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Selbstständigkeitserklärung

Ich erkläre an Eides Statt, dass ich die vorliegende Dissertation selbst und ohne unzulässige Hilfe Dritter verfasst, die benutzte Literatur sowie Hilfsmittel vollständig erwähnt habe und die Dissertation noch von keiner anderen Fakultät abgelehnt worden ist. Diese Dissertation stellt auch in Teilen keine Kopie anderer Abeiten dar. Sofern fremde Abbildungen zur Illustration kopiert wurden, wurde dies als Quelle und im Literaturverzeichnis angegeben.

Abstract

Listed firms at the Chinese stock market are typically transformed former state-owned enterprises (SOEs). They are usually characterized by a concentrated ownership structure with the state, represented by its agencies at central and local levels, acting as the blockholder. Over the past 30 years of China's economic transition, three stages of SOE reforms have exerted great influence on the formation of the current corporate governance model at the Chinese stock market. This dissertation reviews the status and changes of the governance practices at each of the three stages in China's SOE reforms. It further explains how these changes took place by examining the most influential factors in the evolution of governance practices. We argue that there exists a path dependency, mainly driven by a learning process, in China's corporate governance evolution. By applying linear regression models, this dissertation provides evidence that listed firms with overall better corporate governance are valued higher and that the effectiveness of corporate governance differs from industry to industry.

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I. Introduction

Shortly after the foundation of the People's Republic of China (PRC) in October 1949, the Chinese government socialized the country's total economy. By doing so, a planned system in reference to the former Soviet Union was built up and directed the Chinese economy for almost three decades. Upon the end of the Cultural Revolution (1966-1976), China began to reform and open-up its economy to the outside world in 1978 under the leadership of Deng Xiaoping (1904-1997), who has been widely regarded as designer of China's economic reform and opening-up era since 1978.

Initial reform efforts in China were to combine plan and market together. The central government introduced incentives to agricultural productions and to the state sector, aligned prices to the underlying supply and demand, and opened the economy up to the outside world (cf. Qian 1999a, p. 3). The most important reform policy was the dual-track price system, introduced in the mid-1980s. Under this system, any commodity carried a planned price for the production quota set by the state and a market price set by the market supply and demand. Until early 1990s, most commodities were priced by the market, while the planned price track largely phased out (cf. Qian/Wu 2000, p. 7). In 1992, the central government altered its course from "combining plan and market together" to a "socialist market economy" with "Chinese characteristics", i.e., a competitive market system in which public ownership predominates. While the adjective "socialist" characterizes the political system in China, the term "market economy" clearly points to China's overall reform goal.

China had faced in the pre-reform era a number of problems such as enormous population pressure, severe shortages of human capital and natural resources, very poor industrial and infrastructure bases, and the difficulty of maintaining financial stability (cf. Qian 1999b, p. 2). In 1978, as the reform era began, 250 million Chinese were still living in absolute poverty (cf. GRRB 2008, p. 3). Since the reform and opening-up policies were adopted, the number of Chinese living in absolute poverty has been substantially cut down and came to merely 14.8 million by the end of 2007 (cf. ibid. p.3).

Meanwhile, China's national nominal GDP has achieved nearly a 10 percent average growth rate and proliferated from 364.5 billion RMB in 1978 to 30,067.0 billion RMB in 2008 (cf. NBSC 2007a, 2007b, 2008b). Starting from almost nil (0.167 billion USD in 1978), its foreign exchange reserves now rank the first in the world (1,946.0 billion USD by the end of 2008).[1] In 2008, China ranked 17th in the World Competitiveness Yearbook of the International Institute for Management Development (cf. IMD 2008) and 30th in the Global Competitiveness Report of the World Economic Forum (cf. WEF 2009), respectively, and thus stood out among all the transition economies and developing countries.

A few remarkable features characterize China's economic transition over the past three decades. Firstly, China has been following a gradual transition path. Many reforms had been initially carried out on an experimental basis and in some localities, before successful experiences were extended into a wider or even national scale by policies. Almost all important reform policies in China were based on former steps on lower and local levels. Secondly, China's transition succeeded without complete market liberalization. Though the state sector has been shrinking in its weight in the national economy, the state[2] still holds a big stake in several key industries (transportation, telecom, banking, oil, steel, etc.) and controls their operations. Thirdly, privatization and private property rights were not essential components of China's first three decades of transition. It was not until middle 1990s that the central government allowed privatization of small- and middle-sized SOEs. As recently as in March 2007, private property rights became *de jure* recognized by the Real Rights Law.[3] Last but not least, China's transition has been progressing without democratization. The Communist Party of China dominates in governing the country, and this one-party system is supposed to further exist for a long time.[4]

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1 See SAFE 2010 for the data of the respective years.

2 The term "state" is to some extent a vague term. Here, it refers to the central government on behalf of all the Chinese people or local governments on provincial and municipal levels, as the case may be. After a wave of administrative decentralization in the 1970ies, most large-size SOEs were delegated to local governments, while the central government supervised less than 150 SOEs. In this context, "the state" rather refers to local governments in the context of managing and monitoring SOEs.

3 Article 4 of the Real Rights Law states: "The real right of the state, collective, individual or any other right holder shall be protected by law, and may not be damaged by any entity or individual."

4 Very recently, Wu Bangguo, chairman of the Standing Committee of the National People's Congress (NPC), proclaimed during NPC's annual meeting in 2009 that China will

China's economic success as well as the Chinese characteristics makes its transition path an attractive object for economical researches. One of the most popular research areas is the booming Chinese stock market. Early literature in this area tends to prefer initial public offerings and stock pricings. Recently, more and more researchers have become interested in the corporate governance issues at the Chinese stock market.

This dissertation is a study on corporate governance practices in China. It tries to answer the main research question whether it makes sense to invest into listed firms with good corporate governance at the young Chinese stock market. This main research question is divided into a few sub-questions concerning corporate governance at China's stock market:

a. What are the current corporate governance practices?
b. How has corporate governance evolved over the past decades?
c. What backs this corporate governance evolvement?
d. Does stock valuation reflect peculiarities of this evolvement?
e. Are listed firms with good corporate governance relatively higher valued?

The structure of this dissertation is organized as follows: Chapter II outlines the theoretical foundations of corporate governance. Chapter III briefly describes the financial system in China. Chapter IV devotes to the current corporate governance practices in China. Chapter V deals with corporate governance evolvement in China and its deep roots. Chapter VI empirically investigates the link between Chinese listed firms' corporate governance and market valuation. Chapter VII summarizes the dissertation and gives an outlook for the future research work.

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never become a Western-style democracy in terms of a multiple party system and a separation of legislative, executive, and judicial powers (cf. ZHU 2009).

II. Theoretical Foundations of Corporate Governance

This part of the thesis pursues the goal to provide an in-depth overview over the theoretical foundations of corporate governance. As the starting point the term corporate governance will be defined considering a narrow and a broader perspective. Subsequently the importance of corporate governance is laid out, which will be followed by a reflection of the elementary conflicts of corporate governance. A wide range of paradigms that emerged to provide explanatory considerations to these conflicts will subsequently be elaborated upon. The lastsubsection of this part devotes itself to the review of the functions and influences of the financial markets on the development of enterprises and their corporate governance structures.

1. Definition of Corporate Governance

Corporate governance, as narrowly defined by Shleifer & Vishny (1997, p. 737), "deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment". As such corporate governance relates to a set of institutional and market-based mechanisms that "induce the self-interested controllers of a company […] to make decisions that maximize the value of the company to its owners" (Dennis & McConnell, 2003, p.2). Under this narrow definition corporate governance effectively ensures "that market signals and other relevant information are translated into investment decisions" (Berglöf 1997, p. 95) and that "imperfect information and different mechanisms that reduce or eliminate moral hazard in the relation between firms and financiers" are dealt with (Hellwig, 1991). The concerns of finance providers to firms - the reduction of their investment risks as well as the optimization of their capital allocation - are, thus, the main area of focus for corporate governance (Rubach & Sebora, 1998).

In a broader definition corporate governance is considered "describing good, efficient management and supervision of companies on the basis of internationally recognized standards in the interests of the company's owners and its social environment" (Cromme, 2005, p. 366). In this sense it is "concerned with holding the balance between economic and social goals

and between individuals and communal goals" (Cadbury, 2000) through "a set of relationships between a company's management, its board, its shareholders and other stakeholders" (OECD, 2004a, p. 11). Being deemed critical to economic and social well-being, corporate governance is to provide for the incentives and performance measures to achieve business success, and for accountability and transparency to the ensure the equitable distribution of the resulting wealth (Clarke, 2007, p. 2). In this broader definition corporate governance is concerned with the internal aspects of corporations, such as the delegation of authority, the interaction of the corporate bodies, issues of internal control, etc., as well as external issues to corporation such as relationships between a company's management, and its share- and stakeholders (OECD, 2004; Werder 2005, S.34). Here the aim of corporate governance is to "align as nearly as possible the interests of individual corporations and society" (Cadbury, 2000).

Despite their differences both definitions of corporate governance have the understanding in common that corporate governance provides "the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined" (OECD, 2004a, p. 11). Equally, both definitions agree to the fact that "good corporate governance should provide proper incentives for the board and management to pursue objectives that are in the interests of the company and its shareholders and should facilitate effective monitoring" (ibid). Any "governance framework is there to encourage the efficient use of resources and equally to require accountability for the stewardship of those resources" (Cadbury, 2000).

2. The Importance of Corporate Governance

For businesses to grow and expand they need to be able to attract funding from investors. Investors, on the other side, will only want to grant funds to companies they trust of being financially sound, well-managed and profitable (Mallin, 2007, p.1). Consequently, corporate governance should be seen as a highly desirable precondition for capital investments (Bartha, Gillies; 2006, p. 86) that reduces the cost of capital and encourages of more efficient utilization of resources through a provision of a degree of confidence that is necessary for the proper functioning of any market economy (OECD, 2004, p. 11). As a consequence, corporate governance represents a major factor determining economic performance (Cernat, 2004, p. 148) and enhancing growth (OECD, 2004a, p. 11).

According to Berglöf (1997, p. 113) may the importance of corporate governance also originate from "other aspects of the environment in which firms operate." As corporate governance is said to be a substitute to competition in the sense that when indicators of corporate governance are strong the relative significance of competition decreases, and vice versa (Aghion et al., 1997, Berglöf, 1997, p. 113) a correlation between financial systems and competitive environment may be derived. In environments where competition is well developed, corporate governance is likely to be less imperative. However, in environments unlikely to develop a strong level of competition, effective corporate governance is going to be particularly important. "The corollary for financial systems is that, in countries where competitive forces in industry for some reason are weak, the demands on corporate governance are going to be stronger, and vice versa." (ibid, p. 113)

At last, "good governance has always been intuitively associated not just with sound, but with successful companies" (Clarke, 2007, p. 22).

3. Conflicts of Corporate Governance

The literature commonly considers two sets of corporate governance conflicts that arise between shareholders as the owner of an enterprise and management focusing mainly on the ability or lack thereof of shareholders to control the usage of their capital invested into a firm or to influence the utilization of the invested capital in a way they want (Berle & Means, 1932; Jensen & Meckling, 1976; Fama & Jensen, 1983a, 1983b; Jensen, 1986, 1993). This is due to the fact that both the narrow and the broad definition of corporate governance consider the interaction of these two key governance participants. But next to the conflicts between shareholders and management arising out of the separation of ownership and control (Fama & Jensen, 1983a), a second set of conflicts may like arise between large and small shareholders (Burkart et al., 2003). And since shareholders are not the only suppliers of capital to firms there may as well be a third set of potential conflicts between shareholders and creditors that need to be taken into consideration (Jensen & Meckling, 1976, p. 44). Lastly and in accordance with the broader definition of corporate governance it can be considered that corporate governance conflicts may well arise between any two or more of the stakeholding parties. Swanson (1996, p. 417) therefore subsumes that the primary governance conflict is "the intricate balance between maximizing the efficiencies necessary to create wealth and ensuring that the controlling parties are accountable to those with a stake in the enterprise".

The substance of corporate governance conflicts commonly follows from the separation of ownership of control or in the broader sense from the separation into performing and controlling parties. Once this separation is in place it serves as the starting point for a diversity of potential conflicts. The main areas of conflict originate from the relationship between the principal (owner, stakeholder) and the agent (manager), the level of trust upheld by and in key players, the extent of information asymmetries between the related parties and lastly issues related to a common goal alignment of all relevant parties. As indicated earlier the definition of relevant parties or stakeholders itself bears already potential for a conflict as there are different perceptions uphold with regard to the parties to be considered.

a) Separation of Ownership & Control

Berle & Means (1932) noted that with the increased capital requirements of the modern corporation a separation between ownership and control of wealth was to inevitably occur. This was so despite the unchanged preferences of owners to maximize their utility by managing their companies themselves rather than entrusting someone else with doing so. (ibid). Eventually corporations grew beyond the means of a single owner as they proofed incapable of meeting the increased economic obligations of a corporation. Consequently, "the modern corporation typically has multiple owners, each intent on maximizing his or her investment in the enterprise" (Davis et al., 1977, 22). With the number of shareholders starting to increase, shareholders' influence upon corporate management diminished (Clarke, 2007, p. 87). Means (1931) recognizes various ranges of ownership control dilution. From control through almost complete ownership via majority control and control through legal devices without majority ownership to minority control and lastly management control. "Thus in the management controlled company the separation of ownership and control has become virtually complete. The bulk of owners have in fact almost no control over the enterprise, while those in control hold only a negligible proportion of the total ownership" (Means, 1931, p. 89). Clarke (2007, p. 87) concluded similarly that "as corporations became the dominant vehicle […] their legal instruments of incorporation […] increasingly reflected the concerns not of stockholders, but of executive management".

With the increase of the amount of owners or, stated otherwise, with the wider dispersion of ownership individual shareholdings decreased and with

it the ability to influence decision-making as well as incentives to invest significant resources for the monitoring of the management (Clarke, 2007, p. 87). With the majority of shareholders following passive risk diversification strategies rather than active ownership assignment the importance of individual shareholders with a significant ownership increases comparatively. A rather modest shareholding may suddenly be an influential blockholding if all remaining shares are held widely dispersed among individuals and investors. Whereas the letter profit from the blockholder expending resources to monitor and influence management, they may suffer from a decrease of share value if the blockholder uses its control to extract corporate resources. ”Thus, the ultimate effect of blockholder ownership on measured firm value depends upon the trade-off between the shared benefits of blockholder control and any private extraction of firm value by blockholders” (Dennis & McConnell, 2003, p. 3).

b) Principal - Agent

Adam Smith (1776) constituted that “being managers of other people’s money than 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-partner frequently watch over their own. […] Negligence and profusion, therefore, must always prevail more or less in the management of the affairs of a joint stock company” (Smith, 1976, p. 264 - 265). Smith thereby defines the conflict arising out the situation that “owners become principals when contracting with executives to manage their firms for them” (Davis et al., 1977, p. 2). As an agent, a manager is called upon to maximize of the principal’s utility. Any agent will accept this responsibility for as long as he thereby maximizes his own utility (ibid). The relationship between the principal and agent is therefore of fundamental to corporate governance, especially as diverging interests and utility choices of them lead inevitably to a conflict.

Jensen & Meckling (1976, p. 484) note that principal-agent relations “are the essence of the firm, not only with employees but with suppliers, customers, creditors, and so forth” as they can be considered to describe any situation of cooperative effort by two or more people.

c) Trust

"The essential and eternal concept of trust is a vital component of corporate governance"(Clarke, 2007, p. 30). Trust "promotes decision making and enhances cohesiveness" (Stiles & Taylor, 2002, p. 123 - 124). As "the absence of trust is deeply corrosive"(Clarke, 2007, p. 30) much of the activity of corporate governance revolves around its development (Stiles & Taylor, 2002, p. 13). If trust between parties and to a transaction can be developed depends on the prevalence of social norms (Powell, 1996). Being generally based "on an individual's theory as to how another person will perform on some future occasion, as a function of that target person's current and previous claims, either implicit or explicit" (Good, 1988, p. 33) trust is usually created in networks or groups. Puffer & McCarthy (2008, p. 21) declare that no "corporate governance system can be effective without public trust in the actions of company managers, boards of directors, and such entities as auditors, financial institutions, and government oversight bodies that can influence company governance processes".

d) Information Asymmetry

Due to the separation of ownership and control and imperfect markets the management of a company will always prevail with an information advantage over the shareholder on past but especially future transactions. As the management runs the operations of an enterprise, knowledge about these must be unevenly spread between management and shareholder. The literature describes three types of information asymmetries in the management - shareholder relationship.

An adverse selection may occur as a consequence to unevenly distributed knowledge about particular (hidden) characteristics of a transaction prior to the deal conclusion (Akerlof, 1970). Hidden action describes a situation of moral hazard, characterized by the inability of the owners to monitor the actions of the contracting party, which may provide for exploitation schemes. Hidden intention describes another instance of moral hazard and refers to the secret intention of a contracting party to extort rents via uncooperative behavior once the contract is signed.

Hutchinson & Gul (2004, p. 597) explain that corporate governance controls are commonly considered to be diminishing information asymmetries. However, such controls are truly important only for firms with a high level information asymmetry. Additionally, information asymmetries are higher

with growth firms because managers have private information about the value of future projects and hence their actions are not readily observable to shareholders. Therefore, growth firms experience a greater need for corporate controls (ibid).

e) Goal Congruence

Modern corporations are complex team-productions, with the output being jointly produced by several-input owners, e.g. managers, employees etc. (Alchian & Demesetz, 1972). In attaining the goal to achieve some level of efficiency, tasks are delegated within the corporation and specialized units emerge that produce part of the output on behalf of the entire team. An inevitable result of this specialization is the dispersion of knowledge among the different team-units and information and knowledge being distributed asymmetric (Kunz & Pfaff, 2002, p. 277). Next to information asymmetries cooperative efforts may suffer from the fact that individuals commonly pursue their own goals which may only partially be overlapping with the team goals (Mayo, 1945; Barnard, 1968). Barnard (1968, p. 141) therefore holds that "an organization can secure the efforts necessary to its existence […] either by the objective inducement it provides or by changing states of mind." Fama (1980, p. 289) adds that despite the fact that the members of an organization act from self-interest, they "realize that their destinies depend to some extent on the survival of the team in its competition with other teams".

As principals and agents have varying utility functions (Jensen & Meckling, 1976) and from there on different goal orientations as well as risk-preferences (Wright et al., 2001, p. 417), goal conflicts occur. To the extent that such conflicts prevail, the costs of an agent's decisions to the principal are expected to increase (Jensen & Meckling, 1976).

Whereas in political models goal conflicts are resolved through bargaining, negotiation, and coalitions whereas in economic models they are resolved through the coalignment of incentives (Eisenhardt, 1989, p. 63) and the implementation of controls. Accordingly incentives and monitoring are "the essence of organizational analysis, whether the substance has to do with decentralization, division of labour, formal rules, structure, communication or ownership versus control" Moe (1984, p. 755).

A) Incentives

Eisenhardt (1989, p. 61) holds that a principal has two options to influence the behavior of the agent should he lack complete information. One is to contract with the agent on the outcomes of the agent's activities, whereby the agent's behavior is motivated by co-alignment of his preferences with those of the principal. This co-alignment comes at the price of transferring risk to the agent as outcomes are only partly a function of behaviors and are likely to be affected by events uncontrollable to the agent (e.g. technological change, competitor actions, etc.). As outcome uncertainty constitutes a risk that must be borne by someone, the costs of shifting this risk onto the agent are positively associated with the level of uncertainty to achieve the goal(ibid) as the agent will require a higher premium for taking on additional risk.

The incentives to reach a certain outcome are generally divided to be either extrinsic or intrinsic. Extrinsic incentives take the form of pecuniary and non-pecuniary benefits (Jensen & Meckling, 1976, p. 486) whereas "people are said to act intrinsically motivated if they value activities for their own sake, such as they perform them without being externally induced" (Kunz & Pfaff, 2002, p. 279).

Whereas tournament theory maintains that larger extrinsic incentives motivate agents to aspire to higher goals and results in and improved enterprise performance (Lee et al., 2008, p. 318) Lazear (1989) pointed out that large extrinsic incentives may induce sabotage of other managers' results instead of efforts to do better oneself. Several authors pointed out that extrinsic performance incentive may diminish an agent's intrinsic motivation (Deci, 1975; Frey, 1997; Ryan & Deci, 2000). An extrinsic reward granted to the agent is said to contradict, at least to some degree, the notion of the principal to raise his own utility. As such the conclusion of a contract providing the agent with an extrinsic incentive is said to come with a hidden cost to the principal (Lepper & Greene, 1978).

A further problem with extrinsic rewards is that the organization goal to which they are tied is often "defined only imperfectly and frequently is intended to be modified or updated as the organization progresses towards it" (Rosanas & Velilla, 2005, p. 85). An incentive system that always provides an extrinsic incentive "in the 'right' direction (the organizational goal) cannot exist" especially when the organizational objectives are ambiguous (ibid, p. 87).

B) Internal Control

As the second option to influence the behavior of an agent should the principal lack complete information Eisenhardt (1989, p. 61) suggests an investment in control systems (e.g. information) such as budgeting systems, reporting procedures, boards of directors, and additional layers of management to discover the agent's behavior and to revert from incomplete information to complete information. Williamson (1985) supports this notion arguing that since principals find it difficult to know ex ante which agents will selfaggrandize, it is prudent for them to limit potential losses to their utility (Williamson, 1985).

Any collectivity which has an economic goal must then find a means to control diverse individuals efficiently (Ouchi, 1980, p. 130). To this effect formal control systems are commonly set up which provide the principal with richer information. Consequently incentives can be aligned with organizational interests to motivate actions in their direction. At the same time the control systems allow for an evaluation of the achievements which build the basis for extrinsic rewards being grated. The evaluation process is usually less than perfect because the organizational goal is not only often imperfectly defined or frequently changing (Rosanas & Velilla, 2005, p. 85) it is also difficult to measure. This measurement challenge derives from the fact that firms are usually team productions where several types of resources are used, the output is not a sum of separable inputs of each team member, and where not all of the resources used by the team belong to one person (Alchian & Demsetz 1972). Nilakant & Rao (1994, p. 665) elaborate further that in complex team productions one generally must be differentiating between two types of business activities upon which the final outcome is contingent - operational and facilitative effort. The earlier involves the transformation of inputs into an output or a set of outputs and the latter involves the acquisition of inputs, coordination of inputs, intermediate outputs and transformation processes, and the selection of conversion technologies.

