and Dealing in Land", followed by the policy of Pudong real estate development and from the second half of 1991, the real estate industry started to

boom, along east and south east costal cities in China and till the first half of 1993, the real estate market reached the peak and the development investment increased at the unprecedented speed of 165%, although the state policy of the macro economic adjustment and control started to take the effect. In 1991, there were 4,200 real estate enterprises across China. In 1995, there were 33,482 real estate enterprises (China Real Estate Index System, Nr.2, 2001).

The fast growth of real estate industry in 1992 and 1993 was driven by the investment. A huge amount of capital including the bank capital was invested in the real estate industry, at the same time, the foreign investment in the real estate industry increased. All these pushed up the growth rate of the real estate investment higher than the growth rate of the total investment during the same period.

Figure 4.3 shows the growth rate of real estate investment from 1991 to 1995. From 1991 to 1995, the increase rate of real estate investment is 32.7%, 117.6%, 164.9% and 31.8%, respectively, and 8.8%, 73.2%, 103.1%, 1.4% and 5.8% higher than the growth rate of the total investment during same period.

Figure 4.3 Growth rate of investment in real estate



Source: *China's Statistics Yearbook (2003)*

The real estate market was characterized at this time by the construction of special economic development zones, office buildings and retail buildings. The fast growth of real estate market went beyond the ability of the consumption and the economic growth. The excessive investment was focused in the big and medium cities along the east and south east coast cities. The land price in these cities was driven up speculatively and housing price was rocketing. The investment in the real estate was highly risky. The results of the excessive investment during this period were large vacancies of the buildings with huge amounts of capital stuck in these investments. The overheating investment in the property projects led directly to the policy of macro economic adjustment and tight fiscal control and the real estate market started to get into the adjustment period.

At this time, the two stock exchanges, Shenzhen Stock Exchange and Shanghai Stock exchange were established and started to operate experimentally. Some real estate companies went to listing on the stock market via IPO. By the end of 1993, about 10% of the total public traded companies on the two stock exchanges were real estate companies and the real estate shares had the best performance in 1993.

4.3.2. 1994-1999: real estate market in recession

In 1994, the real estate market was getting more and more rational under the functioning of the government policies of the macro economic adjustment and control and the investment in the real estate slowed down. The increase in real estate investment fell greatly to 31.8%. But on the stock market, the heat that the real estate companies went onto listing on the stock market didn't fall and 8 more real estate companies were listed on Shenzhen Stock Exchange, about 8% of the total newly listed companies in that year.

From 1995, the growth rate of the real estate investment continued to fall. To cool down the overheating real estate industry, the government determined not to approve the real estate companies to be listed via IPO any more for the time being (China Real Estate Index System, Nr. 2001).

At the same time, the real estate investment was in the stagnate status. In the 1997, the total investment was increased negatively, 1.2%, compared with the previous year, the first time since the 1990s, and the real estate market plunged into the recession. Some of the listed real estate companies performed poorly because of the poor liquidity of the cash and large amount of building voids resulting from the excessive expansion at the peak time and the real estate share fell into the underperforming shares section. The real estate share price shrank 2/3 since the Asian financial crisis of 1997 (China Real Estate Index System, Nr. 2, 2001).

Generally, from 1994 to 1996, the growth rate of real estate industry fell down greatly and reached the lowest point. 1998 and 1999, the two years went through the fluctuations with short-waves and the adjustment period lasted about 7 years.

4.3.3. Since 2000: real estate market in rebound

From 1999, the reform of the residential housing was strengthened further and the government took a series of preferential policies including to commercialise and monetarise the allocation of the residential housing (which used to be allocated by economic units as a welfare and the household only paid humble rent as a nominal), reduction of the real estate gains tax which was introduced by the end of 1994 and charged 50% for the luxurious building construction such as hotel, office building, villa and the gradual opening of the secondary property market. At the same time, the income tax is levied on the saving interest to lower the level of individual savings, the housing funds were activated, the tight control in the bank loan to residential housing construction was lifted and, the interest rates for the loan of the residential building construction were reduced—the average reduction of the interest rates since 1996 was 10% for the loan of one-year term and 13% for the loan of five-year term and longer to encourage the individual household to purchase the residential housing. The banks started to provide the mortgage loans for the household to purchase the residential housing. The real

estate investment started to rise greatly and the whole real estate industry started to rebound from 2000 after the 5 years' recession.

In 2000, the total investment in the real estate industry increased 21% and 15% of the total fixed assets investment (see Table 4.1). The average increase rate of real estate investment from 2000 to 2002 is 24% and the real estate investment took 17% of total investment. 67% of the investment was on the residential buildings, 5% on the office buildings, 12% on the commercial business buildings and 16% on the other projects. The sold space and sales revenue of the commodity property increased 30%. The sales price rose steadily. The investigation to 35 the large and medium-size cities throughout China by China Statistics Bureau and China Economy Planning and Development Commission jointly showed that in the third quarter of 2000, the sales prices of the commodity property rose 1.5%, the price of the land transaction rose 0.9% and the rental rose 2.2% compared with the same period of the previous year.

Table 4.1 Real estate investment from 2000 to 2002

RMB in billion	Investment in real estate	Ratio of total investment in fixed assets	Residential building (% of total)	Office building (% of total)	Commercial business building (% of total)	Others (% of total)
2000	498.41	15%	331.20 (66%)	29.79 (6%)	57.60 (12%)	79.42 (16%)
Increase rate (%)	21%		26%	-12%	20%	24%
2001	634.41	17%	421.67 (66%)	30.80 (5%)	75.53 (12%)	106.42 (17%)
Increase rate (%)	27%		27%	3%	30%	34%
2002	779.09	18%	522.78 (67%)	38.10 (5%)	93.36 (12%)	124.86 (16%)
Increase rate (%)	23%		24%	24%	24%	17%
Average (2000-2002)	637.30	17%	425.21 (67%)	32.89 (5%)	75.63 (12%)	103.57 (16%)
Average increase rate (%)	24%		26%	5%	25%	25%

Source: *China's Statistics Yearbook (2003)*

As regards the purchasing, the individual household purchase of the commodity residential housing (the prices of the commodity residential housing are decided by the market which is different from the “economic” residential housing constructed for the households with lower income and sold at the prices defined by the local authorities. For such projects, the developer-traders enjoy the subsidies from the government in the acquisition of land use right, interest rate of loan, taxes and fees. But such projects were usually built in the far outskirts of the city with poor facilities and poor construction quality) and showed great increase amounting to above 80% of the total commodity residential housing. The residential housing consumption is the new hot spot of consumption for the urban residents.

Office building was under the stringent control of the government, because of the excessive investment at the beginning of 1990s resulting in a large amount of voids (China Real Estate Index System, Nr. 2, 2001).

So far, the real estate market in China is the development market, residential housing development is in a predominant position. The real estate rental market has not been working in full swing and the property has not been held as an income producing investment by the corporate organisations and institutions widely in China.

4.4. Historical review of China’s listed real estate companies

The first publicly traded real estate company in China is Shenzhen Fountain Corporation (000005) listed on Shenzhen Stock Exchange on 10th, December 1990, ten days later after Shenzhen Stock Exchange was founded and opened on 1st December 1990. It used to be a textile company established in 1987. In 1988 it was restructured as a joint stock Ltd. and went listing in the real estate sector on Shenzhen Stock Exchange in 1990. In 1991, two more companies were publicly traded on Shenzhen Stock Exchange in the real estate industry, they were Gintian Corporation (000003, delisting in 2002) and Vanke (000002). From 1992 to 1994,

there were 13 more real estate companies listed on Shenzhen Stock Exchange and 9 companies on Shanghai Stock Exchange. They constituted 9 per cent of all the publicly traded companies at the two exchanges in 1994 (China's Securities and Futures Statistics Yearbook, 2003). Reviewing the background of these earlier listed real estate companies on China's stock market, they were the state owned enterprises (SOEs) or a branch of SOEs established in the 1980s. Most of them were construction companies, or facilities management divisions affiliated to a government department or SOEs. They were restructured into jointly stock companies via reforming of mechanism, that is, the new corporation was founded on the base of the previous unit (the parent company) by splitting off the unprofitable assets and leaving the redundancies to its previous company (or parent company) and went on listing on the stock market. The staff in the new companies including the management team came from the previous unit or the parent company. It is quite common that the previous company is the controlling shareholder, controlling the new jointly stock company and appointing the managers of the new stock companies.

These early days were the glorious period for these publicly traded real estate companies. For example, the share price of Gintian (000003) rose from 18.20 Yuan per share on 9th, March, 1992 to 39.60 Yuan per share on 1st, June, 1992, increasing 118% in less than 3 months.¹⁵ The share price of Lujiazui (600633) rose from RMB 3.18 Yuan per share at the end of July, 1994 to RMB 13.25 Yuan per share on 6th, September 1994, increasing 316.7% in 2 months.¹⁶ The real estate investment at this time focused mainly on the office buildings, hotels, industry buildings and luxurious residential buildings in the two key Special Economic Development Zones in Shenzhen and Pudong in Shanghai. Overinvestment resulted in large vacancies and uncompleted buildings, the waste of funds, especially the banks' fund and land resource. In May, 1995, the government started to take tight fiscal policy to control the investment in the fixed

¹⁵ and ¹⁶: the data are from the website of www.wind.com.cn

assets. In 1996, CSSRC issued a notice, suspending initial public offer (IPO) of the real estate company for the time being (China Real Estate Index System, Nr. 2, 2001).

From then on, no real estate companies were being listed via IPO in the real estate industry on the stock market till 2001. The further reform of the residential housing distribution from the later 1998 brought about the recovery of the real estate market. To expand the domestic demand and facilitate housing distribution reform, in July, 1998, the central government reduced the interest rate, followed by another three reductions of the interest rates till February, 2002. The individual persons could buy their houses by mortgage provided by the banks. The great demand for the housing pushed the real estate market to recover. Housing industry is regarded as the economic increasing point and the pillar to reflate the domestic economy in China. With the booming of the real estate market, the government started to tentatively relax the ban of the IPO of the real estate companies on the stock market. The Construction Ministry of China selected 4 well-performed real estate companies (600383, 600376, 600322 and 600533) to be listed in 2001 and 2002 on Shanghai Stock Exchange.

In China, there are two types of real estate companies. One is real estate development companies, they develop and then trade the property. Their profits depend greatly on the property trading. Developing and then holding as investment don't have significant role in the activities of these real estate companies. They are developers/traders. Another type of real estate companies is called SEDZ type; that is the real estate companies whose business activities happen mainly in the Special Economic Development Zone (SEDZ), such as the utility construction, facilities building and managing, land renting, office and industry buildings renting and administrating the business settled in the SEDZ. Most of such companies are local government divisions, performing the task of building and administrating the Special Economic Development Zones and were listed on Shanghai Stock Exchange from 1996 to 1999. There are 7 such real estate companies. We want to point out that the companies under study here are selected according to "Guidelines of the Industry Sectors Classification for

China's Listed Companies" by CSRC. That is (1) when the ratio of a business income in a company equals or exceeds 50% of total turnover, then this company shall be classified into the industry sector corresponding to this business; (2) if the company has no business which income equals to or exceeds 50% of the total income and if one of the business incomes amounts to more than 30% of any others, the company shall be classified into the industry sector corresponding to this business; otherwise, it shall be classified into conglomerates. After reviewing the Annual Report of China's listed companies, 50 listed companies are classified into the real estate sector. Table 4.2 shows the name list of China's listed real estate companies in 2002.

Among the 50 listed real estate companies, 13 are based in Shenzhen, 14 in Shanghai, 3 in Beijing and in Guangzhou respectively. There are 35 firms listed via IPO (3 of them were delisted in 2001 and 2002 due to consecutive economic losses), 18 of them are listed via takeover/restructuring.

Table 4.3 shows the overview of China's stock market and the real estate sector in 2002. By the end of 2002, there are 1,199 companies listed on two stock exchanges. The total number of capital stocks is 546.38 billion of shares and 31% of them are negotiable, while the market capital is RMB 3,832.91 billion of Yuan and 33% of it is tradable. The number of the stocks of real estate companies on the two exchanges is 19.34 billion of shares, about 4% of the total market. 41% of real estate stocks are negotiable, 10% higher than the whole market ratio. The total market capital is RMB 72.71 billion of Yuan, about 2% of the total market capital and 43% of it is tradable.

Table 4.2 Name list of China's listed real estate companies in 2002

No.	Code	Name	Location	Date of listing
1	000002	Vanke	Shenzhen	29/10/1991
2	000005	Xingyuan	Shenzhen	10/12/1990
3	000006	Zhenye A	Shenzhen	30/02/1992
4	000011	Shen Wuye	Shenzhen	30/02/1993
5	000014	Shahe	Shenzhen	02/06/1992
6	000029	Shenshenfan	Shenzhen	15/09/1993
7	000031	Baoheng	Shenzhen	08/10/1993
8	000042	Changchen	Shenzhen	20/04/1994
9	000046	Guangcai	Shenzhen	12/09/1994
10	000049	Wanshang	Shenzhen	10/01/1995
11	000402	Financial Street	Beijing	26/06/1996
12	000502	Hengda	Haikou	23/11/1992
13	000505	Pearl River	Haikou	21/12/1992
14	000511	Yinji	Shenyang	18/05/1993
15	000514	ST Yu Develop	Chongqing	12/07/1993
16	000526	Hao Shiguang	Xiamen	01/11/1993
17	000540	Century Zhongtian	Guiyang	02/02/1994
18	000558	Lander Real Estate	Shenyang	09/05/1994
19	000572	Jinpan	Haikou	08/08/1994
20	000573	Winnerway	Dongguan	15/08/1994
21	000608	Super Shine	Chengdu	18/11/1996
22	000628	Chengdu Brilliant	Nanning	16/09/1996
23	000931	Centergate Tech	Beijing	13/09/1999
24	600895	Zhangjiang Hi-tech Park	Shanghai	24/04/1996
25	600823	Shimao	Shanghai	04/02/1994
26	600791	Tianchuang	Guiyang	30/01/1997
27	600767	Winsan	Shanghai	15/11/1996
28	600736	Suzhou New District	Suzhou	15/08/1996
29	600696	Linca	Shanghai	06/12/1993
30	600684	Pearl River	Guangzhou	28/10/1993
31	600675	China Enterprise	Shanghai	06/08/1993
32	600663	Lujiazui	Shanghai	08/11/1994
33	600648	Wai Gaoqiao	Shanghai	26/07/1993
34	600641	Cosco	Shanghai	02/03/1992
35	600639	Jinqiao	Shanghai	31/05/1993
36	600638	New Huangpu	Shanghai	26/03/1993
37	600634	Hainiao	Shanghai	04/03/1993
38	600606	Jinfeng Investment	Shanghai	27/03/1992
39	600603	ST Xingy	Shanghai	13/01/1992
40	600533	Chixia	Nanjing	28/03/2002
41	600393	Donghua	Guangzhou	08/01/1993
42	600383	Golden Field	Shenzhen	12/04/2001
43	600376	Tianhong Baoye	Beijing	12/03/2001
44	600322	Tian Fang	Tianjin	10/09/2001
45	600256	GHGF	Xinjiang	26/05/2000
46	600215	Changchun Economic	Changchun	09/09/1999
47	600193	Prosolar Tec	Xiamen	27/05/1999
48	600167	Shenyang New District	Shenyang	28/01/1999
49	600133	East lake Hi-Tech	Wuhan	12/02/1998
50	600052	Zhejiang Guangsha	Zhejiang	15/04/1997

Source: www.stockstar.com. Adjustment is made based on the annual reports of listed companies.

Table 4.3 Overview of the China's stock market and real estate sector (2002)

(Value in billion)

	Nr. Of listed companies	Issued stocks	Tradable stocks	% of tradable stock	Mkt. capital (RMB)	Tradable mkt. capital (RMB)	% tradable mkt. capital.
Total	1,199	546.38	168.90	30.91%	3,832.91	1,247.34	32.54%
Real estate	50	19.34	7.95	41.10%	72.71	31.27	43.01%
% of total	4.17	3.53	4.7		1.89	2.5	

Sources: *China Securities and Futures Statistics Yearbook, 2003.*

4.5. The characteristics of real estate companies

One of the characteristics of China's real estate companies is large in quantity and small in size. For example, in 2002, there are 32,618 real estate enterprises with the revenue of RMB 707.79 billion of Yuan (Statistics Yearbook of China, 2003). Among them 50 real estate companies are listed on China's stock market with total revenue of RMB 33.96 billion of Yuan, amounting to 4.8% of total revenue. In 2002, the largest real estate company is Vanke with the revenue of RMB 4.56 billion of Yuan, 0.6% of total revenue. Such a low market concentration is attributed to the high profit at the initial period of property market development and the irregularity of the property market (Jiang *et al.*, 2004). The major source of the profit of the China's real estate companies is from the land development and transaction. When the government has no effective policy to manage the land use right, having the land means having the money for the real estate enterprise.

Another striking feature of China's real estate industry is that the privately owned enterprises (POEs) and private funding is active in this field and they have contributed greatly to the real estate market development. According to the statistics, POEs are most active in real estate industry in China. For example, in 2002, more than half of the real estate enterprises are POEs. Therefore, it is necessary to separate the real estate companies into state owned enterprises (SOEs) and privately owned enterprises (POE) for analysis. POE refers to the one owned by the natural persons, family or private institution who holds controlling stake of legal person shares.

Since 1990s, the government adopted some policies on the payable transfer of the use right of the state owned land and the industry resources would be open to all the capital subjects; the POEs had got the chance to enter the real estate field, participating in the real estate developing activities along side with SOEs.

Before the enforcement of “Securities Law” in China, the number of shares that a natural person held could not exceed 0.5% of the total outstanding shares of the listed company, therefore, a natural person could not have a chance to be the direct controller of listed company. With the issue of “Securities Law” in 1999, this restriction was eliminated. It is stipulated in Securities Law that “all participants involved in issuing and dealing in securities enjoy equal legal status...(Article 4)”. All this has laid favourable foundation for the natural person to be direct controller of listed companies.

The consistent and stable economic development in China since 1990s has provided a favourable macro economic environment and opportunity for China’s privately owned enterprises to develop and grow. At the same time, the state economy adjustment strategy - grab the big and key companies and let go the medium and smaller ones - that is to let smaller sized companies privatised first and grow under the market competition - has facilitated the private economy’s growth and given POEs a good chance to go listing on stock market via either IPO or takeover. In 2001 and 2002, the activities of takeover or reorganisation between companies took place frequently and some POEs bought the shell of the listed companies (usually the companies suffered from economic losses) and floated on the stock market.

By the end of 2002, there are about 70 POEs publicly traded on the two stock exchanges and 15 of them are classified into the real estate sector. They own 20 per cent of the total real estate stocks. So it is necessary to treat POEs as a separate group to analyse.

The land and the capital are two essential resources for the survival and development of the real estate companies. In China, the land is owned by the state and the land use right is transferred by the agreement between the government and related party in the practice. In the course of the transfer, such problems occurred as the transfer was dealt at low or even zero price, discounting or exempting the rent of land at the discretion of the local government, the government officials' intervention in the transfer price, the transfer was operated in the "black box" or under the table, non-disclosure of the land supply information and the result of land supply and transfer price, etc. The real estate industry is said to be the least transparent field in China. These problems have impeded the sound development of China's real estate industry. In August, 2003, a new act "The Act of Land Use Right Transfer by Agreement" came into effect, which is expected to regulate the conduct of the land use tight transfer and improve the industry competition.

The capital flow is regarded as the blood of the real estate development. In 2002, 22% of the real estate funding was from the domestic banks, 28% was from the equity and 49% was from the depository and presales funds (CSB, 2003), which were also the loan from the banks; therefore, the total funds from the banks amounted to 71%, increasing the risk of banking system and the companies were exposed to the market volatility.

In such a market environment, whether the corporate governance structure has impact on the corporate performance and how it affects the real estate companies, will be investigated in the following chapters.

Chapter 5. Ownership structure and corporate performance: evidence of China's listed real estate companies

5.1. Introduction

Fama (1980) argued that if a firm is viewed as a set of contracts, ownership is a concept irrelevant. A properly functioning manager market may discipline managers and solve incentive problems caused by the separation between ownership and control. Jensen and Ruback (1983) emphasized that the role of the market for corporate control and the takeover has restricted non-value maximisation behaviour of top corporate managers. However, economists argue that ownership matters because it affects, at least to some extent, the working of the markets. Shleifer and Vishny (1986) developed a model to demonstrate that a certain degree of ownership concentration is desired for the takeover market to work more effectively. Ownership concentration provides the investors with both the incentive and the ability to monitor and control the management. Large shareholders are able to capture a chunk of the gains from monitoring and are likely to supply it at levels that would be otherwise impossible to reach in diffusely held firms.

The rapid growing of Chinese listed companies, in which there has been significant presence of state shareholding and government control, has spurred huge amounts of academic and policy research. One of the focal points in the literature has been the effect of state shareholding on corporate performance. Theoretical perspective in the literature includes the assessment of possible increase in political interference costs due to state ownership, the evaluation of possible reduction in agency costs thanks to the monitoring of state owners, and the comparison between the interference costs and monitoring benefits (Bai *et al.* 2000; Li, 2000; and Stiglitz, 1997).

Empirical works are based on the above theoretical perspectives and employ various conventional estimation techniques using conditional means of the

variables. Empirical findings are diverse and indicate to all possible directions. For example, Xu and Wang (1999), Qi *et al.* (2000), Sun and Tong (2003), and Bai *et al.* (2004) all suggest a negative correlation between state ownership position and firm performance and also market valuation. Chen (1998) presents a finding of positive correlation. Tian (2002) argues that there might be a U-shaped relationship between government ownership position and firm performance. Sun *et al.* (2002), however, present an inversed U-shaped relationship, exactly opposite to Tian's (2002) finding.

However, there are two problems in these studies. First, their studies use the data of all the listed companies in all the industries sectors on China's stock market without considering the difference in industry competition and doing in-depth analysis of industry environment. The industry was used as dummy variable. There is no in-depth analysis of one specific industry. Chen and Jiang (2000) in their study of the ownership structure conclude that the different types of controlling shareholders should not be treated the same in all the industries. In the key and monopolized industries, the state controlling shareholder may not behave differently from the legal person controlling shareholder and tradable shareholders in the corporate governance and firm performance. In the more competitive industries, the proper reduction of the state shares and the increase in the stake of legal person shares and tradable shares would improve the corporate governance and firm performance.

Second problem in these studies is that the legal person shares are treated as one group without distinguishing the ultimate owners as the state or non-state. As discussed previously, the legal person shares can be classified as state legal person shares and non-state legal person shares. If the company is owned by the state via state legal person shares, it should not be treated separately from the other SOEs owned directly by the state shares. It should not be treated the same as the company controlled by the non-state legal person shares, since the ultimate owners of the companies are different. It may cause misunderstanding if the legal person shares are treated as one group for analysis without distinguishing the ultimate owners. This is one of the hypotheses in the study.

The analysis in this chapter uses the data of the listed real estate companies on China's stock market. First of all, it separates the companies to SOEs and POEs based on the ultimate owners. Then it separates the companies into different groups based on the different types of controlling shares - the state shares or legal person shares. Using the regression techniques, it investigates the irrelevance of the ownership structure and firm performance. Then it investigates whether a certain type of shares or the type of ultimate owners - state shares or legal person shares, SOEs or POEs - can explain the results. The purpose of the research is to provide supplementary evidence of a specific sector to the other empirical studies of corporate governance on the country level in China's context.

The rest of the chapter is structured as follows. Section 5.2 describes the construction of the study variables of ownership and corporate performance. Section 5.3 reports the descriptive statistics of ownership structure. Section 5.4 reports the performance measures. Section 5.5 analyses the ownership concentration and the effect on firm's performance. Section 5.6 analyses the power balance in closely held real estate companies. In Section 5.7, the test of robustness is done and in Section 5.8, the conclusions are drawn. The case studies are discussed in Appendix 3.

5.2. The definition of study variables

Following La Porta *et al.* (1999), this chapter analyzes ultimate ownership and control pattern. In China, the annual report of a listed company is required to disclose the name list and the number of shares owned by the Top 10 large shareholders. The Company Law stipulates that the interim shareholders' general meeting shall be convened if shareholders holding 10% or more of the company shares request it. 10% as threshold can be regarded as the minimum percentage of shareholder's stake necessary to exercise effective control. According the Securities Law, the change of the holding of stockholders who hold more than 5% of the company's stocks is defined as a major incident that might have a fairly

large impact on the price of its listed stock and should submit an interim report to the securities regulatory body under the State Council and the stock exchanges. So it can be understood that in China the shareholders holding above 5% of the shares are defined as large shareholders, otherwise as small ones. If the shareholder wants to fulfil the control right, he/she has to hold at least 10% of the total outstanding shares of the company.

The study variables are defined as follows:

- Top 10 (Top10): the number of shares owned by Top 10 large shareholders of a listed company as a measure of ownership concentration. This information is disclosed in the annual report of listed real estate companies. It is expected to have a positive relationship between Top 10 and corporate performance.
- 1st large shareholder (1st holder): the number of shares owned by the first large shareholder of the company as a measure of the ownership concentration. . It is expected to have a positive relationship between 1st large shareholder and corporate performance.
- 2nd large shareholder (2nd holder): the number of shares owned by the second large shareholder in the company as proxy of other blockholder.
- Other 3rd to 10th large shareholders (other 3rd -10th holders): the number of shares owned by the third to tenth large shareholders of the company as proxy of other blockholders.
- State owned company (SOE): an indicator variable. It equals one if the company is state owned company; otherwise equals 0.
- State shares dominated company (ST-Sh. com): an indicator variable. It equals 1 if the company is dominated by the state shares; otherwise equals 0 if the company is dominated by the legal person shares.
- Fraction of the state shares (ST-Sh.): the number of shares held by the state directly divided by the total number of shares outstanding.
- Fraction of legal person shares (LP-Sh.): the number of legal person shares divided by the total number of shares outstanding.
- Fraction of tradable shares (TR-Sh.) the number of all the tradable A-shares, B-shares and H-shares divided by the total outstanding shares.

- Earning per share (EPS): profits after tax and interest divided by total outstanding shares. The paper uses EPS as a measure of performance because the share capital of the listed real estate companies is fairly stable over the study period, thus it is a comparable measure for the company.
- Return on equity (ROE): profit after tax and interest divided by the by the value of total equity.
- Assets (ASSETs): the total book value of firm's assets in billion of Yuan as proxy of firm size. Firm size can be measured in different ways. Gilson (1997) uses the natural log of the total assets as proxy of firm size. The literature shows that alternative measures of firm size, based on annual sales or equity (log) (Vafeas, 1999) do not materially affect the inferences.
- Sales (Sales): the total operating sales in billion of Yuan as an alternative proxy of firm size.
- Debt to assets ratio (DAR): it equals the book value of the debt divided by the book value of assets.
- Growth rate: (Growth): this is measured by the annual growth of the sales.

With the regard to the performance measurement, tow broad types of performance measurement i.e., accounting performance and market valuations are investigated in the current. For example, Sun and Tong (2003) and Chang and Wang (2004) use return on equity (ROE) and return on sales (ROS), i.e. the earning before interest and tax over sales. For market valuation, Bai *et al.* (2004) and Chen and Xiong (2002) use Tobin's Q. As pointed out by Bai *et al.* (2004), the common critic on market valuation variables is that both state and legal person shares can not be traded freely in China and therefore lack market prices. In their studies they use both 70% and 80% illiquidity price discount to generate two additional variables.

This study focuses on the firm performance measured by the accounting ratios. One of reasons is that the property share price has weak correlation with profitability ratios of the companies (See Figure 5.1) and firm size measured by sales and total assets (even inverse correlations with sales in 2000 and assets in

2001); therefore, it is argued that the property shares could not reflect the true value of the companies.

Figure 5.1 Correlation of property share price with profitability ratios and firm size

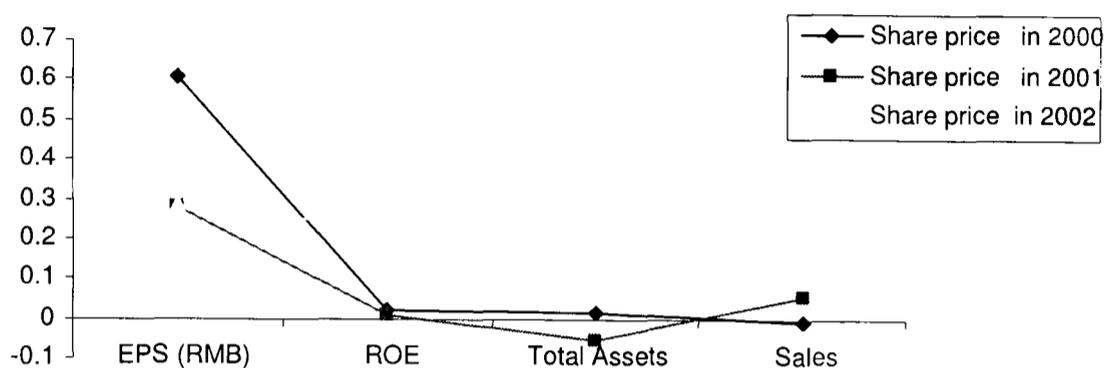


Figure 5.2 shows the relation of share prices with performance ratios of EPS and ROE and firm size represented by total assets and sales from 2000 to 2002. The share prices in three years were more correlated with EPS (62% in 2000 and 30% in 2001 and 2002) than with ROE (5% in 2000 and 2001 and 28% in 2002). The share prices had low correlation with firm size measured by total assets and the sales or even inverse correlation with total assets (-5% in 2001), indicating that the share prices in smaller companies were easier to be manipulated.

5.3. Descriptive statistics

5.3.1. Ownership structure

Here it starts by reporting the proportion of real estate stocks in types in Table 5.1

The largest fraction of the real estate stock is the tradable shares (A-shares, B-shares and H-shares) with the average mean (median) of 42.5% (36.8%), followed by the legal person shares with the mean (median) of 31.4% (35.2%) and the state

shares with the mean (median) of 25.5% (11.2%). The others include mainly the employee shares (0.09%). From the point of liquidity of the stock, majority of the real estate stocks are not transferable on the stock market, given that the state shares and legal person shares make up 57.5% in total and are restricted to transfer.

Table 5.1 Composition of real estate stock (2000-2002)

N=137	ST-Sh	LP-Sh	TR-Sh	Others
Mean	25.5%	31.4%	42.5%	0.9%
Median	11.2%	35.2%	36.8%	0.0%
Standard Deviation	0.27	0.25	0.16	0.04
Minimum	0.0%	0.0%	25.3%	0.0%
Maximum	74.7%	74.3%	100.0%	24.6%

The measure of the ownership concentration is based on these fractions of shares owned by firm's most significant shareholders. Table 5.2 displays the ownership concentration: percentage of shares owned by Top 10 large shareholders from 2000 to 2002.

Table 5.2 Ownership concentration by Top 10 large shareholders and correlation with the first large shareholding (2000-2002)

N=137	TOP10 (%)	1 st	2 nd	Other (3 rd -10 th)	LP-Sh. (%)	ST-Sh. (%)	TR-Sh. (%)
		holder (%)	holder (%)	holders (%)			
Mean	56.49	41.1	7.25	8.13	29.04	25.72	1.25
Median	56.99	40.01	5.75	6.33	19.43	11.99	0.47
Std. Deviation	16.1	17.82	6.15	7.43	25.79	27.87	2.43
Minimum	1.96	0.39	0.16	0.45	0	0	0
Maximum	78.88	74.69	23.87	37.28	74.28	74.69	13.68
Corr. with							-
1 st holder	0.75**		-0.29**	-0.53**	-0.32**	0.75**	0.19*

Note: ** and * stand for the correlation significance at 1% and 5% levels.

The concentration ratio measured by the number of shares owned by Top 10 large shareholders is 56.49% (median is 56.99%) over three years. The mean (median) of the first large shareholding is 41% (40.01%), ranging from 0.39% to 74.69%. The differences exist across the firms. There is one company (600603) who has no controlling shareholder, with the largest shareholder owning 0.39% of the total shares and all the shares being tradable and widely dispersed. The mean (median) of the second large shareholding is 7.25% (5.75%), ranging from 0.16% to 23.78%, while the other 8 large shareholdings (3rd to 10th) are in total, 7.25% (5.75%).