While for operational efforts (e.g. structured, mechanical jobs) the goal to be achieved can be clearly defined and is rather simple to measure, for facilitative efforts (e.g. corporate management) the goals are difficult to define and the contribution only imperfect to measure. Consequently, in increasingly more complex situations, "measurement systems are very imperfect or even difficult to define, and the result of the measurement is inevitably different from the goal the organization is actually trying to achieve.; therefore, the correlation between the real goal to be pursued and the performance actually measured is bound to be less than one" (Rosanas & Velilla, 2005, p.

85). The simpler the situation (e.g. operational effort), the higher is the correlation between measured performance and the real organizational goal; and the more complex a situation (e.g. facilitative effort) the weaker is the correlation between the measured performance and the organizational goal. Anthony & Govindarajan (2003, p. 94) conclude that perfect goal congruence cannot exist in practice in any complex situation. Hence, the control system will also not be perfect and therefore necessarily allow managerial opportunism to a certain extent (Rosanas & Velilla, 2005, p. 89).

In this regard, Lazear (1989) pointed to the potential of moral hazard for agents arising out of the inability to properly define the managerial goal and to measure its achievement appropriately. This situation leads any control system to improperly (from the perspective of the organizational goal) decide on key performance indicators to be measured. Lazear (1989) concludes that this may result in two detrimental actions of an agent. Whenever an action has an effect on the key performance indicator to be measured but none on the organizational goal, thereby being organizationally useless, a corporate incentive may induce the agent to perform that useless action. Corollary, if an action has a decisive effect on the organizational goal, but none on the key performance indicator to be measured any incentive to further the key performance indicator may induce the agent not to perform that action. (Rosanas & Velilla, 2005, p. 86)

If the internal control systems and mechanisms fail, external control mechanisms (e.g., acquisitions, divestitures, and ownership amendments) will emerge to control self-serving managers despite the fact that the latter are commonly more expensive. Because of this extra expense, internal mechanisms are generally preferred by principals (Walsh & Seward, 1990).

4. Corporate Governance Paradigms

A variety of paradigms and theoretical constructs have been developed and applied to better comprehend and eventually to solve or at least minimize the costs arising out of the conflicts in corporate governance. This section will consider eight different paradigms with a particular emphasis on agency theory as the main paradigm, followed by the transaction cost economics approach, the stewardship theory, the stakeholder approach and eventually in short overview of paradigms with less academic coverage such as managerial hegemony, resource dependency, class hegemony and network governance.

a) Agency Theory

The ubiquitous agency relationship stands for a situation in "which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent" (Jensen & Meckling, 1976, p. 310). Agency theory suggests that problems of organization arise out of this delegation of duty and authority. Two main problems have been found inherent in agency relationships which agency theory is concerned with solving. The first refers to the agency problem which arises from goal incongruencies between principal and agent and/or from the costs to monitor the agent's behavior and performance outcome. The second problem refers to risk sharing and arises whenever the principal and agent have different attitudes toward risk and consequently may prefer different actions because of the varying risk preferences (Eisenhardt, 1989, p. 58).

The model of man underlying organizational economics and agency theory "is individualistic and […] predicated upon the notions of an in-built conflict of interest between owner and manager" (Donaldson, Davis, 1991, p. 51) and of a rational actors who seek to maximize their individual utility with the least possible expenditure (Jensen & Meckling, 1976). Moreover, the model is one of an individual calculating likely costs and benefits, and thus seeking to attain rewards and avoid punishment, especially financial ones (Donaldson, Davis, 1991, p. 51). Per agency theory, the principal derives pecuniary benefits (costs) from an agency relationship, whereas the agent derives both pecuniary and non-pecuniary benefits (costs) from this relationship. The nonfinancial benefits may include “the physical appointments of the office, the attractiveness of the office staff, the level of employee discipline …" (Jensen & Meckling, 1976, p. 486) (Wright et al., 2001, p. 417)

Unless the role of the principal and the agent are merged into one, i.e. ownership and management in the hands of the same person agency costs cannot be completely eliminated (Wright et al., 2001, p. 417). Commonly there are three different kinds of agency costs considered (Jensen & Meckling, 1976; Matos, 2001). Bonding costs refer to such costs as incurred for appointment of independent auditors, residual costs refer to costs related to the appointment of an independent board and monitoring costs refer to any costs incurred to monitor management’s activities. (Rashid & Islam, 2008, p. 25) The larger the firm becomes the larger are the total agency costs” (Jensen & Meckling, 1976, p. 522; Wright et al., 2001, p. 419)

Agency theory attributes uncertainty in performance outcomes to moral hazard, adverse selection and the state of nature. With the state of nature, referring to external environmental influences uncontrollable by an organization which may cause variations in outcomes, considered as an exogenous factor, agency theory focus on the reduction of uncertainty arising out the agent's effort and type (Nilakant & Rao, 1994, p. 655).

Moral hazard refers to the lack of agreed upon effort as exerted by the agent. That is, moral hazard refers to shirking, the most important source of agency conflict ((Jensen & Meckling, 1976, p. 487) which is likely to go unnoticed due to a prevailing information asymmetry around a complex issue that would require considerable expenses by the principal to be overcome (Eisenhardt, 1989).

Adverse selection refers to the misrepresentation of facts by the agent which the principal is unable to completely verify at the time of the transaction (Fama & Jensen, 1983a).

Having its roots in economic utilitarianism (Ross, 1973) agency theory examines the agency relationship primarily in the context of an individual principal or agent based on the social science doctrine of methodological individualism (Donaldson, 1990). The paradigm holds that economic phenomena should be examined with the behavior of individuals being considered deliberate as economic life is best understood as maximizing individual's behavior (Wright et al., 2001, p. 414). Agency theory has subsequently developed along two main branches: positivist agency theory and principal-agent theory. (Nilakant & Rao, 1994, p. 650) The contract between the principal and the agent is the commonly shared unit of analysis for both theorems (Eisenhardt, 1989, p. 59).

Positivist agency theory focuses on the broad issues arising out of separation of ownership and emphasizes governance mechanisms to discipline agents, such as incentive schemes, financial and labour markets (Fama 1980; Fama and Jensen 1983a; Jensen 1983). The emphasized governance mechanisms are best covered by two propositions (Eisenhardt, 1989, p. 60). First, outcome-based contracts are effective in limiting agent opportunism by better coaligning the preferences of agents with those of the principal. The second proposition is that information systems also limit agent opportunism as they provide information about the behavior of the agent to the principal, which in turn will serve as a deterrent to deceive the principal (ibid).

Principal-agent theory takes the ownership and allocation of firms as a given and concentrates on the design of optimal, behavior vs. outcome, em-

ployment contract and information systems (Baiman 1982, 1990). As a theory that can be applied to various other agency relationships such employer-employee, lawyer-client, buyer-supplier, etc. (Harris & Raviv, 1978). The model assumes goal conflict between principal and agent, and an agent who is more risk averse than the principal as he is unable to diversify his employment in comparison to the principal being able to diversify his investments (Eisenhardt, 1989, p. 60). Eisenhardt (1989, p. 61) formulates that in case of complete information a behavior-basedcontract is most efficient, as an outcome-based contract would needlessly transfer risk to the agent. In case of incomplete information an outcome-based contract is most efficient as the principal lacks the ability to control for the conformity of the agent's behavior as well as for the congruence of the actual goals pursued.

The two agency theory branches are complementary as positivist agency theory identifies various contract alternatives, and principal-agent theory indicates which contract is the most efficient under varying levels of outcome uncertainty, risk aversion, information. The essence of positivist agency theory is the evaluation of goal conflicts arising out of cooperative efforts among individuals with differing preferences. Principal-agent theory on the other side elaborates on the trade-off between the costs for monitoring the agent's behavior and the cost of a risk transfer associated with monitoring only the agent's performance outcomes (Eisenhardt, 1989; Nilakant and Rao, 1994).

From a principal-agent perspective relaxing the assumptions of agency theory related to risk-attitude, goal conflict, predefinition accuracy of tasks and goals may affect the choice of one contract type over the other (e.g. behavior-based vs. outcome-based contract).

As such MacCrimmon & Wehrung (1986) conclude that to the extent that an agent becomes less risk averse (e.g., a wealthy agent), a principal will find it more attractive to pass on risk to the agent using outcome-based contracting. With the principal becoming more risk-averse (e.g. old principal) the attractiveness to pass on risk to the agent using outcomebased contracting increases. So, if the agent is becoming less risk averse or the principal is becoming more risk averse the attractiveness of outcome-based contracting increases.Demski, (1980) indicated that with decreasing potential for goal conflict, e.g. in highly socialized firm (Ouchi, 1979) or in situations driven by intrinsic rather than extrinsic motivation (Perrow, 1986) the principal incurs less monitoring costs to observe the agent's behavior and behavior-based contracting becomes more attractive.

Levinthal (1988) has shown that optimal principal-agent contract under complete information (first-best contract) is different from the optimal contract information is incomplete (second-best contract). Under complete information the principal will conclude a behavior-based (employment) contract whereas under incomplete information the principal favors an outcome-based contract to avoid the incurrence of tremendous monitoring costs. The second-best contract is compared to the first-best contract less efficient with part of the efficiency loss deriving from the transfer of risk onto the agent. This is supported by the findings of Eisenhardt (1985, 1988) that with the increasing ability to correctly predefine an agent's goals and tasks the costs for the observation and evaluation of the agent's behavior decrease. Consequently principals will prefer behavior-based contracts to outcome-based as information about the agent's behavior is more readily available to them. On the other side Anderson (1985) and Eisenhardt (1985) determined that with increasing difficulties to measure outcomes or individual contribution within a practical amount of time, outcomebased contracts become less attractive and vice versa. Lastly, Lambert (1983) established that the longer the cooperation between a principal and an agent, the better will a principal know his agent. Consequently the assessment of the agent's behavior is less costly and behaviorbased contracting becomes more attractive.

The limits of agency theory are determined by its underlying the model of man (Davis et al, 1997, p. 24). Jensen & Meckling (1994) criticize it as being a simplification for mathematical modeling and an unrealistic description of human behavior. Hirsch et al. (1987) said the models assumptions limit its generalizability which Doucouliagos (1994) supports in arguing that labeling all motivation as self-serving does not provide for the complexity of human action. Perrow (1986) reasons that agency theory overemphasizes the prevalence of self-serving behavior and disregards other behavioral notions. He also holds that agency theory does not account for common organizational slack and promotion policies, which for example take the length of service into account length, to reduce the effects of moral hazard and adverse selection. Kaplan (1983) in the same vein questions whether managers indeed engage in continuous utility maximization.

Despite being concerned with strategies and mechanisms to reduce uncertainty in task performance, agency theory is said to overlook two critical sources of outcome uncertainty - "incomplete knowledge about the effort-outcome relationship and lack of agreement about effort and outcome" (Nilakant & Rao, 1994, p. 649). Principal-agent approaches to contract design

are considered by Nilakant & Rao (1994, p. 649) to be "unrealistic to the extent that they presume that performance in organizations results exclusively from individualcontributor jobs, exaggerate the degree to which individuals are work-averse, and emphasize the quantity of effort at the expense of the quality and type of effort."

Lastly, Davis et al. (1997) note that agency theory by specifying an intermediate condition of control, e.g. the installation of controls to reduce abuse of the delegated duty and authority arising out of an agent's poor motivation, many other reasons for performance failures such as low ability, lack of knowledge, and poor information are left unaddressed and unconsidered.

In spite of this criticism agency theory has become one of the most relevant theoretical paradigms in economics. It has been used by scholars in accounting, economics, finance, marketing, political science and organizational behavior (Eisenhardt, 1989, p. 57). Agencytheory reestablishes the importance of self incentives and self-interest in organizational thinking (Perrow, 1986), especially as "contractual relations are the essence of the firm, not only with employees but with suppliers, customers, creditors, and so on" (Jensen & Meckling, 1976, p. 484). Agency theory furthermore made two specific contributions to organizational thinking. It introduced the consideration of information being a commodity, that has a cost can be purchased (Eisenhardt, 1989, p. 64). This highlights the significant role of formal information systems, such as budgeting and boards of directors, and of informal information systems, such as managerial supervision, not known to organizational research before. "The implication is that organizations can invest in information systems in order to control agent opportunism" (ibid). Secondly, agency theory contributed to organizational risk considerations as organizations face uncertain futures which are only partly determined by its members. Viewing uncertainty in terms of risk/reward trade-offs and not just in terms of the inability to preplan, agency theory implies that "outcome uncertainty coupled with differences in willingness to accept risk should influence contracts between principal and agent" (ibid, p. 65).

b) Transaction Cost Economics

Transaction cost economics is said to be the most established theoretical approach after agency theory (Clarke, 1997, p. 26). Williamson (1975, 1985) argued that markets and firms are alternative modes of executing economic transactions. The transaction cost economics paradigm was devel-

oped by Coase who noted that "the main reason why it is profitable to establish a firm would seem to be that there is a cost of using the price mechanism" (Coase, 1937, p. 390). There are several cost considerations that lead production to be organized through a firm price mechanism rather than the market price mechanism. First, determining prices at the market is much more costly than within a firm as the price discovery process at the market requires significantly more transactions compared to the one within a firm, particularly as prices at the market differ widely (Cheung, 1983, p. 6). Second, the information cost of knowing a product is important as it allows for the incurrence of lower costs in price negotiations. Eventually the costs of measuring attributes of a product and the costs for individual price agreements with contributors in cooperative efforts (ibid, p.6-8) constitute other cost factors. Ouchi (1980, p. 130) therefore maintained that transaction costs arise mainly out of the difficulty to determine the value of a good or service arising from the underlying nature of the good or service or from a lack of trust between the parties to a transaction. Transactions cost economics, hence, relates the nature of firms with the imperfection of markets and with the transaction costs in market exchanges (Clarke, 2007, p. 26) and explicitly regards efficiency as the fundamental element in determining the nature of organizations (Ouchi, 1980, p. 129) as the latter supersede the market in its efficiency for equitable mediation of transactions between parties (ibid, p. 140)

Transaction-cost economics emphasizes in addition to ownership and incentive alignment, ex post support institutions (Williamson 1985). Alchian & Demsetz (1972) argue that firms exist because of team production which leads to metering problems, since there is an incentive for individual members to shirk. One method of reducing shirking is for someone to specialize as a monitor to check the input performance of team members, which leads to the emergence of a firm. To transaction cost economics the notion that firms are superior to markets in monitoring input performance and in providing incentives for individual performance is central (Williamson, 1986, p. 87).

The locus of attention remains the principal-agent relationship, but according to transaction cost economics shareholders are perceived to "face a diffuse but significant risk of expropriation because the assets in question are numerous, and ill-defined, and cannot be protected in a well-focused, transaction specific way" (Williamson, 1985, p. 306). Transaction cost economics has at its heart the goal to discover internal measures and mechanisms that would reduce costs associated with contractual hazards to an effi-

cient level. (Willamson, 1975, p. 143 negates the reliability of a financial market to mitigate these problems, as it has only “limited constitutional powers to conduct audits and has limited access to the firm’s incentive and resource allocation machinery”

Barney & Ouchi (1986) noted that agency theory and transaction cost economics jointly share the assumptions of self-interest and bounded rationality. They also have similar dependent variables, e.g. firms closely correspond to behavior-based contracts, and markets to outcome-based contracts. The independent variables considered by both theories are the most important difference (Eisenhardt, 1989, p. 64). In transaction cost theory these independent variables are asset specificity and small numbers bargaining, whereas in agency theory the risk attitudes of the principal and agent, outcome uncertainty, and information systems are the variables of interest (ibid). Williamson (1988) considers both theories to mainly differ in their approach to costs and in the elementary notion that transaction cost economics unlike agency costs views corporate governance problems as proceeding from a number of contractual hazards.

As with agency theory, transaction cost economics has been criticized by organizational theories such as Jones (1983) & Perrow (1981, 1986) to neglect aspects such as altruism and power and to overemphasize the relevance of self-interest and efficiency in the evolution of organizations. Nikalant & Rao (1994, p. 667) add that "to the extent that transaction-cost economics emphasizes hierarchical control, performance evaluation, monitoring, and incentives, it fails to view the firm as a network of interdependent roles and ignores the critical role of facilitative effort in firms."

c) Stewardship Theory

Having its roots in psychology and sociology rather than economics stewardship theory examines situations in which executives as stewards are motivated to act in the best interests of their principals (Donaldson & Davis, 1989, 1991). The theory holds that managers are not motivated by individualistic goals, but by the success of the organization as the steward's utility functions are said to be maximized upon accumulation of shareholders' value (Davis et al., 1997, p. 25). The manager as seen by stewardship theory, thus, shows a pro-organizational, collectivistic rather than a self-serving behavior (ibid). Consequently behaviors such as moral hazard and adverse selection could not be arising in a stewardship relation between manager and owner.

Despite the fact that stewardship theory generally assumes that the motives of the steward can be and are aligned with the objectives of their principals (Davis et al., 1997, p. 21), a steward will place higher value on cooperation than defection even if the goals between the principal and the steward are not congruent as the steward perceives greater utility in cooperative behavior (ibid, p. 24). Even when a course of action is considered unrewarding the steward will act upon it out of a sense of duty towards the organization and the principal, that is, normatively induced compliance (Etzioni, 1975).

The model of man underlying stewardship theory is that of a person who is being motivated by a need to achieve, to successfully master challenging work, to exercise responsibility and authority, from which recognition of peers and superiors is obtained (McClelland 1961; Herzberg et al., 1959). Thus, stewardship theory emphasizes intrinsic factors rather than extrinsic rewards to be the underlying drivers for performance. Donaldson & Davis (1991, p. 51) add that "identification by managers with the corporation, especially likely if they have served there with long tenure and have shaped its form and directions, promotes a merging of individual ego and the corporation, thus melding individual self-esteem with corporate prestige".

Similarly to agency theory stewardship theory assumes that most stakeholders' interests are well served by increasing shareholder value, albeit a potential multiplicity of stakeholders and a multitude of competing objectives pursued by them (Davis et al., 1997, p. 25).

"Contrary to agency theory, stewardship theory uses a different model of man and assumes different situational and psychological antecedents to individual behavior" (Klein, 2007, p. 1081). According to O'Reilly & Chatman (1996) stewardship theory proposes social control mechanisms based on shared values, goals, and attitudes in contrast to agency theory's promotion of formal control mechanisms relying on extrinsic rewards or punishments to control managerial behavior. Barney and Hansen (1994) consider control devices to likely be inefficient since "what works well to control or motivate an opportunistic manager may not work well to control or motivate a steward" (Lee & O'Neill, 2003, p. 212).

Donaldson & Davis (1991) argue that stewardship theory - in contrast to agency theory - supports the notion of a chief executive officer to also be the chair of the board of directors, as pro-organizational actions are best facilitated when corporate governance structures provide the chief executive officer with high authority and discretion. As stewards are assumed to maximize their utility by achieving organizational rather than self-serving objec-

tives the accumulation of authority is considered fostering corporate performance.

As such stewardship theory calls for corporate structures that empower and facilitate rather than monitor and control, especially as monitoring and controlling can potentially be counterproductive to the organizational goal since control may undermine the pro-organizational behavior of the steward (Argyris, 1964). Under control a steward will not enjoy the aimed for internal rewards, such as achievement or self-actualization. As a result the steward's motivation may diminish as the workplace becomes depersonalized and members of the organization including the steward appear interchangeable (Davis et al., 1997, p. 39). In such "environments, employees may resort to antagonistic adaptive activities such as absenteeism and turnover; theft and vandalism; and demanding better financial compensation" (ibid, p. 40).

d) Stakeholder Theory

While agency theory has its clear focus on the principal-agent relationship with the maintenance or enhancement of shareholder value being paramount (Mallin, 2007, p. 16), stakeholder theory demands that a wider of group of constituents is taken account for in corporate decision making. Redmond (2005, p. 156) explains this demand in reference to a generally accepted legal concept stating that "the logic of separate personality and limited liability doctrines favour the externalization of the social costs of corporate behaviour, shifting the risk of the enterprise operations away from shareholders and onto stakeholders or wider society". Blair (1995) argues in the same vein that companies could not be seen just as a bundle of assets that belong to shareholder, but need be conceived as institutional arrangements governing the relationships of all parties that contribute firm-specific assets.

Whereas it was argued that ownership grants exclusive rights to property title holders and that shareholders bearing the residual risk with their financial investments into a corporation should have the exclusive right to decide over the course of the enterprise (Engelen, 2002), Berle & Means (1932, p. 309) declared that "neither the claims of ownership nor those of control can stand against the paramount interests of the community". A further argument that agents have a contractual obligation only to the shareholders and therefore a fiduciary duty only towards the latter, Blair and Stout (2001, p. 5) utilizing another legal excurse explain that managers enjoy a remarkable

degree of freedom from shareholder command and control as "corporate law itself does not obligate directors to do what the shareholders tell them to do". Blair & Stout (2001, p. 6) conclude that corporate law does not compel management to the sole goal of shareholder value maximization "but does not preclude them from pursuing this goal either."

Monk's & Minow's (2001, p. 40) argument that the pursuit of a multitude of goals leads to a problem of effective accountability and therefore increased agency costs as "it is difficult enough to determine the success of a company's strategy based only on one goal - shareholder value. It is impossible when we add other goals", has yet been left unresolved by proponents of the stakeholder approach.

Puffer & McCarthy (2003b, p. 400) identify three distinguished groups of shareholders with a different level of influence on corporate decision making and corporate governance. Top management, the supervisory board, and the shareholders are referred to as primary stakeholders who decide upon, implement, and execute corporate governance in corporations Secondary stakeholders are - employees, creditors, customers, and suppliers - groups that can affect a firm's operations and results by providing or withholding goods, services, and resources. In stakeholder-based corporate governance systems they may be directly involved in governance through memberships on supervisory boards. The third and least influential group of stakeholders, referred to as peripheral stakeholders, are - business associations, rating bodies, investment banks, financial analysts, and auditing firms - groups that can influence corporate governance by providing advice or exerting pressure on the company, or the through misstatements or miscommunication of company processes and results. Peripheral stakeholders usually interact directly with primary stakeholders on a relatively frequent basis, but are rarely members of boards of directors.

Fink et al (1999, p. 12) elaborate that the actual ability of stakeholders to influence corporate decision making derives from a variety of sources with the access to physical resources not being the only influential factor. Stakeholder are said to be able to influence corporation due to their position (legitimate power), their expertise (expert power), their ability to reward compliance (reward power) or to punish non-compliance (coercive power). The goal of their involvement in decision making commonly relates to the "scope and the timing of investment decisions, as well as on considerations of decision alternatives and opportunity costs stemming from alternative decisions" (ibid). They will naturally also aim to influence corporate decision-making whenever they perceive their own interests to be affected, par-

ticularly should a transfer of control be about to take place (ibid, p. 8). Balling, (1998) notes that control rights transfers usually take place in conjunction with ownership changes (e.g. privatization, takeovers, mergers, restructuring) or in times of financial distress, when employees are being laid off, managers exchanged or upon (ibid).

In this regard, stakeholder theory is considered to be in "juxtaposition to agency theory" (Mallin, 2007, p. 16) with stakeholders claiming that a consideration of their interests in the agent's business conduct leads to superior moral and ethical decisions.

e) Institutional Theory

Institutional theory as promoted by Axelrod (1997) holds that actors/organizations may in difference to agency theory adapt their behavior towards a given environment by internalizing its norms and values without a particular rational reasoning as they are social beings. According to Scott (2001) there are three different kinds of institutions affecting the behavior of any actor or organization. Regulative institutions provide for norms as expressed in laws and rules which are explicitly followed (e.g. a Corporate Governance Code). As the non-abidance to these norms is commonly sanctioned they are being adapted to in order to avoid punishment. Normative institutions are behaviours that are considered appropriate and expected to be abided by in accordance with prevalent moral standards. Culturalcognitive institutions refer to norms being followed with little awareness as they appeal to beliefs or logics of action commonly shared (e.g. form of greeting). As such cultural-cognitive institutions relate to behaviours of particular cultural relevance which are mainly adapted to through mimetic mechanisms.

f) Resource Dependence Theory

Resource dependence theory in agreement with institutional theory and network theory highlights "the interdependencies of organizations rather than viewing them simply in terms of management intentions" (Clarke, 2007, p. 29). According to Hilman et al. (2000) corporate management provides a critical link to the external environment hat helps to overcome uncertainty via the provision of resources. Management with its key relationships with suppliers, buyers, public policy makers and other social groups

thereby effectively deal influence the level of uncertainty a corporation is exposed to. Daily & Dalton (1994) argue that the selection of management must be considered also from the perspective if their inclusion provides access to vital resources and information, thereby reducing environmental dependency. Pfeffer & Salancik (1978) add that to the extent that directors effectively manage environmental uncertainty corporations become powerful, which according to Singh et al. (1986) leads ultimately to an increased probability of survival for the company. In this light resource dependence theory is considered by Clarke (2007, p. 29) to add "a vital external dimension to corporate governance relationships".

g) Network Governance

Network governance is defined as an interfirm coordination through informal social systems to coordinate complex products or services in uncertain competitive environments (Clarke, 2004, p. 160). These informal social networks are developed unconnected to existing formal contractual relationships among the firms (Gerlach, 1992, p. 64). Through these networks selected autonomous firms operate persistently like a single entity towards the achievement of particular tasks, whereas they may be competing fiercely in other domains or with regard to their formal relationships (Jones et al., 1997, p. 916).

Network governance systems are said to constitute "a distinct form of coordinating economic activity" (Powell, 1990, p. 301) to "resolve fundamental problems of adapting, coordinating, and safeguarding exchanges" (Clarke, 2004, p. 159) in contrast to the market or firms. These viability of network governance increases significantly with the need of enterprises to deal with "hypercompetition where rapid and flexible responses are necessary" (Clarke, 2004, p. 10). "Patterns of interaction in exchanges and relationships" and "flows of resources between legally separate and independent units" are identified as the two key concepts of network governance structures (Jones et al. 1997, p. 914).

The arguments in favour of network governance resemble the arguments for the establishment of firms as used by the transaction costs economics paradigm. To be emerging and existing in the long run any governance form, including network governance, must resolve economic exchanges more efficiently than other governance forms (Williamson, 1991). Such networks are therefore likely to be very flexible in their appearance as well as their disappearance. This notion is supported by the finding that network

governance relies mainly on "social coordination and control, such as occupational socialisation, collective sanctions, and reputations, than on authority and legal recourse" (Jones et al., 1997, p. 916) as the engaged in agreements are of social and not legal nature.

h) Managerial Hegemony

Managerial hegemony has at its heart the demonstration of the factual control of the supervisory board by the management board (Clarke, 2007, p.29). Mace (1971) indicated that the domination of the board of directors by senior executives were rather the normal case than the exception in the U.S.A. directors. This was expressed by the factual determination of board memberships as well as the compensation paid to senior executives by the chief executive officer rather than the board of directors. Mace also noted that that there was a "wide gap of what directors are supposed to do, what people generally assumed they do, and what directors actually do".

i) Class Hegemony

Class hegemony is rather radical paradigm arguing that corporations perpetuate the power of an elite, thereby aiding to exploit others in the interest of accumulating wealth and even more power (Mills, 1971). Radical approaches of similar kind have not found much attention since Mills but as noted by Clarke & dela Rama (2006) this may change again in light of the globalization.

5. Corporate Governance and Financial Markets

To finance growth companies need funding, which they can either generate internally through profitable operations or which they can obtain externally in financial markets. "From where a company derives the finance it requires to develop and grow is one of the most fundamental questions any enterprise faces" (Clarke, 2007, p. 93). This is due to the fact that any choice in this regard has profound implications for both the future profitability of an enterprise as well as its corporate governance structure (ibid). Whereas the utilization of internally generated funds may allow corporate governance structures to be unchanged, corporate growth will often be inhibited as new ventures can only be realized to the extent of free cash flows derived from

ongoing operations. The utilization of external funds on the contrary may allow corporations to engage in new ventures but will inevitably lead to changes in their corporate governance structures as external suppliers of finance will want to "assure themselves of getting a return on their investment" (Shleifer & Vishny 1997, p. 737).

Consequently, for any economy to grow a developed financial market has proven to be an important prerequisite (Dennis & McConnell, 2003, p. 31). This is underpinned by the fact that the four most important financial centers worldwide - New York, London, Tokyo and Frankfurt - are located in four of the eight leading economies worldwide. But if strong financial markets are to develop strong investor protection is necessary (Dennis & McConnell, 2003, p. 31). As such, investor protection legislation and their effective enforcement "affect the size and extent of countries' capital markets and, with them, the level of economic growth" (ibid). With increasing investor protection investors face less risks such as expropriation and consequently demand a lower rate of return (La Porta et al., 1997). With lower rates of return demanded firms in turn are more likely to use external finance as the cost for external capital thereby decreases (Dennis & McConnell, 2003, p. 31). La Porta et al (1997) note that investor protection is generally stronger in common law countries than in countries who adopted the civil law doctrine. They consequently found that the utilization of external finance is highest in common law countries and lowest in civil law countries.

Essentially, there are two ways of obtaining external finance, either through bank finance (e.g. debt) or by selling shares on the stock market (e.g. equity) (Clarke, 2007, p. 93). According to Williamson (1998, p. 567) "debt and equity are treated not mainly as alternative financial instruments, but rather as alternative governance structures. Debt governance works mainly out of rules, while equity governance allows much greater discretion".

a) Corporate Governance and Debt Finance

Essentially there are two different ways to attain debt finance. By obtaining a loan from either a bank or other direct creditors commonly leading to the maintenance of close relationships with these few suppliers of debt finance as they exert immediate and direct control over the company. The other way is to issue bonds to the public thereby commonly obtaining finance from a large amount of debt suppliers. With a decreasing amount of

debt held in comparison to the capital stock of a company, the suppliers of debt (e.g. the market) will increasingly forego to actively monitor corporate performance (Hutchinson & Gul, 2004). If suppliers of debt have no access to inside control mechanisms, they are likely to require further safeguarding procedures and mechanisms (Goncharov et al., 2006, p. 440).

With decreasing oversight and increasing amounts of debt acquired (e.g. higher leverage) directors and shareholders "might have an incentive to engage in high risk projects, since under limited liability their creditors would bear most of the cost if the venture was unsuccessful" (Clarke, 2007, p. 94).

b) Corporate Governance and Equity Finance

A company may also decide to obtain financial means from selling shares to the public. In this case a company will need to adhere to market disclosure requirements. Similarly to the situation with debt holders, the level of oversight exerted by shareholders decreases with the amount of individual shareholders to a company increasing and the relative amount of shares held in blocks decreasing (see section 2.c.A on ownership and control). Shareholders, especially widely dispersed shareholders, rely on functional, liquid and efficient equity markets (Clarke, 2007, p. 94). The more efficient a market, the more information is provided timely to shareholders thereby reducing the information asymmetries between management and shareholders which results in an increased willingness of market participants to trade the securities in question and thus an increased market liquidity (Diamond and Verrecchia, 1991). A higher market liquidity essentially sets shareholders in the position to exercise influence over a corporation through the purchase or sale of shares, whereby "the market rewards performing companies with higher share prices, and sanctions poorly performing companies with lower share prices" (Clarke, 2007, p. 94).

c) Corporate Governance and the Market for Corporate Control

The lower its share price the more vulnerable becomes a company, including to the possibility of a takeover (Clarke, 2007, p. 94). The market for corporate control - whereby a company perceived to be not performing well, or to have hidden underutilized assets could be purchased - is one of the

most severe disciplinary mechanisms in the outsider-based market model of corporate governance (ibid, p. 98). A takeover is said to be the most dramatic way of resolving an apparent conflict of goal incongruence between management and shareholders as "firms which deviate most extensively from shareholders' objectives - and which consequently tend to have lower market values as shareholders dispose of their holdings - have a greater likelihood of being acquired. The threat of a takeover, as much as its manifestation acts as a constraint on managerial behaviour" (Davis 1996, p. 83). Henry Manne (1965) noted that a takeover may likely be attempted when a company's management appears inefficient and the stock price relatively low to what it could be with a more efficient management. With the market of corporate control being the last resort of the equity market, full disclosure of information, strict adherence to trading rules, and stock market liquidity are important preconditions to its functionality (Nestor & Thompson 2000, p. 8).

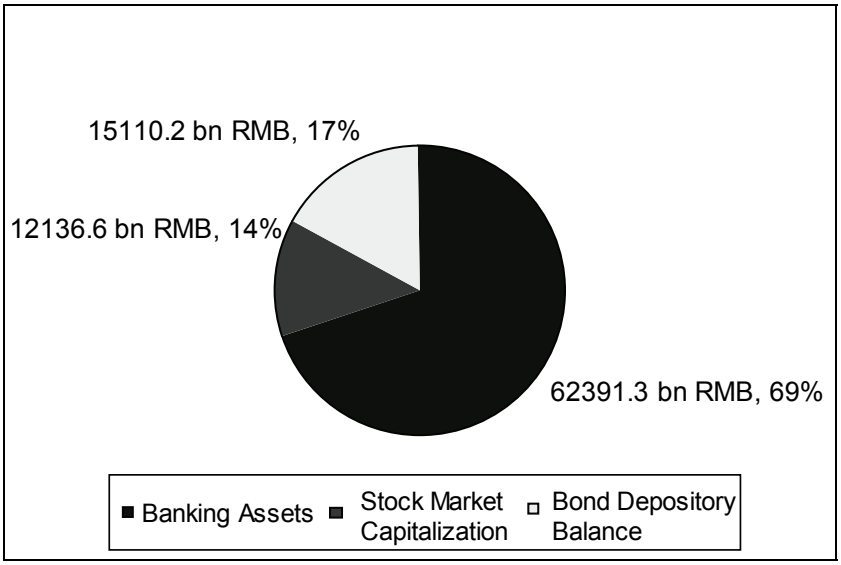
The financial market and in particular the market for corporate control serve as the second - the external - level of control over a corporation (Rosanas & Velilla 2005, p. 85) and complements the internal level of control (see section 3.e.B).

III. Backgrounds of the Financial System in China

1. Financial System Structure

We describe the Chinese financial system in a simplified sense, namely one that barely consists of the banking system, the stock market, and the bond market. For each component, we utilize banking assets, the stock market capitalization, and the bond depository balance, respectively, to measure their slices in the entire financial industry pie (see Figure 3.1). In 2008, banking assets amounted to 69% of the entire financial system's assets. Bonds ranked a distant second with a proportion of 17%. Stocks stood closely behind bonds with a share of 14%. China's banking system is more than twice as big as its bond and stock markets together.

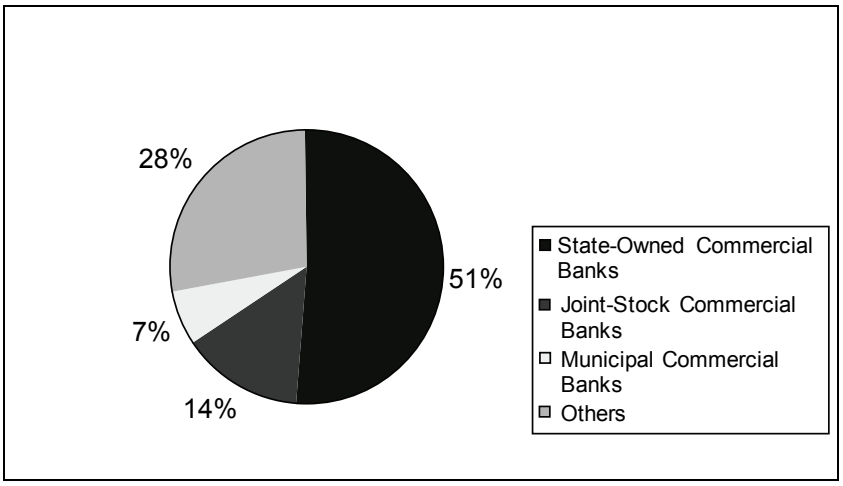
Figure 3.1: China's Financial System Structure, 2008



Data source: http://www.pbc.gov.cn, http://www.chinabond.com.cn, http://www.cbrc.gov.cn

Figures 3.2 and 3.3 demonstrate the banking assets structure[5] and the bond structure, respectively. In 2008, half of the banking assets (51%) were owned by the four state-owned commercial banks, namely the Bank of China (BOC), the China Construction Bank (CCB), the Agricultural Bank of China (ABC), and the Industrial and Commercial Bank of China (ICBC). At present, 12 joint-stock commercial banks[6] are performing in China. They held 14% of the entire banking assets in 2008. Municipal commercial banks, operating in regional areas, had a share of 7% in the banking assets in 2008. Other institutions include policy banks, rural commercial banks, rural and urban credit cooperatives, foreign financial institutions, company finance houses, trust and investment corporation, financial leasing companies, automobile finance companies, currency brokers, post-office saving banks, etc. They took the remaining proportion of 28%.

Figure 3.2: Banking Assets Structure, 2008

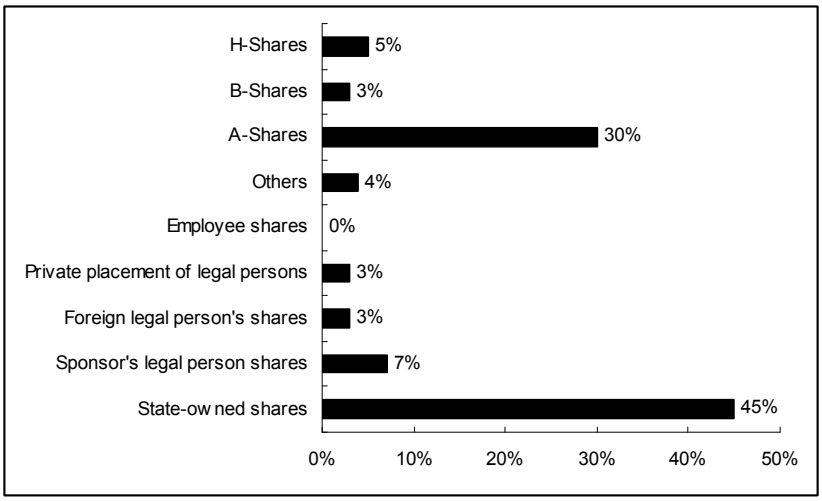


Data source: http://www.cbrc.gov.cn

5 The banking institutions include policy banks, state-owned commercial banks (SOCBs), joint stock commercial banks (JSCBs), city commercial banks, rural commercial banks, urban credit cooperatives (UCCs), rural credit cooperatives (RCCs), postal savings, foreign banks, and non-bank financial institutions (NBFIs).

6 Bank of Communication, China Citic Bank, China Everbright Bank, Hua Xia Bank, Guangdong Development Bank, Shenzhen Development Bank, China Merchants Bank, Shanghai Pudong Development Bank, Industrial Bank, China Minsheng Banking Corp., Evergrowing Bank, China Zheshang Bank.

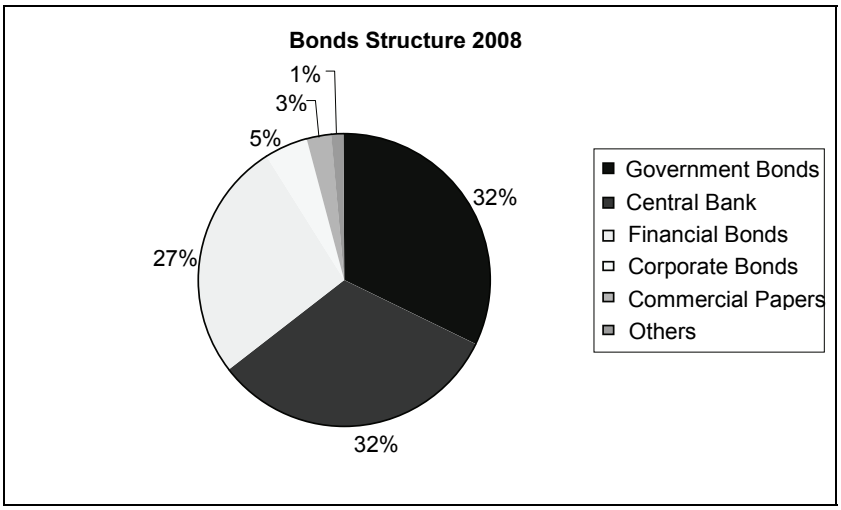
Figure 3.3: Overall Share Structure at the Chinese Stock Market, 2005



Data source: CSRC (2006), http://www.wind.com.cn/

Within the bonds structure, government bonds, central bank bonds, and financial bonds (mostly policy bank bonds) are the three dominating segments. They added up to over 90% of the total bond depository balance in 2008 (see figure 3.4). By contrast, corporate bonds had a small quotient of 5%.

Figure 3.4: Bonds Structure, 2008



Data source: http://www.chinabond.com.cn

It can be stated that China's financial system is a banking-centric one. China's banking system dominates by far in the financial system structure. Among all the Chinese banks, the four state-owned commercial banks possess the largest stake of all banking assets. China's stock market and bond market are, compared with the size of China's banking system, underdeveloped. Both of them are dominated by the state. By 2005, the state prevailed with a proportion of nearly 50% in the overall shareholding structure.[7] The bond market is mostly used to issue government and central bank bonds, while corporate bonds are not a common financing tool in China.

2. Development of the Chinese Banking System[8]

Prior to the reform era, China had been following a Soviet-style banking system. The People's Bank of China (PBOC), founded in 1948 under the Ministry of Finance, had been the only bank in China and combined the roles of central and commercial banking. By 1978, it controlled about 93% of the total financial assets in China and settled almost all financial transactions (cf. Allen et al. 2009, p. 5).

With the reforms launched, the PBOC became a separate entity by 1979. From 1978 to 1984, its commercial banking businesses were taken over by four large state-owned commercial banks (BOC, CCB, ABC, ICBC), known as the *Big Four*. The Big Four were initially designated a different sector of the economy (foreign trade and exchange, construction, agriculture, industrial and commercial lending) which they were allowed to serve only. Since 1985, the Big Four are competing in all sectors. During the 1980s, regional banks, in which local governments typically had a big stake, were established in the so-called Special Economic Zones (SEZs) in the coastal areas. Meanwhile, a net of credit cooperatives was implemented in both rural and urban areas.

7 Before 2005, state-owned shares belonged to the non-tradable share types. With the 2005 non-tradable share reform launched, most of state-owned shares have become tradable ordinary A-shares and are not reflected in the official market statistics any longer. But the state maintains its control, as long as the shares are not sold (cf. Section 2.3 and Section 3.).

8 Though foreign banks have been operating for some time in China, their market share is, compared with domestic banks, still small. Thus, we focus in our brief description on the Chinese banks.

The asset quality of the four state-owned banks worsened substantially during the 1990s, as their policy-lendings for SOEs were typically not repaid. As solution for this problem, the central government founded three policy banks in 1994 to undertake the policy-lending activities instead of the Big Four, while the Minister of Finance issued 270 billion RMB government special bonds to recapitalize the four banks in 1998. In 1999, four state-owned asset management companies[9] bought the non-performing loans (NPL) at the face value of 1.4 trillion RMB.

Two important bank-laws were issued in 1995. The 1995 *Central Bank Law* of China confirmed the PBOC as the central bank and significantly reduced the influence of local governments on credit allocation decisions. The 1995 *Commercial Bank Law* officially termed the four state-owned banks as commercial banks, directing them more towards commercial business based on market principles instead of policy-lending (cf. Berger et al. 2009, p. 117). New joint-stock banks, some of which privately owned, also entered the market in the mid-1990s. At the same time, foreign investors were allowed to hold minority stakes in regional Chinese banks under regulatory permission.

Significant reforms of the Chinese banking system took place after China joined the World Trade Organization (WTO) in 2001. The 1995 Central Bank Law and Commercial Bank Law were revised to be compliant with the WTO agreement. China Banking Regulatory Commission (CBRC) was established in 2003 to oversee reforms and regulations. CBRC took two strategies to improve Chinese banks' management and efficiency. In 2003, it allowed foreign investors to own up to 25% of any domestic bank, whereas the ownership from any one investor had to be between 5% and 20%, subject to regulatory approval. Introduction of foreign investors firstly occurred at Chinese joint-stock commercial banks,[10] and then spread to three of the Big Four.[11] Another strategy was to encourage the Chinese

9 China Great Wall Asset Management Corporation, China Cinda Asset Management Corporation, China Orient Asset Management Corporation, China Huarong Asset Management Corporation.