Obviously, the ownership structure indicates that many of the listed real estate companies have a single controlling shareholder, given that 10% is the cutoff for controlling shareholder. There is a gap between the numbers of shares held by the first large shareholder and the second large shareholder and it increases with the number of the shares owned by the first large shareholder. The number of shares owned by Top 10 large shareholders is positively correlated with the number of shares owned by the 1st large shareholder, and the numbers of shares owned by the 2nd and the other (3rd to 10th) large shareholders are negatively associated with the 1st large shareholder. The 1st large shareholder is negatively correlated with the legal person shares and the tradable shares, but positively associated with the state shares. All this suggests that the more the 1st large shareholder owns, the less the other large shareholders. The SOEs controlled directly by the state shares have higher ratio of the first large shareholding.

Table 5.2 also reports the types of the shares held by Top 10 large shareholders. The largest fraction is legal person shares with the mean of 29% (median 11.42%), followed by the state shares of 25.72% (median is 11.99%) and the tradable shares of 1.25% (median is 0.47%). The tradable shares owned by Top10 large shareholders are widely dispersed among the institutional and individual investors. For example, in 2002, there are only 77 individual investors ranked among Top10 large shareholders of all the 50 listed real estate companies, holding on average 0.2% of the total outstanding shares per person. 0.2% is a negligible figure compared with the controlling shareholder holding more than 40% of the

total outstanding shares. The average number of shareholders a real estate company has in the end of 2002 is 66,349, ranging from 5,140 (000540) to 3,264.2 (000931). It is conceivable that the dispersed individual ownership may give rise to the classic free-rider problem (Grossman and Hart, 1980): small investors do not have the incentive or the capability to monitor managerial performance. The small shareholders' inactivism has also been further worsened by block holdings of the state shares and the legal person shares.

How concentrated the ownership structure is for the listed real estate companies? Table 5.3 shows the percentage of shares controlled by the 1st large shareholder of the listed real estate companies. 14 companies (28%) have the 1st large shareholder holding from 51% to 75% of total outstanding shares and they are all SOEs. 11 companies (22%) have the 1st large shareholders holding from 41% to 50% of total outstanding shares. 7 of them are SOEs. 18 companies (36%) have 1st large shareholder owning 21% to 40% and 11 of them are SOEs. 7 companies (14%) have the 1st first large shareholder owning less than 20% of total outstanding shares and 5 of them are SOEs. Obviously, in the SOEs, the ownership is more concentrated than that in the POEs.

Table 5.3 Percentage of shares owned by first large shareholder (2002)

	0%<X<20%	21%<X<40%	41%<X<50%	51%<X<75%
Nr. of firms (SOE)	7 (5)	18 (11)	11 (7)	14 (14)
%	14%	36%	22%	28%

To study ownership structure by firm size, it breaks down the firms according to the book value of the total assets in 2002. The first bracket is for small size firms with the book value of total assets below RMB 1 billion of Yuan, the second bracket is for the medium size firms with the book value of total assets between RMB 1 and 4 billion of Yuan. The firms with the total assets of above RMB 4 billion of Yuan are classified as large ones. The size of the listed real estate companies varies across firms from the one with the total assets of more than RMB 8 billion of Yuan to the one with total assets of RMB 0.17 billion of Yuan. Vanke (00002) is the largest one with the total assets of RMB 8.22 billion of

Yuan, while the smallest one is Yu Development (000514) with total assets of RMB 0.17 billion of Yuan. Table 5.4 shows the distribution of assets and share capital of the listed real estate companies (2002).

Table 5.4 Distribution of assets and share capital of China's listed real estate companies (2002)

(Value in billion)	Nr. of firms	Total assets (RMB)	of total assets (%)	Average (RMB)	Total shares (shares)	% of total shares (%)	Average (shares)
Small firms (> 1 bn)	18	10.7	10%	0.54	3.05	16%	0.17
Medium firms (1-4 bn)	25	60.1	53%	2.4	11.29	59%	0.45
Large firms (<4 bn)	7	41.45	37%	5.9	4.8	25%	0.69
Total	50	112.25			19.2		

The 7 large firms own 37% of the total assets worth averagely of RMB 5.9 billion of Yuan per firm. They hold 25% of total real estate stocks, averaging 0.69 billion of shares per firm. The 25 medium size firms have 53% of total assets, on average, worth of RMB 2.4 billion of Yuan per firm. They have 59% of total real estate stocks, worth averagely 0.45 billion of shares per firm. The 18 small size firms have only 10% of the total assets, worth of RMB 0.54 billion of Yuan per firm, averagely. They control 16% of the capital shares, averaging 0.17 billion of shares per firm.

Table 5.5 shows the real estate stocks composition by firm size in 2002. The fraction of state shares rises with the firm size. Large firms are controlled directly by the state, where 32.92% of the total shares are state shares and 16.05% of them are legal person shares. All the large listed real estate companies are SOEs. In the medium and small size firms, the legal person shares are in a predominant position with 30.93% of the total shares in medium size firms and 34.36% of them in small size firms. The stake of the state shares declines to 24% in medium size

firms and 21.10% in small size firms. 72% of the medium size firms and 61% of the small size firms are SOEs. Although the total number of shares owned by Top 10 large shareholders in the three classes of firms is not significantly different, the ownership in large firms is more concentrated by the first large shareholder holding 44.25% of total shares than in the medium size firms (41.1%) and the small size firms (36.6%). The ownership concentration measured by the first large shareholding increases with the firm size. This is inconsistent with the argument that ownership concentration tends to be inversely related to firm size (Demsetz and Lehn, 1985; and Holderness and Sheeham, 1988), which likely reflects consideration of risk aversion and wealth limitation. This positive association of ownership concentration and firm size reflects the Chinese government strategy of SOE reform - “grab the big and let go the small”.

Table 5.5 Real estate stock composition by firm size (2002)

	Nr. of firms	Top 10 (%)	1 st holder (%)	2 nd holder (%)	Others (3 rd -10 th) (%)	LP-Sh. (%)	ST-Sh. (%)	TR-Sh. (%)	SOE ^a
Large	7	52.57	44.25	3.64	4.4	16.05	32.92	3.83	1
Medium	25	56.98	41.42	7.11	8.45	30.93	24.35	1.69	0.72
Small	18	56.69	36.6	9.98	10.11	34.36	21.1	1.23	0.61
Total	50	56.26	40.08	7.66	8.48	30.08	24.38	1.83	0.72

Note: ^aFor the binary variables, the mean represents the proportion of firm which equals 1 for the variable.

5.3.2 Breakdown of controlling shareholders

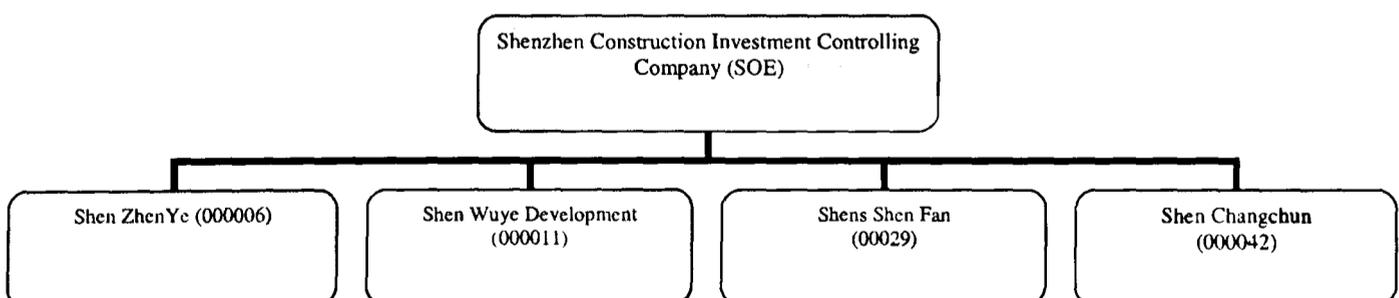
As discussed in the previous chapter, the listed real estate companies can be classified into state owned (SOEs) and privately owned companies (POEs) according to the ultimate owner. Many of the real estate companies have a single controlling shareholder. Who are these controlling shareholders? Table 5.6 reports the breakdown of the controlling shareholders of the listed real estate companies in 2002.

Table 5.6 Breakdown of the controlling shareholders of listed real estate companies in 2002

	Group company	Government financial Dept.	No Controlling shareholder	Total
Nr. of firms	47	2	1	50
SOEs	33	2	1	36
POEs	14			14
ST-Sh.com	23	2		25
LP-Sh.com	24			24

47 of the listed real estate companies are controlled by the group companies. 2 of them by local government finance department. One company has no controlling shareholder and is administrated by the local government line industry administration department. 33 companies are controlled by the state via the state owned group companies. 14 companies are controlled by the privately owned group companies. 25 companies are controlled directly by state shares and 24 companies are controlled by the legal person shares. For example, Shenzhen Construction Investment Controlling Company, one of the three key state assets management institutions in Shenzhen, authorized by the government of Shenzhen to manage the state assets is the largest controlling shareholder of four listed real estate companies in Shenzhen, controlling directly in total 1,289,02 million of shares (16.8% of the total real estate stocks and 59% of the total state real estate shares on Shenzhen Stock Exchange), exclusive of the shares controlled by its subsidiary companies (see Figure 5.2).

Figure 5.2 The listed real estate companies controlled by Shenzhen Construction Investment Controlling Company



Some listed real estate companies hold their own controlling stake of stocks. If the company is SOE, it is authorised as the representative of the state to manage the

company. The senior managers of the company are appointed by the government to manage the company. For example, Shanghai New Huangpu (600638) owns 35.22% of its own stocks on the behalf of the state and the listed company is the controlling company at the same time. Hart (1995) notes two disadvantages of holding large portions of shares in a company. The first is that owning a large fraction of shares will offset the gains from going public—the risk reduction benefits from portfolio diversification are lost. The second is that, even though large shareholdings can mitigate the agency problems, they can not eliminate them.

The affiliated relation exists among Top10 large shareholders in many companies and is required to disclose in the annual report. Often, the first large shareholder of the listed company is the parent company of the other large shareholders or controls them via its subsidiary company. For example, in Vanke (00002), the 1st large shareholder controls the 2nd large shareholder via its affiliated company. The 1st large shareholder of Shen Changcheng (000042) is Shenzhen Construction Investment Controlling Company who is also the controlling shareholder of its 2nd large shareholder, Shenzhen Zhenye (Group) Ltd. (000006), they control more than 70 per cent of total outstanding shares of the company. This relation not only exists in the SOEs, but also in the POEs. For example, in Zhejian Guansha (600052), 5 of Top10 large shareholders have the same one parent company who is the largest shareholder of the listed company. They control in total 29.47% of the total shares. So, the 1st large shareholder's controlling position is solidified further by the affiliated relation with other large shareholders.

It seems that the controlling shareholders in the listed real estate companies tend to consolidate the controlling position by controlling the other large shareholders of the listed companies. The affiliated relation between the controlling shareholder and other blockholders makes the other blockholders inactive in participating in the corporate governance and has no incentives and ability to monitor the controlling shareholder.

5.4. Performance measures

Table 5.7 reports the summary of the descriptive statistics of the China's listed real estate companies from 2000 to 2002. Over the three years, the mean (median) EPS of the listed real estate companies is 0.1 (0.15) and the mean (median) ROE is -1% (3%). The mean and median difference of ROE indicates the skew distribution of firm performance and the relatively large negative figures have impact on the general performance. The mean (median) sales are 0.61 (0.41) billion of Yuan and the average (median) growth rate is 49% (14%). The mean (median) book value of the assets is 2.18 (1.64) billion of Yuan. 75% of the listed real estate companies are SOEs, and 47% of the listed real estate companies are dominated by the state shares.

Table 5.7 Descriptive statistics of China's listed real estate companies

	EPS						ST-SH.	
N=137	(Yuan)	ROE	Sales	GROWTH	Assets	DAR	SOE ^a	Com ^a
Mean	0.1	-1%	0.61	49%	2.18	59%	75%	47%
Std.								
Deviation	0.53	0.34	0.77	2%	1.82	0.4	0.43	0.5
Median	0.15	3%	0.41	14%	1.64	54%		
Minimum	-3.36	-377%	0	-94%	0.17	23%		
Maximum	1.2	37%	4.57	1436%	9.69	460%		

Note: ^aFor the binary variables, the mean represents the proportion of firm which equals 1 for the variable.

This section further classifies the listed real estate companies into two groups based on the type of controlling shares. One is dominated by the legal person shares without distinguishing POE or SOE and the other one is dominated by the state shares. Table 5.8 reports the mean comparisons of the listed real estate companies dominated by legal person shares and state shares.

Generally, the companies dominated by the state shares have EPS of 0.20 and ROE of 2%, outperforming the ones dominated by the legal person shares with EPS of 0.01 and ROE of -3%, on average. The difference of EPS is significant at the level of 5%. But it is premature to say that SOEs are more efficient, since

53% of the legal person shares dominated companies are SOEs. The companies dominated by the state shares are larger in size with average sales of RMB 0.77 billion of Yuan and the total assets of RMB 2.78 billion of Yuan, compared to the sales of RMB 0.46 billion of Yuan and the assets of RMB 1.65 billion of Yuan in the ones dominated by the legal person shares and the differences are significant.

Table 5.8 Mean comparisons of China's listed real estate companies dominated by legal person-and state-shares (2000-2002)

LP-Sh. (N=73)	Std. Error		ST-Sh. (N=64)	Std. Error		Mean difference
	Mean	Mean		Mean	Mean	
EPS (Yuan)	0.01	0.08	0.20	0.04	(0.19)***	
ROE (%)	-3.38	0.05	2.06	0.01	(0.05)	
Sales	0.46	0.07	0.77	0.12	(0.30)***	
Growth	0.55	0.23	0.42	0.21	(-0.13)	
Assets	1.65	0.14	2.78	0.28	(1.13)****	
DAR	61.60	0.06	55.71	0.02	(-0.06)***	
Top10	53.50	1.96	59.91	1.84	(6.42)***	
1 st holder	32.54	1.63	50.86	2.10	(18.31)****	
2 nd holder	9.87	0.73	4.26	0.57	(-5.61)****	
Others (3 rd -10 th)	11.09	0.86	4.76	0.75	(-6.32)****	
LP-Sh.	48.41	2.20	6.95	1.25	(-41.46)****	
ST-Sh.	3.30	1.14	50.93	2.30	(47.63)****	
Tradable-Sh.	1.26	0.32	1.24	0.26	(-0.02)	
SOE ^a	0.53	0.06	1	0	(0.47)****	

Note: (1). *, **, ***, **** Stand for significance at the levels of 15%, 10%, 5%, 1%.

(2). ^aFor the binary variables, the mean represents the proportion of firm which equals 1 for the variable.

The ownership concentration in the state shares dominated companies is higher than in the ones dominated by the legal person shares, and Top10 large shareholders hold 59.95% of total outstanding shares in the state shares dominated companies, compared to 53.50% of the total shares in the legal person shares dominated companies. The ownership is highly concentrated by the first large shareholder owning 50.86% of the total shares in the state shares dominated companies, while the first large shareholder in the legal person shares dominated companies owns 32.54%. The numbers of shares owned by the 2nd and the other (3rd -10th) large shareholders are higher (9.87% and 11.09%) in the legal person shares dominated companies than the ones (4.26% and 4.76%) in the state shares

dominated companies. These differences are significant. In the state shares dominated companies, the state is in an absolutely controlling position.

The legal person shares dominated companies have grown faster than the state shares dominated companies, although the difference is insignificant. The debt to assets ratio (61.60%) is also higher than the one in the state shares dominated companies (55.71%) and the difference is significant at 1% level. Many companies have mixed shares structure. For example, there are on average 3.3% state shares and 1.26% tradable shares owned by Top 10 large shareholders in the companies dominated by the legal person shares, and 6.95% of legal person shares and 1.24% of tradable shares in the state shares dominated companies.

It also categorizes the listed real estate companies into POEs and SOEs according to the ultimate owners. Table 5.9 reports the mean comparisons of the listed real estate companies (POEs and SOEs).

There is no significant difference in the performance between POEs and SOEs as a whole. The POEs have better ROE (1.88%), but lower EPS (0.04) than SOEs which have ROE of -1.7% and EPS of 0.12. As analysed previously, SOEs are larger in size measured by sales (RMB 0.69 billion of Yuan) and assets (RMB 2.46 billion of Yuan) than POEs in sales (RMB 0.34 billion of Yuan) and the assets (RMB 1.34 billion of Yuan) and these differences are significant. The ownership structure in POEs and SOEs is significantly different. The ownership in SOEs is more highly concentrated by the first large shareholder owning 43.86% of total shares than the one in POEs owning 32.73%. However, the numbers of shares owned by the second (11.92%) and the other (3rd to 10th) large shareholders (12.99%) in POEs are higher than the ones in SOEs (5.71% and 6.53%).

The POEs are controlled by the legal person shares (53.85%), but some of them have the state shares (2.28%). In SOEs, the state shares are in a predominant position (33.53%), compared with the state legal person shares (20.85%).

Table 5.9 Mean comparisons of China's listed real estate companies (POE and SOE) (2000-2002)

	POE (N=34)		SOE (N=103)		Std. Error	Mean difference
	Mean	Std. Error Mean	Mean	Std. Error Mean	Mean	
EPS						
(Yuan)	0.04	0.09	0.12	0.05	0.08	
ROE	1.88	0.01	-1.7	0.04	-0.04	
Sales	0.34	0.09	0.69	0.08	0.35***	
Growth	0.13	0.15	0.6	0.2	0.47	
Assets	1.34	0.15	2.46	0.19	1.12****	
DAR	0.55	0.02	0.6	0.04	0.05	
LP-Sh.	53.85	2.34	20.85	2.32	33****	
ST-Sh.	2.28	0.87	33.53	2.77	-31.25****	
TR-Sh.	1.12	0.42	1.30	0.24	-0.18	
Top 10	57.63	2.02	56.12	1.71	-1.51	
1 st holder	32.73	1.78	43.86	1.86	11.13****	
2 nd holder	11.92	1.04	5.71	0.53	-6.21****	
Others (3 rd -10 th)	12.99	1.41	6.53	0.63	6.46****	

Note: (1). *, **, ***, **** Stand for significance at the levels of 15%, 10%, 5%, 1%.

(2). *For the binary variables, the mean represents the proportion of firm which equals 1 for the variable.

Cross-comparing Table 5.7 with Table 5.8, it is found that the state shares dominated companies outperform the POEs and the SOEs as a whole. Since the SOEs can be controlled by the legal person shares or the state shares and POEs perform slightly better than SOEs as a whole, it can be inferred that the SOEs dominated by the legal person shares may have the negative impact on the performance of companies dominated by the legal person shares as a whole. The cross-comparison seems to suggest that the SOEs dominated by the legal person shares underperform the SOEs controlled by the state shares and the POEs.

Overall, the ownership is highly concentrated in the listed real estate companies and the number of shares owned by the first large shareholder increases with firm size. The large firms are SOEs and are dominated by the state shares. The listed real estate companies dominated by the state shares perform best followed by the POEs. However, these mean comparison tests do not show whether the performance difference can be explained by firm size or ownership structure.

5.5. Ownership concentration and the effect on firm performance

It seeks the evidence of the effects of ownership and control concentration on firm performance when there is one controlling shareholder and to test two hypotheses in the real estate sector. The first is that ownership concentration is irrelevant to the firm performance. The second hypothesis is that the type of shares is irrelevant to the firm performance in the real estate sector.

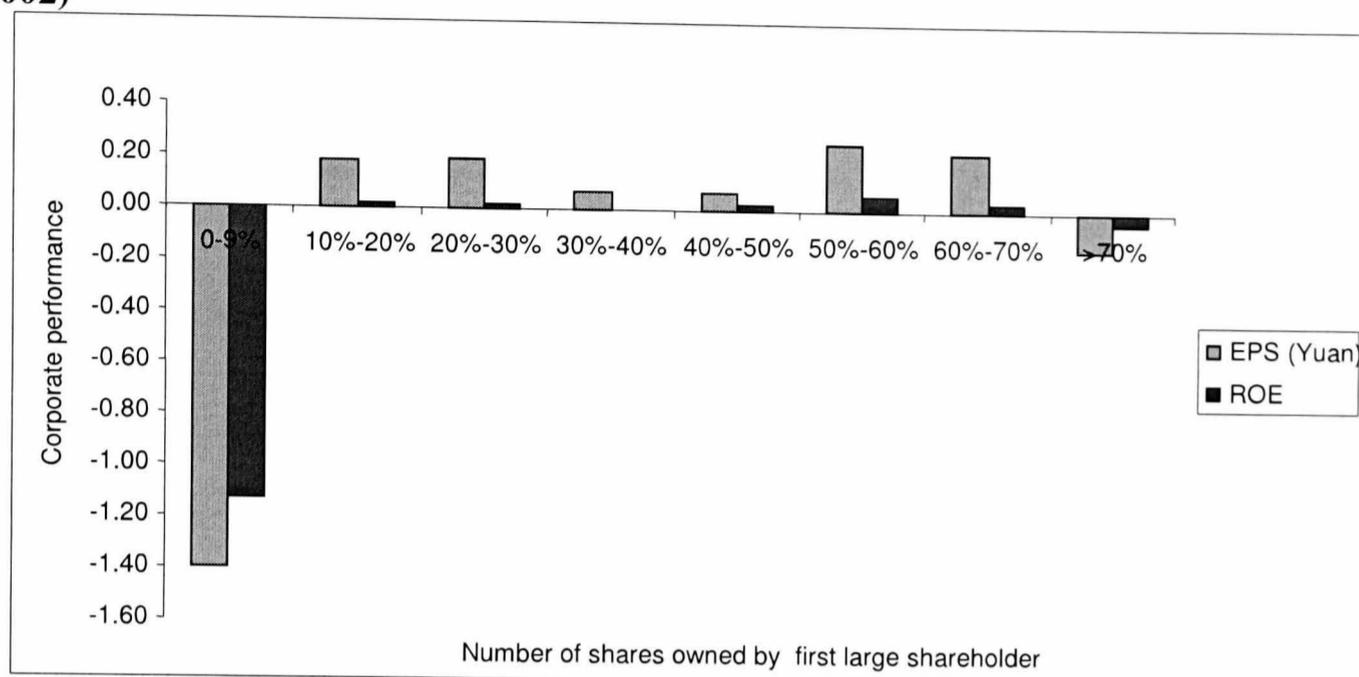
5.5.1 Graphical evidence

To investigate these two hypotheses, it first presents a figure showing the association between the firm performance and the number of shares owned by the first large shareholder. It then conducts a series of regressions.

It starts by plotting the association between firm performance ratios measured by EPS and ROE and the number of shares owned by the 1st large shareholder (see Figure 5.3). The companies have negative performance ratios measured by EPS and ROE, when the first large shareholding is below 10%, then the performance increases with the first large shareholding. However, when the first large shareholding is between 30% and 40%, the performance ratios start to decline with the EPS of 0.07 Yuan and ROE of 0.3%; then, rise again. The firms perform best when the first large shareholding is between 50% and 60%, then the performance ratios start to decline. When the first large shareholding is above 70%, the companies have the negative performance ratios.

The Figure 5.3 provides suggestive evidence on the first hypothesis in favour of the positive effect associated with the number of shares owned by the largest shareholder. The Figure 5.3 also shows that the association of the firm performance to the 1st large shareholding is not monotonic and here it does not control for other factors influencing firm performance. Thus, multivariate analysis for nonlinear relationship is needed to investigate more precisely the hypothesis.

Figure 5.3 Relation of number of shares owned by the first large shareholder and corporate performance of China's listed real estate companies (2000-2002)



5.5.2. Regression analysis

It starts by including as control variables several firm-specific variables commonly used in the studies of firm performance. Sales growth rate and the sales as proxy of firm size are included. It is expected that firm size has positive effect on firm performance. The variable of debt to assets ratio is used, since it is an important factor that will influence the firm performance.

Table 5.10 reports the outcomes of the regression. The second row displays the regression outcome of the control variables on EPS. The fourth row displays the regression outcome of the control variables on ROE. The hypothesis is rejected as Top10 is significantly different from zero in the regressions of EPS, and ROE and positively related to the performance of the companies. This result is consistent with the other empirical studies on the ownership structure and corporate performance of the China's publicly traded companies (e.g. Xu and Wang, 1999 and Sun and Huang, 1999 and 2003). The significant impact of the ownership concentration ratio on the firm performance supports the suggestions of La Porta *et al.* (1999) and Bebchuk (1999) that in countries with poor investor protection,

control should be concentrated to prevent someone seizing it without fully paying for it. Significantly positive effect of ownership concentration ratio of Top10 on performance ratios suggests that the widely dispersed ownership structure may not be the best way to improve the economic efficiency in the real estate sector. As mentioned above that large amount of shares held by Top10 large shareholders are in the hand of the 1st large shareholder for the listed real estate company. In SOEs, the controlling shareholder is the state and in POEs, it is the family/individual person or private institution. Accordingly, the results in Table 5.10 should be explained as a positive correlation of profitability of the firms with the number of shares owned by the first large shareholder.

Table 5.10 Regressions of ownership structure and corporate performance of China's listed real estate companies from 2000 to 2002 (one)

N=137	Firm size	GROWTH	DAR	TOP10	SOE	Adjusted R ²	F	P-value
EPS	0.26 (4.84)***	0.00 (0.03)	-0.70 (-9.16)***	0.01 (3.79)***	0.02 (0.23)	0.55	28.18	0.00
ROE	0.07 (3.29)***	0.00 (0.01)	-0.76 (-26.64)***	0.003 (3.95)***	-0.02 (-0.64)	0.87	149.35	0.00

Note: (1): t-statistics are in parentheses.

(2)*, **, *** represent the significant levels of 10%, 5% and 1%.

SOE has no explanatory power in the equations of profitability ratios and yields mixed signs. The other explanatory variables such as sales as proxy of firm size have significant explanatory power, while the growth rate shows a positive but insignificant coefficient. The debt to assets ratio has negative impact on firm performance, as expected.

From the above statistical analysis, it can not be told whether the different types of shares have effect on the firm performance. Therefore, two groups of sample are classified based on the type of controlling shares. One is dominated by the legal person shares and the other is dominated by the state shares and run a series of regressions to test the effect of the different type of shares on the firm performance, Table 5.11 reports the outcomes of the regression.

Table 5.11 Regression of ownership structure and corporate performance of China's listed real estate companies from 2000 to 2002 (two)

	Firm size	GROWTH	DAR	TOP10	LP-Sh.	SOE	Adjusted R ²	F	P-value
Legal person shares dominated (N=71)									
EPS	0.30 (2.01)**	-0.02 (-0.60)	-0.77 (-6.32)***	0.02 (1.77)*	-0.02 (-1.47)	0.03 (0.27)	0.51	11.54	0.00
ROE	0.07 (1.28)	-0.01 (-0.79)	-0.77 (-16.57)***	0.01 (2.39)**	-0.01 (-2.27)**	-0.01 (-0.25)	0.85	61.04	0.00
State share dominated (N=64)									
EPS	0.24 (3.89)*	0.03 (1.30)	-0.54 (-2.55)**	0.004 (0.72)	0.00 (0.33)		0.24	4.37	0.00
ROE	0.03 (2.43)**	0.00 (0.74)	-0.18 (-4.50)**	-0.0003 (-0.31)	0.00 (1.41)		0.25	4.56	0.00

Note: (1): t-statistics are in parentheses.

(2)*, **, *** represent significant at 10%, 5% and 1% levels.

For the legal person shares dominated real estate companies, the ownership concentration measured by Top10 is positively associated with the performance and significant in the two equations of EPS and ROE. The legal person shares are negatively correlated with the performance ratios and significant in the equation of ROE at 5% level. SOE has no explanatory power to the firm's performance in the group.

In the state shares dominated companies, the ownership concentration measured by Top10 has no explanatory power to the firm's performance in both of the equations of EPS and ROE. The state shares have positive impact on the firm performance but insignificant. The high ratio of the state shares implies that the company is likely to have more government protection and preferential policies. When the gains are higher than the moral hazard cost, the state shares can be positively related with the firm performance. This finding is inconsistent with the empirical study on the ownership structure and firm performance of China's listed companies by Xu and Wang (1999) that the state shares have negative but insignificant effect on firm performance, while legal person shares have positive but significant effect on the firm performance. As expected, the variables of firm size and the debt to assets ratio are significantly related with performance in all the equations as in Table 5.10.

Property investment is capital intensiveness and the scale of economics of the real estate company is one of the key factors to determine the firm performance. China's real estate industry is subject to the influence of the government policy and the macro economic adjustment. The land market is not transparent and controlled by the government. The real estate market in China is not a fully competitive and transparent market. Although the real estate industry is not monopolized by the government, the state has significant influence on the real estate company. The state shares controlled companies may enjoy more these benefits than the others. Chen and Jiang (2000) argue that the certain type of shareholder can not be believed to have positive influence on the corporate governance in all the industries of China and the positive influence of the diversified ownership structure depends on the market competition of the industry, which implies that in order to achieve the expected corporate governance improvement via the diversified ownership structure, first of all, the industry competition should be enhanced. My findings here are consistent with their suggestion.

In sum, the empirical evidence from the China's listed real estate companies suggests that the ownership concentration have positive and the significant effect on firm performance. The type of controlling shares has effect on firm performance in the real estate sector. The legal person shares have negative and significant effect on the firm performance. The state shares have positive, but insignificant effect on the firm performance.

5.6. The balance of controlling power in closely held listed real estate companies

Controlling shareholders have strong incentives to closely monitor the company and its management, and can have a positive impact on the governance of the company. However, their interest may also conflict with the interest of other shareholders—minority shareholders. This conflict is most destructive when the controlling shareholders extract private benefits at the expense of minority

shareholders (Jensen and Meckling, 1976). A number of studies suggest that large shareholders function as a mechanism to mitigate such expropriation. La Porta *et al.* (1999) and Pagano and Roel (1998) argue that other large shareholders reduce diversion by monitoring the controlling shareholder. Gomes and Novaes (1999) focus on how ex-post bargaining problems among large shareholders protect minority shareholders by preventing large shareholders from undertaking actions that would reduce minority shareholders' payoffs.

One of the great contributions to the literature of balance of the power in closely held corporations is Bennedsen and Wolfenzon (2000). They analyse a model of a closely held corporation with non-transferable shares and potentially more than one significant shareholder. The model shows that it may be in the initial owner's interest to dilute her own power by distributing votes among several large shareholders. This dilution of power commits the initial owners to form a coalition to obtain control, and thus create a controlling body that has more cash flow, and that divert less. Their model shows that the best ownership structure is one with either a single large shareholder or shareholders of roughly the same size. Their findings suggest that dilution of power as a mechanism to commit to low levels of diversion.

Shi (2000) studies the impact of the power balance on the corporate performance when there is presence of more than one large shareholders (based on the criteria whether the number of the shares owned by the first large shareholder exceeds the total number of shares owned by the second to the tenth large shareholders) for the China's listed companies and finds that the companies with power balance outperformed the companies with single controlling shareholder. But his study does not take the factor of the impact of ownership concentration on corporate performance into consideration. It follows this line to study the effect of power balance in China's listed real estate companies. If the company has a single controlling shareholder, it is closely held company; otherwise it is the one with power balance.

Table 5.12 reports the percentage of shares owned by Top 10 large shareholders in 2002. As discussed previously that the cut-off for the number of shares a controlling shareholder is required to own is 10% of the total shares outstanding. Ownership is highly concentrated by a single shareholder who holds, averagely, 40.08% of the total shares. The 2nd large shareholder owns 7.66 % of total shares and the 3rd large shareholder owns 2.96% of total shares. Obviously, the other large shareholders are too weak to have incentive to participate in the monitoring of the controlling shareholder and the management of the company.

Table 5.12 Ownership concentration: percentage of shares owned by Top 10 large shareholders (2002)

Value in %	1st holder	2 nd holder	3 rd holder	4 th holder	5 th holder	6 th holder	7 th holder	8 th holder	9 th holder	10 th holder
N=50										
Mean	40.08	7.66	2.96	1.92	1.11	0.73	0.61	0.48	0.36	0.32
SD	16.63	6.37	3.21	2.63	1.23	0.77	0.69	0.53	0.28	0.23
Min.	0.39	0.19	0.08	0.07	0.06	0.06	0.06	0.05	0.05	0.04
Max.	73.53	21.74	16.41	16.30	6.47	4.07	4.07	3.26	1.08	0.93

Under this ownership structure, the external corporate governance mechanism such as takeover has no effect on China's stock market. The large shareholders don't worry that they will be merged and taken over because of the fall of the share prices caused by the poor corporate performance; therefore, they can utilize their controlling power to expropriate the benefit of minority shareholders and the company.