10 In 2003, Shanghai Pudong Development Bank sold 5% stake to Citigroup, while Industrial Bank sold 24.98% stake to a consortium made up by Hang Seng Bank Ltd. and others. In 2004, Shenzhen Development sold about 18% stake to Newbridge Capital Ltd, while Bank of Communications sold 19.9% stake to HSBC.

11 The CCB sold 9% stake to the Bank of America, 5.1% stake to Temasek in 2005. The BOC sold 20% stake to Royal Bank of Scotland and Temasek in 2005. ICBC sold 10% stake to Goldman Sachs Group Inc., Allianz AG, and American Express Co. in 2006.

banks to issue shares[12] so as to set up external monitoring. Since 2005, some joint-stock commercial banks as well as CCB, BOC, ICBC have gone public in Hong Kong and Shanghai.

3. Development of the Chinese Capital Markets

Under the Chinese planned system before 1978, funds had been allocated to enterprises by the central and local governments. There had been no need for capital markets for enterprises to raise money. After 1978, relaxation policies over the business conduct generated capital demand from economic entities. In this context, bonds, stocks, and future contracts came into being in China. With the two stock exchanges established in Shanghai and in Shenzhen, respectively, the Chinese capital markets were established. The foundation of the Securities Committee and the China Securities Regulatory Commission (CSRC) brought the capital markets under a nationwide regulatory system.

Analogously to other reforms in China's transition process, the development of the Chinese capital markets has been mainly driven by the central government. New market segments and products were typically launched on an experimental basis, before expanding across the country. In some cases, the development progresses were ceased and corrected by the regulators and then relaunched.

The development of the capital markets was strongly backed by Deng Xiaoping. On his southern tour to promote the reform and opening-up policies in early 1992, he stated:

> Are securities and the stock market good or bad? Do they entail any dangers? Are they peculiar to capitalism? Can socialism make use of them? We allow people to reserve their judgement, but we must try these things out. If, after one or two years of experimentation, they prove feasible, we can expand them. Otherwise, we can put a stop to them and be done with it. We can stop them all at once or gradually, totally or partially. What is there to be afraid of? So long as we keep this attitude, everything will be all right, and we shall not make any major mistakes. (Deng Xiaoping 1992/1994, p. 361)

12 Funds raised at stock exchanges outside mainland China are not subject to the 25% restriction on foreign ownership.

a) Stock Market

Emergence

The emergence of stocks can be traced back to the shareholding reforms that were initiated in rural areas in China. During the late 1970s, the earliest joint-stock township enterprises were built up by farmers. In the mid-1980s, shareholding reforms spread to the urban areas. A few large and medium-sized enterprises were permitted to conduct a shareholding experiment and to issue shares. In doing so, the primary stock market emerged. Most of those issued shares were offered to employees of the enterprises and local residents, without participation of underwriters. They were similar to bonds, as they guaranteed fix dividends, were sold at par, and redeemed on maturity. In 1986, over-the-counter (OTC) transactions appeared for stocks.

In 1990, the central government approved of establishing two stock exchanges in Shanghai and Shenzhen, respectively, aiming at broadening external financing channels and improving operating performance for former SOEs.[13] From the beginning, short sale of shares is not allowed in the exchange trading. Both exchanges launched their respective composite indices in 1991.[14] By the end of 1991, eight stocks were listed on the Shanghai Stock Exchange (SSE), while the Shenzhen Stock Exchange (SZSE) had six listings. Later, RMB-denominated ordinary shares for domestic residents and institutions to invest in were called A-shares for short. In 1991, China also undertook a pilot scheme to issue shares, known as B-shares, to foreign investors. B-shares are domestically listed, denominated in RMB, but subscribed to and traded in USD or HKD by overseas investors.[15]

13 For example, CSRC issued in December 1996 the *Notice of Several Regulations on Share Issuance*, which required local authorities to "give preference to the 1,000 key enterprises determined by the state, especially 300 of them, as well as to the 100 enterprises and 56 enterprise groups in experiment with the modern enterprise system" (own translation). The key enterprises were mostly SOEs.

14 The Shenzhen Composite Index was launched on April 4, 1991, taking the previous days as the base of 100 points. SSE took December 19, 1990 as its base of 100 points for the Shanghai Composite Index and launched it on July 15, 1991.

15 Since 2001, domestic residents can trade in B-shares as well.

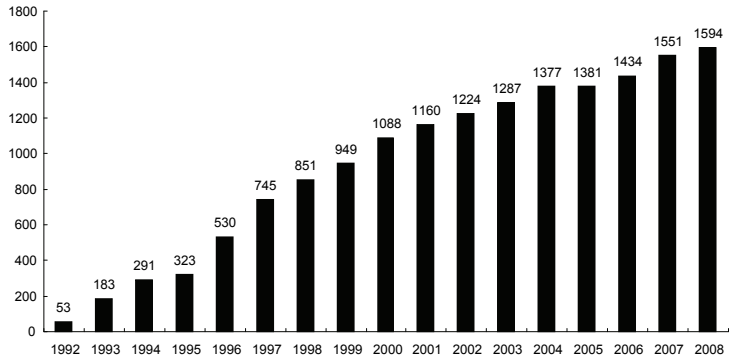
Market Growth

Since 1992, the Chinese stock market has boomed and become one of the worldwide largest in a relatively short lapse of time. Starting from 53 in 1992, the number of firms listed on SSE and SZSE increased about 30 times to 1,594 in 2008 (see Figure 3.5). More than 2,230 billion RMB and 5.09 billion USD were raised through A-share and B-share offerings, respectively, while the market capitalization totaled over 10 trillion RMB since 2007 (see Table 3.1). More than 40 million investment accounts were opened (see Table 3.1). After the rally in 2007, the Chinese stock market reached a market capitalization of over 30 trillion RMB. This volume overstepped not only China's nominal GDP for the first time (see Figure 3.6), but, as exhibited in Table 3.3, most of the developed stock markets and ranked No. 2 behind the New York Stock Exchange (NYSE).[16]

In the first decades of China's stock market, regulators and exchanges preferred listing of big SOEs in several industries. From 2001 on, the SZSE began to explore the possibility of building up a Growth Enterprises Market (GEM). As the first step, the SZSE set up the Small and Medium-sized Enterprises (SME) Board in May 2004. By the end of 2008, there were 273 firms listed on the SME Board in Shenzhen, having raised over 120 billion RMB through IPOs and refinancing (see Table 3.2).

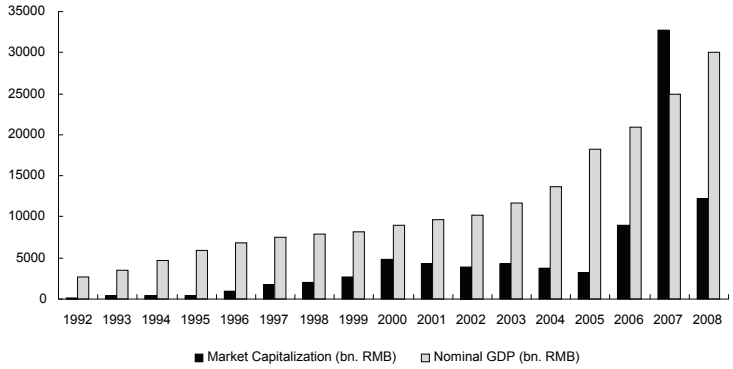
16 Although SSE alone ranks just six in the annual report and statistics (2007) of the World Federation of Exchanges, we come to this result by adding up the market capitalization of SZSE to it and comparing the total value with the data of other exchanges.

Figure 3.5: Number of Listed Firms, 1992-2008



* The number includes listed firms which have only issued A-shares or B-shares, or both types
Data Source: CSRC (2006)

Figure 3.6: Stock Market Capitalization versus Nominal GDP in China, 1992-2008



Data source: SSE (2006), CSRC (2008), NBSC (2009), CSDCC (2009)

Table 3.1: Total Funds Raised, Number of Investment Accounts, 1992-2008

Year	Total funds raised through A-shares (bn. RMB)	Total funds raised through B-shares (bn. USD)	Number of investor accounts (stock + fund) (m.)	Total market capitalization of A- and B-shares (bn. RMB)
1992	5.00	0.80	2.7	104.8
1993	27.64	0.70	8.4	354.2
1994	9.98	0.40	11.1	369.1
1995	8.55	0.40	12.9	347.4
1996	29.43	0.60	24.2	984.2
1997	82.59	1.30	34.8	1,752.9
1998	77.80	0.30	42.6	1,952.2
1999	89.40	0.05	48.1	2,647.1
2000	152.70	0.20	61.5	4,809.1
2001	118.20	0	69.7	4,352.2
2002	78.00	0	72	3,832.9
2003	82.00	0.04	73.4	4,245.8
2004	83.60	0.30	75.9	3,705.6
2005	33.80	0	77.1	3,243.0
2006	246.40	0	82.5	8,940.4
2007	772.80	0	138.8 (118.8)*	32,714.1
2008	339.60	0	152 (132.8)*	12,136.7
Total	2,237.50	5.09		

* Number of the active investment accounts

Data source: CSRC (2006), NBSC (2008a), NBSC (2008b), SSE (2008a), SZSE (2008), CSDCC (2008).

Table 3.2: Total Funds Raised on the SME Board, 2004-2009

	2004	2005	2006	2007	2008	Total
New listings	38	12	52	100	71	273
Total raised funds (bn. RMB)	9.11	2.91	17.93	48.95	41.01	119.91

Data source: finance.sina.com.cn/stock/

Table 3.3: Market Capitalization of Leading Stock Exchanges, 2006-2007

Stock Exchanges	end 2007 bn. USD	end 2006 bn. USD	Change in USD	Change in local currency
01. NYSE Group	15,651	15,421	1.50%	1.50%
02. Tokyo Stock Exchange Group	4,331	4,614	-6.10%	-12.00%
03. Euronext	4,233	3,713	13.70%	2.60%
04. Nasdaq Stock Market	4,014	3,865	3.80%	3.80%
05. London Stock Exchange	3,852	3,794	1.50%	-0.20%
06. Shanghai Stock Exchange	3,694	918	302.70%	276.80%
07. Hong Kong Exchanges	2,654	1,715	54.80%	55.20%
08. TSX Group	2,187	1,701	28.60%	9.00%
09. Deutsche Börse	2,105	1,638	28.60%	15.90%
10. Bombay Stock Exchange	1,819	819	122.10%	97.80%
11. BME Spanish Exchanges	1,799	1,323	36.10%	22.70%
12. National Stock Exchange India	1,660	774	114.50%	91.00%
SSE+SZSE	4,479	1,145	291.20%	265.90%

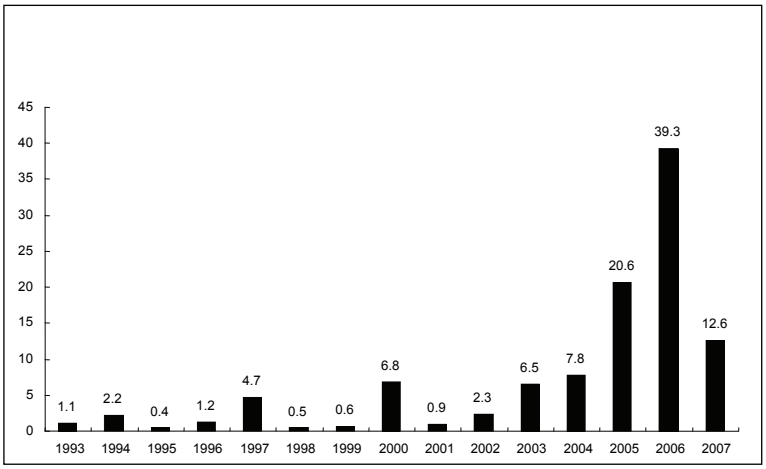
Data source: WFE (2007), SZSE (2006, 2007)

Opening-up

To attract foreign investment, China's opening-up policies covered the stock market as well. The introduction of B-shares in 1991 was the first step to open up China's stock market to the outside world. Soon thereafter, domestic firms were allowed in 1993 to go public on overseas stock exchanges.

The Chinese stocks listed and traded in Hong Kong, New York, London, and Singapore are, in reference to A- and B-shares, also called H-shares, N-shares, L-shares, and S-shares. From 1993 to 2007, Chinese firms raised more than 100 billions USD through overseas listings (see Figure 3.7). Since overseas listings connected domestic firms to international capital market more closely, the B-share market became less important in fund raising (see Table 3.1).

Figure 3.7: Total Funds Raised Through Overseas Listings, 1993-2008



Data Source: CSRC (2008)

On its WTO accession, China made a few commitments concerning the securities industry. First, foreign securities firms could directly trade in B-shares. Second, representative offices of foreign securities firms in China could apply for special membership at all domestic exchanges. Third, foreign service providers could set up joint ventures for securities trading and fund management, with initial shareholdings capped at 33% and 49% within three years after the WTO accession. Fourth, within three years of the WTO accession, foreign securities firms could set up joint ventures with shareholding not exceeding 33%, and the joint ventures could, without the need to enlist the service of an Chinese intermediary, underwrite A-shares, underwrite and trade B-/H-shares and government/corporate bonds, as well as launch funds (cf. CSRC 2008, p. 184).

By the end of 2006, Beijing had complied rather fully with China's 2001 securities industry WTO commitments, both in formal (legislative and regulatory) terms and in implementation of the WTO mandated regime (cf. Howson 2007, p. 153). The authorities also adopted some additional policies in opening up the stock market. For example, in November 2002, foreign companies were allowed to purchase state-owned shares and legal person shares of Chinese listed firms.[17] In February 2006, foreign investors were allowed to make strategic investments in the A-share of listed companies.[18]

In December 2002, the CSRC launched the Qualified Foreign Institutional Investor (QFII) program, which licenses foreign institutional investors to trade A-shares on the secondary market. By the end of 2007, 52 foreign institutional investors had been granted the QFII status, 49 of which had been allocated quota of totally 10 billion USD, while five foreign banks had been permitted to provide QFIIs custodian services (cf. CSRC 2008, p. 32).

By the end of 2007, there were seven Sino-foreign securities firms and 28 Sino-foreign fund management companies operating in China, of which 19 firms had a foreign shareholding of above 40% (cf. ibid., p. 31). Four representative offices of foreign securities firms became special members of the Shanghai and Shenzhen Stock Exchanges; 39 and 19 foreign securities firms were trading B-shares on Shanghai and Shenzhen Stock Exchanges, respectively (cf. ibid., p. 31).

Meanwhile, the authorities further promoted connections to overseas capital markets. In May 2006, the Qualified Domestic Institutional Investor (QDII) program was launched, allowing licensed domestic institutional investors to invest in overseas markets. By the end of 2007, 15 fund management firms and five securities firms had been granted QDII status with an aggregate investment quota of 24.5 billion USD (cf. ibid., p. 32).

17 According to the *Notice Regarding Transfer to Foreign Investors of State-Owned Shares and Legal Person Shares of Listed Companies* (CSRC 2002), only those industries that are opened to foreign investors can conduct such a share transfer, while the Chinese controlling shareholder should maintain his (relative) controlling status after the transfer.

18 According to the *Measures for Strategic Investments by Foreign Investors upon Listed Companies* (MCPRC 2005), foreign investors may acquire A-shares of the Chinese listed firms having finished the reform of non-tradable shares by means of long- and mid-term strategic investment. They may acquire A-shares by means of contract transfer or share offering, while the proportion of obtained shares should be no less than 10% after the first investment and should not be transferred within three years.

b) Bond Market

From 1954 on, the central government issued its first treasury bonds (T-bonds), so-called Economic Construction Bonds, for five years in succession. In 1959, the issuance of T-bonds was stopped. In 1981, the central government relaunched T-bonds. T-bonds in the early 1980s typically had a long maturity (10 years) and were non-transferable. From 1982 on, a few enterprises took the initiative to issue enterprise bonds. In 1987, the State Council stipulated that further enterprise bond issuances were subject to approval by the PBOC, and that PBOC, the State Planning Commission, and the Ministry of Finance would set a cap on the total amount of enterprises bonds to be issued annually. A third type of bonds, so-called financial bonds, appeared in 1984. They were issued by banks to support the completion of construction projects that ran short of funds. Since then, it has served as a regular financing tool for Chinese banks.

In April 1988, experiments with OTC trading of T-bonds by individual investors were made in a few big cities. Two months later, the permission for individual transactions expanded to 28 provinces and municipalities, and 54 large and medium-sized cities (cf. CSRC 2008, p. 6). By the end of 1988, trading of T-bonds had spread across the country. The secondary bond market emerged. In December 1990, trading of T-bonds was introduced by SSE. In 1995, all OTC bond markets were closed by the central government, because the once uncontrolled business caused high risks. In consequence, SSE and SZSE became the only legal bond markets. In 1996, a big amount of book-entry T-bonds began to be issued and repurchased on SSE and SZSE, which marked the formation of bond market on exchanges.

In 1997, Chinese commercial banks withdrew from bond business at exchanges.[19] In the same year, the PBOC established the inter-bank bond market on the basis of China Foreign Exchange Trading System. Besides commercial banks, other financial institutions such as insurance companies, credit cooperatives, securities firms, securities investment funds, finance houses, foreign institutional investors, non-financial institutions, and pension annuities gained the access to the inter-bank bond market in the following years. International institutions were permitted to issue bonds denominated in RMB, known as Panda bonds. The types of bonds issued by finan-

19 As a big amount of bank deposits flew into the stock market through bond repurchase business early this year, PBOC ceased bond repurchase and dealing by commercial banks.

cial institutions included short-term, ordinary, foreign currency, subordinated, hybrid and asset-backed bonds, bond forwards, and enterprise bonds.

Since 2002, commercial banks offer, as an extension of the inter-bank bond market, counter services for individual investors and SMEs to trade in T-bonds. In January 2009, commercial banks listed on Chinese exchanges were experimentally allowed to return to the bond market at exchanges.

c) Futures Market

As early as in October 1990, Zhengzhou Grain Wholesale Market was opened, and forward contracts were introduced there. In October 1992, Shenzhen Nonferrous Metals Futures Exchange made the first standard futures contract in China. In 1993, the commodity futures market flourished. There were over 50 commodity futures exchanges and more than 300 futures brokerage companies across the country. Meanwhile, T-bond futures came into existence. In December of 1992, SSE introduced the first T-bond futures. In early 1995, the number of exchanges dealing in T-bond futures increased to 14.

However, the futures market was fraught with speculations and manipulations due to insufficient regulation (cf. CSRC 2008, p. 19). In 1993, the State Council emphasized that its Securities Committee and the CSRC were the regulators of the Chinese futures market and began to clear it. Futures brokers which were either unqualified or acting illegally were closed or suspended. Dealing of a number of commodities, including steel, sugar, coal, rice, and rap oil, was suspended. In May 1995, trading of T-bond futures was suspended as well. In 1998, the existing 14 futures exchanges were consolidated into three (Shanghai, Dalian, Zhengzhou).

From 1999 to 2002, the State Council and the CSRC promulgated the first regulations on futures trading, exchanges, and brokerage firms at the futures market, starting to establish a legal and regulatory framework. From 2004 on, new commodity futures contracts were introduced, including cotton, fuel oil, corns, soybean, sugar, soybean oil, purified terephthalic acid (PTA), zinc, rapeseed oil, linear low-density polyethylene (LLDPE), and palm oil. The three commodity futures exchanges have been gradually unifying their trading rules and expanding the use of a common trading portal.

In May 2006, the first Sino-foreign futures joint venture[20] was established, marking the start of foreign participants in China's futures market. In September 2006, the China Financial Futures Exchange (CFFEX) was set up in Shanghai. The preparation on introduction of stock index futures is still ongoing. Up to now, *Trading Rules of China Financial Futures Exchange* have been promulgated; and nearly 80 members have been licensed for transactions (cf. CFFEX 2008). Mock trading of stock index futures has been ongoing for testing purposes since October 2006, but there is still no fixed plan or schedule to launch the stock index futures.[21] In January 2008, the Shanghai Futures Exchange (SHFE) introduced the first futures contract on gold.

20 The futures brokerage was established by China Galaxy Securities Co. and ABN AMRO Asia Futures Limited with 60% and 40% stake, respectively.

21 The CFFEX General Manager, Zhu Yuchen, stated during an interview on 9 March 2009 that the financial crisis hindered the introduction of stock index futures and there was no schedule of launching them (cf. HU 2009).

IV. Corporate Governance in China

1. How Did Corporate Governance Become Popular?

While China's stock market has been expanding impressively, it is meanwhile conspicuous that this development has so far been inconsistent with China's economic success measured by its nominal GDP (see Figure 2.6). As the national economy recorded a yearly GDP growth of at least 8% since the 1990s, the stock market capitalization, in spite of increasing listings, fluctuated heavily over the same time period. Especially from 2000 to 2005, albeit the number of listed firms blew up by about one-third and the issued shares doubled, the market capitalization shrank apparently due to collapsing stock prices. In identifying the causes for this conjuncture, the attention of the market regulators and participants was soon directed to the deficiencies of the corporate governance practices in China.

More precisely, it was several unveiled Enron-alike scandals as well as capital tunneling by controlling shareholders that stroke the overall investors' confidence at the Chinese stock market. Two cases illustrate these problems.[22] One involved the one-time top performer, North China-based firm *Yinguangxia* (YGX), whose stock price leaped by about 440% in 2000. Barely one year later, two journalists called YGX's brilliant achievements into question and disclosed that YGX had been forging documents and misrepresenting information. The official investigation by the CSRC in 2002 fixed a total fraudulent profit of 770 million RMB by YGX from 1998 to 2001 (cf. Guo 2007). The other example relates to Sanjiu Pharma who inadequately disclosed transactions with related parties, including the controlling shareholder and other subsidiaries of it, and created fictitious transactions in order to raise cash from banks (cf. Chen et al. 2005). The CSRC investigation revealed that Sanjiu Pharma had been extracted as much as 2.5 billion RMB, about 96% of the firm's equity, through related transactions (cf. CSRC 2001).