To study the effect of the balance of controlling power in China's listed real estate companies, the companies are classified into two groups based on the number of controlling shareholders the company have. One group is the one with a single controlling shareholder (closely held one) and the other one with more than one controlling shareholders (power balance) and do the univariate test. The mean comparisons of the study variables in the two groups are presented in Table 5.13.

Table 5.13 Mean comparisons of China's listed real estate companies with one and more than one controlling shareholders

	Closely held (N=97)		Power balance (N=40)		Mean difference
	Mean	Std. Error Mean	Mean	Std. Error Mean	
EPS	0.08	0.06	0.15	0.08	-0.07
ROE	-2.72	0.04	3.89	0.01	-0.07
Firm size	0.66	0.09	0.47	0.08	0.20*
Growth	0.52	0.21	0.39	0.19	0.13
Top10 1 st holder	53.41	1.75	63.99	1.50	-10.58****
Others (2 nd - 10 th)	44.03	1.93	33.98	1.93	10.05****
LP-Sh.	9.35	0.66	30.00	1.61	-20.65****
ST-Sh.	19.94	2.26	51.13	3.15	-31.19****
ST-SH. Com	31.76	2.91	11.21	3.17	20.54****
SOE	0.87	0.03	0.48	0.08	0.39****
Com	0.60	0.05	0.15	0.06	0.45****

Note: *, **, ***, **** Stand for significance at the levels of 15%, 10%, 5%, 1%.

It is worth mentioning that in 2002, 18 companies have more than one controlling shareholder (with power balance) and 32 companies have a single controlling shareholder (closely held), so majority of the listed real estate companies are closely held. Although the companies with power balance have better EPS of 0.15 and ROE of 3.89% than the ones closely held which have EPS of 0.08 and ROE of -2.72%, the difference is not significant. The closely held companies are larger in size and the difference is significant at the level of 15%.

There is significant difference in the ownership structure between these two types of companies. The ownership concentration ratio measured by Top 10 large shareholding in the companies with power balance is higher (63.99%) than the closely held ones (53.41%), but the 1st large shareholding is lower (33.98%) than the closely held ones (44.03%); the other (2nd -10th) large shareholding is much higher (30%) in the ones with power balance than the ones (9.35%) in the closely held ones. These differences are significant. In the companies with power balance, the legal person shares are in a predominant position (51.13%); whereas in the closely held companies, the state shares are in a predominant position (31.76%). 87% of the companies with one controlling shareholder are SOEs and 60% of them are dominated by the state shares, compared to the 48% and 15% of the companies with power balance and the differences are significant at the level of 1%.

It uses the numbers of shares owned by the 1st large shareholder as ownership concentration and the 2nd to 10th large shareholders as proxy of other blockholders and does the regressions of the ownership concentration on the firm performance. It also includes the variable of the squared term of the other (2nd to 10th) large shareholders. The outcomes of the regressions are reported in Table 5.14. The regressions of ownership structure and the firm performance from 2000 to 2002 (three).

Table 5.14 Regressions of ownership structure and corporate performance of China's listed real estate companies from 2000 to 2002 (three)

	Firm size	GROWTH	DAR	1 st holder	Other holders (2 nd -10 th)	Other holders (2 nd -10 th) ²	SOE	ST-SH. Com.	Adjusted R ²	F	Sig.
EPS	0.2 (5.31)*	0.005 (0.21)	-0.68 (-8.85)*	0.01 (3.59)*	0.01 (1.42)	-0.0001 (-0.28)	-0.0005 (-0.01)	0.05 (0.65)	0.53	20.32	0
ROE	0.05 (3.81)*	0.0002 (0.05)	-0.76 (-26.16)*	0.003 (3.73)*	0.01 (2.54)**	-0.0001 (-1.70)***	-0.01 (-0.47)	0.01 (0.3)	0.87	109.82	0

Note: (1): t-statistics are in parentheses.

(2)*: **, *** represent significant at the levels of 10%, 5% and 1%.

Identical results are found in 1st large shareholder regressions as in the Top 10 regressions in Table 5.10. In both of the regressions of the performance ratios

measured by EPS and ROE, the 1st large shareholder is significantly different from zero and has positive correlation with the performance ratios.

For SOEs, the controlling shareholder is state-owned institution, local government department or the listed company itself (see Table 5.6) and the first large shareholding in SOEs is significantly larger than in POEs (see Table 5.9). The significantly positive relation of the 1st large shareholder with firm performance can be explained by other two factors besides the inventiveness. One is the political influence. The state owned real estate companies have preference in policy, tax and access to land resource and capital under the current real estate market in China. Second one is the economic scale. The state owned real estate companies are significantly large in size than non-state owned companies (see Table 5.9). All these factors decide that the ownership concentration has positive impact on the performance of China's listed real estate companies.

The presence of the other (2nd to 10th) large shareholders has also significant impact on firm performance. In all the equations of profitability ratios, the number of shares owned by the 2nd to 10th large shareholders is positively related to the firm performance and significant in the equation of ROE at 5% level. But this relation is non linear. The squared term of the other large shareholders (2nd to 10th) is negatively associated with the firm performance and significant in the equation of ROE at 10% level.

This finding indicates that given that the ownership concentration has positive impact on the firm performance, the increase in the number of shares owned by other large shareholders and the dilution of the controlling power among a few large shareholders have positive effect on the firm performance. However, the reverse association of the squared term of the other (2nd to 10th) large shareholding to performance ratios indicates that the dispersed ownership structure may not improve the firm performance.

The analysis above indicates that in China's real estate sector, with the increase in the number of shares owned by other large shareholders they will have incentive

to participate in monitoring the management of the company and improving the corporate governance and firm performance. Bennedsen and Wolfenzon (2000) argue that the balance of the power in a closely held corporation is a mechanism to commit to lower levels of diversion. Huang and Li (2002) study the ownership structure and performance of China's listed companies and find that the ownership concentration is positively related with firm performance. They also study the effect of the power balance of China's listed companies and find that when the number of shares owned by the 1st large shareholder is reduced to about 15%-28%, the companies have the best performance and suggest to reduce the number of shares owned by the first large shareholder from 44.26% to 15%-28%.

5.7. Test of Robustness

To test the robustness of the results, first of all, the performance measures of EPS and ROE are replaced with ROA (return on assets) in the regression equations, similar results were yielded (see Table 5.15), but the explanatory power was weaker than the ones in the equations of EPS and ROA and not significant. In the calculation of state shares dominated companies, the state shares have positive effect on ROA and significant at 5% level.

Table 5.15 Regression of ownership structure and corporate performance of ROA from 2000 to 2002

N=137	Firm size	Growth	DAR	Top 10	SOE	Adjusted R ²	F	P-value
ROA	0.29	0.07	-0.61	0.02	0.08	0.02	1.44	0.21
	(1.06)	(0.62)	(-1.12)	(1.51)	(0.17)			

Note: (1): t-statistics are in parentheses.

(2)*, **, *** represent the significant levels of 10%, 5% and 1%.

It also replaces the sales as proxy of firm size with the assets (log) as proxy of firm size (not tabulated here), there is no materially difference.

In the sample of the listed real estate companies, 34 of them have complete data of the three years (2000-2002). The other 16 companies are either de-listed by the end of 2002 or were listing or were restructured into real estate companies during

2001 and 2002. To test the effect of these newly-entered companies, the regressions excluding these newly-entered companies are run and the result is reported in Table 5.16. Compared with the result in Table 5.10, identical results in firm size, debt to assets ratio are found. The ownership concentration measured by Top 10 large shareholdings has significant impact on the firm performance and has positive coefficient in the equation of EPS, but negatively associated with ROE which is inconsistent with the result in Table 5.10. The continuous SOEs have inverse association with the firm performance, although insignificant.

Table 5.16 Regressions of ownership structure and corporate performance of China's listed real estate companies from 2000 to 2002 (continuous companies, one)

	Firm size	GROWTH	DAR	TOP10	SOE	Adjusted R ²	F	Sig.
EPS	0.23 (5.78)***	-0.0001 (-0.28)	-0.70 (-9.22)***	0.01 (4.23)***	-0.11 (-1.19)	0.63	35.15	0.00
ROE	4.95 (3.09)***	-0.46 (-0.73)	-79.60 (-26.05)***	-0.29 (-3.56)***	-0.73 (-0.20)	0.90	174.20	0.00

Note: (1): t-statistics are in parentheses.

(2)*, **, *** represent significant at the levels of 10%, 5% and 1%.

It further uses the continuous companies' data and replace the Top 10 with the number of shares held by the 1st large shareholder and the other (2nd to 10th) large shareholders and the squared term of the other (2nd to 10th) large shareholders and the regression outcomes are reported in Table 5.17. The first large shareholding is positively associated with the firm performance measured by EPS and ROE, identical with the ones in Table 5.14. The number of shares held by the other (2nd to 10th) large shareholders is positively related with ROE and significant at 10% level, the same as the outcomes in Table 5.14, but has negative impact on EPS, which is inconsistent with the one in Table 5.14, although insignificant. However, the squared term of the other (2nd to 10th) large shareholders has a positive coefficient in the equation of EPS and statistically significant at the level of 10%. This result also indicates that the increase in the number of shares owned by the other large shareholders (for example, the 2nd and 3rd large shareholders) and the presence of more than one controlling shareholders in the closely held real estate companies has positive effect on the firm performance.

Table 5.17 Ownership structure and corporate performance of China's listed real estate companies from 2000 to 2002 (continuous companies, two)

	Sales	GROWTH	DAR	1 st holder	Other (2 nd -10 th) holders	Others (2 nd -10 th) ² holders	SOE	Adjusted R ²	F	Sig.
EPS	0.23 (5.76)*	0.00 (-0.16)	-0.70 (-9.46)*	0.01 (4.08)*	-0.01 (-0.58)	0.00 (1.75)***	-0.11 (-1.18)	0.62	24.62	0.00
ROE	0.06 (3.64)*	-0.01 (-0.98)	-0.80 (-25.21)*	0.003 (3.63)*	0.01 (1.70)***	0.000 (-0.57)	-0.02 (-0.57)	0.90	131.74	0.00

Note: (1): t-statistics are in parentheses.

(2)*, **, *** represent the significant levels at 10%, 5% and 1%.

Comparing the regression results reported in Table 5.14 and Table 5.17, the newly entered listed real estate companies have impact on the full sample. The results without the newly entered companies in Table 5.17 have adjusted $R^2 = 62\%$, $F=24.62$, $p < 0.001$ in the EPS equation and adjusted $R^2 = 90\%$, $F=131.74$, $p < 0.001$ in the ROE equation and the results in the full sample with the newly entered companies in Table 5.13 have adjusted $R^2 = 53\%$, $F=20.32$, $p < 0.001$ in the equation of EPS and adjusted $R^2 = 87\%$, $F=109.82$, $p < 0.001$ in the equation of ROE, the differences in some study variables indicate the newly entered companies weakens the explanatory power to the firm performance. The same effect is addressed to the regression of the complete data as in Table 5.10.

To focus on cross sectional regression as in Morck *et al.* (1988), the re-estimations of the regressions for each year (2000, 2001 and 2002) are conducted and the outcomes are reported in Table 5.18. Regression of ownership structure and corporate performance of China's listed real estate companies in 2000, 2001 and 2002.

The separate regression model including location dummies is conducted, but not reported here. Since majority of real estate companies are located in Shenzhen, Shanghai and Beijing, the dummy factors in these regions explain over 80% of the result. For the other locations where there is only one company, the result is not significant.

Table 5.18 Regression of ownership and corporate performance of China's listed real estate companies (2000, 2001 and 2002)

	2000	EPS	ROE	2001	EPS	ROE	2002	EPS	ROE
Firm size		0.20	2.00		0.22	0.05		1.18	0.06
		(2.05)**	(1.39)		(3.21)***	(3.61)***		(4.02)***	(2.71)**
GROWTH		-0.02	-0.59		0.001	0.001		1.05	-0.01
		(-1.14)	(-1.93)*		(2.49)**	(4.74)***		(1.00)	(-0.48)
DAR		-1.47	-20.88		-0.30	-0.39		0.27	-0.83
		(-4.13)***	(-33.95)***		(-1.39)	(-6.60)***		(-10.87)***	(-23.13)***
TOP10		0.01	0.16		0.01	0.002		1.005	0.003
		(2.27)**	(2.80)***		(1.99)**	(3.31)***		(1.79)*	(2.04)**
SOE		-0.03	-0.80		-0.11	-0.04		1.01	-0.02
		(-0.16)	(-0.31)		(-0.97)	(-1.77)*		(0.08)	(-0.57)
Adjusted R ²		0.38	0.40		0.34	0.65		0.82	0.95
F		5.21	5.58		6.07	19.1		46.5	168.88
P-value		0.00	0.00		0.00	0.00		0.00	

Note: (1): t-statistics are in parentheses.

(2)*, **, *** represent the significant levels at 10%, 5% and 1%

5.8. Conclusions

This chapter documents the relationships between ownership structure and firm performance of the China's listed real estate companies. Its main contribution is to disentangle the ownership structure and test its effect on the firm performance in one sector in China's economy context.

Empirical evidence presented in this chapter points out that in China's real estate sector, the importance of relative ownership concentration and the role of more than one controlling shareholders. First, in the transitional economy of China where there is no effective investor protection system and the equity market is less developed, the ownership concentration has important effect on the firm performance and is positively associated with the firm performance. The firm performance increases with the number of shares owned by the 1st large shareholder. The large shareholder can own the legal person shares or the state shares, can be SOE or POE. It also tests the effect of type of shares on the firm performance and finds that the legal person shares have negative and significant effect on the firm performance; while the state shares have positive but insignificant effect on the firm performance. This result shows that in the real

estate industry, the state has strong influence on the firm performance. The industry characteristics show the importance of the government influence on the real estate company.

Second, it is found that the existence of more than one controlling shareholders in the listed real estate companies has significantly positive influence on the firm performance. The companies with more than one controlling shareholders outperformed the companies with a single controlling shareholder, although the difference is insignificant.

The findings in this chapter suggest that in China's real estate sector, where the market is not fully competitive and transparent and the land is controlled by the government and is acquired in most cases by the negotiation rather than the fair market bidding, SOEs, especially the ones dominated directly by the state shares have the priority in the access to the acquisition of the land and the capital. So this market competition environment decides the significant role of the state shares.

The finding in this chapter is subject to an important caveat. In this study, the data of direct stake of the shareholders is used without separating voting rights and cash flow rights, although the divergence between these two rights reflects the agency cost, therefore, the number of shares owned by the controlling shareholders can not show completely the degree of the ownership concentration. The association of the controlling shareholder to firm performance can not reflect exactly the effect of degree of ownership concentration to firm performance.

Chapter 6. Board characteristics and the effects on corporate performance

6.1. Introduction

The shareholders, as the owners of the firm, have certain rights, including the right to elect the board of directors. The board, as the agent of the shareholders, has the responsibility to monitor corporate managers and their performance. The monitoring role of corporate boards in public corporations has become a central issue in both the financial and the academic press and it has been largely grounded in agency theory. Berle and Means's (1932) seminal work suggested that managers did not have sufficient equity in the firms they managed to give them the incentive to turn their full attention to profit maximisation. Instead, managers may pursue self-interested initiatives at the expense of shareholders. One monitoring mechanism that may temper that tendency is the oversight by the board of directors; this oversight, or control, function of a board is often described as the most critical of directors' roles (Fama, 1980; Mizruchi, 1983 and Zahra and Pearce, 1989).

Much empirical research has examined whether board structure is related to company performance, but these studies have largely overlooked board size. Instead, investigations have most frequently examined the importance of outside directors and directors' equity ownership.

Empirical research on the importance of board size is thin. The research that has examined the association between board characteristics and firm performance has produced the mixed results. There has been no consensus regarding the direction of the relationship of the firm performance and the board size. Holthausen and Larcker (1991) consider board size among a range of variables that might influence executive compensation and company performance. They present results indicating a positive association between the board size and the value of CEO compensation, but fail to find consistent evidence of an association between board size and company performance. Yermack's (1996) study of Fortune 500

industrial firms, partly confirmed by Bhagat and Black (1996), verifies the predictions by Jensen (1993) and others of a negative correlation between firm value and the size of a firm's board of directors. Yermack's sample is dominated by firms with large boards and finds no consistent association between board size and firm value for board size below six board members. Eisenberg, Sundgren and Wells (1998) use a randomly selected sample of approximately 900 small Finnish firms. The effect, confirming Yermack's findings, shows a negative correlation between firms' profitability, as measured by industry-adjusted return on assets, and board size.

The association between board composition and firm performance has been the subject of many studies. The composition of a firm's board is typically a surrogate for the extent to which the board is independent of the firm's CEO (e.g., Daily, Johnson, and Dalton, 1999; Dalton *et al.*, 1998 and Seward and Walsh, 1996). Although more than 20 measurements of board composition can be found in relevant research - for example, the proportion of inside directors, outside directors, affiliated directors, or interdependent directors (Daily *et al.*, 1999) - these measures are all designed to capture some aspect of board independence. The relevant research about the firm performance and board composition includes Hermalin and Weisbach (1991), Klein (1998) and Meyers, *et al.*, (1997), etc. Klein's study demonstrates a linkage between firm performance and board composition by examining the committee structure of boards and directors' roles within these committees. He finds little association between firm performance and overall board composition. But by going into the inner workings of the board via board committee composition, he finds significant ties between firm performance and how board is structured. A positive relation is found between the percentage of inside directors on finance and investment committees and accounting and stock market performance measures.

A board comprised of members with dependent relationships with a firm (that is, inside directors, affiliated directors and/or interdependent directors) is less likely to provide a dispassionate assessment of the firm's CEO. Meyers, *et al.* (1997) investigate the role of outside directors in the corporate-control process by

exploiting variation in ownership structure within the insurance industry. In mutuals, the ownership rights are not transferable. This inalienability restricts the effectiveness of control mechanisms like external takeovers, thus increasing the importance of monitoring by outside directors. Consistent with this hypothesis, they find that mutuals employ more outside directors than stock firms and that the switch between stock and mutual characters makes corresponding changes in board composition; mutuals' bylaw frequently stipulates participation by outside directors; and mutuals with more outside directors make lower expenditures on salaries, wages and rent. Dalton *et al.* (1998) investigate the relationship between board of directors and firm financial performance. Moderating variables include firm size, board composition (external vs. internal members), and performance indicators (market-based vs accounting-based indicators). The results for the overall meta-analysis of the board size—financial performance association strongly suggests a nonzero, positive relationship. Also these relationships are consistent for market-based and accounting based firm performance measures. Likewise, the board composition does not moderate the board size—financial performance relationship.

When a single individual wears the “hats” of both the CEO and chairman of the board (unitary leadership structure), managerial dominance is greatly enhanced since that individual is more aligned with management than with stockholders. Having separate persons holding the CEO and chairman positions (dual leadership structure) enhances the monitoring ability of the board (Jensen, 1993). Therefore, a board that is effective for monitoring has relatively more outside directors, a dual leadership structure and is small (Jensen, 1993).

So far, the studies on the board size and the performance of China's listed companies are limited. The research in this aspect so far includes Sun and Zhang (2000), Shen and Zhang (2002) and Yu and Chi (2004). Sun and Zhang (2000) find an inverse association between board size and Tobin's Q, but insignificant. Shen and Zhang (2004) find that the large board size may be one of the reasons that the corporate governance of the board in ST companies failed. However, Yu and Chi (2004) use the data of China's listed companies from 1998 to 2001 and

find inverse U relation between the board size and the profitability ratios measured by ROE and EVA and significant. They also find that majority of listed companies have 9 members on the board of directors.

This chapter focuses on a study of board characteristics and their effects on the corporate performance of the listed real estate companies in China. The corporate governance environment in China is different from Yermack's study sample. The ownership of the listed real estate companies of China is highly concentrated. Approximately 61 % of all shares in this sector are non-transferable state shares and legal person shares, making the takeover as one of the governance mechanisms ineffective. Holding large amounts of non-transferable stocks, managers are not worried about being taken over because of the falling down of share prices resulted from inappropriate operation of the business. The highly concentrated ownership structure led to the board of directors dominated by the insiders. Thus, increasing in the board size may imply an increase in the proportion of outside directors. This chapter finds a positive relationship between board size and corporate performance, inconsistent with the studies of Yermack (1996) and Eisenberg *et al.* (1998).

This chapter is designed as follow. In Section 6.2: the data definition is discussed. In Section 6.3: the descriptive statistics is reported. In Section 6.4: regression analysis is discussed. In Section 6.5: the sensitivity check is discussed. In Section 6.6: the board composition and its effect on the firm's performance is discussed. In Section 6.7: the conclusions are drawn.

6.2. Data definition

The main hypothesis of this chapter are that firm performance is dependent on the quality of monitoring and decision-making by the board of directors and that the board size represents an important determinant of its performance. Below a straightforward model of the relation between firm value and board size is estimated here. A set of explanatory variables is regressed against the profitability

ratios. Their robustness to a variety of alternative specifications and evaluate is also illustrated whether alternative theories can account for the observed relation between firm value and board size.

The definitions of the study variables are made as follows:

- Board size (BSIZE): total number of directors on board.
- Inside directors (INSIDEDIR): the number of directors on the board from the controlling shareholders and executive directors.
- Independent directors (INDDIR): the number of independent directors on the board. The inside directors and independent directors are two major constituents of the board size. Thus, it is expected to have a positive relationship of the two board constituents with board size. Although most of the listed real estate companies introduced the independent directors since 2000, a positive relationship of independent directors with firm performance is expected as suggested in other empirical research (e.g. Yermack, 1996).
- Management team (MAGTEAM): it consists of the directors, supervisors and management members who may or may not get the compensation from the listed company. Large management team does not necessarily mean efficiency, especially when some members of the management team do not get their salaries from the listed companies; so a negative relationship between management team and firm performance is expected.
- Unpaid management officer (UNPAIDMAG): the percentage of non-executive directors on the board and non-executive supervisor on supervisory board who don't get salaries from the listed company. They are the members of board of directors and supervisory board.
- Paid chairman of the board (paid chairman): equals 1 if the chairman of the board gets the salary from the listed company, otherwise equals 0.
- Leadership structure (LEADER): equals 1 if the positions of chairman of board and CEO are taken by two persons (dual leadership structure); otherwise equals 0 for the unitary leadership structure.

- Earning per share (EPS): profitability ratio. The net income is divided by the total outstanding shares
- Return on equity (ROE): profitability ratio. The net profit is divided by the total equity.
- Assets (log) (ASSET): the natural log of the total book value of firm's assets in billion of Yuan as proxy of firm size.
- Top 10 large shareholding (Top10): the number of shares owned by Top 10 large shareholders of the listed company as the measure of ownership concentration ratio. This information is disclosed in the annual report of the listed real estate companies. It is expected to have an inverse relationship between ownership concentration ratio and board size.
- 1st large shareholding (1st holder): the number of shares owned by the first large shareholder in the company as a measure of the ownership concentration.
- 2nd large shareholding (2nd holder): number of shares owned by the second large shareholder in the company as a measure of the ownership concentration.
- Other (3rd to 10th) large shareholding (other 3rd -10th holders): number of shares owned by the third to tenth large shareholders in the company as a measure of the ownership concentration.
- SOE: equals 1 if the ultimate owner of the listed company is state, otherwise, equals 0.

Other factors may also affect performance. To take them, not all of them, into account, some other variables are defined.

- Supervisory size (SUPSIZE): the number of supervisors on the supervisory board.
- Inside supervisors (INSIDESUP): the number of supervisors on the supervisory board appointed by the controlling shareholders and the listed company. Since the information about the supervisors in the annual report of the listed real estate companies is not complete. The criteria defines the inside supervisors as (1). they take a position in the company of the

controlling shareholders or the listed company; (2). they get the salaries from the listed companies.

- Sales (SALE): the total operating sales in billion of Yuan as an alternative proxy of firm size.
- Fraction of the state shares (ST-Sh.): equals the number of shares held by the state directly divided by the total number of shares outstanding.
- Fraction of legal person shares (LP-Sh.): equals the number of legal person shares divided by the total number of shares outstanding.
- Fraction of tradable shares (TR-Sh.) refers to all the tradable A-Shares, B-Shares and H-Shares. They are the total number of tradable shares divided by the total outstanding shares.
- State shares dominated company (ST-Sh. com): equals 1 if the company is dominated by the state shares; otherwise it equals 0 if the company is dominated by the legal person shares.

6.3. Descriptive statistics

Table 6.1 reports the descriptive statistics of controlling variables of the sampled firms and the correlations with board size.

The mean of the board size of China's listed real estate companies is 9.19, ranging from 5 to 15 members within the scope of the requirement of Company Law. Two companies have no independent directors by the end of 2002. Generally speaking, the board is dominated by the insiders, with 5 (56%) of the 9 directors being the representatives of the controlling shareholders and executive directors. The inside directors are positively associated with the board size. Since 2001, most of the listed real estate companies adjusted the board size by at least 2 members of independent directors as required by CSRC. The average number of independent directors is 2.20 (23.6%).

Table 6.1 Descriptive statistics of governance characteristics of China's listed real estate companies and correlation with board size.

N=137	Min.	Max.	Mean	Std. Deviation	Corr./ BSIZE	Corr./BSIZE (log)
BSIZE	5.00	15.00	9.19	2.11	1.00	0.98**
BSIZE(log)	0.48	1.00	0.78	0.10	0.98	1
INSIDEDIR	2.00	11.00	5.26	2.02	0.64**	0.60**
INDDIR	0.00	4.00	2.20	0.74	0.27**	0.31**
SUP	2.00	7.00	3.58	1.01	0.28**	0.30**
CSUP	1.00	6.00	2.93	1.17	0.26**	0.31*
MTEAM	10.00	27.00	16.36	3.16	0.71**	0.72**
UNPAIDMAG(%)	0.00	71.43	37.84	19.52	0.12	0.10
Paid chairman ^a	0.00	1.00	0.64	0.48	0.10	0.08
Leadership structure (LEADER) ^a			0.88	0.32	-0.14	-0.14
EPS (Yuan)	-3.36	1.20	0.10	0.53	0.25**	0.32**
ROE	-3.77	0.37	-0.01	0.34	0.10	0.11
Asset (in billion of RMB)	0.17	9.69	2.18	1.82	0.34**	0.31**
Asset (log)	-1.76	2.27	0.45	0.85	0.37**	0.35**
Sales (in billion of RMB)	0.00	4.57	0.61	0.77	0.30**	0.31**
TOP10	1.96	78.88	56.49	16.10	-0.05	-0.04
1 st holder	0.39	74.69	41.10	17.82	-0.08	-0.08
2 nd holder	0.16	23.87	7.25	6.15	-0.05	-0.05
Others (3-10)	0.45	37.28	8.13	7.43	0.12	0.13
LP-Sh.	0	74.28	29.04	25.79	0.04	0.03
ST-Sh.	0	74.69	25.72	27.87	-0.07	-0.05
Tradable-Sh.	0	13.68	1.25	2.43	-0.07	-0.07
ST-Sh.comp. ^a	0.00	1.00	0.47	0.50	0.06	0.07
SOE ^a	0.00	1.00	0.75	0.43	-0.03	0.02

1.^aFor the binary variables, the mean represents the proportion of firm with equal to 1 for the variable.

2. **Correlation is significant at the 1% level (2-tailed).

3. *Correlation is significant at the 5% level (2-tailed).

The management team comprises of 16 members, they are board directors, managers and supervisors and their numbers are positively related with the board size. However, 38% of members of the management team do not get their salaries from the listed companies; they are the members of board of directors and supervisory board. 36% of the chairmen of board are not paid by the listed companies. 88% of the companies have adopted dual leadership structure with two persons taking the positions of chairman of board and general manager (equivalent to the title of CEO). As a monitoring organ, the supervisory board is composed averagely with 4 members, 3 of the 4 members are the insiders - from the controlling shareholders or the employees of the listed companies.

On the one hand, China takes two-tier system, with board of directors and supervisory board in parallel under Shareholders General Meeting to execute the strategy-decision right and monitoring right respectively. The management team is approved by the board of directors and monitored by the supervisory board. On the other hand, China also has introduced independent directors to the board of directors since 2001 to improve its monitoring function of board of directors.

From the description of responsibilities in the Company Law, Code of Corporate Governance of China's Listed Companies and Guideline of Introduction of Independent Directors, the monitoring function of supervisory board and independent directors are repetitive and overlapping. So far, the size of supervisory board (mean is 3.58) is larger than the size of independent directors (mean is 2.20). The nomination and appointment of the members of supervisory board are controlled by the controlling shareholder. Table 6.1 shows that 2.93 of 3.58 members of supervisory board are from the controlling shareholder and/or the employee of the listed company; therefore, they are unlikely to perform the supervisory function to the management of the company. The independent directors are expected to cover the gaps in the monitoring function of the supervisory board. But the system of independent directors is at the preliminary stage, the number of independent directors is smaller, the relevant law and regulation of the rights and duties of the independent directors is not available; impacting on the monitoring function of the independent directors. What is more important, the Guideline does not mention the relationship and the coordination between supervisory board system and independent director system: the relationship between the two systems is not clear.

The ownership is highly concentrated and the average number of shares owned by the Top 10 large shareholders is 56.49%. Indeed, the single large shareholder owns on average 41% of the total outstanding shares, they own non-transferable state shares or legal person shares; while the second large shareholder owns 7.25% of total shares and the other third to tenth large shareholders own in total 8.13% of shares.

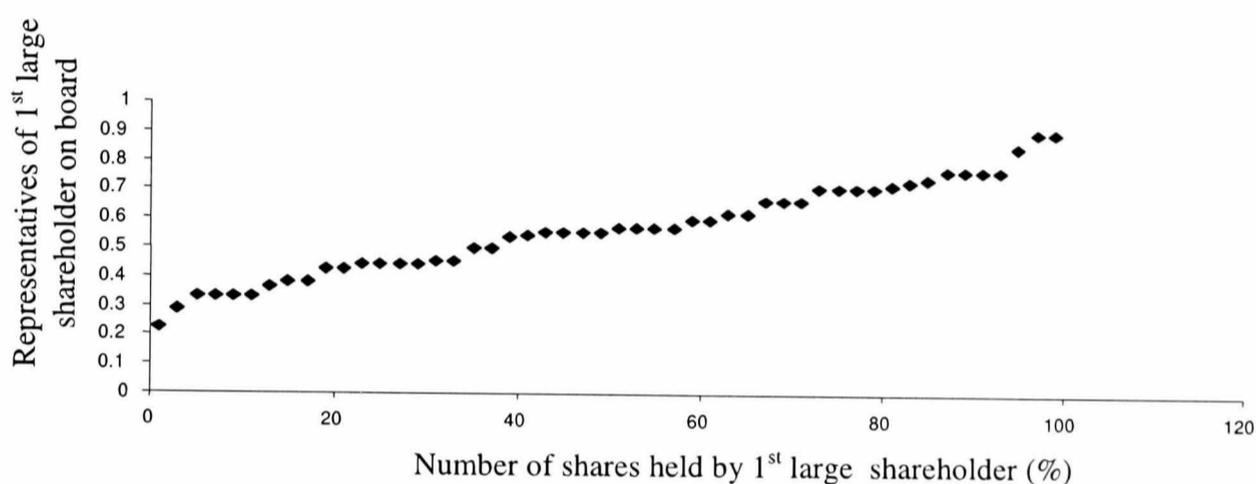
A controlling shareholder is defined by the Company Law as the shareholders who own at least 10% of the total shares of the company. In many listed real estate companies, there is a single controlling shareholder. Since the transfer of legal person shares and state shares are restricted, the non-transferable shares (29% legal person shares and 26 of state shares) are in a predominant position among the shares owned by Top 10 large shareholders. The tradable shares are only 1.25% of the total shares owned by Top 10 large shareholders. 75% of the listed real estate companies are SOEs and 47% of them are state shares dominated. The fact that the insiders control both of the board of directors and the supervisory board casts doubt on whether there is any effective monitoring function in these companies.