22 For more information on the two cases see CHEN ET AL. (2005).

Although the conception of corporate governance had been introduced to China as early as in the mid-1990s,[23] it did not arouse much interest until during the long lasting bear market from 2000 to 2005. Both the Chinese government and the stock market regulators are now aware of the importance of good corporate governance practices.

2. Why Does Corporate Governance Matter?

a) Social Stability

The young stock market in China has brought forth a tremendous number of shareholders from individuals over institutional investors to state agencies. According to China Securities Depository and Clearing Corporation, more than 140 million investment accounts (stocks and investment funds totally), overwhelmingly held by small individual investors, had been opened until the end of 2007 (cf. CSDCC 2008, p. 14-15). If every account was indeed owned by one person,[24] it would correspond to one tenth of China's whole population or one fourth of its urban population directly engaging in the stock transactions. As for institutional investors who manage the wealth of individuals, there are more than 350 mutual funds, over 50 QFIIs, several large domestic insurers as well as the National Social Security Fund trading actively on the market. Moreover, an unknown, but large amount of banks loans have been flowing into the stock market through gray or illegal channels (cf. Liu 2006, p. 416). Notably, the central and local governments who are managing state assets on behalf of Chinese people still maintain the lion's share in many listed firms through their asset management administrations. The number of directly and indirectly involved small shareholders is so large that a thorough breakdown of the stock market would very likely rock the boat. Therefore, it is not difficult to understand that the central government as well as other state agencies and exchanges warned loudly of an overheated market for several times as the stock prices were skyrocketing in

23 For example, Masahiko Aoki and Hyung-Ki Kim published in 1995 the book "Corporate Governance in Transition Economies" (cf. AOKI/KIM 1995).

24 It appears that in reality a number of these accounts are old, inactive, fake, or controlled by some institutions. Nonetheless, the number of small Chinese shareholders is immense.

2007.[25] A failed stock market may cause social uncertainty that remains one of the government's primary concerns.[26]

b) Capital Competition

The more integrated China becomes in the world economy, the more affected will it be by international rules and conventions which have mainly been set down by developed countries. Hoping international investors to buy and hold their shares, Chinese listed firms have to adjust themselves to those corporate governance practices preferred by global investors. The internationalization of the capital markets is nevertheless a two-edged sword for all developing economies: capital can as easily flow out from a market with weak investor protection as into it. The East Asian financial crisis in late 1990s demonstrates that opened capital markets without well-developed corporate governance mechanisms can be easily abandoned by capital flows. Even though China's extraordinary achievements in the last three decades and the internationally broadly recognized prospect for the near future may keep the interest of foreign investors high – the list of QFIIs is constantly getting longer – and in this way compensate the negative impacts of its weak corporate governance practices, this is not expected going to work in the long run. It is thus in China's interest to make its corporate governance practices attractive for foreign investors.

c) Further Transition

China's economic transition toward a Chinese "socialist market economy" is still ongoing and the current, in 1990s launched round of SOE reforms has not finished yet (see Section 4 for more details). Only part of the former SOEs are listed in Shanghai and Shenzhen. The remaining ones are waiting for an initial public offering as a vital channel for their future fund-raising. Hence, the central and local governments who mostly hold claims on SOEs have sufficient incentives to maintain the stock market as a well-functioning

25 For example, the *Guidelines of Shanghai Stock Exchange on Individual Investors' Behavior* (SSE 2008b), which was issued in July 2007, insists on the principle of caveat emptor.

26 For example, Deng noted in 1989: "In China the overriding need is for stability. Without a stable environment, we can accomplish nothing and may even lose what we have gained" (DENG XIAOPING 1989/1994).

platform for financing SOEs. It should also be mentioned that the establishment of a stock market is the first step to complete the capital markets in China, whereas the stock market itself still needs to complete its functions as well as to diversify its investment product line. The success of the following steps, say, derivative products including stock index futures and a corporate bond market, will depend on the success of the stock market. They could not be executed, if the firstly built stock market already collapsed. China's further transition and capital markets development cannot afford a failed stock market.

3. What Has Been Done to Improve Corporate Governance?

In dealing with the deficiencies at the stock market, the Chinese government commenced to improve its corporate governance framework by enacting and revising a series of governance-related guidelines and laws. After the first corporate governance code for listed companies had been issued by the CSRC in 2002, both the *Company Law* and the *Securities Law* were revised by the National People's Congress (NPC) in 2005. The new regulations address some problems at the stock market, including the independence of the boards of directors, firms' information disclosure, and expropriation of small shareholders.

With respect to investigation of illegal activities at the capital market, the CSRC did not set up a law enforcement bureau (Bureau I) until 1995. It further established subordinate local enforcement bureaus in several big cities. In 2002, the CSRC instituted another law enforcement bureau (Bureau II) for investigation of market manipulation and insider trading, while Bureau I took the responsibility to investigate fraud in securities issuances, dishonesty in statements, and other offences. In 2003, the Ministry of Public Security established the Securities Crime Investigation Bureau to cooperate with the CSRC for investigation of offences at the securities market. In 2007, the CSRC instituted the Sanction Committee, Chief Enforcement Officer, and the Law Enforcement Task Force in its headquarters to lead the enforcement system. Meanwhile, local enforcement bureaus were reinforced with a larger work force. From 2003 to 2007, the CSRC investigated 736 cases, forwarded 104 of them for criminal charges, imposed sanctions on 212 cases involving 180 entities and 987 individuals, and banned the entry of 165 professionals and executives into the securities market for extended periods (cf. CSRC 2008, p. 22).

At present, all of the public firms have, in accordance with the CSRC, introduced independent directors as an internal monitoring mechanism into the board, as required by the CSRC. More chairmen are now separated from the CEO function. Listed firms are obliged to make clear statements on their efforts in improving governance structure and revealing information on compensations for the board members and executives. The relations of the board members to the controlling shareholder are defined in annual closures. The regulators and exchanges are making efforts in oversight of affiliated transactions between listed firms and their controlling shareholders among which tunneling of assets had usually taken place. These alterations in corporate governance have let the public firms become more transparent for investors as previously.

4. How Different is the Chinese Model?

a) Classical Models

Corporate governance models vary across countries. Yet researchers tend to identify two prevailing corporate governance models: the Anglo-American market-based shareholder model and the insider models of, say, Germany and Japan (cf. Shleifer/Vishny 1997; La Porta et al. 1998, 1999; Bebchuck/Roe 1999). The preference for one of the two types of models is mainly attributable to each country's economic success in 1980s and 1990s, respectively (cf. Becht et al. 2002, p. 32).

In the Anglo-American model, public equity is widely dispersed, while directors make all the decisions or have an exclusive power to initiate them (cf. Enriques/Volpin 2007, p. 127). In spite of several accounting scandals unveiled at the turn of the century in the USA, the listed firms in this model still face strictest legal restrictions and enforcement in respect of minority shareholder protection;[27] and there is a highly competitive product market to boost the firms' performance. Whilst the external mechanisms for investor protection are strong in this model, the internal governance structure is no more than a principal-agent relation set between shareholders and the board of directors through the general meeting. Both the management and monitoring functions at the corporate level are combined in the board of directors. By contrast, the equity of public firms in the German and Japanese

27 See for example ROE (2003) for more details of US securities regulation.

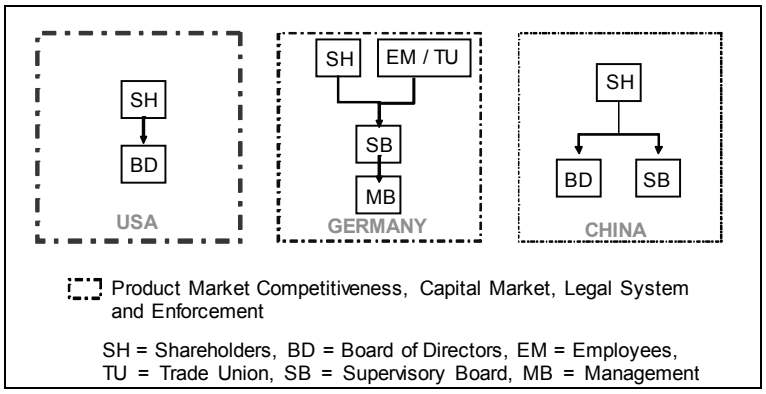
models is more concentrated. Although the market mechanisms are less strong than in the US model,[28] the German and Japanese models have evolved into a more sophisticated internal governance structure that takes in other stakeholders such as labor unions, banks, and employees as co-principals of the firms.

b) Chinese Model in Comparison

Figure 4.1 illustrates in a simplified sense the corporate governance models in the USA, Germany, and China. The dot-dash frame symbolizes the external governance-related environments at the national level. A bolder frame indicates that an economy is by and large equipped with more developed capital markets, a stronger legal system with more effective enforcement, and a more competitive product market, whereas a more thinly lined frame matches a weaker governance environment. Compared with the USA and the German models, the Chinese corporate governance model has a weak external environment with regard to market and legal mechanisms. This fact is not surprising in consideration of China's ongoing process of transition to a market economy and corresponding constructing of its rule of law.

28 For example, LA PORTA ET AL. (1998) found that "common law countries generally have the strongest, and French civil law countries the weakest, legal protections of investors, with German and Scandinavian civil law countries located in the middle" (p. 1113). Yet SHLEIFER/VISHNY (1997) concluded that "the differences between them [USA, Germany, Japan] are probably small relative to their differences from other countries" (pp. 737f.). In the last two decades, Germany has made a lot of efforts in empowering shareholders, enhancing disclosure and strengthening public enforcement. Thus, its external mechanisms are moving towards the market-based model.

Figure 4.1: Corporate Governance Models in the USA, Germany, and China



Source: Own figure

A) External Aspects

Product Market

Product market competition drives producers and service suppliers to improve their performance. However, the Chinese product market lacks of competition in some industries: The central government considers industries such as utilities, transportation, telecommunication, banking, oil, and steel to be of strategic importance and keeps the entry of other suppliers under strict control. Therefore, it is big SOEs who dominate in these industries. Another cause of weak competition is local protectionism for the sake of regional economic development. In their procurement process, provincial and municipal governments usually favor local products and encourage local enterprises to purchase locally manufactured materials and products. This is becoming more obvious in dealing with the current world financial crisis since 2007: while planning a huge amount of spending in order to guarantee economic growth, ten provincial governments have issued documents on purchasing local products including electrical appliances, vehicles, and steels (cf. 21CBH 2009).

Capital Market

The Chinese stock market is dynamic in terms of a rapidly increasing number of investors and market capitalization. Yet it is so far underdeveloped in other more important aspects. First, the entire financial system in China is dominated by a large, state-controlled bank system, implying that the financing through the Chinese stock market is limited. The limits usually result from the government's tight control in the number and size of public issuances and in the choice of firms to be listed: the authorities prefer the state sector. Second, the Chinese stock market lacks of alternative investment products. Third, the stock market is rather a domestic one than an international one. By now, it is to a limited extent opened to a small number of foreign institutional investors. Similarly, domestic investors barely have any access to overseas stock markets except for a few products of QDIIs. Listings of foreign-invested firms have been announced[29] to accelerate the market internationalization. However, no rules or schedule have been made yet.

Legal Institutions

The legal institutions in China provide an interesting picture. On the one hand, the Chinese legal system represents sufficient shareholder protection. Using the measures of La Porta, Lopez-de-Silanes, Shleifer, and Vishny (LLSV) (1998) on legal provisions for publicly traded firms, Allen, Qian, and Qian (2005) compared the shareholder protection in China with that in LLSV countries. They found out that China reaches the average level of all LLSV countries. China's score falls in between the English-origin countries that have the highest measures of protection and German-origin countries that have the poorest protection. With measures drawn from independent international rating agencies, they further compared the law enforcement in China with that in LLSV countries. This time, they came to a very different result: China's law enforcement is significantly below the average level of

29 After the third round of China-U.S. Strategic Economic Dialogue in December 2007, both sides promised to further open up its financial markets to the other. China agreed to allow, in accordance with relevant prudential regulations, qualified foreign-invested companies, including banks, to issue RMB-denominated stocks; qualified listed companies to issue RMB denominated corporate bonds; and qualified incorporated foreign banks to issue RMB denominated financial bonds. See U.S. DEPARTMENT OF THE TREASURY (2007).

all LLSV countries. The inconsistent results suggest that China's shareholder protection is relatively strong on paper, but weak in practice. The reasons that the laws are not effectively being enforced in China are (1) lack of qualified legal professionals, and (2) conflict of interest between fair play in practicing law and the monopoly power of the single ruling party (cf. Allen et al. 2005, p. 11).

B) Internal Aspects

Governance Structure

As to the internal governance structure, the Chinese model looks, at first appearance, quite similar to the two-tier board system of the German model. In Germany, the public firm is governed by a management board (Vorstand) and a supervisory board (Aufsichtsrat). The managing board is in charge of the daily operations of the firm, while the supervisory board is responsible for appointing, supervising, and advising the management board and directly involved in developing strategies of the firm (cf. Mallin 2007). In the Chinese model, management and monitoring tasks are delegated to the board of directors and the board of supervisors, respectively. The Chinese board of supervisors also takes in employee representatives, which makes it more like the German way of co-determination (Mitbestimmung). However, there is no such hierarchical relationship between the board of directors and the board of supervisors as in the German model. While the German supervisory board has the authority to appoint and, if necessary, even dismiss the members of the management board, the two boards in the Chinese model are running on the same level, and the directors and supervisors are all appointed or dismissed by shareholder action. In view of this structural arrangement, it is doubtful whether the board of supervisors have enough power to conduct the supervising work effectively.

Overall Ownership Structure

The ownership structure at the Chinese stock market is deeply characterized by the state's design. Typically, former SOEs were approved to go public, and the share distribution was regulated by the central government. A large proportion of the shares was prevented from being transacted at the exchanges. Until 2005, Chinese shares were divided into two types: non-

tradable shares that were not allowed to be publicly traded, and tradable shares that were entitled to transactions at the exchanges. Each type was further divided into different classes, depending on their shareholder or listing location.

Non-tradable shares mainly comprised state-owned shares and legal person shares. State-owned shares were in the possession of the central and local governments through their underlying asset management agencies, while legal person shares are those owned by entities with a legal person status. The legal persons referred to domestic sponsors, foreign companies, and other legal entities who had taken part in a non-public offering of the relevant firms.[30] Other untradeable shares were in the hands of employees or private individuals.

Table 4.1: Ownership Structure of Chinese Public Firms 2005

Year 2005		Shares (bn.)	% of total
Non-tradable	State-owned shares	343.3	44.82
	Sponsor's legal person shares	55.2	7.21
	Foreign legal person's shares	22.6	2.95
	Private placement of legal person's shares	24.3	3.17
	Employee shares	0.4	0.05
	Others	28.7	3.75
Tradable	A-shares	228.1	29.78
	B-Shares	21.8	2.84
	H-Shares	41.6	5.43

Source: CSRC (2006), http://www.wind.com.cn/

Table 4.1 provides a snapshot of Chinese public firms' overall share structure in 2005. At the year end, about two-thirds of the shares at the Chinese stock market were non-tradable. Among them, state-owned shares have the dominant proportion of approximately 45%. Since domestic sponsors of public firms are usually former SOEs under control of the state's agencies, the state indeed controlled more than half of all shares of the listed firms. By contrast, tradable A- and B-shares which were dispersed among private and

30 By 1994, many Chinese joint-stock companies had been founded through non-public offering by 1994. Yet this is not allowed since the Company Law was brought into effect in July 1994.

institutional investors summed up to slightly over 30%. Therefore, the Chinese stock market is state-dominated.

Before 2005, the only legal channel of transacting non-tradable shares was equity transfer between enterprises, provided that the agreement had been approved by relevant authorities and regulators. In 2005, the regulators launched a reform of non-tradable shares in order to make them tradable. Against compensation in cash or stocks, shareholders of the one-time non-tradable shares have gained the right to sell them after certain lockup periods (12-24 months) have expired.

Although the 2005 non-tradable shares reform has enhanced the equity liquidity of the listed firms in China, it has not significantly changed the market's ownership structure and the state's dominance. Even though the state's directly and indirectly controlled shares are now entitled to market transfer, the state and its agencies need not do so. Consequently, the state's role in the governance structure has not changed.

V. Evolvement of Corporate Governance Practices in China

Shleifer & Vishny (1997) argued that the Anglo-American and the German/Japanese corporate governance models are efficient, because they have a good complementarity between the level of legal protection and ownership concentration. Countries with poor investor protection typically exhibit more concentrated control of firms than countries with good investor protection (La Porta et al. 1998, 1999, Claessens et al. 2000).

In reference to these theoretical and empirical works, one may argue that China's weak legal protection for shareholders has given rise to a concentrated ownership structure. However, this logic does not really match the situation in China. The main reason is that in China, the state has been playing a decisive role in both the formation of the legislation, including legal protection for investors, and the establishment of a corporate governance structure that emerged in the 1990s. Hence, both the general legal protection for investors and the ownership structure at the Chinese stock market rather reflect the will of the central government than build up certain causality by themselves.

The corporate governance model been , the causality in the formation of the Chinese model is still unclear, if legal protection for investors is not a drive. How did the Chinese model evolve over the past decades? What backed every big change in its evolution? These questions are crucial for a good understanding of the corporate governance model in China.

Since most listed firms at the Chinese stock market have SOE backgrounds, it makes sense to look back at Chinese SOEs' development process, and to trace the roots of the Chinese corporate governance model. In doing so, the author utilizes the distinction between the content of change and process of change in the organizational change studies (Van De Ven, 2009), and principal-agent relationships as the overall framework of this survey.

1. Corporate Governance Practices in Chinese SOEs: Content of Change

In the planned economy before 1978, state ownership was considered the sole legal form of enterprises.[31] This concept provided justification for state planners to mobilize human and financial resources and allowed them to assess production and distribution demands. The state did not only own the property rights of, but operated the SOEs through its officials who were executing the managerial powers. This model served as an organizer of economic resources and activities as well as a tool binding the state, SOEs, and employees to each other (cf. Shipani/Liu 2002, p. 8). That is to say, SOEs were operating on the state's coffers as the sole financial input, while employees were living on salaries earned at the SOEs. Therefore, SOEs had some social security functions other than just production units. A job at a certain SOE was once called an "iron rice bowl" that symbolized a secured life with salary, housing, medical treatment, and pension offered by the SOE.

Having learned a bitter lesson from abolishing the development of the national economy during the ten years long lasting Cultural Revolution and seen the economic success in the developed countries, the central government intended to increase productivity and raise living standards in 1978 by reforming its economic model systematically into a more competitive one. On the Third Plenum of the Eleventh Chinese Communist Party Congress at the end of 1978, the Party set to shift its focus from class struggles to economic development (cf. CPC 1978). Following this ideological turning, the Chinese reform era began.

Depending on the central government's major policies for reforming SOEs and their management, we identify three governance stages of Chinese SOEs since 1978: (1) the incentive stage from 1978 to 1983, (2) the contracting model from 1984 to 1992 and (3) the corporatization model since 1993. As summarized in Figure 5.1, governance practices at the three stages differentiate in their features with regard to the goal of relevant policies and the roles of the state as well as SOEs and their executives (managers) as participants.

31 Article 15 of the Chinese Constitution of 1982 declared, "The state practices economic planning on the basis of socialist public ownership".

a) The Incentive Stage (1978-1983)

The experiment of SOE reform had started even shortly before the Third Plenum of the Eleventh Chinese Communist Party Congress was held. In autumn 1978, six SOEs in the Sichuan Province were selected by the local government to be the first ones to undertake an experiment along the lines of "expanding enterprise autonomy and introducing profit retention" (Qian 1999a, p. 8). In 1979, the number of experimenting SOEs in Sichuan was increased to about 100. The selected SOEs were given more autonomy in a way that they could produce and sell goods to the external free market[32] and retain some profits in case they had fulfilled the plan quotas. They were also authorized to promote some middle-level managers, who still had to be approved by the government.

In summer 1979, the central government issued *Some Provisions on Enlarging Industrial SOEs' Autonomy* (cf. CPC 1979) and other four documents to extend the SOE reform experiments to other provinces. By 1980, more than half of Chinese SOEs (in terms of output value) were involved in the experiments and obtained some limited autonomy in production planning, material purchasing, employment, sales, and use of retained profits.[33] These incentives had an active effect on SOEs' performance of that time. Compared with 1978, the delivered profits of all SOEs to the state grew in 1979 by 10.1%. The government deficit of 1 billion RMB in 1978 was replaced by a surplus of 13.5 billion RMB in 1979. The income from SOEs rose by 7.5% as against the previous year (cf. Wang 2006, p. 10).

However, these practices were *de facto* no change of the dominating planned system, but a cautious testing of a profit-orientation of the SOEs. Planned production quotas still took priority on SOEs' task lists. Only those who were able to complete their production plans and to mobilize surplus human and financial resources, could enjoy the profit retention. Although the state shared some decision rights with SOEs, it remained pervasive in SOEs' operations. It owned all the enterprises on behalf of the Chinese people and delegated officials to manage SOEs' operations. At the same time, it assessed production and distribution demands, formed production schemes for SOEs, and monitored the realization of these schemes. Apart from mate-

32 The external free market was established as the government allowed peasants to sell their surplus products.

33 The central government required SOEs to split their retained profits into funds for housing, bonuses for employees and funds for production development, while the government would not interfere with the use of these funds.

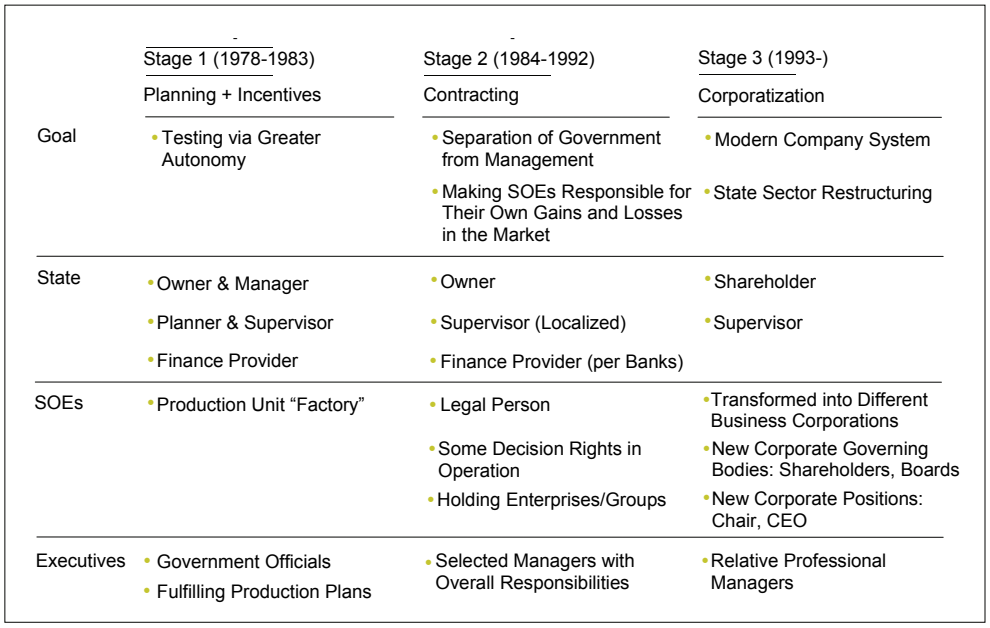
rial resources, the state furthermore supplied funds to finance SOEs' operations. In fact, the state provided all SOEs with the input resources and distributed their output according to its plans. In this context, SOEs were rather "production units" or factories, as they were often called in Chinese, than real business enterprises with an orientation to increase returns and profits for their investors via active management. SOEs were not regarded as independent legal persons. Unsurprisingly, the term legal person never existed in the central-planning period. In nature, the governance practices in SOEs had not changed much in comparison with those in the planned system.

b) The Contracting Stage (1984-1992)

A) Dual-Track System

It was not until 1984, as the government issued *On Regulations of Further Expanding Autonomy of SOEs* and officially permitted a market track alongside with the planned track for industrial goods, that the SOE reform in China got a new push. Under the dual-track system, which was officially activated in early 1985 for all economic agents, SOEs were to sell industrial goods up to an appointed quota quantity to the state at a planned price, while any surplus products were allowed to be sold at the market and priced freely. Consequently, any kind of good was priced twofold with a planned price and an unregulated one. Chinese SOEs were now for the first time linked with the market. Due to decreasing market prices mainly caused by tight monetary policy in 1990, the price difference between the planned and the market track became insignificant. By the mid-1990s, most provinces had undertaken liberalization in prices and the planned-price track had almost ended for most industrial goods.

Figure 5.1 Corporate Governance Practices since 1978



Source: Own figure

B) Contracting for SOEs

More importantly in this phase, the central government launched the *Contract Responsibility System* at the beginning of 1987, trying to separate the state from the management of SOEs and to encourage the latter to expand production and earn profits. Under this system, the director of a SOE signed a contract, which governed the relationship between the SOE and its factory director, with the local government for a period of time of at least three years,[34] so that he or she would be fully responsible for the SOE's operation and gained consequently more control rights over the enterprise's operation than before. The focus of such a contract rested mainly with the profit sharing between the government and the SOE: The SOE as an entity should contribute a fixed proportion or a minimum amount of profit to the government, while the total income of managers and employees were dependent on the operational performance – the rest of the profit after tax. The contract re-

34 The proportion of profit retention was to be bargained yearly in the incentive model.

sponsibility system had a political advantage because the government, managers, and workers could all derive a benefit, if the SOE performed well.[35] Hence, the incentive effect was high for all these parties. By 1989, almost all SOEs were subject to a responsibility contract. In 1992, this practice was promoted through the issue of *Regulations on Transforming the Management Mechanism of State-Owned Industrial Enterprises* that granted SOE managers more control rights in areas of foreign trade, investment, employment, wages, etc.

C) Roles of the State

At this contracting stage, the state began to loosen its control over SOEs and cut its roles in the SOEs' governance from owner, manager, planner, supervisor, and finance provider down to three: owner, supervisor, and finance provider. The "State-owned Industrial Enterprises Law of China" (SOEs law) prescribed that the local organization of the Chinese Communist Party should guarantee and supervise the implementation of the Party's and the state's guiding principles and policies, so that the SOEs' supervision by the state became actually localized. This was particularly important with regard to the state's new financial policies referring to SOEs.

The new financial policies, which intended to strengthen constraints for SOEs, stepwise introduced a tax system to replace the former way of profit retention. As mentioned, in the incentive stage SOEs had gained full freedom in using their retained profits. However, the proportion or sum of retained profits remained dependent on the quota and therefore arbitrary. Addressing this problem, the State Council approved in 1983 *On Methods of Promoting SOE Taxation instead of Profit Retention*, according to which big- and medium-sized SOEs should be taxed by 55% upon their incomes, while small-sized SOEs were subject to a progressive tax rate from 7% to 55%. In the light of differences in industries, the second step tax reform was carried out after the *Provisional Regulations of the People's Republic of China on Enterprises Income Tax* had been issued in late 1984. New tax items, such as tax on industrial products, sales tax, value added tax, city planning tax, real estate tax, and resource tax, were introduced. As a result, the state made an advance in governing SOEs, for it tried to replace an arbi-

35 However, in case the SOEs had not achieved a satisfying profit, they were still liable for paying the fixed amount to the state.

trary administrative control (setting the retained profits) with clear law provisions (tax rates).

In addition, the way SOEs obtained financing altered along with the fiscal reform of banks. As early as in 1970, local governments were made responsible for material allocation and fixed investment. With the fiscal decentralization in 1980, provincial governments could not only share their budgetary income revenue, but had the authority to determine the structure of their expenditures including the financing of SOEs. In 1983, the state strengthened the financial constraints for SOEs by introducing bank loans instead of appropriations for SOEs' circulating capital. Now, alongside the contractual system in force, local governments gained great influence over credit decisions of the regional branches of the central bank and state specialized banks for SOEs and even had the authority to determine whether a loan should be paid back by the relevant SOEs.

D) Roles of SOEs

At this stage, the Chinese government set up big enterprise groups which should link SOEs vertically and horizontally. This policy aimed at promoting a more rational production structure, technological development, and intra-group cross-financing as well as creating large conglomerates. Accordingly, there came into being a new level in the governance structure between the state/government and a number of SOEs. As was stated in a Party's document from 1984,[36] SOEs themselves were to be transformed into legal entities whose management should enjoy full management authority and full responsibilities for their own profits and losses. With the SOEs Law, that was adopted in 1988, a legal person status was granted to SOEs by law.

The factory director acted now as the legal representative and exercised leadership in the operation of the enterprise. For the first time in Chinese SOE history, the factory director occupied the central position in the enterprise operation. According to the SOEs Law, the director should be selected through a "competitive process". Although no details were issued on how to fulfill this requirement, it provided incentives to select a higher qualified director for the enterprise. Besides, some measures were introduced to facilitate SOEs' management. For example, SOEs were allowed, through the

36 See the the Central Committee of the Chinese Communist Party's "Decision on Reform of the Economic Structure" (CPC 1984).

employees' congress and other forms, to practice "democratic management", while employees might take part in the management and its supervision. The SOEs Law also required the establishment of a management committee or a similar consulting body to assist the director with decision-making on important issues.

c) The Corporatization Stage (since 1993)

A) Unsuccessful Contracting

Despite the major reform efforts made for the state sector since 1978, it still proved to be uncompetitive in contrast to the private sector that expanded impressively in the first 15 years of China's reform and opening-up policies. There was steady increase in SOE losses since the managements obtained more decision-making power (cf. Sachs/Woo 1997, p. 24). Even though no SOE had ever been closed down, the state sector was not any longer the main strength of the national economy by the end of 1993. The share of the state sector in the industrial output descended from 78% in 1978 to 43% in 1993 (cf. Qian 1999a, p. 15). Even its share in total non-farm employment was down from 60% to about 30% in the same time period (cf. ibid., p. 15).

The contracting system did not help SOEs to expand and function well due to some deficiencies in its design. As far as profit retention is concerned, it was difficult to fix a reasonable minimum profit for the SOEs to pay to the state. The responsibility system was itself experimental, which means there was no ready-made standard for setting the minimum proportion or sum of profits. In addition, the contracting system said nothing about what to do, when SOEs could not make a desired profit or suffered a loss. Nonetheless, the profit paid to the state was obligatory. With regard to the entire reform policies, the state leadership had not planned to establish a rule-based market through their first reform attempts. For this reason, the contracting system rather aimed at stimulating improving efforts from inside SOEs than to generate incentives and to enhance constraints through outside forces like more competitive environment and stricter legislation. Besides, neither the ownership nor the property rights issues were included in the contracting system. Logically, the state would undertake all the losses of its SOEs in the end to avoid SOEs' bankruptcy, which actually reduced the incentives for SOEs' efforts to make more profits. As a result, some incentives for the SOEs per se were either short-term or got reduced in view of

the state's soft budget constraints. To solve these problems, SOE reform entered a new Corporatization phase compatible with the establishment of a market economy by the government.

B) SOE Corporatization and Restructuring

In 1993, the Third Plenum of the Fourteenth Party Congress adopted the "Decision on Issues Concerning the Establishment of a Socialist Market Economic Structure". The Decision formulated clear goals in the areas of the reform strategy (coherent package and appropriate sequencing of reforms), a rule-based system (unified foreign exchange rate and tax rates and accounting rules for all enterprises regardless of ownership), market-supporting institutions (formal fiscal federalism, centralized monetary system, social safety net), and property rights and ownership (transforming SOEs), respectively (cf. Qian 1999b, pp. 23f.).

Unlike at the incentive and contracting stages, which centered on the extension of SOEs' autonomy and profit sharing, the *Decisio*n addressed SOE reforms in terms of property and ownership rights in several ways. First, it intended to transform SOEs into modern enterprises with "clear property right, clarified rights and responsibilities, separation of enterprises from the government, and scientific management" (CPC 1993).[37] Second, the Decision implied the privatization of small SOEs:

> With regard to small SOEs, the management of some can be contracted out or leased; others can be shifted to the partnership system in the form of stock sharing or sold to collectives and individuals (ibid.).

Third, the Decision supported the development of a financial market, advocating "[s]tandardizing issuances and listings of shares, and gradually enlarging the scale" (ibid.). Through this policy, the Chinese stock market was combined with SOE reforms.

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37 Shareholders of modern SOEs are entitled to enjoy their shareholders' rights in proportion to their shares and are obligated to transfer ownership of their investment to the corporation. Rights, obligations, and liabilities between and among the corporation, shareholders, employees, creditors, consumers, and other stakeholders should be delineated clearly. The government should separate itself from SOEs' operation. SOEs should avoid random decision-making, relaxed management, undisciplined job performances, and low-level managerial abilities and implement democratic decision-making processes, efficient execution, and strong supervision over decision-making.

In 1993, the "Company Law" was enacted to facilitate the new policies in SOE reform. In 1995, the new SOE reform guidelines were brought into action. After local governments in Shandong, Guangdong, and Sichuan had conducted first experiments, small SOEs were privatized and employees laid off nationwide on a large scale. The central government promoted the restructuring of the state sector with the slogan "grasping the large and letting go the small".[38] "Small" SOEs had played a very important role in China's planned economy, for the Chinese state sector was made up dominantly by small- and medium-sized enterprises. In 1993, they still accounted for 95% in number, 57% in employment and 43% in output of the state industrial sector (cf. Cao et al. 1999, p. 109). By the end of 1996, some 70% of small SOEs had been privatized in several pioneering provinces and about half were privatized in many other provinces. From 1996 to 1997, over 20 million SOE employees were laid off throughout China. Until 2005, another 20 million SOE employees were laid off. After reaching a peak of 112.6 million in 1995, the total state sector employment shrank to 64.3 million in 2006 (cf. NBSC 1996, 2007a). Even no large SOE was privatized, the share of state industry was reduced by almost half through releasing the small- and medium-sized SOEs (cf. Qian/Wu 2000, p. 39).

"Grasping the large" referred to keeping a number of backbone large and medium-sized SOEs, particularly those in some strategic industries such as transportation, telecom, banking, oil, steel, etc. Based on the provisions in the Company Law, "to be grasped" large and medium-sized traditional SOEs were "corporatized" instead of following a privatization process, that is, converted into different western-type corporate entities predominantly in the form of limited liability companies and joint-stock companies,[39] while the state still maintained its control. The new corporation forms of SOEs vary from their predecessors in their better-defined ownership structure,

38 The slogan emerged in the central government's work report at the Ninth NPC. Yet the practices had been ongoing for a period of time. At the last few Plenums of the Eighth, the concept had already been implicitly expressed in the central government's work reports.

39 These corporate entities include wholly state-owned corporations, closely held corporations, and publicly held corporations. According to the Company Law of 1993, a wholly state-owned corporation is a limited liability corporation invested and established solely by the state-authorized investment institutions or government agencies. A closely held corporation is a small company with few shareholders and of small capital size. A publicly held corporation, also called a joint stock limited company, is a corporation whose total capital is divided into equal shares, and is owned by shareholders who assume liability towards the company to the extent of their respective shareholdings.

shareholder rights, and management accountability. With corporate entities officially coming into being in People's Republic of China, the term "corporate governance" is since then relevant for the governance issues of Chinese firms. Before, there had been no "corporate" governance, but governance issues or practices of SOEs. However, to the government's disappointment, SOEs' performance continued to decline in the 1990s (cf. Qian 1999b, p. 30).

The Fourth Plenum of the Fifteenth Party Central Committee in 1999 adopted more aggressive policies for the SOE reform. One of them was the "readjustment of the layout of the state economy" (CPC 1999, section III) in the sense to narrow the state sector. Specifically, the state decided to concentrate its control over four main types of industries – industries related to national security, natural monopolies, industries providing important public goods and services, pillar industries as well as backbone enterprises in high and new technology industries, while withdrawing from other areas. Committing the government to withdrawing from most industrial and services sectors was a significant and encouraging step forward in transforming the state sector in the economy. Obviously, these types were vaguely defined. That being the case, obstacles to privatization in areas other than the core industries could arise, say, due to local governments' interest there. Nonetheless, this deficiency might slow down but not prevent the privatization process of small SOEs, compared to its potential speed.

Another policy adopted at the Fourth Plenum of the Fifteenth Party Central Committee was the diversification of ownership structure for those enterprises still under state control. Except for a few enterprises solely funded by the state, all other enterprises should become joint stock companies with multiple owners involving private investors or foreign investors. This policy accelerated listings of SOEs both inland and abroad. China Telecom, China National Petroleum Corporation (CNPC), China Petrolchemical Corporation (SINOPEC), and the Legend Group are some examples. Another new policy concerned the establishment of a corporate governance system. The term "corporate governance" appeared in a Party document for the very first time.

C) Roles of the State and SOEs

At the current corporatization stage, the state has changed its role from the only owner of SOEs to the shareholder possessing property rights over the state-owned part of a corporatized SOE's assets. The state continually acts

as the supervisor of SOEs, but the way it finances them has changed a lot, and it has relegated the job to the capital markets. SOEs have changed into different types of companies and introduced, indispensably according to the Company Law, three corporate governing bodies: shareholders, the board of directors, and the board of supervisors.[40] Some new functions such as the chair of the board of directors and the chief manager in the sense of a Chief Executive Officer (CEO) have been introduced as well. The Chinese corporate governance model has been built up.

Today, registered SOEs accounted for about 5% of all industrial companies and about 15% of the total output value.[41] Large scale SOEs still constitute the backbone of the economy. The state sector continues to place a disproportionally large claim on economic resources, for instance, bank lending.

2. Driving Forces in China's Corporate Governance Evolution: Process of Change

While the most advanced economies – Western Europe, the United States, and Japan – have converged in economies, business practices, and living standards over the last few decades, their corporate ownership and governance remained different, and different degrees of ownership concentration and labor influence have persisted. In identifying the rationale behind the different corporate ownership and governance patterns, Bebchuk and Roe developed in 1999 a theory of the path dependence of corporate structure. They argued that

> a country's pattern of ownership structures at any point in time depends partly on the patterns it had earlier. Consequently, when countries had different ownership structures at earlier points in time – because of their different circumstances at the time, or even because of historical accidents – these differences might persist at later points in time even if their economies have otherwise become quite similar. (Bebchuck/Roe 1999, p. 127)

Although Bebchuck and Roe have the most developed countries in their sights, in our opinion, the consistency of the state's dominance in Chinese SOEs' ownership structure demonstrates a clear path-dependent process as well. That is, how the Chinese SOEs were owned at the starting point af-

40 In case of small firms with few shareholders, the boards are not indispensable, but a CEO is required.

41 Calculated with data of NBSC (2007a).

fected much the way they would be owned later. Every important change happened in Chinese SOEs' corporate governance was carried out on the basis of the existing ownership structure and did not mean to replace it with a different model, for example, a dispersed or a bank-based ownership.

It is worth noting that Bebchuck and Roe (1999) argued in their path-dependence theory that there exist a structure- and a rule-driven path dependence. In this article, however, we mainly take the structure-driven path, i.e., how the governance structure of SOEs has evolved, into account, as official rules (laws, regulations) on SOE reforms have typically been brought into effect to support those structural changes. For example, the Company Law was enacted after the central government decided to transform traditional SOEs into modern enterprises. Therefore, the rule-driven path dependence in SOE reforms is *de facto* in keeping with the structure-driven one.

One may argue that the SOE ownership is self-evident, for the term of state-ownership already literally describes the ownership structure. This view is correct as far as the owner or blockholder of SOEs is concerned. However, the term of state ownership alone conceals any significant information on the structural changes in Chinese SOEs' governance. Neither does it reflect what differences occurred in SOEs' ownership structure and control along the reform path, as described in section 4, nor does it imply the driving forces behind such changes. In the following, we highlight several historical and environmental factors during China's transition to a market economy, which have had significant impacts on the evolvement of the SOE reforms.

a) Two Radical Campaigns

Two radical campaigns that had hit China's economy very hard took place in the first three decades of the People's Republic of China. The first one happened shortly after China's planned economy had been established by 1957. The initial planned system followed the former Soviet model that featured concentration of authority in the central government. Yet Mao Zedong was doubtful of the validity of the Soviet-style (cf. Qian 1999a, p. 24). Under his leadership, China began to restructure the Soviet planning model only one year after its establishment. In 1958, the Great Leap Forward (GLF), as the radical reform was called, was initiated to realize an acceler-

ated and infeasible industrialization.[42] However, the unrealistic economic expansion and continuously unfavorable weather conditions led to a disastrous famine, causing millions of deaths[43] in rural areas during 1959-1961. At the same time, China's light industry output and national income declined annually by 2% and 3.1%, respectively (cf. Qian 1999a, p. 25) due to overemphasis of heavy industry, especially steel output (cf. Luo 2004, pp. 25f.).

The second big-bang campaign began as Mao initiated the Cultural Revolution in 1966, aiming at "a further revolution under proletarian dictatorship".[44] Although the national economy still grew moderately during the ten years (1966-1976) of this mass movement, the growth was slower than in the 14 years before and the 6 years after it (cf. Chen 2008), implying that the radical movement suppressed the potential of China's economy. Big problems during the Cultural Revolution included serious imbalance of the proportions among the sectors of the national economy and of the proportions between reserves and expenses, greatly lowered economic performance, and appearance of government deficit. Also the central government admitted later that the national economy suffered huge losses during these ten years (cf. CPC 1981).

The Great Leap Forward and the Cultural Revolution were accompanied by two waves of administrative decentralizations, which have taken great influences on China's transition path. Both of the two decentralization waves took place under Mao's leadership. For Mao, centralization would offer little incentives for people's initiatives,[45] and he preferred decentralization of government authority to local levels (cf. Qian 1999a, p. 24). Mao's preference was not purely personal, but backed by the communists' long-time experience in time of war (cf. CPC 1981). In those days, the revolutionary bases of the communists had been run in separate rural areas, and

42 The plan of this mass movement was that the industrial output of China should surpass that of Great Britain and the United States within fifteen years. See LUO (2004, pp. 25f.).

43 Surveys of Chinese scholars assess the number to be in the range of 17 and 40 millions. See LI (2006).

44 So was it explained in the "Resolution on Certain Questions in the History of Our Party Since the Founding of the People's Republic of China" (CPC 1981).

45 As summarized in "Resolution on Certain Issues in the History of Our Party Since the Founding of the People's Republic of China" (CPC 1981), one of Mao's core thoughts was following the mass line (zou qun zhong lu xian).

mobilization of local incentives for production in each base had been the main concerns of communists (cf. ibid.).

The first wave of decentralization occurred alongside the Great Leap Forward. Two institutional changes were made with regard to restructuring the planning system. On the one hand, the central government deputed the control over most SOEs as well as the planning authority to local governments (cf. Qian 1999a, p. 25). While there had been 9,300 SOEs subordinated to the central government in 1957, there were only 1,200 in 1958 (cf. ibid., p. 24). The local government gained the authority to make most decisions on regional fixed investments, material allocation, and expenditures. On the other hand, China established numerous People's Communes, which served as local authorities and were responsible for agricultural production, commerce, bank affairs, education, and public health in the rural areas. Within a few months after the movement initiation, 99% of the peasants were organized in about 24,000 People's Communes, with an average size of 5,000 households (cf. ibid., p. 25). With the communes established, a large number of so-called commune and brigade enterprises were founded to expand non-agricultural activities.

The disaster caused by the Great Leap Forward forced the central government to correct its 1958 policy. In the urban areas, recentralization of the planning system began. From 1961 on, all large and medium-sized industrial enterprises were again subordinated to the central government (cf. ibid., p. 26). Between 1959 and 1965, SOEs under the control of the central government increased from 2,400 to 10,533 (cf. ibid., p. 26). In rural areas, the central government carried out a more liberal policy: communes were sustained, but became a less powerful institution; production teams consisting of 40-50 households became the basic production units; peasants were allowed to cultivate small private plots, run sideline productions, and open rural free markets (cf. ibid., p. 25).

During the Cultural Revolution, a second wave of administrative decentralization began in China due to a goal of high growth in the Fourth Five Year Plan (1971-1975)[46] and the preparation for war.[47] From 1970 on, the

46 For example, steel production was required to double within five years (cf. QIAN 1999a, p. 27). To achieve the goal of high growth, the central government believed that local initiative must be mobilized through decentralization.