The pairwise correlations presented in the last two columns of Table 6.1 generally suggest that, in contrast to Yermack (1996), the board size is positively correlated with firm performance measured by EPS and ROE. The firm size measured by sales and total assets as proxy of firm size is also positively related with board size and is significant. Yermack (1996) and Johnson *et al.* (1993) report that the board size ought to correlate with firm size, because larger firms probably need larger boards. With regard to board composition, inside directors and independent directors are positively related to board size, since they are the major constituents of the board composition. The ownership concentration measured by Top10, 1st holder and 2nd holder are negatively related with the board size, although insignificant. Another concentration ratio measured by the number of shares owned by the 3rd to 10th large shareholders is positively related with board size. It seems that the higher ownership concentration leads to smaller board and that board size decreases with an increase in ownership concentration.

How many of the shares are required by the controlling shareholder to control the company absolutely? Given that many companies have one single controlling shareholder and there is a gap between the number of shares owned by the 1st large shareholder and the 2nd large shareholder and the other (3rd to 10th) large shareholders as reported in Table 6.1; therefore, to control the company absolutely, the number of the shares required by the controlling shareholder

should not exceed 50% of the total shares. The data of 2002 is used to do a simple liner regression of the number of shares held by the 1st large shareholder on the representatives of the 1st large shareholder on the board and the relationship between them is reported in Figure 6.1.

Figure 6.1 Relationship between 1st large shareholder and its representative on board



The relation of the number of shares held by the 1st large shareholder and its representatives on the board keeps a positive linear relationship. The minimum number of shares required to control the director board absolutely (50% of the board seats are taken by the representatives of the 1st large shareholder) are about 35% of the total outstanding shares.

Since the real estate stocks are classified into transferable shares (41%) and non-transferable shares (59%). The 41% of tradable shares are owned by thousands of small investors. For example, in 2002, there are 77 individual investors ranked up among 500 Top10 large shareholders of the 50 listed real estate companies, holding on average 0.2% of tradable shares. So it is impossible for any individual investor to have a seat on the board of directors. Therefore, the number of shares required by the controlling shareholder (almost all the shares owned by the controlling shareholder are non transferable shares) to control the company absolutely must be less than 35%. If the controlling shareholder owns 21% of the total outstanding shares (59% x 35%), she/he can effectively control the board of directors and the company as well, rather than 35% of the total outstanding shares,

taking the existence of large amounts of the minority shareholders holding tradable shares into account. Given the high ownership concentration in the listed real estate companies, the controlling shareholders can control the companies absolutely at relatively low controlling cost.

According to the Company Law of China, the members of board of directors are elected on the shareholders general meeting and shareholders attending the meeting shall have the right to one vote for each share held. A resolution of the shareholders general meeting must be passed by more than one half of the voting rights held by the shareholders present at the meeting. One or two large shareholders control predominate number of total shares of the company, they put their director candidates on each position on the board to guarantee the success in electing their representatives on the directorship, resulting in the directors of board of the listed companies dominated by the representatives of the controlling shareholder. The ownership structure decides the board structure.

Although pairwise correlations are informative, more conclusive evidence on the importance of board size and board composition is provided through subsequent multiple regressions, which control several potentially confounding influences.

6.4. Regression analysis

6.4.1. Univariate test

To provide preliminary evidence on the association between board size and firm performance, the firm performance across the range of different board size for 2002 is compared. The results are reported in Table 6.2.

The sample observations is classified based on the board size into 9 categories. from the firms with 7 members to those with 15 members. Then, the mean of EPS

and ROE is estimated for each board size category. Significant deviations from zero for the mean EPS and ROE are examined using *t*-tests.

Table 6.2 Board size and firm performance of China's listed real estate companies in 2002

Board members	Number of observations	Percent	Mean (EPS)	Mean (ROE)
7	12	24	-0.17	-26.49***
8	5	10	0.23	-0.81*
9	19	38	0.14	2.12*
10	1	2	0.40	0.05**
11	7	14	0.25	1.88*
12	1	2	0.21	3.70
13	3	6	0.35	3.24
15	2	4	-0.20	-0.04
Total	50	100		

Note: *, **, *** stand for the significant levels at 10%, 5% and 1%.

The listed real estate companies with board size of 9 to 13 members have better performance than the ones with smaller or larger board size. Sample observations in these categories collectively represent 62% of the total observations (31 out of 50). However, the firms with board size of 9 to 11 members have positive mean ROE and significant in *t*-tests.

The companies with the board size of 7 or below 7 members have the lowest performance ratios measured by EPS and ROE. The companies with the board size of 9 to 13 members have positive performance ratios measured by EPS and ROE. Largeness does not mean more efficient. The companies with larger board size of 15 members also have negative performance ratios, indicating the inefficiency of large board in monitoring the management. This suggests the smaller or larger board size in China's listed real estate companies is inefficient in corporate governance.

6.4.2. Regression analysis

In this section, the relationship between board size and corporate performance is estimated. In empirical studies, for example, Morck *et al.* (1988), Hermalin and Weisbach (1991), and Yermack (1996), the OLS and 2SLS frameworks are used, since it is argued that firms that are subject to competitive equity markets have incentive to adopt appropriate governance mechanisms to control agency problems (Jensen and Meckling, 1976). Therefore, where agency problems are significant, firms will adopt governance structures that are better at controlling these problems. The OLS approach attempts to identify a cross-sectional association between board size and corporate performance while controlling for the different control mechanisms that firms employ. The OLS, however, treats the board size as exogenous and does not attempt to distinguish between the factors determining the variation in board size across the firms and produces biased estimates in the presence of endogeneity. Although I agree with this argument, the approach of 2SLS might not be appropriate to the China's corporate governance, where majority number of shares is non-transferable and controlled by the state. The range of board size is fixed by the law; therefore, the corporate governance factors are unlikely to be adjusted according to the competitive market; thus, I use OLS methodology in my analysis.

The equations are estimated using the means of the variables for each listed real estate companies between 2000 and 2002. In the first, the board size is regressed on the other governance variables by using Equation (1). In the second, the board size and the other controlling variables are regressed on the profitability ratios of EPS and ROE as shown in Equation (2). All the variables are treated as exogenous variables. The log transformation of board size is used to make the distribution of the board size dependent variable more systematic. This method is used in the study of Eisenberg *et al.*

Equation (1):

$$\text{BSIZE (log)} = a_0 + a_1 \text{Profitability} + a_2 \text{Assets (log)} + a_3 \text{Ownership} + a_4 \text{MTEAM} + a_5 \text{UNPAIDMAG} + a_6 \text{Paid chairman} + a_7 \text{SOE} + u$$

Equation (2):

$$\text{Profitability} = a_0 + a_1 \text{Assets (log)} + a_2 \text{Ownership} + a_3 \text{BSIZE (log)} + a_4 \text{BSIZE}^2 \text{(log)} \\ + a_5 \text{MTEAM} + a_6 \text{UNPAIDMAG} + a_7 \text{Paid chairman} + a_8 \text{LEADER} + a_9 \text{SOE} + u$$

And

Profitability = EPS and ROE

Ownership = the number of shares owned by the first, second and other (3rd to 10th) large shareholders

Table 6.3 reports the OLS estimates of the relationship of board size and firm performance. Inconsistent with other empirical studies such as Yermack (1996) and Eisenberg *et al.* (1998), it finds that there is positive association between board size and firm's performance which is significant in the regression of EPS. In the companies with more concentrated ownership, the board size tends to be smaller. Increasing the board size implies the increase in the proportion of outside directors or the adjustment of the ownership structure. Therefore, increasing the board size by adding more independent directors or adjustment of ownership structure, for example, increasing the number of shares owned by the other large shareholders, will improve the corporate governance and the firm's performance.

Firm size measured by total assets (log) is positively related with the board size, but insignificant. Larger firms are likely to have larger board size, but since the range of board size of the listed companies in China is fixed by the Company Law, it is irrelevant to firm size within a certain range, with a top line of 15 members and a bottom line of 5 members, the effect of firm size on board size is not significant.

The ownership concentration ratio measured by Top 10 is negatively related with board size and significant in the equation of EPS. The inverse relationship of the ownership concentration measured by Top 10 indicates that the higher ownership concentration results in the smaller board size, as expected, with the controlling shareholder controlling the company with the relatively low controlling cost. The size of management team is positively correlated with the board size, as the board

directors are part of the management team. Interestingly, in the SOEs, the board size tends to be smaller because as proved in the previous chapter, in the SOEs, the ownership is more concentrated. The companies with dual leadership structure have larger board size.

Table 6.3 OLS estimate of the relationship between board size (log) and firm performance

	BSize (log)	BSize (log)	EPS	ROE
EPS (Yuan)	0.04 (3.65)***			
ROE		0.02 (0.96)		
Assets (log)	0.005 (0.65)	0.01 (1.31)	0.19 (3.82)***	0.14 (3.94)***
TOP10	-0.001 (-1.78)**	-0.001 (-0.80)	0.01 (4.10)***	0.01 (4.82)***
BSize(log)			5.45 (4.79)***	0.86 (1.07)
BSize ²			-0.01 (-3.43)**	-0.001 (-0.71)
MTEAM	0.02 (11.41)***	0.02 (11.84)***	-0.02 (-1.23)	-0.01 (-0.95)
UNPAIDMAG(%)			-0.01 (-2.74)**	-0.002 (-1.14)
Paid chairman ^a			-0.10 (-1.09)	-0.04 (-0.57)
LEADER ^a	-0.06 (-3.18)***	-0.07 (-3.67)***	-0.1 (-0.81)	-0.11 (-1.24)
SOE ^a	-0.03 (-2.42)**	-0.03 (-2.23)**	0.01 (0.12)	-0.06 (-0.94)
Constant	0.52 (12.32)***	0.50 (12.59)***	-3.26 (-4.63)***	-0.65 (-1.31)
Adjusted R ²	0.63	0.60	0.40	0.27
F	27.42	27.6	9.56	5.23
Sig.	0	0	0	0

Note: (1): t-statistics are in parentheses.

(2). *, **, ***represent the significant levels of 10%, 5% and 1%.

(3). ^aFor the binary variables, the mean represents the proportion of firm with value equal to 1.

However, as expected, the firm size has a positive and significant relationship to firm's performance. Large board size may be associated with advantages. Pfeffer and Salancik (1978) argue that larger firms have far more influence over their environments than do smaller firms and are concomitantly more likely to enlist the support of critical constituencies. Haveman (1993) suggests that having control over such resources make it easier to initiate and sustain change. In addition to these arguments, I think the firm size is especially important for the real estate companies. Capital resources and land resource are the essential for the real estate companies to survive and grow. The larger organisations have more ability than the smaller ones to form environmental links to secure these critical resources.

The ownership concentration measured by the number of shares owned by Top 10 large shareholders of the company is positively correlated with the firm's performance and significant in two equations of profitability ratios. The positive impact of the ownership concentration on the firm's performance is consistent with the other empirical studies such as Xu and Wang (1997)'s that ownership concentration is beneficial to the firm's performance.

The size of management team is inversely related with the firm performance, although insignificant, suggesting that the larger management team does not mean it is more efficient, especially when there are more management members who are not on the company payroll. The number of unpaid management team members is inversely associated with the firm performance and significant in the equation of EPS. The unpaid management team members are the chairman of the board, members of the board of directors and the supervisory board. They hold an important position in the controlling company and get the salaries from controlling company. The negative impact of the number of such management officers to the firm's performance sheds doubt on the efforts and time they contribute to the listed companies. Lipton and Lorsch (1992) suggest that the most widely shared problem directors face is lack of time to carry out their duties. Byrne, (1996) and NACD (1996) ever criticised the directors who spread their

time too thin by taking on too many outside directorships, confounding their ability to attend meetings regularly and therefore, to monitor management well.

The leadership structure is positively related with board size and significant in both equations at the level of 1%, but it has no explanatory power to the firm's performance. In our sample, only six companies have unitary leadership structure with one person to take the two positions of chairman of board and general manager (or chief executive officer).

Although the board size is positively related with firm performance, the squared term of board size is negatively associated with firm performance and significant in the equation of EPS, which suggests that there is non linear relation.

The regressions of SOE to the profitability ratios yield mixed and insignificant signs, showing the enough evidence to prove that SOEs are more inefficient.

In sum, inconsistent with other empirical studies, I find the board size of China's listed real estate companies is positively related with firm performance. The effect of firm size is not significant to the board size, but significant to firm performance. Ownership concentration is negatively related, although insignificant, to the board size, but positively and significantly related to the firm performance. The larger the management team is, the more inefficient, especially when there are more unpaid management officers including the chairman of board in the management team. SOEs have smaller board size.

6.5. Sensitivity check

Durbin-Watson option is used to test for correlations between errors. The values less than 1 or greater than 3 are definitely cause for concern. All the values in Durbin and Watson equation in each mode fall with the acceptable value (Field, 2000).

Additional tests are done considering the potentially undue influence of outliers on the empirical results. While the full sample with available data is used in each model reported here, the results are robust to the exclusion of independent variable observations lying more than three standard deviations from their respective variable means.

The results presented in Table 6.3 are robust to several alternative variable specifications. First, the firm size can be alternatively defined as the raw data of sales. Second, the ownership concentration measured by the number of shares owned by Top10 large shareholders can be defined by the number of shares owned by the 1st, 2nd and other (3rd to 10th) large shareholders. Third, the board size (log) can be substituted by raw data of board size. In all these cases, the statistical significance of the board size variable remains unchanged. Finally, when the dependent variable is defined as the return on equity (ROE), analogous results are yielded.

6.6. The board composition and its effect on the firm's performance

6.6.1. Relation of board size and ownership structure

Board size reflects the composition of the board of directors. More independence implies that a board is able or willing to provide guidance that does not necessarily mirror the will of the CEO. The existence of large number of non-transferable shares restricts the effectiveness of the control mechanisms like external takeover; thus, more independent boards should be adopted as suggested by Brickley and James (1987). Increasing the effectiveness of monitoring function of the board of directors by increasing the number of the independent directors on board is essential for effective corporate governance in China. The OECD defines the board independence as “Board independence usually requires that a sufficient number of board members not be employed by the company and not be closely related to the company or its management through significant economic, family or

other ties. Independent board members can contribute significantly to the decision-making of the board. They can bring an objective view to the evaluation of the performance of the board and management. In addition, they can play an important role in areas when the interests of management, the company and shareholders may diverge such as executive remuneration, succession planning, changes of corporate control, take-over defences, large acquisitions and the audit function”, (OECD Commentary V, E).

Studying board composition, Hermalin and Weisbach (1991) find no relation between firm performance and the fraction of outside directors. However, Baysinger and Butler (1985) find some evidence that companies perform better if board include more outsiders.

There is another constituent of board composition - inside directors. These include the directors chosen by the controlling shareholders and executive directors. Normally, in the listed real estate companies, the general manager (CEO), deputy general manager and financial manager are the executive directors. The inside directors are in a predominant position on the board of directors, with 5 out of 9 members as Table 6.1 shows. The shareholders meeting, the board of directors and supervisory board are dominated by the controlling shareholder. Who will monitor and assess the managers and who will protect the interest of minority shareholders from being expropriated? Although inside directors have important proportion on the board, it is not expected to have a positive relationship of inside directors to the firm performance; however, it is expected that the number of independent directors on board to be positively associated with firm performance.

The proportion of inside directors on the board is expected to be related with the ownership structure. It tests, first of all, the relationship of board size and board composition and ownership structure. It uses the data in 2002 and the raw data of board size for the variables. To examine the relationship of board size and ownership structure, it uses the ownership concentration ratios measured by the number of shares held by 1st, 2nd, and other (3rd to 10th) large shareholders. Table 6.4 reports the outcome of the regression.

Table 6.4 Relationship between board size, board composition and ownership structure

	INSIDEDIR	INDDIR	1 st holder	2 nd holder	2 nd holder ²	Other (3 rd -10 th) holders
BFSIZE	0.79 (13.12)***	1.37 (8.09)***	-0.01 (-1.54)	-0.11 (-1.60)	0.01 (1.80)*	-0.02 (-0.69)
Constant	2.37 (3.17)***					
Adjusted R ²	0.59					
F	28.76					
Sig.	0.00					

Note: (1): t-statistics are in parentheses.

(2). *, **, *** represent the significant levels of 10%, 5% and 1%.

Board size is positively related with board composition as expected and significant with the two composition constituents. Without any doubt, the increase in any of these two composition elements will increase the board size. The board size is inversely related with all the three ownership concentration ratios measured by the 1st, 2nd and other 3rd to 10th large shareholding, although insignificant. However, the positive and significant association of the squared term of the number of shares owned by the 2nd large shareholder to board size indicates that the adjustment of ownership structure; that is the increase in the number of shares owned by the other large shareholders can change the board size. Under the current ownership structure in China, changing the board size by changing the ownership structure is not feasible.

According to “Guideline for Introducing Independent Directors to the board of directors of listed companies”, by June 30th, 2003, at least one third of board shall be independent directors. And at least one of the independent directors should be an accounting professional. By the end of 2002, the average number of independent directors in most of the listed real estate companies is two, while the average number of the board directors is 9. To meet the requirement of the Guideline, most of the companies should add at least one independent director on the board by June 2003. To ensure that independent directors have enough time

and energy to perform the duties of the independent directors effectively, the Guideline defines that “in principle, the independent directors can only hold concurrently the post of independent directors in five listed companies at maximum” (Article 2).

To capture the effect of ownership structure to board size, the board size and ownership structure is broken down into 5 categories based on the number of directors on board and the mean ownership concentration in these categories. Table 6.5 represents the report of the breakdown.

Table 6.5 Breakdown of board size and ownership concentration (2002)

Number of directors on board	Nr. Of observations	Top 10 (%)	1 st holder (%)	2 nd holder (%)	Other (3 rd to 10 th) holders (%)
7	12	53.88	40.33	6.45	7.1
8	5	56.7	50.47	3.25	2.99
9	19	57.3	39.79	8.98	8.53
11	8	58.7	34.53	10.49	13.23
13-15	6	54.06	39.23	5.79	9.31

Although the range of board size is fixed by the Company law in China, the ownership structure still has effect on the board size. Table 6.5 shows that across the firms, the number of shares owned by the Top 10 large shareholders is not deviated much with each other, and it is on average more than 50% of total shares. Highly concentrated ownership measured by 1st large shareholder results in the smaller board size. The companies with board size of 8 or below 8 members have the 1st large shareholder holding 50.47% or 40.33% of the total outstanding shares. The companies with the board size of 9 or above 9 members have the 1st large shareholders holding about 39% of the total shares. Whereas, the companies have larger board size have the presence of other blockholders. For example, the companies with the board size of 9 or 11 members have the 2nd and other (3rd to 10th) large shareholders holding 8.98%, 10.49%, 8.53% and 13.23% respectively of the companies’ total outstanding shares.

When the ownership is highly concentrated by one controlling shareholder, the board size is smaller; diluting the controlling power among more than one controlling shareholder is likely to change the board size. This finding suggests that in China's corporate governance environment, optimizing the ownership structure and diluting the controlling power among more than one controlling shareholder will cause the change of board size. To achieve this target, the state has to reduce the number of shares controlled to the market and relieve the problem that the state is the single controlling shareholder in many listed companies and let the companies participate in the market competition. This is fundamental to improve the corporate governance in China. Brunello, Graziano and Parigi (2003) argue that concentrated ownership, family control, limited institutional investor activism, and lack of monitoring result in the Italian corporate governance structure that is dominated by insider. This can be extended to the corporate governance structure in China.

Fama and Jensen (1983) argue that outside directors can arbitrate in disagreements among internal managers and perform tasks involving serious agency problems between managers and residual claimants, such as setting executive compensation or searching for replacement for top managers. The number of other directorships held by outside directors may proxy for the value of their reputation capital. The threat of damaging this reputation capital is likely to prevent outside directors from colluding with management. Gilson (1990) and Kaplan and Reishus (1990) present evidence consistent with the market for directorships motivating outside directors.

6.6.2. Relation of board composition and firm performance

It sets up a hypothesis that board size might correlate with board composition variables and the composition explains the result. To test the effect of board composition on the corporate performance, it uses the data of 2002 and run non-linear regressions of the profitability ratios on the board size and board composition by including a squared term of inside directors and a squared term of

independent directors. Table 6.6 reports the relationship of board size and board composition to the corporate performance.

Table 6.6 Relationship of board size, board composition and firm performance in 2002

	BSIZE						Adjusted		
	(log)	INSIDEDIR	INSIDEDIR ²	INDDIR	INDDIR ²	Constant	R ²	F	Sig.
EPS	0.59 (0.93)	0.14 (1.46)	-0.01 (-1.27)	0.61 (3.78)***	-0.10 (-2.61)**	-1.55 (-3.22)***	0.15	5.73	0.00
ROE	0.09 (0.20)	-0.01 (-0.14)	0.0001 (0.45)	0.58 (5.12)***	-0.11 (-4.04)*	-0.78 (-2.32)**	0.17	6.39	0.00

Note: (1): t-statistics are in parentheses.

(2)*, **, *** represent the significant levels of 10%, 5% and 1%.

The board size (log) is positively related with firm performance, although insignificant. The number of inside directors and the squared term of the insider directors have no explanatory power to the firm's performance. Although inside directors are considered valuable for their service in the expertise-counsel role (e.g. Baysinger and Hoskisson, 1990 and Hoskisson *et al.*, 1994), but they are routinely criticised for their lack of independence from CEOs.

As noted previously, the inside directors are chosen by the controlling shareholder and some of them are not paid by the listed company. Their professional promotion does not depend on the performance of the listed company where they take the directorship and therefore, they may be less likely to spend enough time and energy on the performance of the listed company. The number of independent directors is positively and significantly correlated with the firm's performance, but the significant and negative signs of the squared number of independent directors indicate a non-linear relationship. This suggests that the companies which have larger proportion of independent directors outperform the ones with smaller proportion.

Whivdasani and Yermack (1999), suggest that the benefits of outside directorships may be non-linear, declining for the highest directorship levels as busy directors have less available time to monitor management properly. Although the background of the independent directors and other outside

directorship they take is not disclosed in the annual report of the listed companies. the finding of non-linear relationship of independent directors and firm's performance for China's listed real estate companies suggests that an appropriate increase in the number of independent directors on the board of directors will have significant impact on the firm performance.

6.7. Conclusions

This chapter discusses China's listed real estate companies' board characteristics - board size and board composition and its relationship to the corporate performance. The effect of board size may be different in different culture, legal environment, and corporate governance tradition. In China, the ownership is highly concentrated in one or two large shareholders who control the shareholders meeting and the board of directors. The shares owned by the controlling shareholder are non-transferable, reducing the effectiveness of other corporate governance mechanisms such as external takeover in China. Under such situation, adding independent directors to the board of directors to improve the independence and the monitoring role of the board of directors is essential to the corporate governance in China. My empirical study suggests that the board size has effect on the firm's performance and those effects reflect the board composition which explains the result.

In China, the Company Law fixes the range of the board size between 5 and 15 members. The board of directors is dominated by the insiders. The direct evidence on the association between board size and corporate performance of China's listed real estate companies suggests that board size is positively correlated with firm performance. The number of inside directors on the board has no explanatory power to the firm performance, although the board of directors is dominated by the insiders. The number of independent directors has significant impact on the firm performance. The positive relationship between the number of independent directors on the board and firm performance indicates that the increase in the

proportion of independent directors within certain extent will improve the monitoring function of the board and the firm performance.

For China's listed real estate companies, the effect of firm size on the board size is not significant. But the firm size has significant impact on the firm performance, with larger firms having more ability to secure the critical resources.

Ownership structure has a negative association with board size, although this is insignificant. The firms with higher ownership concentration ratios measured by Top 10, 1st, 2nd and other (3rd to 10th) large shareholdings have smaller board size. Ownership concentration is positively related with firm performance. The increase in the number of shares owned by the other large shareholders (i.e. the change of the ownership structure and dilution of the controlling power among more than one controlling shareholders) will change the board size.

Board size is positively related with board composition as expected and significant with two composition constituents. The board size is inversely related with all the three ownership concentration ratios, although insignificant. The squared term of the number of shares owned by the 2nd large shareholder indicates that the change of ownership structure, i.e. the increase in the number of shares owned by the other large shareholders can change the board size. But under the current ownership structure in China, changing the board size by changing the ownership structure feasible at this moment.

In a word, the analysis above indicates that rationalizing the ownership structure and adding more independent directors on the board will improve the monitoring function of the board of directors, the corporate governance and firm performance.

Chapter 7. Corporate governance and manager compensation

7.1. Introduction

Previous studies have proposed that optimal executive compensation contracts perfectly align the interests of the executives with those of the firm's shareholders (Grossman and Hart, 1983 and Harris and Raviv, 1979). In theory, such contracts act as incentive mechanisms for executives to engage in behaviour that maximize the firm's value and reward executives for such behaviour (Fama, 1980 and Jensen and Meckling, 1976). Whether executive compensation contracts meets this test of optimality, *ex ante* or *ex post*, is an empirical question subject to ongoing investigation (Tosi, Werner, Katz, and Gomez-Mejia, 1989).

A perfect market for management services should be able to determine the optimal management remuneration. For instance, on one hand, the managers would get at least the remuneration that would prevent them from taking a job at another firm (the so called reservation salary) and, on the other hand, they would not be able to get any more compensation than an equally good alternative management team would demand.

Tough product market competition forces managers to focus on high financial performance because, if they do not, it would ultimately result in bankruptcy and the loss of their jobs (Scherer, 1980; and Hart, 1983).

Several studies have examined the relationships between measures of firm performance and top manager pay. For example, Murphy (1985) finds a statistically significant relationship between the level of pay and performance, while Mehran (1995) finds firm performance is positively related to management's ownership stake and to the percentage of its equity-based compensation. However, Jensen and Murphy (1990) did not find a significant relationship between changes in firm value and changes in executive compensation. Miller (1995) shows no support for a linear relationship between

pay and performance, but found strong support for a convex relationship. Hadlock and Lumer (1997) find that pay–performance sensitivities have significantly increased over time for small firms, but not for large firms.

More recently, in a study examining the role of boards in setting managerial pay, Porac, Wade, and Pollock (1999) find evidence that boards make comparisons within and between industries in which the firm competes to support their top management compensation decisions. The authors conclude that boards of directors tend to “anchor their comparability judgments” by examining other firms’ performance. This suggests that top manager performance is assessed based on relative measures and with an eye toward the industry environment affecting the firm.

The presence of competitors in the product markets makes it possible to sharpen the incentive effect of the remuneration system by letting the remuneration correlate with performance relative to that of close competitors rather than letting it correlate with performance relative to that of the market. This is also called yardstick competition (Nalebuff and Stiglitz, 1983; Shleifer, 1985, and Hermalin, 1992).

Since May 1999, three Chinese listed companies in Wuhan initiated the managerial stock scheme as an incentive mechanism, by 2002, there are 34 listed companies adopting the managerial stock incentive. The Chinese legal framework and the corporate governance structure are different from the ones in the Western economies. The issues around the managerial incentive are whether the managerial stock option would turn into the manager’s “rent-seeking”, due to the absence of the real owner of the company

Wei (2000) studies the relation of the manager compensation¹⁶ of Chinese listed companies and the corporate performance and finds that the management

¹⁶The manager compensation refers to the compensation paid to the directors of board, managers and members of supervisory board, excluding the allowance paid to independent directors.

compensation is not related with the firm performance and the management compensation varies across industries and is related with firm size. Zhou and Sun (2002) study the Chinese listed companies which have taken managerial stock incentive and conclude that the companies that are suitable to take the managerial stock incentive are those that grow fast, have independent remuneration and assessment subcommittee on the board, and have the state assets management company as controlling shareholder. The companies that force the managers to buy the company stock with their annuity perform better than the ones that grant the managers the performance-based shares.

This chapter uses the available data of manager compensation of China's listed real estate companies to test the agency cost induced by the inefficient incentive system. It tests the relationship between the corporate governance and manager compensation and investigates what explains the variation of manager compensation.

Since the stock option as an incentive system is not adopted in the state-owned real estate companies, and the managerial ownership in the POEs can be treated as the controlling shareholder's ownership as examined in Chapter 5, the analysis here is focused on the relation between the governance structure and manager's compensation (including basic salary, position allowance and performance bonus).

The finding here is that the manager compensation of Chinese listed real estate companies has weak or even negative association with firm performance. The proportion of shares owned by the first large shareholder is positively associated with manager compensation. The finding is inconsistent with the empirical finding that the existence of large controlling shareholder reduces the managerial discretionary right. The board structure has no explanatory power to the manager compensation. The variation in manager compensation is explained by the firm size and the turnovers of the chairman of board and the top manager. The finding suggests that the weaker governance structure induces agency cost measured by the manager compensation.

The chapter is designed as following. In Section 7.2, the components of manager compensation are overviewed generally. In Section 7.3, the research methodology and the control variables are defined. In Section 7.4, the statistics outcomes are discussed. In Section 7.5, the conclusions are made.

7.2. Components of manager compensation

7.2.1. Why the managerial stock option is prevalent in western economies

The trend towards higher levels of pay and an increased use of stock options can be partially explained by a number of factors. First, competitive labor markets have made retention of employees a primary concern for companies. Compensation plans with vesting periods or long-term performance incentives have evolved in response to retention concerns. Second, the bull market of the late 1980s and 1990s led companies and employees to increase their focus on equity-based compensation structures. Third, many compensation plans have favorable financial accounting and tax implications under US GAAP and US tax rules that reinforce their use. Fourth, since 1994, US tax rules limit the corporate deduction for non-performance-based pay for the CEO and each of the four other highest paid executives to 1 million of US dollar. Since certain types of performance-based compensation are excluded from this limit, an increase in emphasis on performance-based compensation has resulted. Finally, start-up firms, which typically struggle for earnings, often are cash constrained and rely heavily on human capital as their primary asset. In part, these firms have set the pace for equity-based compensation schemes, which require little or no cash outlay, can be designed for favorable accounting and tax treatment, and can be effective retention tools.

7.2.2. Manager salary

Compensation packages can be viewed as comprised of two general components: (1) a fixed or non-performance-based element (e.g. salary), and (2) a variable or performance-based portion. One benefit of using salary as a compensation mechanism is that employees have certainty about the payout of their compensation package. In addition, since the payment with performance-based compensation is less certain than the payment under compensation plans comprised only of a fixed salary, plans with performance-based components place greater risk on the employee than do plans without them. As a result, companies may have to pay a premium to compensate employees for assuming this increased risk. Risk averse and undiversified executives will be willing to accept stock-based pay instead of cash only if the value of stock-based pay is substantially greater than the value of the cash foregone (Hall and Murphy, 2002). This suggests that the expected total compensation cost is greater for plans that rely more heavily on performance-based compensation.

Conversely, the expected total compensation cost usually is lower with plans relying primarily on salary. Limitations of using salary as the only component of the compensation plan include limited incentives for both short-term and long-term performance. As a result, decisions regarding the proportion of compensation that should be performance-based often involve a cost versus benefit assessment—whether the benefits of increased performance that come from using performance-based compensation outweigh the additional compensation costs that arise from the risk premium the company must pay the employee for accepting increased uncertainty associated with performance-based compensation. When those costs outweigh the benefits, the salary component of compensation is likely to be high.

7.2.3. Annual performance bonus

An annual bonus is an award for performance during a pre-determined time period, typically one year. These bonuses usually are used to provide an incentive for employees to focus on short-term performance. However, since bonuses typically are based on accounting numbers, they can encourage manipulation of the accounting numbers and a focus on short-term performance at the expense of long-term performance, resulting in sub-optimal operating decisions.

Bonuses can be structured in a variety of ways. For example, bonuses can be based on a strict formula or can be determined subjectively by the board of directors or compensation committee. Bonus plans may have thresholds below which no bonus is provided or ceilings over which no incremental bonus is paid. Bonuses can be based on individual, business unit, or corporate performance.

7.2.4. Stock

Stock can be granted to employees outright or can be granted with restrictions. In addition, the granting of stock can be contingent on performance requirements. A primary benefit associated with the use of stock as compensation is that it requires no cash outlay by the company. In addition, if the employee retains ownership of the stock after receiving it, the granting of shares for compensation purposes provides a long-term performance incentive since the employee gains the most when the company's stock is performing the best.

However, the use of stock as a performance incentive brings with it several concerns. First, managers and employees may have limited ability to affect the company's stock price. To the extent the stock price is less controllable; it is a less effective performance incentive. Second, increased stock ownership by managers may increase risk adverse behavior. As their ownership in the company increases, managers' fortunes become more dependent on stock price performance and can be highly affected by stock price declines. As such, managers may seek to reduce

this downside risk by avoiding risky projects that may be desirable to shareholders (because they offer the potential for high returns) but that may lead to large stock price declines if they fail (Kaplan and Atkinson, 1998). Third, shareholder dilution is a primary concern to existing shareholders. As employees receive more stock, existing shareholders' claims to the company's future value and dividend payments may decrease because the proportion of the company stock that they own decreases.