47 Mao assessed that a Soviet invasion and the beginning of World War III was nearing. In consequence, the government proposed dividing the country into 10 cooperative regions, each of which should be a relatively complete and self sufficient industrial system to deal with the war (cf. QIAN 1999a, p. 27).

economic planning was mainly conducted on regional levels. The 1970 wave of decentralization was similar to the 1958 one, but went much further. The control over most large SOEs as well as some planning authority in material allocation and fixed investment was again delegated to the local governments. After the decentralization, the central government supervised barely 142 SOEs, down from 10,533 in 1965. The types of material allocated through the central government were reduced from 579 in 1966 to 217 in 1971. The share of within-budget fixed investment by local governments rose from 14% in 1969 to 27% in 1971 (cf. ibid., p. 27). For a second time, however, the administrative decentralization caused disarray and some recentralization measures were taken by the central government in 1973 under the name of consolidation (cf. Qian 1999b, pp. 25f.). Yet in comparison with 1958, the extent of 1970 decentralization was greater, whereas the recentralization afterwards was much weaker (cf. Qian 1999a, p. 26).

b) Incremental Reforms in the Non-State Sector

After the Cultural Revolution came to an end, the reformers, who could be divided into moderate and radical groups (cf. Guo 2004, p. 396), took control of the central government. Moderate and radical reformers all agreed on the necessity of economic reforms,[48] but disagreed on the content, scope, and pace or extent of reforms (cf. ibid., p. 396). Moderate reformers insisted on maintaining basic socialist principles (such as planned economy, public ownership, and distribution according to labor). They were cautious and skeptical about dramatic departures from the planned economy and looked on the market as a supplementary mechanism for the allocation of resources and determination of prices to help establish a planned commodity economy (cf. ibid., p. 396). They favored a slow, gradual, and experimental approach to reforms, through which imbalances generated by reforms could be repaired during readjustment periods (cf. ibid., p. 396f.).

In contrast, radical reformers favored a much less restrictive definition of socialist principles that should exclude the planned economy and remold the principle of public ownership more flexibly, so as to promote a diversified ownership structure while maintaining the dominant position of public ownership (cf. Harding 1987, pp. 78-83). They wished to launch a market econ-

48 The "Communiqué of the Third Plenary Session of the 11th CPC Central Committee" (CPC 1978) stated, "The Plenum decided that (…) from 1979 on, the work of the CPC should focus on the socialist modernizations."

omy and favored a rapid and comprehensive structural reform to quickly remove the inefficiencies and rigidities of the traditional planned economy (cf. Guo 2004, p. 396).

After three decades of economic transition, most of those reform ideas from radical reformers have been realized in today's China. Interestingly, the path of China's transition has been one that was suggested by moderate reformers. In late 1970s, the central government under Deng Xiaoping at last chose to go a gradual reform path and to change the national economy slowly in stages. Under the dual-track system, the market track facilitated several reforms in form of regional experimentations, including agricultural contracting, establishment of non-state enterprises, and special economic zones (SEZs). Without touching the existing ownership structure under tight governmental control, these reforms were incremental to the planning system.

A) Agricultural Household Contract Responsibility System

Before the dual-track system covered SOEs in 1984 (see 4.2.1), it had started in rural areas, with rapid and comprehensive liberalization of the agricultural sector. In 1978, as the rest of the Chinese rural areas were still operating under the collective farming system, several households in the Fengyang County of the Anhui Province began to contract with the local government for delivering a fixed quota of grain in exchange for farming on a household basis. This practice was soon imitated by other counties in the province and promoted by the provincial government. In 1980, the experimentation in Anhui was promoted by the central government through the official introduction of the Agricultural Household Contracting Responsible System (cf. CPC 1980) to replace the commune-bridge system of collective farming.

Under the Agricultural Household Contracting Responsible System, individual peasant households were allowed to lease the former commune land by signing a contract. With the contract signed, the peasant households would take the full responsibility for the piece of land allocated for their use.[49] Although these households remained obliged to fulfill the grain quota

49 In China, land in rural areas is collectively owned, while land in urban areas is state-owned. Before the reform era, pieces of land were allotted by administrative authorities for agricultural and industrial use. Since the 1980s, local governments in urban areas transfer rights of land's use for a determined period against compensation.

as set by the state, they obtained residual claims and control rights over the production on their land, say, cultivating more valuable crops and selling the surplus goods on the free market. By 1984, almost all peasant households across China had adopted the contracting method.

This contracting reform in the rural areas turned out to be a huge success. During the period of 1978-1994, growth in agriculture provided the major impetus to the Chinese economy (cf. Sachs/Woo 1997, p. 10). Shortly after the launch of the reform, the national grain productions grew by 8.7% in 1982 and by 9.2% in 1983 (cf. NBSC 1982, 1983). From 1978 to 1984, the per capita real income in the rural areas increased by more than 50% (cf. Qian 1999a, p. 9). In the same period, the per capita consumption doubled in real terms (cf. Sachs/Woo 1997, p. 30).

However, this growth turned out to be rather temporary. From 1985 onward, the growth in the rural areas stagnated due to (1) farmers' uncertainty about future land use rights, (2) state procurement prices not being raised in line with the increases in input prices, and (3) large reductions in state investment in agricultural infrastructure (cf. ibid., pp. 31f.).

B) Rural Enterprises

Under the dual-track system in the 1980s, a few important relaxation policies in favor of free markets and the non-state sector were adopted. For example, all the previous black markets were now legal. Regulations on the registration and supervision of non-state enterprises were less strict than before. Private enterprises were allowed to employ more than eight people, which was illegal before 1984. The governments in rural areas encouraged collectives and peasants to invest in or to pool their funds to jointly set up various kinds of enterprises. Fiscal decentralization in this period, which primarily aimed at the state sector, also provided incentives for local governments to develop non-state enterprises, since the local governments did not have to share taxes generated through the non-state sector within the planning system (cf. Qian 1999a, p. 11). These measures were greatly conductive to the emergence and growth of the rural enterprises. Between 1983 and 1988, total rural enterprise output increased by more than fivefold (cf. Qian 1999a, p. 12).

In non-agricultural areas, most of the impetus has been coming from so-called township and village enterprises (TVEs). From 1983 to 1984, the former People's Communes were changed into townships, and the erstwhile commune and brigade enterprises were renamed as TVEs. They were

mostly owned directly by township and village governments and collectively by members of a village, and in some cases by private persons. Local governments enthusiastically supported TVEs, because (1) previous administrative restrictions against rural enterprise entry and expansion were removed from almost all industries due to liberalization policies on rural industrialization, and (2) they themselves relied heavily on the development of rural industry as the way to generate their revenue (cf. Qian 1999a, p. 12). Since their emergence, TVEs have been expanding at a remarkable rate and dominating in the non-agricultural growth. Their share in total employment in China increased from 7% in 1978, to 11% in 1984, and further to 21% in 1995 (cf. Sachs/Woo 1997, p. 33). In 1987, TVEs were allowed to take part in foreign trade. Since then, TVE exports have experienced a dramatic growth, with a share of overall exports rising from 9.2% in 1986 to more than 40% in 1996 (cf. ibid., p. 33).

The governance features of TVEs are quite different from those of SOEs. For example, TVEs' ownership and property rights are clearly defined as held by the local governments or individuals (cf. Lin 2001, p. 11). Another feature of TVEs is that they face hard budget constraints. In the late 1980s and early 1990s, the total size of the SOE industrial output was about twice that of TVEs, while loans to SOEs and TVEs accounted for about 86% and 8%, respectively (cf. Qian 1999b, p. 16). In case of a deficit, the local government cannot finance it without the approval of the central government. Since local governments are in deed involved in TVEs as owners, they logically have incentives to ensure TVEs' efficiency and profitability by improving management (cf. Lin 2001, p. 11).

C) Opening-Up

The dual-track approach was also adopted to gradually open up China to the outside world and to attract foreign investment. In 1980, the central government chose four cities in the coastal areas in South China (Shenzhen, Zhuhai, Shantou, and Xiamen) to be the first four special economic zones (SEZs). The SEZs were export-oriented and had a special institutional environment. The local governments were granted the authority over their own economic development. They were allowed to approve foreign investment projects up to 30 million USD and to remain 70% of the increased foreign exchanges from exports. Foreign enterprises were subject to lower taxes than elsewhere in China. The SEZs were also allowed to become market

economies dominated by private ownership, while the rest of China was still under strict central planning and public ownership.

In 1984, the central government declared another fourteen coastal cities[50] as "coastal open cities", which began to enjoy authority similar to that of the first SEZs. Each of these cities gained broader authorities in approving foreign investment projects and setting up development zones, where they could implement more liberal tax and foreign exchange policies for attracting foreign capital and technology. In 1988, Hainan became a separate province and was added as the largest SEZ. In 1992, five additional cities[51] along the Yangtze River, thirteen border cities and towns,[52] and eleven provincial capitals[53] were granted special privileges as coastal cities.

As shown by statistical data (cf. NBSC 1991, 1992, 1993), China's extensive opening-up policies in early 1990s immediately boosted foreign investment and exports: Foreign direct investment (FDI) increased by 160% to 11.1 billion USD in 1992 and further by 130% to 25.8 billion USD in 1993. Registered enterprises with foreign investment expanded from 37 thousand in 1991 to 84 thousand in 1992, and further to 167.5 thousand in 1993. The value of exports in 1992 was 85.0 billion USD, up 18.2%, and that in 1993 was 91.8 billion USD, up 8%. In contrast, China's exports in 1980, as the first SEZs were established, merely reached 27.2 billion RMB (1 USD equalized 1.5 RMB in 1980 and 8.7 RMB in 1993). More notably, enterprises with foreign investment raised their share in exports from 16.8% in 1991 to 20.4% in 1992 and further to 27.5% in 1993.

D) Overall Performance of the Non-State Sector

Under the dual-track system, the total non-state sector, including household agriculture, rural industries, private enterprises, urban collective, and joint ventures, had been outperforming the state sector and changed the economy structure in China. Accordingly, the share of SOE production fell from 78% in 1978 to 69% in 1984, and further to 43% in 1993; while SOEs' share in

50 Tianjin, Shanghai, Dalian, Qinhuangdao, Yantai, Qingdao, Lianyungang, Nantong, Ningbo, Wenzhou, Fuzhou, Guangzhou, Zhanjiang, and Beihai.

51 Wuhu, Jiujiang, Yueyang, Wuhan, and Chongqing.

52 Heihe, Suifenhe, Huichun, Manzhouli, Pingxiang, Dongxing, Hekou, Wanding, Ruili, Yining, Tacheng, Bole, and Erlianhaote.

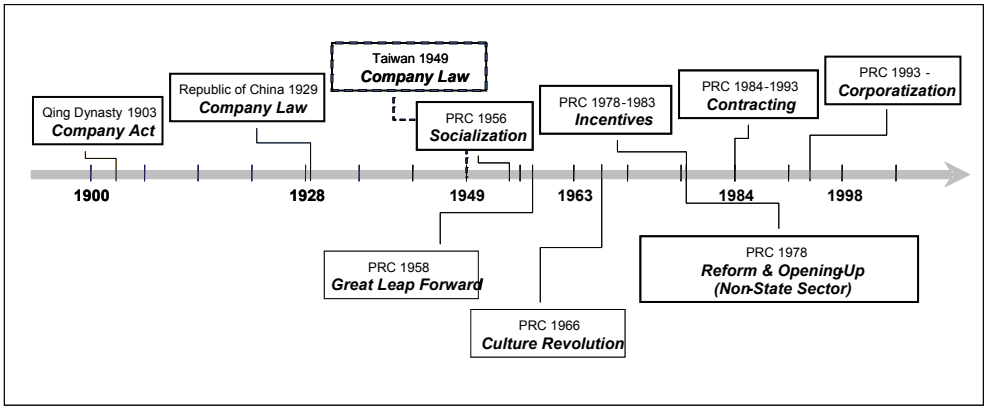
53 Taiyuan, Hefei, Nanchang, Zhengzhou, Changsha, Chengdu, Guiyang, Xi'an, Lanzhou, Xining, and Yinchuan.

commerce was down from 55% in 1978 to 40% by 1993 (cf. Sachs/Woo 1997, p. 10; Qian/Wu 2000, p. 5). As no SOE had been privatized by 1993, the changes of the relative weight of the state sector were solely caused by the rapid growth of the non-state sector.

c) Learning Process in SOE Reforms

Figure 5.1 demonstrates the connections between the SOE reforms and the historical and environmental factors, i.e., the knowledge and experiences that the Chinese government gained before and during the transition has mainly backed its choice of the reform path for SOEs. The boxes marked with PRC (for the People's Republic of China) over the time axis symbolize the path dependence of China's SOE reforms at different stages since 1949 (see section 4). Being dominated by the state ownership, changes on this path are accompanied and affected by factors described under 5.1 and 5.2, shown in the boxes under the time axis. In the following, we discuss how these factors affected the starting point of SOEs' ownership structure and its later changes.

Figure 5.2 Path Dependence in China's SOE Reforms



Source: Own figure

A) Lessons from the Mistakes

As we have described, the central government chose not to firstly touch the existing planned system in urban districts at the beginning of the transition.

This choice can be attributed to the central government's concerns about the potential losses due to radical reforms. At that moment, it must be difficult for the central government to answer the question whether replacing the planned system and public ownership structure with a market economy and a diversified ownership structure, as radical reformers put it forward, would largely improve China's economy. After all, there had been no experiences about how a market economy would function in China. Neither were there transition examples for China to learn from at that time.

Interestingly, if we look further back along the time axis in Figure 5.1, we will find another path dependence of ownership structure in China's history since 1900. Before the foundation of the People's Republic of China, private ownership of enterprises had existed in the Qing Dynasty and been protected by the Dynasty's "Company Act" promulgated in 1903. The Republic of China, followed by the authorities in Taiwan, continued this path. In mainland China, however, this path was discontinued by the socialization process beginning in 1956. Such a break-off was not directly responsible for the later disasters during the Great Leap Forward and the Cultural Revolution, but it had excluded all existing private ownership and facilitated a total deviation from the former economy model to a state ownership model. The risks of such a total deviation were evidenced by the economy development during the Great Leap Forward and the Cultural Revolution, implicating that the government should be cautious with radical economic reforms. Under concerns about failures and uncertainty of success, it was rational and low-risk for the central government to start with incremental reforms.

Our analysis echoes Bebchuck and Roe's (1999) path dependence theory, in which the two authors define efficiency as one of the major reasons why prior ownership structures in an economy might affect subsequent structures. In a simplified sense, efficiency concerns the profits and costs of rebuilding the existing ownership structures or enacting a set of legal rules that support different ownership structures. Although a different type of ownership structure could appear more efficient from today's perspective, a total reconstruction of the current system would be, in view of its potential profits, too costly to be realized. In their paper, Bebchuck and Roe give a numerical example of how companies will compare the potential profits and costs and decide not to restructure the existing ownership model into a different one. In contrast, at the beginning of China's reform era, no such calculation was feasible. Thus, lessons learned in the previous radical campaigns might have helped the central government to make its choice of the reform path.

B) Pre-Reform Institutional Bases

In both of the two waves of decentralization and the recentralization measures afterwards, the changes mainly adjusted the relationship between the central and local governments and not the relationship between the state and SOEs. On the one side, the de- and recentralizing policies dealt with the issue which governmental level should directly take the leadership in SOE operations. In other words, it was about how to allocate the SOE property rights within the administrative structure of the Chinese government. On the other side, SOEs had not become autonomous economic entities, but remained subject to production instructions from either the central or the local governments. Consequently, the governmental control over SOEs was tight throughout the first three decades of the People's Republic of China (cf. Qian 1999a, p. 28).

Nonetheless, the two waves of decentralization had exerted a big influence on the structure of China's planning system, making it not as centrally organized as in the Soviet model. Unlike the Soviet model, the Chinese planning system performed not through the central government granting power to subordinate local agencies to carry out its plans, but to a great extent directly on regional levels. Hence, a complete administrative centralization hardly ever existed in the Chinese planning system, except for the very beginning. Local governments and their agencies practically exerted much control, which made it easier to launch reforms on local bases, especially where the bureaucratic interests were weak (cf. ibid., p. 5).

In Bebchuck and Roe's (1999) path dependence theory, another source of power for the persistence of old ownership are rent-seeking activities, practiced by the interest groups who have been enjoying the rents provided by their positions in the actual ownership structure. If a new ownership system pattern, however efficient it is supposed to be for a single firm or the whole economy, noticeably reduces their current rents, those interest groups would have incentives to impede the efforts to introduce such a pattern as well as the supporting legal rules for it.

In a rent-seeking context, the structural character of China's planning system could explain why real reforms did not initially took place in SOEs in urban areas, but in rural areas. Provided that the central government had been thinking about a radical SOE reform (for example a diversification of the ownership) in the 1970s, there could have been much resistance against it from those agencies and persons who had been controlling SOEs for a long time, because their control would be reduced, and the profits of the

reform were not certain. Compared to that in urban areas, governmental control in the rural areas was, on the one side, less tight after the first wave of decentralization. On the other side, bureaucratic interests in the agricultural sector were weak, and the vested interests of local officials at the commune and the brigade levels were not well organized (cf. Qian 1999a, p. 6). Wan Li, the former party secretary in the Anhui province, who led the first rural reform in the late 1970s, once confirmed the situation:

> Why did reform make its first breakthrough in the rural area? This is by no means an accident and has historical reasons. This is because peasants suffered the most under the old rigid system and thus had the strongest desire for reform. At the same time, rural areas were the weak sector in the old system, and became the breakthrough point of reform. (ibid., p. 5)

C) Learning from the Non-State Sector

As we have discussed under 5.3.1 and 5.3.2, pre-reform mistakes and existing institutions bases can explain why China's reforms started in areas outside of the planning system. After China's transition began, experimentation with relaxation over the non-state sector has been providing abundant and exemplary experiences with other forms of ownership and governance structure for SOEs to learn from. Such a method has been useful for China's transition, because, as argued by Qian (1999b, p. 8), reform was a highly uncertain event and the government's knowledge about it had been very limited. Considering the high uncertainty, experimentation is a way to minimize costs through structured learning.

Experiences gained with those incremental reforms in the non-state sector have practically backed the SOE reforms. Seeing the impressive agricultural growth in the early 1980s, decision-makers in the central government firstly borrowed the idea of contracting from the agricultural reform to launch a similar system for the state sector. However, the contracting approach did not function well for the state sector, suggesting that the government should not only provide incentives, but also reform the entire state sector.

The rise of the non-state enterprises had helped to establish and to strengthen market forces in China. In the early 1990s, the planned track was largely phased out, and prices were mostly determined by the market rather than the state. SOEs were facing direct competition in a number of industries. This environmental change facilitated not only the launch of a market economy in China, but the corporatization and the restructuring of the state

sector as well. On the one hand, it was more efficient for the state to draw back from where SOEs had been uncompetitive and to focus on a few industries where the state has been enjoying a monopoly status. On the other hand, rent-seeking activities by interest groups became much less in those uncompetitive SOEs. As a result, reforms were easier due to less resistance. More importantly, the experiences gained in the non-agricultural sector outside of the state-sector could further be utilized by SOEs in their reforms. Among the non-state enterprises, especially the huge success of TVEs impressed the leadership in Beijing. Deng Xiaoping said on 12 June 1987

> In the rural reform our greatest success – and it is one we had by no means anticipated – has been the emergence of a large number of enterprises run by villages and townships (…). Their annual output value has been increasing by more than 20 percent a year for the last several years. This increase in TVEs, particularly industrial enterprises, has provided jobs for 50 percent of the surplus labor in the countryside. Instead of flocking into the cities, the peasants have been building villages and townships of a new type (…). Our success in rural reform increased our confidence, and, applying the experience we had gained in the countryside, we began a reform of the entire economic structure, focused on the cities. (Deng Xiaoping 1987/1994, p. 236)

Deng Xiaoping's statements showed that the central government had been thinking about transplanting the experiences in the non-state sector to SOEs. In fact, the SOE reforms at the corporatization stage since 1993 have absorbed a few important elements of TVE's governance. Both ownership/property rights and hard budget constraints have been taken in by the SOE corporatization policies to enhance SOEs' efficiency.

With respect to China's opening-up practices, we believe that they have not only exceedingly contributed to the growth of FDI and exports, but also to the changes of SOE governance. For one thing, the boost of foreign enterprises and joint ventures are themselves vivid examples of how modern enterprises look like and how to manage them efficiently. For another, China's increasing exchanges with developed countries have helped the Chinese to master know-hows in management as well as modern firm theories. Slogans like "separation of enterprises from the government" and "scientific management" demonstrated that the SOE corporatization process has been learning from the opened environment.

3. Conclusions

It can be concluded that the state's dominance in the SOE governance was determined at the beginning of the reform era, as the Chinese government chose to start with incremental reforms in the non-state sector instead of restructuring the state sector. Two radical campaigns, the Great Leap Forward and the Cultural Revolution, had significantly affected this choice. On the one hand, the disasters caused by the two movements taught the Chinese government a bitter lesson that they must be cautious with radical reforms. On the other hand, two waves of decentralization during the two campaigns facilitated local reforms on experimental basis rather than radical reforms of the entire planned economy.

Another conclusion is that further SOE reforms at contracting and corporatization stages, which led to changes in SOE governance, were largely backed by a learning process during the transition. Experiences gained in successful reforms of the non-state sector, including agriculture, rural industries, and foreign investment, were utilized in the SOE reforms by the government.

VI. Empirical Research

This chapter is devoted to the empirical investigation of three research questions relevant to corporate governance of listed firms at China's stock market. Firstly, how do corporate governance practices affect the stock valuation over a certain time period? Secondly, do corporate governance practices in a certain time period affect the stock valuation in the following years? Thirdly, does the link between corporate governance practices and the stock valuation differ from industry to industry?

1. Research Methodology

a) Implications of the Corporate Governance Evolvement in China

In the existing empirical literature on China's corporate governance, econometric models from the Anglo-Saxon literature, especially linear regression models with panel data, have been widely used to test the effects of various governance mechanisms on the accounting or the stock market performance of Chinese listed firms. Although historical, institutional, and market peculiarities in China have been mentioned to interpret the empirical results, they have been rarely taken into account by the models themselves. Since corporate governance in China, as discussed in Chapter V, has been evolving along a very different path and is still undergoing changes at a rapid pace, it is questionable whether a research methodology from the western literature, originally designed for the western corporate governance context, is directly applicable to researches on corporate governance in China. Unfortunately, the existing literature appears keen on complicated models without elaborating on their applicability to China's corporate governance context.