The stock is classified into three types:

- Outright grant of stock: on occasion, companies grant shares of company stock to employees as a means of compensation.
- Restricted stock is an award of company stock to an employee that is subject to return to the company if certain restrictions are not met. Restrictions most often include the requirement that employees remain with the company for a specified period or that certain performance goals are met. Benefits of restricted stock include a retention incentive because employees must remain with the company through the vesting period to be awarded the stock. In addition, unlike stock options discussed below, after the vesting period, the employee can sell the stock regardless of its value. Thus, restricted stock guarantees holders some value even if the stock price drops. As with other stock compensation, managers' risk averse behavior may increase with increased ownership as managers attempt to avoid downside risk.
- Performance shares are a specified number of shares that are awarded after established performance goals are met, usually over several years. The benefits of performance shares include a performance incentive and a retention incentive because employees typically must remain with the company through the performance period to be eligible for the award. The award is in the form of shares of stock; however, the monetary amount of the award usually is determined by measures other than the change in stock price, such as accounting earnings or return on assets. This addresses the concerns of employees that controllability of stock price is beyond their power. However, since the amount of the award typically is

determined based on operating results, performance shares can result in attempts by managers to manipulate accounting numbers.

7.3. Methodological approach and variable descriptions

7.3.1. Methodological approach

The null hypothesis of this chapter is that the observed governance structure—ownership structure and board structure—induces optimal manager contracting and firm performance. Under this hypothesis, the shareholders choose the manager compensation contract, which specifies the level of compensation as a function of performance and its demand for highly qualified managers. Under the null hypothesis, only the economic factors such as firm size, firm performance, growth rate of the firm should describe the variation of manager compensation.

The manager compensation is used as a metric for assessing the effectiveness of corporate governance because it is a frequent and observable board decision, and has been the subject of much of the debate regarding the effectiveness of board of directors. Given the amount of information available to the board on corporate strategy, structuring the optimal manager compensation should be a relatively straightforward decision for an effective board.

The test of the null hypothesis is based on including a set of board and ownership structure variables in the compensation regression. If the board and ownership structure variables are statistically significant, they provide evidence that certain board and ownership structures are conducive to the manager entrenchment. Under the alternative hypothesis, the board and ownership variables proxy for the effectiveness for the firm's governance structure in controlling agency problems.

7.3.2. Measurement of manager compensation

The empirical analysis of the managerial compensation (eg. Murphy, 1985 and Mehran, 1995) is based on three different measures of compensation: total compensation, cash compensation and salary. Cash compensation is the sum of salary and annual bonus, whereas salary simply measures the component of compensation that is fixed (or noncontingent) at the beginning of the year. The total compensation is the sum of salary, annual bonus, and the valuation for stock options, performance plans, phantom stock and restricted stock. In my study, the manager compensation refers to the total payment to the directors and managers of the companies as disclosed in the annual report and is measured by (1). the cash pay including salary, the position allowance and bonus; (2). the total value of manager compensation which is the sum of cash pay and the market value of the managerial equity shares calculated by the number of managerial equity shares multiplied by the close price of the company shares at the end of the year. The managerial ownership is also used as an indicator to test whether the company adopting the managerial ownership performs better. If the company has any managerial equity stake, the variable equals one, otherwise, equals zero. Because of the lagged reward, the compensation data obtained from 2001 are matched with sales, growth rate, firm performance for 2000, therefore, I add the manager compensation data of 2003 to match the data of 2002 to obtain three-year's study period.

7.3.3. Economic determinants of the level of manager compensation

Consistent with prior theory and empirical work (Rosen, 1982 and Smith and Watts, 1992), it is expected that larger firms with greater growth opportunities and more complex operations will demand higher-quality managers with higher wages. It proxies for firm size and complexity with firm sales and annual growth rate of sales.

The results of standard agency models suggest that the level of pay is an increasing function of firm performance. Firm performance is measured using the accounting return on assets (computed as the ratio of after the tax to total assets). Firm risk, as a measure of the firm's information environment and the risk of its operating environment, is also a potentially important determinant of the level of manager compensation. Consistent with other empirical research on compensation (e.g., Smith and Watts, 1992; and Core, 1997), the measure of firm's risk is included as control variable for the level of compensation. Theoretical models (e.g., Banker and Datar, 1989) suggest that compensation risk (and the level of expected compensation) may either increase or decrease with firm risk. Cyert *et al.* (1997) find that CEO compensation is higher at firms with greater stock return volatility. The standard deviation of the daily stock prices over the three years is used as proxy for firm risk.

7.3.4 The ownership structure and board structure as governance variables

This chapter uses the ownership structure and board structure as control variables to measure the effect of the corporate governance on the manager compensation.

It employs three measures of ownership structure of the firm. The number of shares owned by the 1st large controlling shareholder is used as the measure to mitigate the agency cost. The number of shares owned by the other (2nd to 10th) large shareholders is used to test the monitoring role of other blockholders. The outside blockholder in other empirical studies refers to the non-controlling blockholder who owns 5% of the company's total outstanding shares. According to the characteristics of the ownership structure of China's listed companies, that is the ownership structure goes to the two extremities: highly concentrated by a single controlling shareholder and the remaining shares widely dispersed among the small shareholders. It uses the proportion of the shares owned by the other (2nd to 10th) large shareholders as proxy of presence of other blockholders. It is expected that the managerial entrenchment is a decreasing function of the holdings of other blockholders and the existence of an outside party with

substantial equity holdings in the firm (e.g., Allen, 1981; Tosi and Gomez-Mejia, 1989; and Finkelstein and Hambrick, 1989). The proportion of managerial equity stake is also used as ownership structure variable, although it is argued that the stocks owned by the managers in China's listed companies are more as a welfare or for the purpose of the fund raising, rather than an incentive system.

It proxies for the effectiveness of monitoring by board of directors by using three measures that characterize the board structure. Board size is measured by the total members on the board of directors. The composition of board is measured by the number of inside directors (directors from the controlling shareholder and the executive directors) and independent directors. The size of the board of directors is expected to be associated with less effective board monitoring, based on the argument that larger boards are less effective and more susceptible to the influence of the CEO (Jensen, 1993 and Yermack 1996). Pfeffer (1981) argues that internal board members are more loyal to management, and thus the CEO can exert relatively more influence over internal (as opposed to outside) board members. However, there is mixed evidence as to whether boards are more effective when they consist of fewer inside directors. A number of empirical studies suggest that agency problems are higher when the CEO is also the board chair (e.g., Yermack, 1996). It defines the dual leadership as an indicator variable, which equals one if the board chair is not the CEO (dual leadership), and zero otherwise.

The other control variables include the state owned company (SOE). If the company is ultimately controlled by the state, the variable equals one, otherwise zero. It also use the variables of the turnovers of chairman and the top manager to test the effectiveness of the governance. The turnovers of chairman and top manager tend to follow the worse performance. If there is turnover of chairman or top manager over the study period, the variable equals one, and zero otherwise.

7.4. Statistics analysis

7.4.1. Descriptive statistics

Table 7.1 reports the descriptive statistic results of the manager compensation and governance structure of the China's listed real estate companies.

The median of the total value of manager compensation is 1.13 million of RMB (mean is 1.65 million of RMB). The manager cash pay is 1.07 million of RMB and the minimum of manager cash pay is 0.10 million of RMB and the maximum is 7.23 million of RMB, varying greatly across the firms in one industry. Obviously, 99% of the total value of manager compensation is manager cash pay. The manager cash pay variation can be explained partially by the region variation where the listed real estate companies are located. Generally speaking, the companies with above the median manager cash pay are located in the south and south east of China, such as Shenzhen and Shanghai where the regional income is relatively high and the companies with below the median manager cash pay are located in the inland provinces such as Sichuan, Liaoning and Hainan, where the regional income is relatively low. For example, the first three companies with the highest manager pay are located in Shanghai and Shenzhen and the ones with the lowest manager pay are located in Sichuan, Liaoning and Hainan.

67% of the listed real estate companies have managerial equity stake which amounts to 0.002% of the total outstanding shares. The median market value of the managerial equity is 0.0167 million of RMB (1% of the total manager compensation). 17% of the companies have the turnovers of chairmen and 39% of the companies have the turnovers of top managers over the study period. The performance ratio measured by median ROE is 0.03 (the mean is -0.01). The median size of the listed real estate company is 0.36 billion of RMB and the mean is 0.62 billion of RMB, indicating the skewness of the firm size. The median growth rate is 14.39% (mean is 50.98%). The ownership is highly concentrated by the 1st large shareholder owning 41.47% (mean is 40.01%) of total outstanding

shares and the other (2nd -10th) large shareholders owning 12.4% (mean is 15.16%). The board is composed of 9 members, 5 of them are inside directors and 2 are independent directors.

86% of the companies take dual leadership structure and have two persons take the positions of chairman of board and top manager.

To capture the difference of the companies with different ultimate owners, it separates them into two groups according that the ultimate owner is the state (SOE) or private person/family (POE) and the mean comparisons of SOEs and POEs are reported in Table 7.2. The manager compensation, no matter it is measured in the cash pay or the total value including the stock value, is much higher in SOEs (the mean cash pay is 1.81 million of RMB and mean total pay is 1.89 million of RMB) than in POEs (the mean cash pay is 0.95 million of RMB and mean total pay is 1.08 million of RMB). The differences are significant. The managerial equity stake in POEs is higher (the mean is 0.03%) than in SOEs (the mean is 0.01%), but 72% of SOEs have managerial equity stake, compared to 55% of POEs. The difference for the variable is statistically significant.

The POEs have more frequent (42%) turnovers of top managers than SOEs (38%). However, 17% of chairmen in SOEs have been turned over compared to 16% in POEs. Usually the turnover of chairman in SOEs is caused by the administrative promotion or the relocation in the government department. In POEs it is due to the changes of the controlling shareholders caused by the takeovers or restructuring.

The performance measured by ROE in POEs is better than in SOEs, although the difference is insignificant.

From the firm size distribution, SOEs are significantly larger with mean sales of 0.73 billion of RMB than POEs with mean sales of 0.08 billion of RMB and the ownership in SOEs is more concentrated by the 1st large controlling shareholder with the mean of 45.86% than in POEs with the mean of 30.61%, but the

proportion of shares owned by the other (2nd to 10th) large shareholders is larger in POEs with the mean of 25.25% than in SOEs with the mean of 11.08%. The differences in the ownership structure are statistically significant, indicating that in POEs, the ownership is not as concentrated as in SOEs, and there are more than one controlling shareholders in some of the POEs. As for the board size, board composition and leadership structure, there are no statistically differences between the two types of companies.

Furthermore, it separates the companies into two groups based on the criteria of whether the companies grant managerial stocks or not and the mean comparisons are reported in Table 7.3. Compared the companies granting the managerial stock with the ones without granting the managerial stock, the differences are significant in the variables of inside directors (0.75), turnover of chairmen (0.13), risk (0.54) and SOE (0.17). The more frequent turnover of chairman it is, the less likely the chairman is to own the company equity stake. If the company is more risky and the stock price is more volatile, the managers in the company won't want to own the company shares. Most of the companies granting managerial equity stock are SOEs. The board in the companies without any managerial equity stock is more dominated by the insiders. The companies granting the managerial equity stock do not perform better than the ones without managerial equity stock, indicating that the managerial equity stake is no incentive to align the interest of the managers to the value of the company. The companies with managerial equity stake are larger in size, grow faster, and pay the managers higher cash pay, too. These comparisons do not lead to the conclusion that the managerial ownership helps reduce the agency cost, as suggested in the other empirical studies (e.g. Mehran, 1995) in the case of China's listed real estate companies.

Table 7.1 The descriptive statistic results of manager compensation and corporate governance structure of China's listed real estate companies

	MAGPAY	MOWN	MOWN- value	Total value	MOWN ^a	Risk	Turnover of chairman ^a	Turnover of top manager ^a	ROE	Firm size	Growth	1 st holder	Others (2 nd -10 th)	BSIZE	INSIDE DIR	INDDIR	Dual leadership ^a
Mean	156.17	0.0002	9.21	165.37	0.67	1.97	0.17	0.39	-0.01	0.62	50.98	41.47	15.16	8.91	5.55	1.37	0.86
Median	106.53	0.000	1.67	113.09	1.00	1.47	0.00	0.00	0.03	0.36	14.39	40.01	12.4	9	5	2	1.00
Standard Error	11.79	0.000	1.66	12.23	0.04	0.14	0.03	0.04	0.03	0.07	16.23	1.54	1.07	0.2	0.17	0.11	0.03
Min	10.18	0.000	0.00	13.42	0.00	0.56	0.00	0.00	-3.77	0	-94.42	0.39	0.65	5	2	0	0.00
Max	722.53	0.003	150.99	747.89	1.00	10.18	1.00	1.00	0.37	4.57	1436.22	74.69	54.16	18	12	4	1.00

Note: ^aFor the binary variable, it equals 1; 0 otherwise

Table 7.2 Mean comparisons of China's listed real estate companies (SOE and POE)

	MAGPAY	MOWN	MOWN- value	Total value	MOWN ^a	Risk	Turnover of chairman	Turnover of top manager	ROE	Firm size	Growth	1 st holder	Others (2 nd -10 th)	BSIZE	INSIDE DIR	INDDIR	Dual leadership ^a
SOE (N=94)	180.88 (15.41)	0.01 0	7.62 (1.26)	188.5 (15.9)	0.72 (0.05)	1.97 (0.17)	0.17 (0.04)	0.38 (0.05)	-0.02 (0.01)	0.73 (0.09)	65.44 (22.05)	45.86 (1.88)	11.08 (1.01)	8.93 (0.23)	5.37 (0.19)	1.26 (0.13)	0.87 (0.03)
POE (N=38)	95.03 (9.51)	0.03 (0.01)	13.13 (4.83)	108.17 (12.01)	0.55 (0.08)	1.96 (-0.26)	0.16 (0.06)	0.42 (0.08)	0.02 (0.04)	0.34 (0.08)	79.79 (12.94)	30.61 (1.6)	25.25 (1.94)	8.87 (0.38)	5.97 (0.38)	1.65 (0.2)	0.82 (0.06)
Mean Difference	85.85***	-0.02**	-5.51	80.34***	0.17*	0.01	0.01	-0.04	-0.04	0.39***	50.23	15.24***	-14.17***	0.03	-0.6	-0.42*	0.06

Note: 1. Standard error mean is in parenthesis

2. ***, **, * stand for the significance at the levels of 1%, 5% and 10%.

3. ^aFor the binary variable, it equals 1; 0 otherwise

7.3. Mean comparisons of China's listed real estate companies with and without managerial stock

		ROE	Firm size	Growth	1 st holder	Others (2 nd -10 th)	BSIZE	INSIDEDIR	INDDIR	Turnover of chairman ^a	Turnover of top manager ^a	Risk	MAGPAY	SOE ^a
MOWN	(N=88)	-0.02 (0.04)	0.67 (0.09)	54.16 (22.81)	40.13 (1.93)	14.18 (1.11)	8.76 (0.21)	5.32 (0.19)	1.27 (0.13)	0.13 (0.04)	0.41 (0.05)	1.80 (0.15)	166.43 (2.09)	0.76 (0.05)
No MOWN	(N=43)	0.02 (0.01)	0.52 (0.09)	44.73 (17.69)	43.54 (2.49)	17.43 (2.34)	9.21 (0.42)	6.07 (0.37)	1.57 (0.19)	0.26 (0.07)	0.37 (0.07)	2.33 (0.30)	135.56 (3.23)	0.60 (0.08)
Mean Difference		-0.05	0.15	9.43	-3.41	-3.25	-0.45	-0.75**	-0.31	-0.13*	0.04	-0.54*	30.88	0.17*

Note: 1. Standard error mean is in parenthesis

2. ***, **, * stand for the significance at the levels of 1%, 5% and 10%.

3. ^aFor the binary variable, it equals 1; 0 otherwise

7.4.2. Regression Analysis

The association between the level of manager compensation, the firm prior performance, firm risk, ownership structure and board structure is examined using a cross-firm multiple regression. The regression equation includes the dependent variable of the total value of manager compensation and the outcome is reported in Table 7.1.

The regression results presented in the Table 7.4 demonstrate that the level of manager compensation across the firms is related to firm size, ownership structure measured by the number of shares owned by the 1st large shareholder, the turnovers of chairman and top manager. The null hypothesis is rejected immediately. The large firms pay higher manager salary, which can be explained to reflect their demand for the higher-quality managerial talent. The manager compensation is positively related with growth rate, although insignificant, indicating that the companies with higher growth rate pay managers highly. The coefficient on ROE is negative; although insignificant, indicating the level of manager compensation is not associated with firm's prior performance.

The variable of the largest controlling shareholder related to ownership structure is significant in the regression of manager compensation at the level of 5%, this is inconsistent with the other studies (e.g. Jensen, 1993) that the existence of large controlling shareholders reduce the agency cost. As discussed in the previous chapter, due to the absence of the real owner of SOEs, the company is controlled by the insiders. They are likely to increase their own wealth by raising their salaries irrelevant of the company performance. The high ownership concentration structure induces the agency cost measured by the manager compensation. The other ownership structure variable measured by the number of shares owned by the other (2nd -10th) large shareholders and the managers have no explanatory power to the manager compensation, indicating the other blockholders are not strong enough to have a say in determining the level of manager compensation and the tiny proportion of managerial ownership is unlikely to align the managers interests with the value of the company. Inconsistent with Allen (1993) and Lambert *et al.* (1993)'s finding that CEO compensation is low when the CEO's ownership is high, the positive association between manager compensation and managerial ownership indicates that the

manager's personal wealth is increased not only by the higher cash pay but also by share equity they own.

The board size and board composition have no explanatory power in deciding the level of the manager compensation. The negative sign of board size to the manager compensation seems to suggest that the small board is easy to be influenced by the managers to decide their compensation. The leadership structure has, negative although, insignificant relation with manager compensation, suggesting the dual leadership structure shall control manager entrenchment, but insignificantly. The irrelevant relation of board structure and manager compensation indicates that the board of directors of the China's listed real estate companies is not effective in designing the reasonable level of manager compensation and in controlling agency problem.

The turnovers of chairman and top manager have significant impact on manager compensation. The positive relation of the turnover of chairman indicates that the new chairman of board has the ability to raise his level of pay by increasing the manager compensation, while the negative association of turnover of top manager indicates that new top manager has no ability to raise the level of manager compensation. The longer the top manager serves the company, the more he would be paid. This finding shows the hierarchy of the controlling power in the listed companies.

The reverse association of the risk and the manager compensation shows that the risky environment will not improve the manager compensation. The managers in the risky companies have lower compensation.

In terms of explanatory power, the regression model indicates that the manager compensation has significant association with firm size, the 1st large shareholding, turnovers of chairman and top manager (adjusted $R^2 = 42\%$, $F=6.81$, $p < 0.001$). Estimating the regression without ownership structure and board structure variables provides insight into the incremental explanatory power of these variables. Table 7.5 reports the regression results without the ownership structure and board structure. Including the ownership structure and board structure variables increase R^2 from 37% to 42% in manager

compensation. The incremental R^2 is 5% but F -statistic decreases from 10.54 to 6.31, ($p < 0.001$). The changes are explained by the ownership structure which adds significant explanatory power to the model of manager compensation. This provides evidence against the null hypothesis of effective governance.

Table 7.4 Regression of manager compensation on its economic determinants, ownership structure and board structure

N=132	ROE	Firm size	Growth	Risk	1 st holder	Others (2 nd -10 th)	MOWN ^a	BSIZE	INSIDEDIR	INDDIR	Turnover of chairman ^a	Turnover of top manager ^a	Dual leadership ^a	SOE	F	Adjusted R ²	Sig.
Total																	
value	-9.91	99.19	0.07	-10.43	1.63	1030.00	28.28	-5.06	5.56	16.81	76.92	-53.16	-28.33	29.50	6.81	0.42	0.00
	(-0.33)	(6.34)***	(1.25)	(-1.27)	(2.10)**	(1.06)	(1.21)	(-0.73)	(0.80)	(1.65)	(2.35)**	(-2.18)**	(-0.82)	(1.20)			

Note: (1). ***, **, * stand for the significance at levels of 1%, 5% and 10%.

(2). T-test is in parenthesis

(3). ^aFor the binary variable, it equals 1; 0 otherwise

Table 7.5 Regression of manager compensation on its economic determinants without ownership structure and board structure

	ROE	Firm size	Growth	Risk	Turnover of chairman ^a	Turnover of top manager ^a	SOE ^a	F	Adjusted R ²	Sig.
Total value	23.04	93.65	0.06	-5.01	31.29	-30.69	46.11	10.54	0.37	0.00
	(0.81)	(7.23)***	(1.19)	(-0.85)	(1.15)	(-1.71)*	(2.14)**			

Note: (1). ***, **, * stand for the significance at levels of 1%, 5% and 10%.

(2). T-test is in parenthesis

(3). For the binary variable, it equals to 1; 0 otherwise

7.5. Conclusions

The study documents that the composition of the manager compensation of China's listed real estate companies and its relation with corporate governance structure and firm performance.

The manager compensation of China's listed real estate company is composed of three elements: basic salary, position allowance and bonus and all of them are paid in cash. The managerial equity stake is a tiny proportion and serves more as welfare than incentive. The distribution of the manager compensation is various across firms and the variation can be partly explained by the different regions where the companies are located. The managers in the large firms and in SOEs get higher pay and this may be explained that the larger firms require higher managerial expertise and abilities.

The ownership structure is associated with the level of manager compensation, after controlling for the economic determinants of compensation. The manager compensation rises with the first large controlling shareholding. The high ownership concentration induces the agency cost measured by the manager compensation. With respect to board structure, I find that board is not associated with the level of manager compensation, indicating the ineffectiveness of board of directors in monitoring the manager performance and controlling agency cost. The manager compensation is not associated with the firm performance measured by ROE, even inversely related with the performance.

The manager compensation is significantly associated with the turnovers of chairman and top manager of the company. The positive and negative associations with the turnovers of chairman and top manager indicate that no matter the turnover is caused by the promotion or relocation of the chairmen in the government department or restructuring of the company by changing the controlling shareholder, it has no effect on improving the corporate governance. The new chairman will enhance his compensation irrelevant of the firm

performance. However, the new top manager has no such power. The longer the top manager serves the company, the higher his compensation is.

The result shows that the ownership structure induces the agency cost as measured by the manager compensation. The companies are typically controlled by the insiders who are the managers and monitors of the company. Rationalizing the ownership structure and developing effective managerial disciplinary and incentive system are fundamental to China's corporate governance reform and are also the major issues the Chinese authorities are facing with. The effective incentive system requires the relevant law and regulation, a set of monitoring system, efficient and transparent stock market and a sound governance environment. However, these are not available in China now. The authorities of the Chinese government and the stock market administration department are exploring various ways to build up a fair and sound stock market in China, improving and reforming the corporate governance system.

Chapter 8. Corporate governance structure and agency costs

8.1. Introduction

The agency costs rooted in the separation of ownership and management were brought to attention by the seminal contributions of Jensen and Meckling (1976). In the original Jensen and Meckling (1976) agency theory, the zero agency-cost base case is, by definition, the firm owned solely by a single owner-manager. When management owns less than 100 per cent of the firm's equity, shareholders incur agency costs resulting from management's shirking and perquisite consumption. Because of the limitations imposed by personal wealth constraints, exchange regulations on the minimum numbers of shareholders, and other considerations, no publicly traded firm is entirely owned by management. Thus, Jensen and Meckling's zero agency cost base case can not be found among the usual sample of publicly traded firms for which information is readily available.

Ang *et al.* (1999) provide evidence on corporate ownership structure and agency costs measured in terms of asset utilisation and operating expense. Their analysis of the Federal Reserve Board's National Survey of Small Business Finances (NSSBF) data on small businesses, relating absolute and relative measures of agency costs suggests that agency costs for outsider managed firms are higher relative to firms that are owner managed. In addition, they show that asset utilisation efficiency and operating expense for small businesses are, respectively, positively and negatively related to the managerial ownership stake in the firm. Singh and Davidson (2003) extend Ang *et al.*'s analysis of the relationship between corporate ownership structure and agency costs to large publicly traded US corporations on NRSE, AMEX and NASDAQ and provide evidence complementing Ang *et al.*'s finding. They find that in large publicly traded corporations, managerial ownership significantly alleviates principal-agent conflicts even in the presence of other agency deterrent mechanisms.

In Ang *et al.*'s study, they focus on managerial ownership and the number of non-manager owners. In their sample, there are firms 100% owned by the managers, which enable them to investigate the expected expense for the no-outside-equity agency-cost base case. Singh and Davidson investigate, in addition to managerial ownership, the role of outside block ownership in terms of their proportion of equity ownership. Since corporations may use alternative governance mechanism as substitutes (Agrawal and Knoeber, 1996), they control for the influence of the size and composition of the board of directors on the level of agency costs. To capture the agency induced managerial expense as a measure of agency cost, Ang *et al.* use total operating expense instead of the firm's selling, general and administrative (SG&A) expense used by Singh and Davidson. SG&A expense representing the cost related to the management function and to the sales of products, includes managerial salaries, rents, insurance, utilities, supplies and advertising cost. The higher level of SG&A expense is a close approximation of managerial pay and perquisite consumption in terms of higher salaries, large office complexes, and other organisational support facilities. These costs, to a large extent, reflect managerial discretionary expense and may be a closer proxy for agency costs.

Ang *et al.* find that the higher managerial ownership significantly and positively influences the corporate assets utilisation efficiency, while Singh and Davidson find some limited evidence that it acts as a significant deterrent to excessive discretionary expense. They also find that in the case of large publicly traded firms, outside block ownership does not help in achieving higher asset turnover, nor in reducing discretionary expense. In terms of board size and composition, they report that larger board size is associated with efficiency losses.

This chapter examines the relationship between corporate governance and agency cost of China's listed real estate companies. In the real estate sector, there are two types of listed real estate companies according to the ultimate owners. One is the state owned companies (SOEs) and the other is privately owned companies (POEs). In SOEs, the state is the ultimate owner and the company is managed by nonowner-manager who owns almost non of the equity stake of the company. In

privately owned companies (POEs), the controlling shareholder is also the manager of the company and owns less than 100% of company's shares. Therefore, this diversified ownership structure gives me a chance to test the agency behaviour in the companies with the different type of ultimate owners.

The equity shares on China's stock market are classified into the state shares, the legal person shares (state owned legal person shares and privately owned legal person shares) and the tradable shares (A-shares, B-shares, H-shares). A listed real estate company can be controlled directly by the state shares or legal person shares. It tests the agency costs in the companies dominated by the state shares and the legal person shares. As Singh and Davidson, it uses two ratios as a proxy of agency cost: selling, general and administration expense (SG&A) and sales to total assets. It hypothesizes that the ownership structure and board structure are not related to the agency costs.

My finding in this chapter is that the large controlling shareholder, no matter it is the state or private person or family or institution, helps improve the assets utilisation efficiency. The existence of other blockholders helps enhance the assets utilisation efficiency and reduce the discretionary expense. The board size and board composition have no effect on controlling the agency cost. Similar to Ang *et al.* and Singh and Davison's findings, it reports the existence of economies of scale between firm size and agency costs measured by assets turnover and SG&A expense. The SOEs seem to have better assets utilisation efficiency, but are insignificant in the control of the SG&A expense. The agency cost in the POEs is higher than in the SOEs, with lower assets utilisation efficiency and higher SG&A expense ratio. My study suggests that in China's real estate sector, although, private funds are active in participating in property development, SOEs, especially the ones controlled by state shares, are more efficient in assets utilisation.

The chapter is structured as follows. Section 8.2 explains the methodological approach and data definition. Section 8.3 deals with the presentation and the discussion of the results. The conclusions are presented in Section 8.4.

8.2. Methodological approach

8.2.1 Agency costs

The first measure for agency cost is the ratio of annual sales to total assets, a measure of assets utilisation as in the studies of Ang *et al.* (1999) and Singh and Davidson (2003). This ratio measures management's ability to employ assets efficiently. A high assets turnover ratio shows a large amount of sales and ultimately cash flow that are generated for a given level of assets. A low ratio would indicate that management is using assets in non-cash flow generating and probably value destroying ventures. While a higher assets turnover may be identified with efficient assets management practices and hence shareholders value creation, a lower sale to assets ratio reflects assets deployment for unproductive purposes. Therefore firms with considerable agency conflict will have lower assets turnover ratios relative to those having less agency conflict.

The second measure of agency costs is selling, general and administration expense (SG&A) scaled by total sales as the measure for managerial agency induced excessive pay and perquisite consumption as in the study of Singh and Davidson (2003). In Ang *et al.*'s research they use total operating expenses including R&D cost. It follows Singh and Davidson focusing on a company's selling, general and administration expense (SG&A) to capture the agency induced managerial expense. Since R&D cost in the real estate companies is limited, it is excluded from the SG&A expense. This accounting item includes salaries which are an important element of total benefits flowing to firm management. In addition, SG&A expense may reflect managerial discretion in spending company resources.

To the extent SG&A expense includes rents, utilities, lease payments, and supplies it directly reflects expenses on office buildings, furnishings, automobiles, and other similar facilities. Further, management may also use advertising and selling expense to camouflage expenditures on perquisites. Therefore, higher

agency conflict would be reflected in higher managerial discretionary expense on SG&A expense.

8.2.2. Ownership structure

The model uses three ownership ratios and they are (1). the number of shares owned by the 1st large shareholder; (2). the number of shares owned by 2nd to 10th large shareholders as a proxy of the presence of other blockholders and (3). the number of shares owned by the managers and directors of the company. While the extent of managerial ownership of firm's equity indicates the degree of the congruence of management and shareholders' interest, it uses the percentage of total equity held by the executives and the board members of a firm as a measure of managerial ownership. Although the managerial equity stake as an incentive scheme is not widely adopted in China at the moment, it still takes this factor into account. But this measurement should be treated differently as in the other empirical studies. For example, in Singh and Davison's study, the insider ownership is used as a measure of interest alignment of managers of the company to the shareholders. In most of China's listed companies, the managerial equity stake is tiny and is issued more as employee welfare than an incentive. Therefore, it is not expected that this variable has any effect on reducing the agency cost. Investors with large ownership stakes have strong incentives to maximize their firms' value and are able to collect information and oversee manager, so can help overcome one of the principal-agent problems in the modern corporation - that of conflicts of interest between shareholders and managers (Jensen and Meckling, 1996). Firms with a large controlling shareholder should have lower agency conflict and lower agency costs. The lower agency costs are reflected in relatively higher assets turnover ratio and a relatively low discretionary expense to sales ratio.

It uses the proportion of the equity held by the large shareholders as a proxy for the incentive and capability of controlling shareholders to monitor managers. Since many of the sample companies have a single controlling shareholder, the

controlling block equity holders refer to the first large shareholder. In POEs, the controlling shareholders are also the top managers of the companies. In SOEs, the controlling shareholder is the state and the companies are managed by non-owner manager.

A larger shareholder's equity stake would indicate greater incentives and capability with outside blockholders to monitor management. Thus, it is expected to have a positive relation between the proportion of the first large shareholding and asset utilisation efficiency. It uses the other (2nd to 10th) large shareholders of a company as a proxy of other shareholders. Similarly, the presence of other block ownership proportion acts as a deterrent to management's wasteful expense and hence should relate negatively to SG&A expenditures.

8.2.3. Control variables

The board size is measured by determining the number of board members. The board composition is measured by classifying board members as insiders (directors from the controlling shareholders and executive directors) and independent directors who hold no post in listed company and maintain no relation with the listed company and its major shareholder that will prevent them from making objective judgment independently.

Following Ang *et al.* and Singh and Davidson, it controls for firm size as well as firm gearing ratio. While there is a case for economies of scale for SG&A expense, variations in asset utilisation may not be easily rationalized in terms of firm size, but assets utilisation may improve with the size due to scope economies and synergy. The firm size is measured in terms of annual sales revenue.

The gearing ratio is measured, as a control variable, with each firm's debt to assets ratio. Debt to assets ratio may be related to agency costs. If higher gearing is used as a bonding device and the fixed committed debt repayments constrain

management's access to cash (Grossman and Hart, 1982; Jensen, 1986). It may be found that the debt level actually relates negatively to agency costs.

8.3. Univariate tests and analysis

8.3.1. Descriptive statistics of sample

Table 8.1 presents descriptive statistics for the pooled sample of the listed real estate companies from 2000 to 2002. The mean (median) assets turnover of the listed real estate companies is 0.26 (0.21). The mean (median) of SG&A expense ratio is 0.46(0.13), indicating skew distribution of the agency cost across the firms. The ownership is more evenly distributed. The mean (median) of first large shareholding is 41.02% (40.01%), the second to tenth large shareholding is 15.22% (12.45%) in total and the managerial ownership is 0.01% (0.00003%). The average board size is 8.87 members (the median is 9), the proportion of inside directors (executive directors and directors from controlling shareholder) is 5.54 members and the number of independent directors is 2.19 members (the median is 2).

Table 8.1 Outcomes of descriptive statistics of agency costs and governance

Nr. =136	Mean	Median	Std. Deviation
Assets turnover	0.26	0.21	0.19
SG&A expense ratio	0.46	0.13	1.36
Sales (¥billion)	0.61	0.37	0.77
Assets (¥billion)	2.20	1.64	1.83
DAR	0.58	0.54	0.40
1 st holder	41.02	40.01	17.94
Others (2 nd -10 th)	15.22	12.45	12.18
BSIZE	8.87	9.00	2.26
INSIDEDIR	5.54	5.00	1.99
INDDIR	2.19	2.00	1.18
Managerial ownership (%)	0.01	0.00003	0.05
SOE ^a	0.76	1.00	0.43

Note: For the binary variable, the mean represents the proportion of firm which equals 1 for the variable.

The firm size distribution of the real estate companies is also skewed as evidenced by the large differences between mean sales (0.61 billion of RMB) and median

sales (0.37 billion of RMB) and so does the total assets (mean is 2.20 billion of RMB and median is 1.64 billion of RMB) over the three years. 76% of the listed real estate companies are SOEs and 47% of the listed real estate companies are dominated by the state shares.

8.3.2. Univariate tests of companies with different types of ultimate owners and companies dominated by different types of shares

Table 8.2 reports the univariate mean comparison test results of the listed real estate companies categorized on the basis that (1). the ultimate owner is the state (SOE) or private person, family or non-state owned institution (POE); (2).the SOEs dominated by the state shares or the legal person shares.

Majority of China's listed real estate companies (76%) are SOEs. The mean of assets utilisation in SOEs is 0.27, higher than the one in POEs which have the mean of 0.20 and the difference of 0.07 is statistically significant at the level of 10%. SOEs have lower SG&A mean of 0.39 than POEs who have SG&A mean of 0.69, but the difference of 0.31 is insignificant. The reason may be because of the economic size, as most of the SOEs are significantly large in size than POEs. From the sales and the assets distribution, SOEs are larger in size than POEs and the differences of 0.36 in sales and 1.11 in assets are significant at the levels of 5% and 1%.

The ownership is more highly concentrated by the first large controlling shareholder in SOEs (43.78%) than in POEs (32.48%). The difference (11.30%) is significant at the level of 1%. The number of shares owned by the second to tenth large shareholders in SOEs is 12%, lower than that in POEs with 24% and the difference (11.73%) is statistically significant at the level of 1%. The board size for the two types of companies is not significantly different, but the POEs have more inside directors (6.06 members) than SOEs (5.37) and the difference (0.69) is statistically significant at 10%, indicating that in the POEs, the controlling shareholder can use relative controlling equity stake (32.48%) to control absolutely the board of directors and further control the company as well.

Table 8.2 Mean comparisons between SOEs and POEs, SOEs dominated by state shares and legal person shares

	SOE N=103	POE N=33	Mean difference	SOE dominated by		Mean Difference
				SOE dominated by state shares N=64	legal person shares N=38	
Assets turnover	0.27 (0.02)	0.20 (0.04)	0.07**	0.26 (0.02)	0.30 (0.04)	-0.05
SG&A to sales	0.39 (0.11)	0.69 (0.33)	-0.31	0.27 (0.05)	0.60 (0.29)	-0.33*
Sales (¥billion)	0.70 (0.08)	0.34 (0.09)	0.36***	0.78 (0.12)	0.56 (0.10)	0.21
Assets (¥billion)	2.47 (0.20)	1.36 (0.15)	1.11****	2.83 (0.28)	1.87 (0.22)	0.96***
DAR	0.60 (0.05)	0.53 (0.02)	0.08	0.56 (0.02)	0.68 (0.12)	-0.12
1 st holder	43.78 (1.88)	32.48 (1.83)	11.30****	51.19 (2.13)	31.30 (2.49)	19.88****
Others (2 nd -10 th)	12.35 (1.07)	24.08 (2.09)	-11.73****	9.02 (1.16)	17.95 (1.79)	-8.92****
BSIZE	8.89 (0.22)	8.82 (0.44)	0.074	9.11 (0.32)	8.53 (0.22)	0.58
INSIDEDIR	5.37 (0.18)	6.06 (0.41)	-0.69**	5.08 (0.20)	5.87 (0.34)	-0.79***
INDDIR	2.11 (0.11)	2.42 (0.22)	-0.32	2.22 (0.15)	1.92 (0.17)	0.30
Managerial ownership	0.00 (0.00)	0.03 (0.02)	-0.03****	0.0002 (0.00)	0.0005 (0.00)	-0.00*

Note (1). *, **, ***, **** Stand for significance at the level of 15%, 10%, 5%, 1%.

(2). Standard error is in the parenthesis.

The POEs have the mean managerial ownership of 0.03%, higher than that in SOEs, which have almost no managerial ownership. But the 0.03% of total shares outstanding can not align the interests of managers to the company. In China, most of the POEs are owned indirectly by private person or family through the group company, but directly managed by the owners.

On the surface, these top managers in POEs do not own or own very tiny proportion of company's equity stake, actually the ultimate owner of the POEs is the largest controlling shareholder who is chairman of board and/or the top manager of the company. So in POEs, the number of shares owned by the

controlling shareholder can be explained as managerial ownership. I treat the controlling shareholder in POEs as the manager-shareholders. Often, there is affiliated relation between the other large shareholders among Top 10 large shareholders, i.e. the ultimate owner of the other large shareholder is also the ultimate owner of the controlling shareholder who is also the top manager and/or chairman of the company.

The agency costs measured in assets utilisation efficiency and SG&A expense in the POEs are higher than the ones in SOEs. The lower asset turnover ratio and higher SG&A expense in the POEs may be explained by two reasons: (1).the scale of economics, since the POEs are smaller in size measured by the sales (0.34 billion of RMB) and total assets (1.36 billion of RMB) than the sales (0.7 billion of RMB) and total assets (2.47 billion of RMB) in the SOEs. (2).the entrenchment of the managers. In the POEs the manager/owner controls on average 32.4% of total shares. Although the manager/owner's interest is aligned with the value of the firm, when the gains they can achieve from controlling the company which they own less than 100% of the ownership outweighs the gains they achieve from the profits of the company, they are entrenched.

Morck *et al*'s interpretation of their findings is that the entrenchment effect will dominate the incentive effect only for medium concentrated levels of managerial ownership. This is so because for low levels of managerial ownership it might not be reasonable to think that the manager is entrenchment at all since his ownership stake is too small to give him any control whatsoever. Furthermore, for very high levels of managerial ownership it seems reasonable that the manager may be 100% entrenched since he will be 100% in control for all very high levels of ownership. As a result, the entrenchment effect will only have an impact on performance for changes in the medium-concentration levels of ownership. This seems to explain the inducement of the agency cost in the POEs, but the mean comparison test could not tell the causality.

It further separates SOEs into two groups: one is dominated by the state shares and the other is dominated by the state legal person shares to test the agency

behaviour in the two types of SOEs. The mean assets utilisation ratio in the state shares dominated SOEs is 26%, slightly lower than the ones in the SOEs dominated by the legal person shares which is 30%, although the difference (0.05) is insignificant. However, there is significant difference (0.33) in SG&A expense between the state shares dominated SOEs (0.27) and the legal person shares dominated SOEs (0.60), indicating that the managers in the SOEs dominated by the legal person shares have more discretionary power and the agency cost in these companies is higher.

The state shares dominated SOEs are larger in size measured by the sales (0.78 billion of RMB) and the assets (2.83 billion of RMB) than the ones (0.56 billion of RMB and 1.87 billion of RMB) dominated by the state legal person shares. The difference in the assets (0.96) between the two types of firms is significant at the level of 5%. The SOEs dominated by the legal person shares have higher debt to assets ratio (0.68) than the state shares dominated ones (0.56) and POE (0.50), although the differences are insignificant, indicating that the SOEs are easier to get bank financing than the POEs.

The ownership in the state shares dominated companies is more highly concentrated by the first large shareholder with the mean of 51.19 % than the one in the legal person shares dominated SOEs with the mean of 31.10%, indicating the state is in an absolutely controlling position in these companies. The mean number of shares owned by the other large shareholders in legal person shares dominated SOEs is 17.96%, higher than that in the state shares dominated SOEs with the mean of 9.02%. The differences in the ownership structure are significant. The board size is not significant different, but the state shares dominated SOEs have fewer inside members (5.08) and more independent directors (2.22) on the board of directors than the legal person shares dominated SOEs (5.87 and 1.92). The managerial ownership in the legal person shares dominated SOEs (0.0002%) is higher than the state share dominated SOEs (0.0005%), although these tiny ratios can be negligible.

It makes a cross-comparison of the POEs with the SOEs dominated by the legal person shares, since both types of companies are dominated by the legal person shares. It seems that POEs have higher agency costs with the lower assets turnover ratio of 0.2 and higher SG&A ratio of 0.69 compared to 0.3 for the assets turnover ratio and 0.56 for SG&A ratio in the SOEs dominated by the legal person shares. The ownership structure and board structure in both types of companies are more or less similar. The SOEs dominated by legal person shares are larger in size than the POEs measured by the sale or the total assets.

Overall, these univariate tests provide some evidence that agency cost behaves differently in SOEs and POEs and the SOEs dominated by the state shares and the legal person shares. The companies who have lowest agency costs are the SOEs dominated by the state shares, followed by the ones dominated by the state legal person shares and POEs as measured by SG&A expense and assets turnover. From assets distribution measured by sales and assets, the SOEs dominated by the state shares are largest, followed by the SOEs dominated by the legal person shares and POEs. Ownership is most concentrated by the large controlling shareholder in the SOEs dominated by the state shares, followed by POEs and the SOEs dominated by the legal person shares. The SOEs dominated by the state shares have the large board size; POEs have the most inside directors on the board. The debt to assets ratio is highest in SOEs dominated by the legal person shares, followed by the SOEs dominated by the state shares and POEs.

8.3.3. Univariate test of the companies with below and above the median of agency costs measured by the assets turnover and SG&A expense

In Table 8.3, I report the univariate mean comparison test results of the China's listed real estate companies categorized on the basis of above and below median value for agency costs measured by assets turnover and SG&A expense. Column 2 and 3 report the assets turnover ratios above and below the median. Column 4 reports the mean difference. Column 5 and 6 report the SG&A expense above and below the median and column 7 reports the difference.

69 variables have above median assets turnover compared to 66 variables below the median and 67 variables have below median SG&A expense compared to 68 variables above the median. The table shows that the companies with above median assets turnover ratio have higher proportion of 1st large shareholding (42.46%), compared to the ones (39.61%) below the median assets turnover ratio. The difference (2.74%) is not significant. However, the companies with lower SG&A expense have slightly lower 1st large shareholding (40.26%) than the ones (41.76%) with above SG&A expense although the difference (1.50%) is insignificant.

Table 8.3 Mean comparisons of agency cost measures-analyzing high (above median) versus low (below median) assets turnover and SG&A expense

	Assets turnover of above variable median N=69	Assets turnover of below variable median N=66	Median Difference	SG&A expense ratio of above variable median N=68	SG&A expense ratio of below variable median N=67	Median Difference
1 st holder	42.36 (2.18)	39.61 (2.19)	2.74	41.76	40.26	1.50
Other (2 nd -10 th) holders	16.90 (1.72)	13.45 (1.14)	3.45**	13.40	17.06	-3.67**
BFSIZE	9.23 (0.27)	8.50 (0.28)	0.73**	8.74	9.01	-0.28
INSIDEDIR	5.72 (0.24)	5.35 (0.25)	0.38	5.12	5.97	-0.85****
INDDIR	2.33 (0.15)	2.03 (0.14)	0.30*	2.24	2.13	0.10
Managerial ownership (%)	0.01 (0.01)	0.06 (0.01)	0.00	0.01 (0.00)	0.01 (0.01)	0.00
SOE ^a	0.83 (0.05)	0.47 (0.06)	0.14***	0.78 (0.05)	0.73 (0.05)	0.05

Note: (1). *, **, ***, **** Stand for significance at the levels of 15%, 10%, 5% and 1%.

(2). Standard error is in the parenthesis.

(3) For the binary variable, the mean represents the proportion of firm which equals 1 for the variable.

This finding indicates that the large shareholder has the incentive and capability to enhance the assets utilisation efficiency, but not in reducing the SG&A expense.

The companies with higher assets turnover ratio and lower SG&A expense have higher proportion of the other (2nd to 10th) large shareholding (16.90% and 17.06%) than the ones with lower assets turnover ratio and higher SG&A expense (13.45% and 13.40%). These differences are statistically significant at the level of 10%. This finding suggests that the other blockholders act as monitor to oversee the management and help reduce the agency costs, consistent with the suggestions of Shleifer (1986), Kang (1995) and La Porta *et al.* (1998 and 1999).

The managerial ownership has no explanatory power for the assets utilisation efficiency because of the tiny amount of shares owned by managers and directors. 83% of the companies with above the median assets turnover ratio are SOEs and 54% of them are controlled directly by the state shares. This finding indicates that SOEs, especially the SOEs dominated by the state shares have lower agency cost measured by the assets utilisation efficiency compared to POEs.

Inconsistent with Yermack (1996) that the companies with smaller board size perform better, but consist with my finding in the previous chapter that in China's context, the performance of the listed real estate companies increases with board size, and the increase in board size implies the increase in the number of independent directors or adjustment of ownership structure.

Table 8.3 also shows that the companies with below median SG&A expense have larger board size (9.01) and more inside directors (5.97) than the ones with above median SG&A expense (8.74 and 5.12), but the difference of 0.28 in board size is not significant. The difference of 0.85 in inside directors is significant at the level of 1%. The companies with higher assets turnover have more independent directors (2.33) than the ones with the lower assets turnover (2.03) and the difference (0.30) is significant at the level of 15%. The difference in independent directors for the companies with above and below the median SG&A expense is not significant. Again, 83% of the companies with higher assets turnover ratio and 73% of the companies with lower SG&A expense are SOEs and the SOEs dominated by the state shares.

Overall, the univariate tests above provide evidence that ownership concentration seems to help improve the asset utilisation efficiency, but is not significant in controlling the managerial discretionary expense. The presence of the other large shareholders as monitor helps reduce the agency cost. The controlling shareholder controls the company by controlling the board of directors. The independent director is new thing for most of the China's listed real estate companies and its explanatory power to control agency cost is not significant at this stage. It seems that in SOEs, the agency cost is lower than in POEs. The reason for this needs further study. In the next section, it adds control variables for the analysis.

8.4. Regression analysis

It relates the ownership structure to agency cost measures in the regression analysis that permits controlling for other governance and structural variations across the firms. It also allows investigating how effective the board mechanisms are in enhancing assets utilisation efficiency and in controlling managerial discretionary expense.

8.4.1. Agency cost in term of assets turnover and SG&A expense

Table 8.4 reports the result of regression analysis of assets turnover and SG&A expense to ownership structure and board structure. The 1st large shareholder is positively and significantly associated with the asset turnover, indicating that the largest shareholder makes more effort to improve the assets utilisation efficiency. The inversely and insignificant association of the 1st large controlling shareholder with SG&A expense may be attributable to the non-owner managers in the SOEs pursuing perk, shirking and excessive perquisite consumption and the owner managers in the POEs to extract more benefit from the controlling right than from the profits of the company. The managers in SOEs do not hold or hold tiny proportion of the equity stake of the companies and are subordinate to the controlling shareholders. Their personnel interests are not aligned with the value

of the companies. They have the incentive to pursue the maximisation of their own interests at the expense of the company interests. In the POEs, the owner/manager owns the controlling number of shares which makes him control the company effectively. When the benefits the managers achieve from the controlling power outweigh the ones from the profits of the company, they are entrenched.

Table 8.4 Regression analysis of agency costs measured by assets turnover ratio and SG&A expense to ownership structure and board structure

	Assets turnover	SG&A expense
Constant	-0.03 (-0.36)	0.47 (0.73)
1 st holder	0.002 (2.42)***	-0.01 (-1.35)
Other (2 nd -10 th) holders	0.01 (4.27)****	-0.02 (-2.71)***
Managerial ownership (%)	-0.35 (-1.23)	2.34 (1.11)
BSIZE	0.00 (-0.53)	0.05 (0.79)
INSIDEDIR	0.00 (-0.39)	-0.08 (-1.21)
INDDIR	0.01 (0.53)	0.06 (0.70)
Firm size	0.17 (8.92)****	-0.32 (-2.30)***
DAR	0.05 (1.44)*	1.98 (8.09)****
SOE ^a	0.08 (2.33)***	-0.36 (-1.37)
Adjusted R ²	0.45	0.46
F	11.83	10.59
Sig.	0.00	0.00

Note: (1). *, **, ***, **** Stand for significance at the levels of 15%, 10%, 5% and 1%.

(2). Standard error is in the parenthesis.

(3) For the binary variable, the mean represents the proportion of firm which equals 1 for the variable.

The number of shares owned by the other (2nd to 10th) large shareholders is positively and negatively associated with assets turnover and SG&A expense and significant in both equations. This finding is consistent with the previous univariate tests and also consistent with the other empirical studies such as Holderness and Sheeham (1985) and Barclay and Holderness (1991) that outside blockholders act as an instrumental in generating superior corporate performance. The managerial ownership has no explanatory power in controlling agency cost.

As discussed previously, the managerial ownership functions more as employee welfare rather than an incentive. The controlling shareholders impinge upon the interest of small shareholders by way of non-division of dividends and diversion of profits. The exploitation of small shareholders by controlling shareholders constitutes ex ante an expropriation threat that reduces managerial initiative and non-contractible investments and many come into conflict with performance-based incentive schemes (Burkart, 1997).

The board structure has no effect on reducing the agency cost. Board of directors as a monitoring organ in the company is dominated by the insiders and has no power in disciplining the managers and therefore, has no effect on controlling the agency cost.

The coefficients for firm size are positively and negatively related to assets turnover and SG&A expense and statistically significant at the levels of 5% and 1%. The finding shows a strong evidence of economic scales.

The relation of debt-to-assets ratio to agency costs is mixing. The debt-to-assets ratio is positively related with assets turnover and significant at the level of 15%. The positive association indicates that firms with higher debt-to-assets ratio are more efficient in their assets utilisation. This result supports Jensen's (1986) theory of free cash flow, which considers additional debt beneficial as the firm attempts to improve the productivity of its assets as a result of additional debt required. Such positive relationship is also identified by Gorman (2000), Ang *et al.* (1999) and Singh *et al.* (2001).

The regression test outcome in Table 8.4 shows a positive association between debt-to-assets ratio and SG&A and significant at 1% level. Obviously this finding is inconsistent with the other empirical studies.

One of the ways to reduce the conflicts between managers and shareholders is the use of debt financing to discipline managers (e.g. Jensen, 1986 and Stulz, 1990). Grosseman and Hart (1982) were the first to argue that managers could pre-commit to work hard by using debt rather than equity. Debt not only reduces the free cash flow but also provides discipline to management through the debt market. Debt monitoring hypothesis is formalised by Harris and Raviv (1990) and Stulz (1990) and empirically demonstrated by Maloney *et al.* (1993). Shleifer and Vishny (1997) provide extensive survey about the role for debt in reducing the conflict of interests between managers and shareholders.¹⁸

The result in Table 8.4 shows that for China's listed real estate companies the additional debt did not decrease the agency cost measured by SG&A expense ratio, and not reduce the cash flow available for spending at the discretion of managers.

The majority of corporate debt of the listed real estate companies is privately placed debt in the form of bank loans. The banks are state owned. Public corporate debt market is not well developed in China. In 2002, there is RMB 625.93 billion of publicly placed debt with merely corporate bonds amounted to RMB 32.5 billion, accounting for 0.85% of the stock market capitalisation (CSFS, 2002). The supervision effect of the banks may be weakened by the intervention

¹⁸ Several articles model the benefits and costs of debt, the benefit is usually the reduction in the agency cost, such as preventing the manager from investing in negative net present value projects, or forcing him to sell assets that are worth more in alternative use. The main costs of debt is firms may be prevented from undertaking good projects because debt covenants keep them from raising additional funds, or else they may be forced by creditors to liquidate when it is not efficient to do so.

of the supervising department of the companies. Baer and Gray (1996) argue that debt is often considered to be a “soft” rather than a “hard” constraint in many transitional economics and this is certainly true for the SOEs in China and the finding here provide a supplementary evidence.

According to capital structure theory, the way to refinance is determined by the cost of capital. In developed capital market, the top managers are restrained by shareholders and creditors, facing the pressure of paying dividend and debt. The empirical results show that listed firms obtain capital first from internal sources, then from debt, and last from equity. Capital cost influences the style of financing. In China, due to the special ownership structure of listed firms, the state share is absolutely the largest among total shares and the representatives of the state shares are usually absent. This reduces the restriction to management, and the managers would over pursue the control right of cash flow. The consequence is that re-financing of listed firms would have partiality for equity rather than debt. Additionally, there is not much pressure of dividend from shareholders, so refinancing of listed firms in China usually place the order of debt after additional or right shares.¹⁹

The coefficient of SOEs is significant in the asset turnover ratio, but insignificant in controlling SG&A expense. This is consistent with the previous test.

In sum, the analysis relating the ownership structures measured by the numbers of shares owned by the 1st large shareholder, the other (2nd to 10th) large shareholders and managers and the agency costs measured in terms of assets turnover ratio and SG&A expense suggests that even after controlling for the other variables such as board size and board composition, the controlling shareholder has the incentive to improve the assets utilisation efficiency but not to reduce the SG&A expense.

¹⁹China Security Regulatory Commission requires that the debt to assets ratio of listed firms who want to add shares on stock market must have higher debt to assets ratio than the average level of the same industry. This policy was announced on March, 18th, 2001.

This is rooted in the ownership structure of China's listed companies. In SOEs, the controlling shareholder is the state or state agent. The company is managed by the outsiders who own almost no equity stake of the company. The controlling shareholders in SOEs are the politicians as the representatives of the state assets who have the responsibilities to improve the assets utilisation efficiency. But the politicians are not the residual claimants of the company; therefore they have no incentive to oversee the management of the company. And the company is managed by non-owner manager who may deviate from the maximisation of the value of the company, by pursuing self interests at the expense of the company and destroying the wealth of the shareholders.

In the POEs, the controlling shareholder is the manager of the company. The owner/manager owns controlling equity stake of the company and their interest is aligned with the interest of the company in this sense. But there is entrenchment when the manager/owner can extract more benefit from the controlling power. The higher agency costs in the POEs reflect the entrenchment of the owner/manager.

The presence of the other large shareholders is significant in controlling the agency cost and enhancing the assets utilisation efficiency. This finding is consistent with the hypothesis that the ownership structure explains the assets efficiency variations across the listed real estate companies. Inconsistent with Singh and Davidson (2003), board structure has no explanatory power to control the agency cost and does not play an important role in monitoring the managers. The tiny managerial ownership makes the managers unlikely to align their interest with the company's wealth, which is the problem in the managerial incentive system in the China's corporate governance.

The effect of debt-to-assets ratio as corporate governance is mixed. The positive associations between debt-to-assets ratio to sales to asset ratio and to SG&A suggest that on the one side, additional debt has brought additional cash flow to the firm and as the result of additional debt required, attempted to improve the productivity of its assets. On the other side the positive association to SG&A

shows the “soft” constraint of debt in the real estate companies and the debt did not use as a corporate governance method to reduce the cash flow available for spending at the discretion of managers. The optimal debt-to-equity ratio is the point at which firm value is maximised, the point where the marginal costs of debt just offset the marginal benefits. My mixed finding here does not show the relation of marginal cost and marginal benefits of the listed real estate companies.

8.4.2. Economic significance

The model can be categorized as a Lin-log model, in which the test variable coefficient (ownership concentration ratio) directly yields a measure of absolute change in the expected value of dependent variables (assets turnover and SG&A expense) for a given proportionate change in the test variable (Gujarati, 1998). Therefore, it can be interpreted the ownership coefficients in terms of their economic significance in generating assets utilisation efficiency gains and SG&A expense savings. For example, the coefficient of the 1st large shareholder is 0.002 (Table 8.4, Column 2), which implies that for a 1% increase in the 1st large shareholder ownership there will be 0.01×0.002 increase in the sales to assets ratio. Thus for an average firm with median sales of 37 million of RMB (see Table 8.1), the resulting change in sales revenue will be $(0.01 \times 0.002 \times 37)$ 0.07million of RMB without expanding the existing assets base. In terms of saving, for an average firm with median SG&A expense to sales ratio of 0.13, the SG&A expense ratio will be lower 0.0013% (Table 8.4, Column 3) (the median of SG&A expense is 44.89 million of RMB, the saving is 0.004 million of RMB).

To extend this calculation to the number of shares owned by the other (2nd to 10th) large shareholders, I get 0.37 million of RMB increase in sales $(0.01 \times 0.01 \times 37)$ and 0.026% lower of SG&A expense to sales ratios (0.01 million of RMB saving). Compared with the increase in 1st large shareholder’s ownership, the increase in the shareholding of the other large shareholders can get more sales increase (0.30 million of RMB) and lower SG&A expense (0.06 billion of RMB of saving). These increased cash inflows will eventually get reflected in higher earnings per

share and hence higher share price and market value of the firms. The test suggests that the increase in the number of shares owned by the other large shareholders (2nd to 10th) can reduce more agency cost than the increase in the number of shares owned by the 1st large shareholder.

8.4.3. Orthogonalised regression for sensitivity test

To avoid the inclusion of highly correlated independent variables in my model, the orthogonalised regressions are conducted to demonstrate the robustness of my findings. This technique is used by Singh and Davidson (2003) in their study of agency costs. Orthogonal means unrelated. To avoid the possible correlation among the three variables, namely, the 1st large shareholder, the other (2nd to 10th) large shareholders and the firm size, these variables are orthogonalised by replacing the 1st large shareholder, and firm size variable by their respective residuals. Specifically, while the 1st large shareholder residuals are obtained by regressing firm size and the other (2nd to 10th) large shareholders on the 1st large shareholder; the firm size residuals are obtained by regressing the 1st large shareholder and the other (2nd to 10th) large shareholders on firm size. The regressions are reported in Table 8.5.

Table 8.5 shows the coefficient for the 1st large shareholder is positively associated with the assets turnover as in Table 8.4, the non-orthogonal regression, but insignificant. However, it is negatively associated with SG&A and significant at the level of 1%. The orthogonalised regression models for the other (2nd to 10th) large shareholders produce significantly positive association to assets turnover and insignificantly negative association to SG&A. The control variable coefficients are similar in firm size and significant in the equations of the assets turnover and SG&A. SOE variable coefficients in both equations are similar compared to non-orthogonal models and significant in assets turnover.

Table 8.5 Orthogonal regression analysis of ownership structure and board structure on assets turnover and SG&A expense

	Assets turnover	SG&A
(Constant)	0.24 (3.58)	1.01 (1.70)
1 st holder	0.001 (0.66)	-0.03 (-3.40)****
Others (2 nd -10 th)	0.003 (2.38)***	-0.01 (-1.29)
Managerial ownership	-0.35 (-1.24)	2.65 (1.05)
BFSIZE	-0.01 (-0.99)	-0.02 (-0.39)
Firm size	0.16 (8.76)****	-0.30 (-1.74)**
SOE ^a	0.09 (2.42)***	-0.20 (-0.63)
Adjusted R ²	0.45	0.13
F	16.61	3.76
Sig.	0.00	0.00

Note: (1). *, **, ***, **** Stand for significance at the levels of 15%, 10%, 5% and 1%.

(2). Standard error is in the parenthesis.

(3) For the binary variable, the mean represents the proportion of firm which equals 1 for the variable.

8.5. Conclusions

This chapter extends Ang *et al.* (1999) and Singh and Davidson (2003) empirical analysis of the relation between ownership structure and agency cost to China's listed real estate companies. Using slightly different measures of ownership structure and controlling for the governance mechanism difference across the firms, it is found that the 1st large shareholding helps enhance the assets utilisation efficiency, but it is not significant in controlling SG&A managerial discretionary expense.

SOE is managed by non-owner manager. POE is managed by the owner-manager. The agency cost in the POEs is higher than in the SOEs. This finding indicates that the owner/manager in the POE who owns less than 100% of the company can get more benefits from the controlling right than from the profits of the company and the entrenchment effect dominates the incentive effect for the medium concentrated level of managerial equity stake.

SOE is significant in improving the assets utilisation efficiency, but not efficient in controlling the managerial discretionary expense. This is connected with the ownership structure. The assets in the SOEs belong to the whole people nominally and are managed by non-owner managers appointed by the government. The absence of real owner in the SOEs facilitates the managers to pursue perk, shirking and excessive perquisite consumption at the expense of the company.

It not only studies the controlling shareholding as a determinant of agency cost, but also investigates the role of other blockholders in disciplining the management. It reports that the proportion of the equity held by the other (2nd to 10th) large shareholders relates significantly to agency costs as measured by the assets turnover and managerial discretionary expense. This finding suggests that the presence of other blockholders helps improve the corporate governance and restrain the agency cost more efficiently than the increase in the number of shares owned by the first large shareholder.

The analysis also controls for the role of board size and board composition in alleviating agency problems. Board composition does not seem to significantly influence agency costs in terms of assets turnover and managerial discretionary expense. The board size is unrelated to the agency costs. This finding indicates that board of directors does not play effective role in controlling agency cost and disciplining the managers in the China's listed real estate companies. The reasons could be that the board of directors is dominated by the insiders, therefore, such board is unlikely to conduct the monitoring role and control the agency costs effectively.

The finding in this chapter suggests that the corporate governance structure of China's listed real estate companies induces the agency costs. The agency cost in the POEs is higher than in the SOEs. To reduce the agency costs, the corporate governance structure should be reformed, for example, to dilute the control power among more than one large shareholder and improve the monitoring function of board of directors.

The finding in this chapter provides another evidence of the China's corporate governance issues. The "insider control" as an expression of manager controlling mechanism in the transitional economy has special incentive and disciplinary function to the managers. On the one side, compared with the traditional planned economy, "insider control" gives the managers the absolute managing autonomy and releases the great motivation for the managers to improve the production efficiency. On the other side, "insider control" facilitates the managers to increase in their own interests and wealth at the expense of the company due to the unavailability of the efficient monitoring system. Now the effective manager compensation system is not available. The manager's nominal salary is low; therefore, the managers pursue on-the-job perquisite consumption as a compensation of their personnel resource.

There is no empirical study showing that to what extent the manager's on-the-job consumption can substitute the manager compensation. However, this substitution brings about two problems for the China's corporate governance reform. One is the controlling right has no incentive and disciplinary function in China's corporate governance and the manager compensation does not function as incentive system if the manager compensation is not reformed; thus the excessive on-the-job consumption can not be resolved. Another problem is that in the current situation that the on-the-job consumption is higher than the manager salary and there is no system to restrain the on-the-job consumption, to what extent the manager compensation is raised as substitution of the on-the-job consumption. This is the topic for future research.

Chapter 9. Conclusions

This thesis investigates the relationship between corporate governance and corporate performance of China's listed real estate companies. The conclusions are focused entirely on the issues that are relevant with regard to the empirical analyses in Chapter 5, 6, 7 and 8 concerning some of the theories on ownership structure, board structure, manager compensation and agency costs reviewed in Chapter 2 focuses mainly on the two fundamental issues of the China's corporate governance - ownership structure and managerial incentive system - and the related agency problems caused by them.

The framework of the thesis is that the ownership structure and manager compensation system as corporate governance mechanisms matter and has impact on corporate performance. Notwithstanding, the fact there is no perfect corporate governance mechanisms, and that the development of an appropriate mechanism for China is a gradual process, there is still an imperative to move forward as quickly as possible in order to minimise the associated costs. However, the maturity of a sound corporate governance system that sustains long-term development is inextricably linked to the success of economic, legal and cultural development in Chinese society as a whole.

China's capital market has developed greatly in the past decades, from 14 listed companies in 1991 to 1200 in 2002 and the total market value of 10.48 billion of RMB in 1992 to 383.29 billion of RMB in 2002. The weak corporate governance will slow the stock market development. Compared with other emerging markets, the stock market value of China is only 18% of GDP (CSFS, 2003). The corporate governance is important, especially when China is facing SOE transition.

The thesis discusses, first of all, the general characteristics of China's corporate governance structure before it focuses on the real estate sector. In Chapter 4, the fundamental issues the China's corporate governance reform are facing and the related corporate governance structure are investigated. Because of historical reasons, most of the listed companies in China are SOEs. The major

characteristics of China's corporate governance are the ambiguous property rights and poor managerial incentive system which have induced the other governance issues such as the irrational ownership structure, imbalance board structure, absence of manager labour market and takeover market.

From the liquidity point of view on China's stock market, more than 60% of stocks are non-tradable. Majority of listed companies are controlled by the state. Nominally, the state assets belong to the whole people and are controlled by the managers who are appointed by the government and supervised and monitored by the politicians from the government. The politicians have ownership right of the company, but no claimant right of the residual of the company; therefore, they have no enough incentive to monitor the performance of the company. In practice, the companies have no real owner and are controlled by the managers (so called insider control) who own almost none of the company equity stake. The insiders have the power to expropriate the wealth of the company and all the stockholders.

The ownership is highly concentrated with the largest shareholder owning 40% of the total outstanding shares. In China where there is no strong legal protection of minority shareholders, the empirical studies show that the ownership concentration is positively related with firm performance. This highly concentrated ownership structure at the same time facilitates the controlling shareholder to expropriate the interest of minority shareholders, since the minority shareholders are too weak to insert any influence on the firm performance. Therefore, the increase in the number of shares owned by other blockholders will improve the corporate governance and firm performance. The empirical studies in Chapter 5 and Chapter 8 also provide supplementary evidence to the suggestion.

The highly concentrated ownership structure determines that the board of directors is controlled by the insiders - directors from controlling shareholder and executive directors. Such a board of directors is unlikely to play a crucial role in monitoring the managers and controlling the agency cost. The independent directors are newly introduced in most of the companies and the effect on improving the corporate governance is not clear now.

There is no effective managerial incentive system. The managers in the SOEs are traditionally regarded as the civil servants and their salaries are regulated by the government. How the government regulates the level of manager compensation to motivate the managers to work hard to maximize the value of the company is not clear. It is also not clear whether there is a quasi-market for the SOE managers inside the government. The manager compensation is not related with firm performance. The managerial stock option as incentive system is not widely adopted in China's listed companies, due to the absence of relevant favourable law and regulation, appropriate method to evaluate the company and assess the performance of managers. Agency cost is induced by the ineffective manager compensation system and the managers pursue perking, shirking, rent-seeking, excessive perquisite at the expense of the company.

The market as external governance factor is not effective in China. Although the China's stock market seems to be an active takeover market and there were frequent changes of controlling shareholders, but the takeovers did not happen by transparent market competitive bidding, instead, by the negotiation under the counter between the related parties. The empirical studies on the purpose of takeovers on China's stock market show that the motivation of the takeover is not to improve the corporate governance and firm performance, but for the managers to increase their own wealth by expanding their empire and their income.

In many countries, institutional investors have become the predominant players on the financial markets and their influence worldwide is growing, chiefly due to the privatisation and development of pension fund systems. An increasingly important external control mechanism affecting governance worldwide is the role of the institutional investor. Institutional investors can exert direct influence on management's activities through their ownership, and indirect influence by their ability to trade their shares (Gillan and Starks, 2001). For the historical reason, the institutional investors in China are weak. By the end of 2002, less than 1% of total investors are the institutional investors. The pension fund which was introduced since 1980 is managed by individual companies. Although the Chinese authorities

have realized the importance of institutional investors in the improvement of the corporate governance and put it on the top of the agenda to develop the institutional investors, at the moment, the institutional investors on China stock market are too weak to insert any influence on the management of the company.

In China, the real estate market is not transparent and fully open market. The scarce resource of land is controlled by the government and traded not via market transparent bidding price, but via negotiation of related parties. Thousands of real estate companies are widely dispersed over the country and are small in size. For some reasons, the IPO of the real estate companies is under strict control of the government. There are 50 listed companies categorized into the real estate sector, although the booming real estate market in China has attracted many companies to get involved in the property development. It has investigated that under such market environment, whether the corporate governance matters to the firm performance.

The empirical findings in Chapter 5, 6, 7 and 8 are highlighted as follows.

1. In the real estate industry, the state controls about two thirds of listed real estate companies (SOEs). One third of them are privately owned companies (POEs). The ownership is highly concentrated and the largest controlling shareholder owns averagely 41% of total outstanding shares. 25.5% of the real estate stocks are state shares, 31.4% are legal person shares and the remaining shares are tradable A- and B-shares. The empirical study in Chapter 5 shows that in the real estate sector, the ownership concentration is positively related with firm performance. The firm performance ratios measured by ROE and EPS increase with the number of shares owned by the first large shareholder and decrease when the first large shareholding reaches over 50%. This finding is consistent with other empirical studies such as Shleifer and Vishny (1997, p. 754) who point out, “large shareholders thus address the agency problem in that they have both a general interest in profit maximisation, and enough control over the assets of the firm to have their interest respected”. The

state shares are positively related with firm performance, although insignificant and legal person shares are negatively related with firm performance. In the real estate sector, the companies controlled by legal person shares are either SOEs or POEs, the test does not show whether the negative impact is caused by the SOEs dominated by state legal person shares or POEs. By cross-comparison of the ownership structure and firm performance in the SOEs and the POEs, the SOEs are larger in size and have higher ownership concentration ratio and the largest shareholder owns 44% of total shares compared to 33% in the POEs. The POEs perform slightly better, although the difference is insignificant. The cross-comparison of the companies controlled by legal person shares and state shares shows the companies controlled by the state shares are largest in size and perform the best; therefore, it can be inferred that the SOEs dominated by legal person shares perform the worst. The empirical finding here shows the importance of economic scale of real estate companies and the influence of the government on the real estate sector.

2. The presence of the other blockholders will improve the monitoring function and the firm performance and this evidence is achieved by the significant relation of the number of shares owned by other large shareholders (2nd to 10th) in the regression of performance measured by ROE. The finding in Chapter 8 also provides evidence of the monitoring effect of other large shareholders in reducing the agency cost. But the negative and significant relations of the squared term of the number of shares owned by the other large shareholders indicate that the diffused ownership structure won't improve the firm performance. The cross comparison of the performance of the companies with a single controlling shareholder to the ones with more than one controlling shareholders shows that the latter perform better than the former, although the difference is not significant, indicating that the presence of the other blockholders may control the expropriation of the largest controlling shareholder and improve the corporate governance.

3. The board of the listed real estate companies is composed of 9 members within the range of the requirement in the Company Law. The board is controlled by the insiders. 5 of 9 members of board of directors are from the controlling shareholder and the executive directors and 2 are independent directors. The board size is positively associated with firm size, indicating that the large firm has large board. However, board size is negatively related with ownership concentration, although insignificant, indicating highly concentrated ownership structure leads to smaller board which is easily dominated by the insiders. Therefore, in Chinese corporate governance environment, the increase in the board size indicates the increase in the proportion of the directors from other blockholders and independent directors. The former implies the power balance of the ownership structure and breakdown of the dominance of the one single controlling shareholder on the board of directors. This is consistent with the previous finding. The board size is positively related with the firm performance and significant in the regression of EPS, but the relation is non-linear. The univariate test shows that when the board is composed of 9 to 11 members, the firms perform significantly better.

4. There is no effective managerial incentive system in China's listed real estate companies. The managers mainly get cash pay (including fixed salary, position allowance and bonus). 99% of the manager compensation of listed real estate companies is cash pay. 67% of the listed real estate companies grant managerial equity, amounting to 0.002% of total real estate stocks. In the POEs, this ratio is slightly higher than that in the SOEs, but the difference is not significant. This tiny proportion of managerial equity is converted from the previous employee shares and serves more as employee welfare or fund raisings, rather than an incentive; therefore, it can not align the manager's interest with the wealth of the company. The manager compensation is not associated with the firm performance, but associated with firm size and the ownership concentration ratio measured by the 1st large shareholding. The manager's salaries in the SOEs are higher than in the POEs. The board of directors

has no explanatory power in deciding manager compensation. The turnovers of chairman and top manager are positively and negatively associated with the manager compensation. The new chairman would increase his own salary by increasing the manager compensation, but the top manager has no power to do so, indicating the hierarchy of controlling power in the listed companies.

5. The poor corporate governance structure induces the agency cost. The empirical finding here provides supplementary evidence. The agency costs are measured by the assets turnover ratio and ratio of expense of selling and general administration to total sales (SG&A). The regression test shows that the 1st large shareholder is positively related with assets turnover ratio and statistically significant; however, it is inversely related with SG&A expense and insignificant, indicating that the large controlling shareholder has the capability to improve the assets utilisation efficiency, but no enough incentive to control the managerial discretionary expense. The ownership ratio measured by the other large shareholders (2nd-10th) is positively and negatively associated with assets turnover and SG&A, indicating that the presence of the other blockholders will reduce the agency costs, consistent with the finding in Chapter 5. The marginal benefit brought about by the other blockholders is higher than that by the largest controlling shareholder. Most of the companies which have lower agency costs (higher assets turnover ratio and lower SG&A ratio) are SOEs. POE is managed by owner-manager who owns averagely 33% of total shares. Theoretically, the agency cost in POEs should be lower. However, the empirical study here shows that the managers in the POEs are entrenched. It seems to be consistent with the suggestion of Morck, *et al.* (1988) that the managers are entrenched, because the entrenchment effect dominates the incentive effect. The finding here suggests that the agency costs be explained by the ownership structure and synergies scaled by firm size. Board structure has no effect on controlling the agency cost. The debt to assets ratio as a corporate governance to control agency cost has mixing relation with agency costs

measured by asset utilisation and managerial discretionary expense. The positive relation of debt to assets utilisation shows that debt is beneficial in improving firm's productivity and the positive relation of debt to managerial discretionary expense shows the weak monitoring role of the banks of China. But the trade-off between the cost of debt and benefit of debt is not clear.

In sum, the empirical studies on the corporate governance structure of China's listed real estate companies here show that in the current real estate market environment, the ownership concentration is related to firm performance. The economic scales measured by the sales or the total assets matters to the performance of the real estate companies. Under the conditions of ownership concentration, the presence of other large shareholders can reduce the agency cost, especially the managerial discretionary expense and improve the corporate governance and firm performance.

The companies directly controlled by the state enjoy the economic scales and government preferential policies and support. Although the diversified ownership structure is one of the solutions to improve the firm performance and the empirical findings here show that the POEs perform slightly better than SOEs as a whole, the entrenchment of manager in the POEs exists and the owner-manager in POEs would expropriate the minority shareholders and extract private benefits from the controlling power.

To reform the corporate governance structure in China, it is necessary to reform the structure of board of directors and improve the monitoring function of the board in the corporate governance by violating the dominance on the board by the insiders and adding an appropriated proportion of independent directors. To reform the manager compensation system and align the interest of the manager to the wealth of the company to motivate the manager to work hard and maximize the wealth of the shareholders is also necessary in the corporate governance reform.

Prospect for future research

For areas where we have done quite a lot of studies, further studies are needed. For the rest areas, are there some questions we should not miss? A few suggestions for the future research are made as follows.

1. Specific classifications based on the type of controlling shares (state shares, state legal person shares or legal person shares) and the type of ultimate owner (state vs. non state, state assets management companies, state owned corporation, family) are necessary when the impact of ownership structure is studied to find out how the ownership structure is formed. The relation of cash flow right to firm performance should be studied in the future research.
2. The presence of other blockholders is suggested to improve the corporate governance and firm performance. What is the rational ownership concentration for the largest shareholder and to what extent is the controlling power diluted? How is the industry characteristic considered and combined into the studies of governance effect?
3. With the privatisation of SOEs, more and more POEs will float on the stock market. The corporate governance in POEs should call the attention of the research.
4. How promotion incentives affect manager efforts and what are the determinants of current management structure? Is there a quasi-market for SOE managers inside the government and is managerial labour market pressure effective for POE? How much shall the manager salary in SOE be enhanced as substitutes of the compensation of the agency cost?

The research on China's corporate governance mechanisms has been going on since 1996 with the further reform of the state owned enterprises. A large number of works in this field have been produced. Anyway, there should be considerable scope for future research on China's corporate governance reform to continue to produce many more interesting empirical as well as theoretical papers.

Reference

- Aghion, P., and Tirole, J., (1997), "Formal and Real Authority", *Journal of Political Economy*, 105 (1), 1-29
- Agrawal, A. and Mandelker, G.N, (1990), "Large shareholders and the monitoring of managers: the case of anti-takeover charter amendments", *Journal of Financial and Quantitative Analysis*, 31,3,377-97.
- Agrawal, A. and Knoeber, C., (1996), "Firm performance and mechanisms to control agency problems between managers and shareholders", *Journal of Financial and Quantitative Analysis* 31, 377-397.
- Alexander, J. A., Fennell, M. L., and Halpern, M. R., (1993), "Leadership instability in hospitals: The influence of Board-CEO relations and organisational growth and decline", *Administrative Science Quarterly*, 38: 74-99.
- Allen, M., (1981), "Power and privilege in the large corporation: corporate control and managerial compensation", *American Journal of Sociology* 86, 1112-1123.
- Allen, J.W. and Gale, M. P., (2000), "Corporate equity ownership, strategic alliances, and product market Relationships", *Journal of Finance* 55, 2791- 2816.
- Ang, J., Cole, R. and Lin, J., (1999), "Agency costs and ownership structure", *Journal of Finance* 55, 81-106.
- Aoki, M., and Patrick, H., (1993), "The Japanese Main Bank System: Its Relevance for Developing and Transforming Economies", Oxford University Press: New York.
- Aoki, M., and Kim, H., (1995), "Corporate Governance in Transitional Economies: Insider Control and the Role of Banks", the World Bank, Washington, DC.
- Baer, H and Cgeryl, G. (1996), "Debt as a control in transitional economies: the experience of Hungary and Poland", in Roman Frydman, Cheryl Gray and Andrzej Rapaczynski (eds), "*Corporate Governance in Central Europe and Russia*, Volume I, Budapest: Central European University Press, 68-110.
- Bai, C., and Wang, Y., (1998), "Bureaucratic control and the soft budget constraint", *Journal of Comparative Economics*. 26(1), 41-46.
- Bai, C; Li, D.D; Tao, Z. and Wang, Y., (2000), "A multitask theory of state enterprises reform", *Journal of Comparative Economics*, 28, 716-738.

- Bai, C., Liu, Q., Lu, J.S., Frank, M., and Zhang J. , (2004), “Corporate Governance and Market Valuation in China”, *Journal of Comparative Economics* 32, 599-616.
- Banker, R.D., and Datar, S.M., (1989), “Sensitivity, precision, and linear aggregation of signals for performance evaluation”, *Journal of Accounting Research* 27, 21-39.
- Barca, F., (1995), “On corporate governance in Italy: issues, facts, and agency”. Unpublished working paper. Bank of Italy: Rome.
- Barclay, M., and Holderness, C., (1991), “Control of corporations by active block investors”, *Journal of Applied Corporate Finance* 4, 68–77.
- Baysinger, B.D. and Butler, H. D., (1985), “Corporate governance and the board of directors: performance effects of changes in board composition”, *Journal of Law, Economics, and Organisations* 1, 101-124.
- Bebchuk, L.A., (1999), “A rent-protection theory of corporate ownership and control”, NBER working paper, No. 7203.
- Bennedsen, M., and Wolfenzon, D., (2000), “The balance of power in closely held corporations”, *Journal of Financial Economics*, Vol. 58, No. 1.
- Berle, A., and Means, G., (1932), “The Modern Corporation and Private Property”, Macmillan, New York.
- Bertrand, M., and Mullainathan, S., (2000), “Do CEOs Set Their Own Pay? The Ones Without Principals Do”, NBER Working Paper no. 7604.
- Bethel, J., Liebeskind, J. and Opler, T., (1998), “Block Share Purchases and Corporate Performance”, *Journal of Finance* 53, 605-635.
- Bhagat, S., and Black, B., (1996), “Do independent directors matter?” Paper presented at the American Law and Economics Association Meeting, Chicago, May 10-11, 1996.
- Bhide, A., (1994), “Efficient Markets, Deficient Governance: U.S. Securities Regulations Protect Investors and Enhance Market Liquidity. But Do They Alienate Managers and Shareholders?” *Harvard Business Review* 72, 128-140.
- Birnbaum , P. H., (1984), “The choice of strategic alternatives under increasing regulation in high technology industries”, *Academy of Management Journal*, 27, 489-510.
- Booth, J., Cornett, M., and Tehranian, H., (2002), “Boards of directors. ownership

- and regulation”, *Journal of Banking and Finance* 26 (No. 10, Oct.), 1973-1976.
- Boyle, G.W., Richard, B., C., and Roger. D. S., (1998), “Extraordinary antitakeover provisions and insiders ownership structure: the case of converting savings and loans”, *Journal of Financial and Quantitative analysis*, 33, 2, 291-304.
- Bradley, M., Desai, A., and Kim, E.H., (1988), “Synergistic Gains from Corporate Acquisitions and Their Division Between Stockholders of Target and Acquiring Firms”, *Journal of Financial Economics (January/March)*, 3-40.
- Brickley, J.A. and James, C.M., (1987), “The takeover market, corporate board composition, and ownership structure: the case of banking”, *Journal of Law and Economics* 30, 161-180.
- Broedman, B., (1989), “Managerial Incentives and Corporate Takeovers: An Empirical Analysis”, Unpublished paper, Arizona State University.
- Byrd, J. and Hickman, K., (1992), “Do outside directors monitor managers? Evidence from tender offer bids”, *Journal of Financial Economics* 32, 195–222.
- Byrne, J., (1996), “Listen up: the National Association of Corporate Directors’ new guidelines won’t tolerate inattentive, passive, uniformed board members”, *Business Week*, November 25.
- Chang, E.C., and Wang, S.M.L., (2004), “Political control and performance in China’s listed firms”, *Journal of Comparative Economics* 32, 617-636.
- Chen, J., (2004), “Corporate governance in China”, RoutledgeCurzon, ISBN 0-415-34513-8.
- Chen, X., and Jiang, T., (2000), “Diversified ownership, firm performance and industry competition”, *Journal of Chinese Economic Research*, Vol.8, 2000.
- Chen, X and Jiang D. (2000), “The diversified ownership, corporate performance and industry competition”, *Journal of Chinese Economic Research*, Vol. 8, 2000.
- Chen, X.Y and Xu, X.T, (2001), “Ownership structure, corporate performance and protection of investor interest”, *Journal of Chinese Economic Research*, Vol. 11, 2001.
- Chen, Z and Xiong, P., (2002), “The illiquidity discount in China”, Working paper, International Centre for Financial Research, Yale University.

- China's Listed Companies' Report (2003), published by Economic Management Publishing House, China. ISBN 7-80162-679-6/F.601.
- China Real Estate Index System (2001), published by Soufun.com Academy.
- China Realizing Consulting Co., (2002), "White paper on Chinese Entrepreneur Value", Baihua Publishing House, ISBN 7-80656-660-0/F.42.
- China Securities Regulatory Commission (2003), *China's Securities and Futures Statistical Year book 2003*, Baijia Publishing House.
- Cho, M.-H., (1998), "Ownership structure, investment, and the corporate value: An empirical analysis", *Journal of Financial Economic* 47, 103-121.
- Claessens, S., Djankov, S., and Lang, L., (2000a), "The separation of ownership and control in East Asian corporations", *Journal of Financial Economics* 58, 81-112.
- Claessens, S., Djankov, S., and Klapper, L., (2000b), "The role and functioning of business groups in East Asia and Chile", *ABANTE* 3 (No. 1, Oct. 88/Apr. 2000), 91-107.
- Claessens, S., Djankov, S., and Lang, L., (2002), "Disentangling the incentive and entrenchment effects of large shareholdings", *Journal of Finance* 57 (No. , Dec.) 2741-2771.
- Claessens, S., (2003), "Corporate governance and development", Global Corporate Governance Forum Focus I, the International Bank for Reconstruction and Development/ World Bank.
- Coffee, J., (1991), "Liquidity versus Control: The Institutional Investor as Corporate Monitor", *Columbia Law Review* 91, 1277-1368.
- The Conference Board, (2002), "Equity ownership and investment strategies of US and international institutional investors", *Institutional investment Report* 4.
- Coombes, P., and Watson, M., (2000), "Three surveys on corporate governance", the McKinsey Quarterly Special Ed. (No. 4) 74-77.
- Core, J.E., (1997), "The directors' and officers' insurance premium: an outside assessment of the cost of weak corporate governance". Working Paper, the Wharton School, University of Pennsylvania.
- Cotter, J. F., Shivdasani, A. and Zenner, M., (1994), "Do Independent Directors Enhance Target Shareholder Wealth During Tender Offers?" *Journal of Financial Economics*, 43, 195-218.
- Cyert, R., Kang, S., Kumar, P., and Shah, A., (1997), "Corporate governance and

the level of CEO compensation”. Working Paper, Carnegie Mellon University.

Daily, C.M., Johnson, J. L., and Dalton, D. R., (1999), “On the measurements of board composition: if you have seen one, you certainly have not seen them all”, *Decision Science*, 30: 83-106.

Dalton, D.R., Daily, C.M., Ellstrand, A. E., and Johnson, J.L., (1998), “Meta-analytic reviews of board composition, leadership structure, and financial performance”, *Strategic Management Journal*, 19: 269-290.

Demirag, I. S. and Solomon, J. F, (2003), “Development in international corporate governance and the impact of recent events”, *Corporate Governance*, Volume 11, Number 1, 2003.

Demsetz, H., (1983), “The structure of ownership and the theory of the firm”, *Journal of Law and Economics* 26, 375-90.

Demsetz, H., and Lehn, K., (1985), “The structure of corporate ownership: causes and consequences”, *Journal of Political Economy* 93, 1155-1177.

Demsetz, H., (1986), “The structure of corporate ownership: causes and consequences”, *Journal of Political Economy*, 93, 1155-1177.

Demsetz, H and Villalonga, B., (2001), “Ownership structure and corporate performance”, *Journal of Corporate Finance*, Vol. 7, Issue3, 209-233.

Denis, D. J., and Denis, D. K., (1994), “Majority owner-managers and organisational efficiency”, *Journal of Corporate Finance*, 1, 91-118.

Dong, X, L and Gao, F., (2002), “Controlling right structure of listed companies: problems and resolution”, *Journal of Chinese Modern Economics Research*, Vol. 3, 2002.

Duggal, R.. and Millar, L., (1999), “Institutional ownership and firm performance: the case of bidder returns”, *Journal of Corporate Finance*, No. 2, 103-117.

Eckbo, B. E., and Smith, D. C., (1998), “The conditional performance of insider trades”, *The Journal of Finance*, LIII, 2, 467-498.

Edwards, J., and Fischer, K., (1994), “Banks, Finance and Investment in West Germany Since 1970”, Cambridge University Press: Cambridge, U.K.

Eisenberg, T., Sundgren, S., and Wells, M., T.. (1998), “Larger board size and decreasing firm value in small firms”, *Journal of Financial Economics* 48 (1998) 35-54.

European Corporate Governance Network (ECGN), (1997), “The Separation of Ownership and Control: A Survey of 7 European Countries Preliminary

Report to the European Commission. Volumes 1-4. Brussels: European Corporate Governance Network.

- Evens, C. R., and Dion, K. L., (1991), "Group cohesion and performance: A meta-analysis", *Small Group Research*, 22: 175-186.
- Faccio, M.; Lang, L., and Young, L., (2001), "Dividends and Expropriation", *American Economic Review*, 91, Vol.1, 54-78.
- Faccio, M., and Lang, L., (2002), "The ultimate ownership of Western European corporations", *Journal of Financial Economics*, Vol. 65.365-396.
- Fama, E.F., (1980), "Agency problems and theory of the firm", *Journal of Political Economy* 88, 288-307.
- Fama, E.F, and Jensen, M. C., (1983), "Separation of ownership and control", *The Journal Law and Economics* 26, 301-325.
- Fan, J. P. H., and Wong, T.T., (2002), "Corporate ownership and the informativeness of accounting earnings in East Asia", *Journal of Accounting and Economics* 33, (Aug.), 401-425.
- Felton, F. R., (1996), "Putting a value on board governance", *McKinsey Quarterly* (4).
- Feng, G. F., and Wu, J., (2001), "The empirical studies of Chinese listed companies' performance", *Journal of Chinese Economic Research*, Vol. 1, 2001.
- Finkelstein, S., and Hambrick, D., (1989), "Chief executive compensation: a study of the intersection of markets and political processes", *Strategic Management Journal* 10, 121-134.
- Firstenberg, P. B., and Malkiel, B. G., (1994), "The twenty-first century boardroom: Who will be in charge?" *Sloan Management Review*, 36 (1), 27-35.
- Gao, J., and Chen, X., W., (2000), "Assets restructuring and its effectiveness analysis on China's stock market", *Journal of Chinese Economic Science*, Vol. 1, 2000.
- Gillan, S., L., and Starks, L., T., (2003), "Institutional investors, corporate ownership and corporate governance: global perspectives", *Ownership and Governance of Enterprises: Recent Innovative Development*, edited by Laixiang, Sun, Palgrave/MacMillan.
- Gilson, S., (1990). "Bankruptcy, boards, banks and blockholders: evidence on changes in corporate ownership and control when firms default", *Journal of Financial Economics* 27, 355-387.

- Gilson, S., (1997), “Transaction costs and capital structure choice: Evidence from financial distressed firms”, *Journal of Finance*, 52, 161-195.
- Gomes, A., and Novaes, W., (1999), “Multiple large shareholders in corporate governance”, Unpublished working paper. The Wharton School, Philadelphia, PA.
- Goodstein, J., Gautam, K., and Boeker, W., (1994), “The effects of board size and diversity on strategic change”, *Strategic Management Journal*, 15, 241-250.
- Gorton, G., and Kahl, M.(1999), “Blockholder Identity, Equity Ownership Structure and Hostile Takeovers”, NBER working paper 7123.
- Gorton, G., and Schmid, F., (2000), “Universal banking and the performance of German firms”, *Journal of Financial Economics* 58, 29-80.
- Green, W.H., (1997), “Econometric analysis”, McGraw-Hill, New York.
- Grier, P. and Zychowicz, E., (1994), “Institutional investors, corporate discipline and the role of debt”, *Journal of Economics and Business* 46, Vol. 1, 1-11.
- Grossman, S., and Hart, O. D., (1980): “Takeover Bids, the Free-Rider Problem, and the Theory of the Corporation”, *Bell Journal of Economics*, 11, 42-64
- Grossman, S., and Hart, O.D., (1982), “Corporate financial structure and managerial incentives”. In: McCall, J. (Ed.), *The Economics of Information and Uncertainty*. University of Chicago Press, Chicago, IL, pp. 102–137.
- Grossman, S., and Hart, O., (1988), “One-share-one-vote and the market for corporate control”, *Journal of Financial Economics* 20, 175-202.
- Gujarati, D.N., (1998), “Basic Econometrics”, McGraw-Hill, New York, pp. 148.
- Hall, B., and Murphy, K., (2002), “Stock options for undiversified executives”, *Journal of Accounting and Economics*, 33(1), 3–42.
- Hallock, C. J., and Lumer, G.B., (1997), “Compensation, turnover and top management incentives: historical evidence”, *Journal of business*, 70, 153-188.
- Harris, M., and Raviv, A., (1988), “Corporate governance: voting rights and majority rules”, *Journal of Financial Economics* 20, 203-236.
- Hart, O., (1983), “The Market Mechanism as an Incentive Scheme”. *Bell Journal of Economics*, 14, 366-82.

- Hart, O., and Holmstrom, B. (1987), "The theory of contracts". In *Advances of Economic Theory. Fifth World Congress*, ed. T. Bewley. Cambridge University Press.
- Hart, O., (1995), "Firms, Contracts and Financial Structure", Oxford. Clarendon Press.
- Hartzell, J. C., and Starks, L. T., (2003), "Institutional investors and executive compensation", *Journal of Finance* 58: 2351-2374.
- Haveman, H. A., (1993), "Organisational size and change: Diversification in the savings and loan industry after deregulation", *Administrative Science Quarterly*, 38: 20-50.
- He, W., T. (2003), "A survey on the effectiveness of Corporate governance of companies listed on Shenzhen Stock Exchange", Shenzhen Stock Exchange Research Report, Nr. 0086.
- Hellwig, M., (1999), "On the economics and politics of corporate finance and corporate control", Unpublished working paper. University of Mannheim: Mannheim.
- Hermalin, B.E., and Weisbach, M. S., (1988), "The determinants of board composition". *Rand Journal of Economics* 19, 589-605.
- Hermalin, B.E., and Weisbach, M. S., (1991), "The effects of board composition and director incentives on firm performance", *Financial Management* 20, 101-112.
- Hermalin, B.E., (1992), "The effects of competition on executive behaviour", *Rand Journal of Economics*, 23, 350-365.
- Hermalin, B. E., and Weisbach, M. S., (2001), "Board of directors as an endogenously determined institution: a survey of the economic literature", NBER working paper 8161.
- Himmelberg, B.E., Hubbard R.G. and Palia, D., (1999), "Understanding the determinants of managerial ownership and the link between ownership and performance since the great depression", *Journal of Finance* 54, 435-469.
- Hirschman, A, (1971), "Exit, voice and loyalty: responses to decline in firms, organisations and states", Cambridge, MA, Harvard University Press.
- Holderness, C., and Sheeham, D., (1985), "Raiders or saviors? The evidence on six controversial investors", *Journal of Financial Economics* 14, 555-579.
- Holderness, C., and Sheeham, D., (1988), "The role of majority shareholders in publicly held corporations: An exploratory analysis". *Journal of Financial Economics* 20, 317-346.

- Holderness, C., G., Kroszner, R., S., and Sheehan, D., P., (1999), "Were the Good Old Days That Good? Changes in Managerial Stock Ownership since the Great Depression", *Journal of Finance* 54, 435-69.
- Holmstrom, B., and Tirole, J., (1993), "Market Liquidity and Performance Monitoring", *Journal of Political Economy* 101, 678-709.
- Holthausen, R., W., and Larcker, D., F., (1991), "Financial Performance and organisational Structure". Unpublished paper, University of Pennsylvania Wharton School.
- Hoshi, T., K and Scharfstein, D.A, (1991), "Corporate structure, liquidity, and investment: evidence from Japanese industrial groups", *Quarterly Journal of Economics* 106, 33-60.
- Hu, J. Z, (2001), "The design of stock option and oversee of the listed companies", *Research Report by Shenzhen Stock Exchange, Nr. 0029, 2001.*
- Hu, R. R., (2002), "Class action: practice in China", fourth Meeting of the Asian Roundtable, November, 2002.
- Huang Y. X., and Li, J., (2002), "Study on power balance of Chinese listed companies", *Journal of Shanghai Stock Exchange Research*, 2002, Vol. 2.
- Jensen, M. C., and Meckling, W.H., (1976), "Theory of the firm: managerial behaviour, agency costs and ownership structure", *Journal of Financial Economics* 3, 305-360.
- Jensen, M., C., and Ruback, R., S., (1983), "The market for corporate control: the scientific evidence", *Journal of Financial Economics* 11,5-50.
- Jensen, M. C., (1986), "Agency costs of free cash flow, corporate finance. and takeovers", *American Economic Review* 76, 323-329.
- Jensen, M., C., and Murphy, K., J., (1990), "Performance pay and top-management incentives", *Journal of Financial Economics* 98, 225-64.
- Jensen, M. C., (1993), "The modern industrial revolution, exit and the failure of internal control systems", *Journal of Finance* 48, 831-880.
- John, K., and Senbet, L.W., (1998), "Corporate governance and board effectiveness", *Journal of Banking and Finance* 22, 371-403.
- Johnson, P., Boone, P., Breach, A., and Freidman, E., (2000). "Corporate Governance in the Asian Financial Crisis". *Journal of Financial Economics*, 58, 141-186.

- Kahn, C., and Winton, A., (1998), "Ownership Structure, Speculation, and Shareholder Intervention", *Journal of Finance* 53, 99-129.
- Kang, J.K. and Shivdasani, A., (1995), "Firm performance, corporate governance, and top executive turnover in Japan", *Journal of Financial Economics* 38, 1, 29-59.
- Kang, J. K., and Stulz, R., (1998), "Do banking shocks affect borrowing firm performance? An analysis of the Japanese experience". Unpublished working paper. Ohio State University: Columbus, OH.
- Kaplan, R., and Atkinson, A., (1998), "Advanced management accounting". Upper Saddle River, NJ: Prentice Hall.
- Kaplan, S., N., and Reishus, D., (1990), "Outside directorships and corporate performance", *Journal of Financial Economics* 27, 389-410.
- Kaplan, S.N., and Minton, B., (1994), "Appointments of outsiders to Japanese boards: determinants and implications for managers", *Journal of Financial Economics* 36, 225-257.
- Kesner, I. F. (1988), "Directors' characteristics and committee membership: An investigation of type, occupation, tenure, and gender", *Academy of Management Journal*, 31: 66-84.
- Klein, A., (1998), "Firm Performance and board committee structure". Unpublished working paper, New York University.
- Kole, S.R., (1995), "Measuring managerial equity ownership: A comparison of sources of ownership data", *Journal of Corporate Finance* 1, 413-435.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R., (1997), "Legal determinants of external finance", *Journal of Finance* 52, 1131-1150.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A and Vishny, R., (1988), "Law and finance", *Journal of Political Economy* 106, 1113-1155.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., (1999), "Corporate ownership around the world", *Journal of Finance* 54, 1115-1155
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R., (2000), "Investor protection and corporate governance", *Journal of Financial Economics* 58, 3-27.
- Lambert, R., Larcker, D., and Weigelt, K., (1993), "The structure of organisational Incentives", *Administrative Science Quarterly* 38, 438-461.
- Larner, R., J. (1970), "Management control and the large corporation". Dunellen Publishing Co. Inc.

- Lee, C., Rosenstein, S., Rangan, N., and Davidson III, W.N., (1992), "Board composition and shareholder wealth: The case of management buyouts", *Financial Management* 21, 58-72.
- Leech, D., and Leahy, J., (1991), "Ownership structure, control type classifications and the performance of large British companies", *The Economic Journal*, 101, 1418-1437.
- Li, D. D., (1998), "Changing incentives of the Chinese bureaucracy", *American Economic Review*, 88 (2), 393-397.
- Li D.D. (2000), "A theory of ambiguous property rights: the case of the Chinese non-state sector", *Journal of Comparative Economics*, 23 (1), 1-19.
- Li, T. M and Deng, S. Q, (1999), "The case study of the board structure and responsibility of listed companies", *Journal of Chinese Listed Company*, Vol. 10, 1999.
- Lin, Y. and Zhu, T., (2001), "Ownership restructuring in Chinese state industry: an analysis of evidence on initial organisational changes", *China Quarterly*, 166, 305-341.
- Lipton, M., and Lorsch, J. W., (1992), "A modest proposal for improved corporate governance", *Business Lawyer*, 48, 59-77.
- Liu, S. J; Sun, P., and Liu, N. Q., (2003), "Principle of ultimate ownership, ownership structure and corporate performance", *Journal of Chinese Economic Research*, Vol. 4, 2003.
- Loderer, C., and Martin, K., (1997), "Executive stock ownership and performance: tracking faint traces", *Journal of Financial Economics* 45, 223-255.
- Lorsch, J. W., and MacIver, E., (1989), "Pawns and potentates: The reality of America's corporate boards", Boston: Harvard University Press.
- Majluf, N., N. Abarca, D. and Rodriguez, L. F., (1998), "Governance and Ownership Structure in Chilean Economic Groups," *ABANTE, Estudios en Direccion de Empresas* 1, 111-139.
- Maug, E., (1998), "Large Shareholders as Monitors: Is There a Trade-off between Liquidity and Control?" *Journal of Finance* 53, 65-98.
- Mayers, D., Shivdasani, A., and Smith, S., (1997), "Board composition and corporate control: evidence from insurance industry", *Journal of Business* 70, 33-62.
- Mazruchi, M. S., and Stearns, L. B., (1988), "A longitudinal study of the

- formation of interlocking directorates”, *Administrative Science Quarterly*, 33, 194-210.
- McConnell, J., and Servaes, H., (1990), “Additional evidence on equity ownership and corporate value”, *Journal of Financial Economics*, 27, 595-612.
- McConnell, J., and Servaes, H., (1995), “Equity ownership and the two faces of debt”, *Journal of Financial Economics* 39, 131–157.
- Meggison, W. L. and Netter, J. M., (2001), “From state to market: a survey of empirical studies on privatisation”, *Journal of Economic Literature*, 39 (2), 321-389.
- Mehran, H., (1995), “Executive Compensation Structure, Ownership, and Firm Performance”, *Journal of Financial Economics* 38, Vol. 2, 163-84.
- Meyers, D. Shivdasani, A. and Smith, C.W. Jr., (1997), “Board composition and corporate control: evidence from the insurance industry”, *Journal of Business* 33-62.
- Mikkelson, W., and Partch, M., (1989), “Managers' Voting Rights and Corporate Control”, *Journal of Financial Economics* 25, 263-90.
- Milgrom, P. and Roberts, J., (1992), “Economics, Management and Organisation”, (NY: Prentice Hall).
- Miller, D., (1995), “CEO salary increases may be rational after all: referents and contracts in CEO pay”, *Academy of Management Journal*, 38(5), 1361–1385.
- Millstein, I., M., (1998), “The basics of a stable global economy”, *The Journal of Commerce*, 30th, November, 1998.
- Mintzberg, H., (1983), “Power in and around organisation”, Englewood Cliffs, NJ: Prentice-Hall.
- Mirrlees, J. A., (1976), “The optimal structure of incentives and authority within an organisation”, *Bell Journal of Economics*, 7, 105-131.
- Mizruchi, M. S., (1983), “Who controls whom? An examination of the relation between management and boards of directors in large American corporations”, *Academy of Management Review*, 8, 426-435.
- Modigliani, F., and Perotti, E. (1998), “Corporate law enforcement and the development of security markets”, *Managerial and Decision Economics*, 18, 519– 528.
- Monsen, J. R.; Chiu, R., J., and Cooley, D. E.. (1968). “The effect of separation of ownership and control on the performance of the large firm”, *Quarterly*

Journal of Economics, June, 435-451.

Morck, R., Shleifer, A., and Vishny, R., (1988), "Management ownership and market valuation: an empirical analysis", *Journal of Financial Economics* 20, 293-316.

Morck, R., and Nakamura, M., (1999), "Banks and corporate control in Japan", *Journal of Finance* 54, 319-340.

Morgenson, G., (1998), "Stock options are not a free lunch", *Forbes*, 18 May, 212-217.

Murphy, K. J., (1985), "Corporate performance and managerial remuneration: an empirical analysis", *Journal of Accounting and Economics*.

National Association of Corporate Directors, (1996), "Report of the NACD blue ribbon commission on director professionalism", November, 1996.

Nalebuff, B., and Stiglitz, J., (1983), "Prices and incentive: towards a general theory of compensation and competition", *Bell Journal of Economics*, 14, 21-43.

Naughton, B., (1995), "Growing out of the plan: Chinese economic reform, 1978-1993", New York: Cambridge University Press.

Nick, S., Nicolitsas, D., and Dryden, N., (1997), "What makes firms perform well?" *European Economic Review*, 41, 783-796.

Noe, T., (2002), "Institutional activism and financial market structure", *Review of Financial Studies* 15, 289-319.

OECD, (2003), "Experience from the regional corporate governance round tables", OECD Publications, 2, rue Andre-Pascal, 75775 Paris Cedex 16, France.

O'Sullivan, N. and Wong, P., (1998a), "The Impact of Board Composition and Ownership on the Nature and Outcome of UK Takeovers", *Corporate Governance: An International Review*, 6, 92-100.

O'Sullivan, N. and Wong, P., (1998b), "Internal versus External Control: An Analysis of Board Composition and Ownership in UK Takeovers", *Journal of Management and Governance*, 2, 17-35.

Pagano, M., and Roel, A., (1998), "The choice of stock ownership structure: agency costs, monitoring, and the decision to go public", *Quarterly Journal of Economics* 113, 187-225.

Pedersen, T., and Thomsen, S., (1999), "Economic and systemic explanations of ownership concentration among Europe's large companies", *International*

Journal of the Economics of Business, 6,(3), 367-381.

- Pfeffer, J., (1981), "Size composition and functions of hospital boards of directors: A study of organisation–environment linkage", *Administrative Science Quarterly* 18, 349–364.
- Pfeffer, J., and Salancik, G. R., (1978), "The external control of organisations: A resource-dependence perspective", New York: Harper & Row.
- Porac, J., Wade, J., and Pollock, T., (1999), "Industry categories and the politics of the comparable firm in CEO compensation", *Administrative Science Quarterly*, 44(1), 112–144.
- Porter, M., (1992), "Capital disadvantage: America's falling capital investment system", *Harvard Business Review* 46, 65-72.
- Prowse, S. (1994), "Corporate Governance in an International Perspective: A Survey of Corporate Governance Mechanism among Large Firms in the United States, the United Kingdom, Japan, and Germany", BS Economic Papers, No. 41, May.
- Radic, H. K., (1971), "Control type, profitability and growth in large firms: an empirical study", *The Economic Journal*, Sept., 547-662.
- Rajan, R. and Zingales, L., (1989), "Financial dependence and growth", *American Economic Review*, 88, 559-586.
- Roe, M., (1994), "Strong Manager Weak Owners: The Political Roots of American Corporate Finance", Princeton University Press, Princeton, N. J.
- Rosen, S., (1982), "Authority, control and the distribution of earnings", *Bell Journal of Economics* 13, 311-323.
- Rosenstein, S., and Wyatt, J., (1990), "Outside directors, board independence and shareholder wealth", *Journal of Financial Economics* 16, 167-198.
- Scherer, F. M., (1980), "Industrial market structure and insider trading: evidence from growth and value portfolios", second edition. Chicago: Rand-McNally.
- Securities and Exchange Commission, (1936), OFFICIAL SUMMARY OF HOLDINGS OF OFFICERS, DIRECTORS, AND PRINCIPAL STOCKHOLDERS. Washington, D.C.: U.S. Government Printing Office.
- Seward, J. K., and Walsh, J. P., (1996), "The governance and control of voluntary spin-offs", *Strategic Management Journal* 17, 25-39.
- Shen, Y. F. and Zhang, J. S., (2002), "Analysis of the corporate governance failure of board of directors in ST companies", *The Securities Herald*,

Vol. 2, 2002.

Shirley, M., (1999), "Bureaucrats in business: the roles of privatisation versus corporatisation in state-owned enterprise reform", *World Development*, 27, 115-36.

Shivdasani, A., and Yermack, D., (1999), "CEO involvement in the selection of new board members: an empirical analysis", *Journal of Finance*, 1999.

Shleifer, A. (1985), "A theory of yardstick competition", *Journal of Economics*, 16, Vol. 3, 319-327.

Shleifer, A. and Vishny, R., (1986), "Large shareholders and corporate control", *Journal of Financial Economic* 5, 309-327.

Shleifer, A. and Vishny, R., (1994), "Politicians and firms", *Quarterly Journal of Economics*, 109 (4), 995-1025.

Shleifer, A. and Vishny, R. (1997), "A survey of corporate governance", *Journal of Finance* 52, 737-783.

Si T.H., (2000), "Ownership Structure, corporate governance and corporate performance", *Journal of World Economy*, Vol. 11, 2000.

Singh M., Wallace N., and Davidson, W. D., (2003), "Agency costs, ownership structure and corporate governance mechanisms", *Journal of Banking & Finance* 27, 793-816.

Smith, A., (1776), "An inquiry into the nature and causes of the wealth of nations", Oxford: the Clarendon Press 1976.

Smith, C.W., and Watts, R.L., (1992), "The investment opportunity set and corporate financing, dividend, and financing policies", *Journal of Financial Economics* 32, 262-292.

Sorensen, A., B., (1999), "Ownership organisation and firm performance", *Annual Review of Sociology*, Vol. 1.

State Statistical Bureau (China), (2003), *Statistical of Yearbook of China 2002*, Beijing: Zhongguo Tongji She (State Statistics Publishing House).

Stearns, J. B., and Mizruchi, M. S., (1993), "Board composition and corporate financing: The impact of financial institution representation on borrowing", *Academy of Management Journal*, 36, 603-618.

Stiglitz, J. E., (1997), "The role of government in Economics development", in Michael Bruno and Boris Pleskovic, eds. "Annual World Bank Conference on Development Economics, 1996", World Bank, Washington, DC.

- Stulz, R. M., (1988), “Managerial control of voting right, financing policies and the market for corporate control”, *Journal of Financial Economics*, 20, 25-54.
- Stulz, R. M., Walking, A., and Song, M. H., (1990), “The distribution of target ownership and the division of gains in successful takeovers”, *Journal of Finance*, 45, 817-833.
- Sun, Y., X and Huang Z., Y., (1999), “The ownership structure of listed companies And corporate performance”, *Journal of Chinese Economic Research* , Vol. 12, 1999.
- Sun, Y. X., and Li, J., (2002), “The studies of power balance of China’s listed companies”, *Journal of Shanghai Stock Exchange Research*, Vol. 2, 2002.
- Sun, Q., and Tong, W., (2003), “China Share Issue Privatisation: the extent if its success”, *Journal of Financial Economic* 70, 182-222.
- Sun Y., X and Zhang R., (2000), “Board size, corporate governance and firm performance”, *Journal of Enterprise Economy*, Vol. 10, 2000.
- Telser, L., (1969), Comment. *American Economic Review* 59, 121–123.
- Tian, G, (2001), “State shareholding and the value of China’s firms”, London School of Economics, working paper.
- Tobin, J., and Brainard, W., (1977), “Asset markets and the cost of capital”, In B. Belassa and R. Nelson (eds.) *Economic Progress, Private Values and Public Policies: Essays in Honour of William Fellner*, Amsterdam: North Holland.
- Tosi, H., and Gomez-Mejia, L., (1989), “The decoupling of CEO pay and performance: an agency theory perspective”, *Administrative Science Quarterly* 34, 169-189.
- Wei, G., (2000), “The incentive of senior managers and listed companies’ performance”, *Journal of Chinese Economic Research*, Vol. 3, 2000.
- Xu, X., (1996), “Autocorrelations in Chinese Stock Returns”, mimeo, Department of Economic, Amherst College.
- Xu, X., and Wang Y., (1997) “Ownership Structure, Corporate Governance, and Firms’ Performance: the Case if Chinese Stock Companies”, the World Bank Washington, DC.
- Vafeas, N., (1999), “Board meeting frequency and firm performance”, *Journal of Financial Economics* 53, 113-142.

- Vance, S. (1983), "Corporate Leadership: Boards, Directors, and Strategy". McGraw Hill, New York.
- Walkling, R., and Long, M., (1984), "Agency theory, managerial welfare, and takeover bid resistance", *Rand Journal of Economics* 15, 54-68.
- Wei, G., (2000), "Top managers incentive and corporate performance of the listed companies", *Journal of Chinese Economic Research*, Vol. 12,2000.
- Weinstein, D., and Yafeh, Y., (1998), "On the costs of a bank-centered financial system: evidence from the main bank relations in Japan", *Journal of Finance* 53, 635-672.
- Weisbach, M., (1988), "Outside directors and CEO turnover", *Journal of Financial Economics* 20, 431-460.
- Weiss, L., (1969), "Advertising, profits, and corporate taxes", *Review of Economics and Statistics* 51,421-430.
- Williamson, O., (1983), "Organisational form, residual claimants, and corporate control", *Journal of Law and Economics* 26.
- Wolfenzon, D., (1999), "A theory of pyramidal structures". Unpublished working Paper, Harvard.
- Wruck, K. H., (1989), "Equity ownership concentration and firm value", *Journal of the Financial Economics*, 23, 3-28.
- Wu, J. L., (2001), "The behaviour of controlling shareholders and corporate governance", *Shanghai Security News*, June, 8, 2001.
- Yao, X., G and Wang, W., (2003), "The takeover motivations of China's listed companies: analysis of governance factors", *Journal of Shanghai Stock Exchange Research*, Vol. 2, No. 1.
- Yermack, D., (1996), "Higher market valuation of companies with a small board of directors", *Journal of Financial Economics* 40, 185-211.
- Yu, T. S and Chi, G.H., (2004), "Board size, its stability and firm performance: theoretical and empirical analysis", *Journal of Chinese Economics Research* , Vol. 4, 2004.
- Zahra, S. A., and Pearce, J. A., (1989), "Boards of directors and corporate financial performance: A review and integrative model", *Journal of Management*, 15, 291-334.
- Zingales, L., (1995), "Inside ownership and the decision to go public", *Review of Economic Studies* 62, 425-448.

Zhang W. Y., (1997), “Enterprisers theory and China’s enterprise reform”.
Beijing University Publishing House.

Zhou, J., B and Sun, J., S., (2002), “Study of managerial stock incentive effect as
governance—empirical evidence of Chinese listed companies”, *Journal of
Chinese Economic Research*, Vol. 5, 2002.

Zhu, T., (1999), “China’s corporatisation drive: an evaluation and policy
implications”, *Contemporary Economic Policy*, 17 (4), 530-39.

Appendix 1. The responsibilities of shareholders meeting and board of directors by the Company Law of China

The Company Law of China defines the responsibilities of shareholders meeting as follows:

A joint stock limited company shall form a shareholders general meeting which shall be composed of all the shareholders. The shareholders general meeting is the organ of power of the company and shall exercise its functions and powers in accordance with this Law. (Article 102)

The shareholders' general meeting shall exercise the following functions and powers:

- (1) to decide upon policies on business operation and investment plans of the company;*
- (2) to elect and replace members of the board of directors and to decide upon matters concerning the remuneration of the directors;*
- (3) to elect and replace the supervisors who are representatives of the shareholders and to decide upon matters concerning the remuneration of the supervisors;*
- (4) to examine and approve reports of the board of directors;*
- (5) to examine and approve reports of the supervisory board;*
- (6) to examine and approve plans of the companies fiscal financial budget and final accounts;*
- (7) to examine and approve plans for companies profit distribution and making up losses;*
- (8) to make resolutions on the increase or reduction of the registered capital of the company;*
- (9) to adopt resolutions on the issuance of company bonds;*
- (10) to adopt resolutions on matters such as the merger, division, dissolution and liquidation of the company; and*
- (11) to amend the articles of association of the company (Company Law, Article 103).*

The right of the shareholders is defined as

A Shareholders general meeting shall be convened by the board of directors in accordance with the provisions of this Law and presided over by the Chairman of the board. Where the Chairman is unable to perform his duties due to special reasons, the vice-chairman or other director designated by the Chairman may preside over such meetings. Shareholders shall be notified of the matters to be considered at a shareholders general meeting thirty days prior to the holding of such a meeting. At interim shareholders general meetings, no resolutions may be adopted in respect of matters not included in the notice (Article 105).

Where bearer shares are to be issued, a public announcement shall be made in respect of the matters mentioned in the preceding paragraph forty-five days prior to the holding of such a meeting.

Holders of bearer shares attending the shareholders general meeting shall deposit their share certificates with the company for the period from five days prior to the holding of the meeting until the end of the meeting.

Shareholders attending a shareholders general meeting shall have the right to one vote for each share held (Article 106).

A resolution of the shareholders general meeting must be passed by more than one half of the voting rights held by the shareholders present at the meeting. Resolutions on the merger, division or dissolution of the company adopted by the shareholders general meeting must require more than two-thirds of the voting rights held by the shareholders present at the meeting.

Amendments to the articles of association of the company must be adopted by more than two-thirds of the voting rights held by the shareholders present at the shareholders general meeting (Article 107).

A Shareholder may entrust a proxy to attend the shareholders general meeting on his behalf. The proxy shall present the shareholders power of attorney to the company and exercise voting rights within the scope of authorisation (Article 108).

Resolutions on matters discussed at a shareholders general meeting shall be minuted down. The directors attending the meeting shall sign the minutes. The minutes of the meeting shall be kept together with the roster of the signatures of the shareholders attending the meeting and the powers of attorney of attending proxies (Article 109).

Shareholders shall have the right to examine the articles of association of the company, the minutes of the shareholders' general meetings and the financial and accounting statements, and to make suggestions or inquiries about the business operation of the company (Article 110).

Where a resolution of the shareholders' general meeting or of the board of directors violates the law or administrative rules and regulations or infringes the lawful rights and interests of the shareholders, the shareholders concerned shall have the right to bring a lawsuit in a people's court demanding that such illegal or infringing action be stopped (Article 111)

The responsibilities of board of directors are defined in the Company Law as following:

- 1. to convene the shareholders general meeting and to report on its work to the shareholders general meeting;*
- 2. to implement resolutions passed at the shareholders general meetings;*
- 3. to decide on the business operation plans and the investment plans of the company;*
- 4. to formulate the fiscal budgets and the final accounts of the company;*
- 5. to formulate plans for the profit distribution and making up losses of the company;*

6. *to formulate plans for increasing or reducing the registered capital of the company and plans for the issue of company bonds;*
7. *to formulate plans for the merger, division and dissolution of the company;*
8. *to decide on the establishment of the internal management organs of the company;*
9. *to engage or dismiss the manager and, upon recommendation of the manager, to engage or dismiss the deputy manager(s) and responsible persons in charge of the financial affairs of the company, and to decide on matters concerning their remuneration; and*
10. *to formulate the basic management systems of the company.”*

Appendix 2. OECD principles of the right of shareholders

OECD principles of the right of shareholders are defined as follows:

A. Basic shareholder rights should include the right to: 1) secure methods of ownership registration; 2) convey or transfer shares; 3) obtain relevant and material information on the corporation on a timely and regular basis; 4) participate and vote in general shareholder meetings; 5) elect and remove members of the board; and 6) share in the profits of the corporation.

B. Shareholders should have the right to participate in, and to be sufficiently informed on, decisions concerning fundamental corporate changes such as: 1) amendments to the statutes, or articles of incorporation or similar governing documents of the company; 2) the authorisation of additional shares; and 3) extraordinary transactions, including the transfer of all or substantially all assets, that in effect result in the sale of the company.

C. Shareholders should have the opportunity to participate effectively and vote in general shareholder meetings and should be informed of the rules, including voting procedures, that govern general shareholder meetings:

1. Shareholders should be furnished with sufficient and timely information concerning the date, location and agenda of general meetings, as well as full and timely information regarding the issues to be decided at the meeting.

1. Shareholders should have the opportunity to ask questions to the board, including questions relating to the annual external audit, to place items on the agenda of general meetings, and to propose resolutions, subject to reasonable limitations.

2. Effective shareholder participation in key corporate governance decisions, such as the nomination and election of board members, should be facilitated. Shareholders should be able to make their views known on the remuneration policy for board members and key executives. The equity

component of compensation schemes for board members and employees should be subject to shareholder approval.

3. *Shareholders should be able to vote in person or in absentia, and equal effect should be given to votes whether cast in person or in absentia.*

D. *Capital structures and arrangements that enable certain shareholders to obtain a degree of control disproportionate to their equity ownership should be disclosed.*

E. *Markets for corporate control should be allowed to function in an efficient and transparent manner.*

1. *The rules and procedures governing the acquisition of corporate control in the capital markets, and extraordinary transactions such as mergers, and sales of substantial portions of corporate assets, should be clearly articulated and disclosed so that investors understand their rights and recourse. Transactions should occur at transparent prices and under fair conditions that protect the rights of all shareholders according to their class.*

2. *Anti-take-over devices should not be used to shield management and the board from accountability (OECD Principle of Corporate Governance: Part One, II, 2004)*

Appendix 3. Special cases studies: ownership structure and firm performance.

This part aims at shedding light on some special cases relating the issue of ownership structure and firm's performance.

As mentioned previously, there are 3 listed real estate companies delisted from the stock market in 2001 and 2002 because of the consecutive economic losses. There is one stock company with no controlling shareholder. This gives me a chance to analyse these special cases.

The first case is Shenzhen Gintian Industry Ltd. (000003), a SOE who was one of the earliest companies that were transformed into the stock limited companies in 1988. It was also one of the earliest companies that were listed on the stock market in the real estate sector in 1993. It used to be a star in the early 1990s on China's stock market. However, in May, 2000, the company was capped with ST¹. In April 2001, it was capped with PT² and in June, 2002 it was delisted from Shenzhen Stock Exchange.

Table 3-1 displays the ownership structure and performance of Gintian. The ownership structure of the company was widely diffused among the institutions and individual investors. The company had no controlling shareholder for several years. The first large shareholder held 7.5% of legal person shares. In the first few years of the joint stock company, there were state shares. Till 1994 all the state shares were converted to legal person shares. The company started to have the negative return first in 1996 and in 1997 there was an improvement in the performance, but since then it suffered from the losses and was delisted from the stock market in June 2002.

¹ST refers to the special treatment for the company who suffers from economic losses for continuous three years to warn the investors of the risks involved in investing in this company

²PT means the listed company is postponed trading on the stock market because of the consecutive economic losses for more than continuous three years.

Table 3-1 Shenzhen Gintian Industry Ltd. (000003)

	St-Sh.	LP-Sh.	Tr- Sh.	Top10	1 st holder	2 nd holder	Others (3 rd -10 th)	ROA	ROE
2002		7.5%	92.5%						
2001		7.5%	92.5%	20.4%	7.5%	4.3%	8.6%	-1.2%	-24.3%
2000		7.5%	92.5%	20.4%	7.5%	4.3%	8.6%	-111.3%	-24%
1999		7.5%	92.5%	20.4%	7.5%	4.3%	8.6%	-178%	-6.1%
1998		7.5%	92.5%					-59%	-8.4%
1997		7.5%	92.5%					4%	8.2%
1996		20.1%	79.8%					-2.5%	-0.8%
1995		8.5%	77.2%					4.6%	1.6%
1994	4.2%	18.9%	76.9%					14%	5.2%
1993	4.0%	21.8%	74.2%					14%	5.8%
1991	8.9%	34.6%	56.5%						

Source: www.stockstar.com

The second case is Shenzhen Overglobe Development Ltd. (000047), established in 1988 and publicly traded in 1994. In December 2000, it was capped with ST and de-listed in May, 2002. The state had no stake in the company. It was legal person shares dominated company with highly concentrated ownership structure. The 1st large shareholder, an institution, owned 47% of total outstanding shares and the 2nd large shareholder had 21% of the total shares (see Table 3-2). The change of the number of shares between the first two large shareholders was caused by the debt issue, that is the company had to sell the shares to the second large shareholder to repay the debt as disclosed in the annual reports 2001 and 2002.

Table 3- 2 Shenzhen Overglobe Development Ltd. (000047)

	LP-Sh.	TR-Sh.	Others	Top10	1 st holder	2 nd holder	Others (3 rd -10 th)	ROA	ROE
2002	73%	27%							
2001	73%	27%		68.2%	46.7%	20.9%	5.4%	0.0%	-0.3%
2000	73%	27%		74.0%	72.7%	4.3%	8.6%	-1433%	-8.8%
1999	73%	27%						-0.9%	-0.8%
1998	73%	27%						235%	3.4%
1997	73%	26%							
1996	73%	26%							
1995	77%	23%	0.3%						
1994	77%	17%	5.7%						

Source: www.stockstar.com

The third case, Shanghai Commercial Real Estate Development Ltd. a SOE took organisational transform into a joint stock company in 1992 and was publicly traded in February 1994 on Shanghai Stock Exchange. In May, 1999, the company was capped with PT and suspended trading on the stock market in 2000. In 2001, the company was restructured, renamed and phased out from the real estate industry subsequently. Initially, the state had a dominant and direct controlling position. From 1997, all the state shares were converted to legal person shares. Before restructuring, there was one controlling shareholder who was also one of the founders holding 21.9% of the total outstanding shares. The Top10 large shareholders held about 49% of the total shares and they were the institutional investors and individual investors. Table 3-3 shows the ownership structure and the performance of Shanghai Commercial Real Estate Development Industry Ltd. Co. (600833).

Table 3-3 Shanghai Commercial Real Estate Development Industry Ltd. (600833)

	ST-Sh.	LP-Sh.	Tr.-Sh.	Top10	1 st holder	2 nd holder	Others (3 rd -10 th)	ROA	ROE
2001		69.9%	30.1%						
2000		69.9%	30.1%	49.2%	21.9%	5.8%	21.5%	-2.5%	-28.5%
1999		78.1%	21.9%	49.2%	21.9%	5.8%	21.5%	-1.8%	-24.6%
1998		78.1%	21.9%	49.2%	21.9%	5.8%	21.5%		
1997		78.1%	21.9%						
1996	24.8%	54.0%	21.2%						
1995	54.0%	24.8%	21.2%						
1994	53.6%	25.2%	21.2%						

Source: www. stockstar.com

There is one listed real estate company (Shanghai Xingye Housing Ltd. 600603) who has no controlling shareholder. Xingye was co-founded by six entities in 1988. In 1991, it issued legal person shares and domestic shares publicly which were traded in January, 1992. From 1995 all the shares were floating on the stock market. From 2000, Shanghai City Development (Group) Corp. (a SOE) was the largest shareholder holding 2.14% of total outstanding shares. China Enterprise Ltd. a listed real estate company, also one of the founders, held 0.52% of total shares. In 2001, Shanghai City Development (Group) Corp. the largest shareholder holding 1.95% of total shares, and all the other 9 large shareholders

were either domestic individual investors or institutions. By the end of 2002, Shanghai City Development (Group) Corp. fell from the first large shareholder to the 8th large shareholder holding 0.16% of the total shares. An investment company came to be the 1st large shareholder holding 0.39% of the total shares. All the other large shareholders were individual investors. All the initial co-founders could not be seen from the list of Top10 large shareholders of the company (I am not sure whether Shanghai City Development (Group) Corp. is one of co-founders, since the name is different). It is a company with overly dispersed ownership structure. But the company was administrated by the local government line industry department; thus, in this sense, it is a SOE. Due to debt involvement with one of the initial founders, that is the fund of the listed company was misappropriated as loan to this founder and was not repaid in due course—which had negative impact on the business operation of the company, the company started to suffer from economic losses for the consecutive two years and was capped with ST in June 2002. Table 3-4 shows the ownership structure and performance of Shanghai Xingye Housing Ltd.

Table 3-4. Shanghai Xingye Housing Ltd (600603)

	LP-Sh.	Tr.-Sh.	Top10	1 st holder	2 nd holder	Others (3 rd -10 th)	ROA	ROE
2002		100%	2.0%	0.4%	0.2%	1.3%	-177.0%	-377.0%
2001		100%	4.7%	2.0%	0.8%	1.9%	-53.0%	-51.0%
2000		100%	3.7%	0.8%	2.1%	0.8%	0.6%	2.3%
1999		100%					7.0%	5.1%
1998		100%					10.6%	4.8%
1997		100%						
1996		100%						
1995		100%						
1994	26%	74%						
1993	31%	69%						
1992	75%	25%						

Source: www. stockstar.com

Except for one company (000047) which was controlled by a private institution, the ownership concentration ratios of all the other three listed real estate companies are below the average ratios (56 per cent) measured by Top10 large shareholders. In the first few years of the companies, the state had stake. Then the state shares

were converted in the following few years to the legal person shares or tradable A-shares. Two of the companies had no controlling shareholders. The shares were more diffused among the institutions and the individual investors who had no chance and capacity to supervise the management. Although there were many factors affecting the firm performance and I can not conclude from these special cases that the success of the companies depend on the state direct control, at least, theses cases tell us that (1). In China's real estate sector, the ownership concentration is relevant to the corporate performance. (2).The free-rider problems of small investors exist in China. Most of the investors, especially, the individual investors are looking for speculative short-term capital gains. The institutional investors are not strong enough to oversee the management. Therefore, the widely disperse ownership structure won't help to improve the firm performance. (3). No evidence is found in my study that the firms dominated by the legal person shares outperform the ones dominated by the state shares. On the contrary, the study shows the positive influence of the state shares on the firm performance