However, we believe that even a simple empirical approach can be a suitable one for researches on China's corporate governance, as long as historical, institutional, and market factors in China are thoughtfully incorporated into it. Chapter IV and V do not only help to better understand corporate governance practices at China's stock market, but provide some impor-

tant facts, as listed below, to be considered in the empirical methodology designing as well.

FACT 1: Over the past years, corporate governance in China has been evolving at a rapid pace. The corporate governance practices can change a lot from year to year, as the current corporate governance framework is still weak and regulators have been trying to enhance its quality by introducing more external and internal mechanisms and strengthening the legal regulations.

FACT 2: China's stock market has a very strong link to the state, and so do corporate governance practices at the stock market. Most listed firms at the Shanghai and the Shenzhen Exchanges are former SOEs. The state, through its central or local governmental functions, still holds a big stake in these corporatized firms and plays a leading role in changing corporate governance practices of listed firms in China. In this context, the introduction or choice of corporate governance mechanisms by listed firms are rather affected by the state's policies than by accounting performance.

FACT 3: The state's influence on listed firms differs from industry to industry. The state keeps its tight control over those industries which it considers being of strategic importance and has withdrawn from other industries. Thus, listed firms in China are subject to different product market environments. In those industries of strategic importance, there are barely any non-state competitors, and state-controlled firms are quasi monopolists, at least at the local market. Other industries are more competitive so that both state-controlled and non-state firms have to face many other rivals.

b) Regression Models

According to the prevailing principal agent perspective, good corporate governance consists of a set of mechanisms which guarantee an adequate return to a firm's finance suppliers, and risk-averse investors are willing to pay a premium for those firms with better corporate governance. Thus, firms with better corporate governance should be valued higher at the stock market. In existing empirical works on corporate governance in China, the multiple linear regression analysis has been mostly conducted to investigate the relationship between corporate governance and market valuation of listed firms (e.g. Bai et al. 2003; Zhang 2006; Wang 2006). Analogous to those works, the basic regression model run in this empirical research is as follows:

$$Q_i = \beta_0 + \beta_1 CorporateGovernance_i + \beta_2 ControlVariables_i + \varepsilon_i \quad (6.01)$$

This basic regression model is utilized to test both the effects of single corporate governance mechanisms and the effect of the overall corporate governance performance on a firm's market valuation. In this equation, Q is the widely used Tobin's Q to measure the market valuation of a listed firm. CorporateGovernance is here the explanatory variable and stands for (1) different corporate governance mechanisms employed in a listed firm or (2) the overall corporate governance performance of a listed firm, being valued with a standardized score. ControlVariables denote control variables made of several firm characteristics such as return on assets, debt structure, growth ratio, and firm size.

The existing empirical literature on corporate governance in China mostly utilizes panel data to run regressions, suggesting that a firm's accounting or market performance is directly linked to its corporate governance practices in the same accounting period. However, it is doubtful whether a change of a certain governance practice can take effect on a firm's accounting performance or be recognized by the stock market in a short term. FACT 1 demonstrates that in China, a listed firm's corporate governance practices can vary much from those in the past year, for instance due to a new policy taken by the regulators, but this does not necessarily mean its corporate governance quality can be enhanced in a short time as well. Panel data on yearly base seem not very suitable for corporate governance practices in China. To avoid this problem, we make use of average data in preference to annual data of several observation years to investigate the link between corporate governance practices and stock market valuation of listed firms in China. In doing so, the basic regression model is modified into the following equation, in which Tobin's Q, governance mechanism variables, and control variables are all measured on an average:

$$average(Q_i) = \beta_0 + \beta_1 average(CorporateGovernance_i) + \beta_2 average(ControlVariables_i) + \varepsilon_i \quad (6.02)$$

Besides, regression models using panel data ignore a very interesting question, at least from the view of investors at a stock market: Does a link between the quality of listed firms' corporate governance practices and their future market performance exist? If evidence can be found that such a link

exists, corporate governance practices can provide reference for stock investments. To accomplish this task, we extend the regression model (6.02) into the following one:

$$average(Q_i)_{t_0} = \beta_0 + \beta_1 average(CorporateGovernance_i)_{t_0} + \beta_2 average(ControlVariables_i)_{t_0} + \varepsilon_i \tag{6.03}$$

$$average(Q_i)_{t_0+1} = \beta_0 + \beta_1 average(CorporateGovernance_i)_{t_0} + \beta_2 (ControlVariables_i)_{t_0+1} + \varepsilon_i \tag{6.04}$$

$$average(Q_i)_{t_0+2} = \beta_0 + \beta_1 average(GM_i)_{t_0} + \beta_2 (CV_i)_{t_0+2} + \varepsilon_i \tag{6.05}$$

In nature, equations (6.03) is the same as equation (6.02), being used to investigate the average effects of single corporate governance mechanisms and the overall corporate governance performance on Chinese listed firms' market valuation over the same time period. The subscript t_0 indicates a time interval of several observation years. Equations (6.04) and (6.05) are employed to test the link between the overall corporate governance performance over the time period t_0 and the listed firms' market valuation in the following two years, respectively. The subscripts t_0+1 and t_0+2 characterize the first and the second years following the time interval t_0, respectively.

All the regression models exclude the endogeneity problem, namely the reverse effect of firms' accounting or market performance on their corporate governance practices. Based on FACT (2), we believe that the regression models for listed firms at China's stock market can hardly have any reverse causality.

c) Industry Clustering

The existing empirical literature on corporate governance in China seldomly takes external mechanisms such as the legal environment and the product market into account. The rationale behind this is that most of the empirical works are comparative researches involving different countries and investigate purely listed Chinese firms, supposing that all industries are

under the same institutional and market circumstances. Nevertheless, according to FACT (3), different industries in China do have more or less competitive product market environments. In consideration of de facto different market environments, it is interesting to examine whether the same corporate governance practices perform differently in different industries or industry clusters.

Although limited researches (e.g. Wang 2006) run regressions with the industry factor as a control variable and provide evidence that the industry variable significantly affects listed firms' performance, they fail to clearly describe and explain the link between industry and corporate governance. To check the possible differences in the effects of corporate governance practices between industries, we divide all the industries of listed firms into some main clusters and run regressions with data from each of the industry clusters.

This empirical analysis involves a total of 21 industries as defined by the stock market regulator CSRC (China Securities Regulatory Commission). The clustering of all these industries is to be carried out prior to the regressions and along two dimensions - the political dimension and the market dimension. The political dimension qualitatively measures the state's control over an industry in the light of industrial policies by the central government. The market dimension quantitatively measures the market share of SOEs in different industrials, according to the total assets, equities, and main business turnovers.

Finally, the political and the market dimensions are used together to identify a "Monopoly" cluster with the least competitive industries and a "Competition" cluster with the most competitive industries. Those industries which include both competitive and incompetitive sub-industries belong to the "mix" cluster. In this chapter, we report regression results for the listed firms from the industries in the "mix" cluster as well, but they serve merely as a reference instead of a research object. After all, these industries are "mixed" with respect to market competition, and the results can thus not lead to convincing conclusions.

d) Choice of Observation Period

In the existing empirical literature on China's stock market, most descriptions of selected data do not explain why a certain time period has been chosen for observation, showing that the choices of time periods are more or

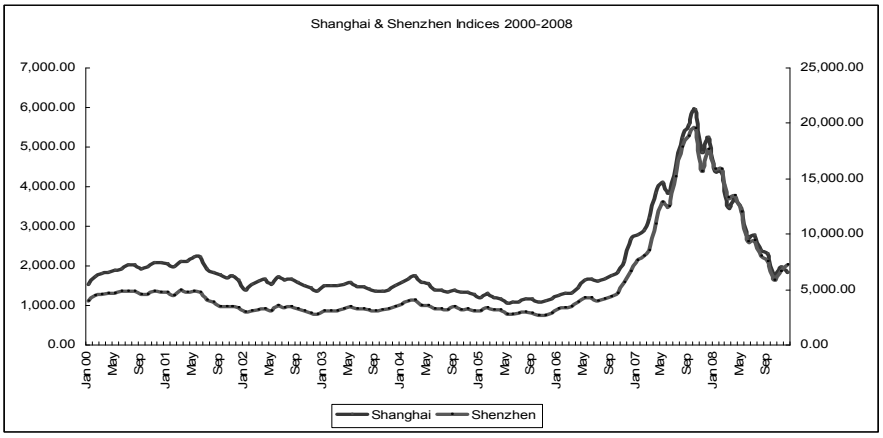
less arbitrary. This problem can be attributed to the very short history of the Chines stock market. To date, stock observations of listed firms in China are available for at most 18 years (1992-2010). In addition, not much attention had been paid to information disclosure until corporate governance recently became a top issue at China's stock market. Thus, it is not difficult to understand that very limited data on firm-level corporate governance practices are available for relevant researches.

For the empirical research, we use listed firms' data from the accounting years 2000-2004. The reasons are the following: Firstly, data from the first five years in the twenty-first century are not only more relevant to the ongoing corporate governance practices in China, but of higher quality than those from the earlier years. The improvements came from the amendment of Accounting Law in 1999, emphasizing the "True and Complete" principle for accounting information, and from the promulgation of "Enterprise Financial Reporting Regulation" in 2000, redefining the components of financial statements in compliance with the conceptual framework of the IASC and specifying the responsibilities and liabilities for parties involved in accounting, reporting and auditing.

Secondly, the time period 2000-2004 covers the years when corporate governance issues began to attract attention from the public and regulators and new regulations on firms' governance were introduced. Since listed firms did not fulfill new regulation at the same pace, differences in firm-level corporate governance practices can be clearly derived from these data.

Thirdly, the stock indices in Shanghai and Shenzhen performed, in spite of the descending tendency, smoothly during the period 2000 - 2004, as shown in Figure 6.01. In contrast, the indices took a roller coaster ride in the next few years, mainly driven by the reform of non-tradable shares since 2005 and the global financial crisis that bursted out in 2008. We believe that stock valuations in China will distort during strong market fluctuations, because local individual investors who dominate at China's stock market are prone to excessive speculation. Thus, the years 2000-2004 rather than the following ones must have witnessed more credible stock valuations of domestic listed firms.

Figure 6.01 Shanghai & Shenzhen Indices 2000-2008



Data source: CSRC (2008)

e) Sampling and Regression Data Sources

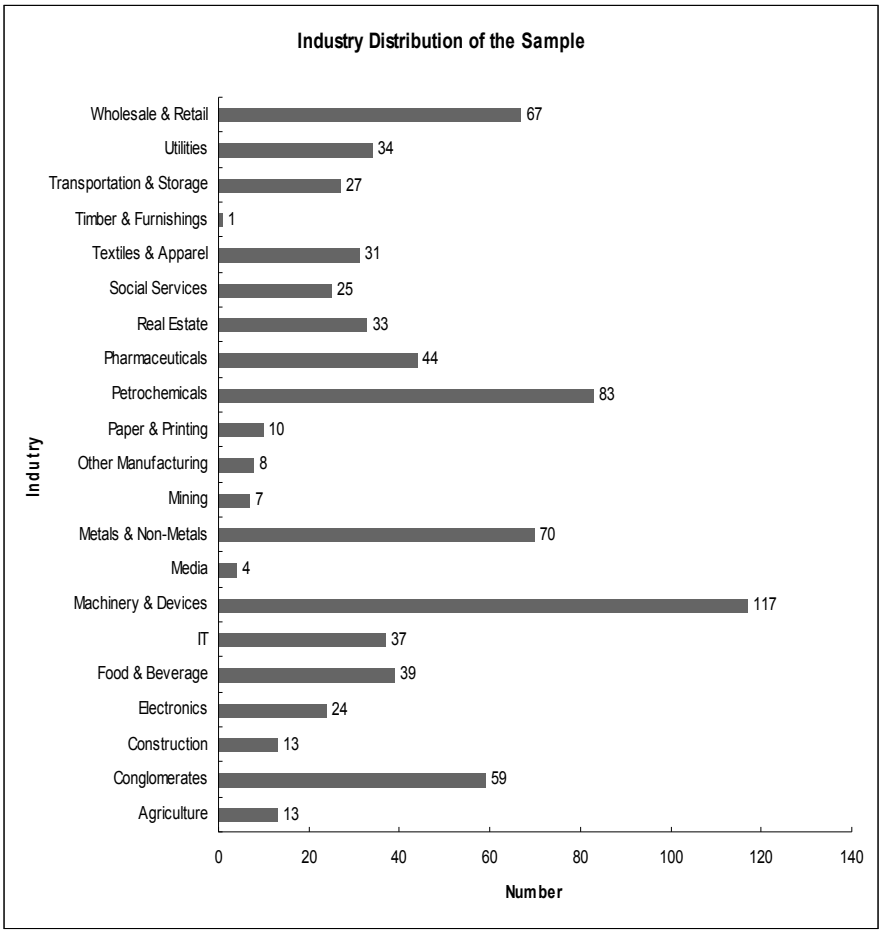
In accordance to the chosen observation period, the sample firstly considers all the non-financial firms that went public at China's A-share stock market prior to the year 2000. The sample excludes financial firms such as banks, insurance and securities companies, because their asset/liability structures essentially differ from those firms in non-financial industries. The sample next excludes those firms who had been suspended or delisted during the observation period. Those listed firms whose equity had been negative during the observation period were excluded as well. As a result, the sample includes 746 listed firms distributed in 21 industries defined by the CSRC) as demonstrated by Figure 6.02.

The sampling process does not distinguish where Chinese firms are listed, but regards the two Chinese stock exchanges together as parts of one stock market. The reason lies in the similar characteristics of the two stock exchanges. On one hand, the regulators did until recently not clearly differentiate the two stock exchanges.[54] The main boards for A-Shares at the two exchanges have been functioning very similarly. On the other hand, the index performances of the two exchanges are highly correlated. For example, it can be easily concluded from the previous Figure 6.01 that the stock indi-

[54] Nowadays, most IPOs of smaller firms take place at the Shenzhen Stock Exchange, while the Shanghai Stock Exchange still focuses on bigger IPOs.

ces of the two exchanges moved quite in the same manner from 2000 to 2008. More precisely, a Pearson correlation analysis of the monthly index performances in the same period results in a significantly high correlation of 0.98.

Figure 6.02 Industry Distribution of the Sample



Source: http://www.wind.com.cn/

The input data for the regression models have two main sources. One of them is the Wind Info, a leading provider of financial data in Mainland China, who serves over 80% of domestic financial institutions and about 60% of Qualified Foreign Investment Institutions (QFIIs). During a two-week

trial of Wind Info in May 2007, we collected the financial data of the Chinese listed firms for the observation period 2000-2004.

The other source of regression data are listed firms' annual reports.[55] Since the data base of Wind Info did not contain any information on important governance elements such as board composition and compensation packages, respectively, we manually collected and calculated these data from the 746 listed firms' annual reports for the 5-year observation period.

f) Regression Variables

All the variables employed in the regression models are listed as follows, with a description of their definition, calculation (if necessary), and data source. For most variables, an abbreviation is given in the parenthesis.

A) Dependent Variables

Tobin's Q (Q)

Definition: Market value of a firm's assets over replacement value of the firm's assets

Calculation: Given the fact that Chinese shares were for a big part not tradable until 2005, the calculation of Q is simplified as sum of the market value of tradable shares and book value of the non-tradable shares over book value of total assets

Data source: Calculated with financial data from Wind Info

B) Control Variables

Return on Assets (ROA)

Definition: Net profits over total assets

Data source: Wind Info

Asset/Liability Ratio (Debt)

Definition: Total liabilities over total assets

[55] To mention are the Chinese websites: www.stockstar.com, www.hexun.com, www.jrj.com.cn, www.windin.com.

Data source: Wind Info

Main Business Growth (Growth)
Definition: Growth of main business income over a year
Data source: Calculated with financial data from Wind Info

Firm Size (Size)
Definition: Adjusted measure of firm assets
Calculation: Base-10 logarithm of total assets in 100 Mio. RMB
Data source: Calculated with financial data from Wind Info

C) Independent Variables

Blockholder A
Definition: Dummy variable of the blockholder
Calculation: 0, if blockholder is the (local) government; 1 otherwise
Data source: Manually collected from annual reports

Blockholder B
Definition: Dummy variable of the blockholder
Calculation: 0, if blockholder is the (local) government or a SOE;
1 otherwise
Data source: Manually collected from annual reports

Blockholding
Definition: Blockholder's shareholding in percent
Data source: Wind Info

Shareholding 2-10
Definition: Relative sum of shareholding of the second to tenth biggest shareholders in percent
Data source: Calculated with financial data from Wind Info

Liquidity of Shares (Liquidity)
Definition: Proportion of tradable shares
Data source: Wind Info

Blockholder Change
Definition: Times of blockholder changes within the observation period
Data source: Manually collected from annual reports

Board Size
Definition: Number of directors in the board
Data source: Manually collected from annual reports

Independent Director Proportion (Independent_proportion)
Definition: Proportion of independent directors in the board
Data source: Manually collected and calculated from annual reports

Executive Director Proportion (Executive_proportion)
Definition: Proportion of executive directors in the board
Data source: Manually collected and calculated from annual reports

Director Positioning at Blockholder Proportion (DPAB_proportion)
Definition: Proportion of directors in the board who hold a position at the blockholder
Data source: Manually collected and calculated from annual reports

Female Director Proportion (Female_D_proportion)
Definition: Proportion of female directors in board
Data source: Manually collected and calculated from annual reports

CEO/Chair Duality
Definition: Dummy variable of CEO/Chair position duality
Calculation: 0, if CEO also holds the chair position of the board;
1, otherwise

Data source: Manually collected from annual reports

Supervisory Board Size
Definition: Number of supervisors
Data source: Manually collected from annual reports

Supervisor/Director Size Ratio (S/D Ratio)
Definition: Supervisory board size over board size
Data source: Calculated with manually collected data

Female Supervisor Proportion (Female_S_proportion)
Definition:Proportion of female supervisors
Data source:Manually collected and calculated from annual reports

Adjusted Highest 3 Director Remunerations (Adjusted_H3D)
Definition: Industry-adjusted sum of the 3 highest director remunerations in Mio. RMB
Data source: Manually collected and calculated from annual reports

Non-Paid (Non-Independent) Director Proportion (Non_Paid_D_proportion)
Definition: Proportion of non-independent directors who receive no remuneration from the listed firm
Data source: Manually collected and calculated from annual reports

Director Shareholder Proportion (D_Shareholder_proportion)
Definition: Proportion of directors who possess shares of the listed firm
Data source: Manually collected and calculated from annual reports

Director Shareholding Proportion (D_Shareholding_proportiion)
Definition: Proportion of directors' shareholding of the listed firm
Data source: Manually collected and calculated from annual reports

Non-Paid Supervisor Proportion (Non_Paid_S_proportion)
Definition: Proportion of supervisors who receive no remuneration from the listed firm
Data source: Manually collected and calculated from annual reports

Supervisor Shareholding Proportion (S_Shareholding_proportion)
Definition: Proportion of supervisors' shareholding of the listed firm
Data source: Manually collected and calculated from annual reports

CEO Turnover
Definition: Dummy variable of CEO turnover
Calculation: 0, if CEO stays on the position; 1 otherwise
Data source: Manually collected from annual reports

Adjusted Highest 3 Management Remunerations (Adjusted_H3M)
Definition: Industry-adjusted sum of the 3 highest management remunerations in Mio. RMB
Data source: Manually collected and calculated from annual reports

Managerment Shareholding Proportion (M_Shareholding_proportion)
Definition: Proportion of management's shareholding of the listed firm
Data source: Manually collected and calculated from annual reports

2. Literature Review and Hypotheses to be tested

a) Blockholding

A) Theories

Ownership structure, i.e. the identities of a firm's shareholders and the sizes of their holdings, varies from country to country. Publicly traded firms' ownership in Anglo-Saxon economies is typically widely diffused

among a large number of individual shareholders. With their very small fractions of a firm's shares, individual shareholders rarely have incentives to expand significant resources to monitor management or influence their decision-making. In addition, the free-rider problem reduces the incentives for these small shareholders to coordinate their actions (Denis & McConnell 2003).

Blockholding or concentrated ownership, however, is more prevalent in a firm's ownership structure around the world. Majluf et al. (1998) provide evidence that the largest shareholders in Chile control over 40% of the equity of the largest companies. La Porta et al. (1999) survey the largest 20 publicly traded firms in 27 wealthy economies and report that of all the sample firms, 36% were widely-held, 30% were family-controlled, 18% were state-controlled, and the remaining 15% exhibited a variety of other ownership structures. Becht & Röell (1999) document that blockholding prevails in firms domiciled in Austria, Belgium, France, Germany, Italy, Spain and The Netherlands. Faccio & Lang (2002) examine western European countries and report that family-owned listed firms are common in continental Europe. Prowse (1992) provides evidence that over 30% of Japanese listed firms' equity are owned by the top five shareholders. Claessens et al. (2000) conclude for their East Asia sample that 75% of the listed firms are associated with business groups.

A concentrated ownership can be of great benefit to large shareholders in a few ways. Firstly, blockholding facilitates takeovers by large shareholders (Grossman & Hart 1980; Shleifer & Vishny 1986). Secondly, a risk-averse entrepreneur may retain a large stake in the listed firm after its IPO such as to manage the firm well himself (Leland & Pyle 1977). Thirdly, blockholding enables a risk-averse shareholder to monitor management well (Admati et al. 1994; Huddar 1993). Fourthly, shareholders with a big stock block may gain an informational advantage over other market participants, which makes it easier for them to speculate at the secondary market (Kahn & Winton 1998).

Blockholding has costs as well. One of its most important problems is that the monitoring of the management by large shareholders can be insufficient. Hirschman (1970) points out that at liquid secondary markets, blockholders tend not to monitor management actively. Indeed, shareholders at highly liquid US secondary markets rarely have incentives to monitor management (Mayer 1988; Black 1990; Coffee 1991; Roe 1994; Bhide 1993). Another problem is overmonitoring by the blockholder: A number of theoretical studies argue that in case of overmonitoring by the large shareholder,

the management may be discouraged from making costly firm specific investments (Aghion & Tirole 1997; Burkart et al. 1997; Pagano & Röell 1998).

The most significant set of problems with blockholding, however, are conflicts of interests between blockholders and minority shareholders. La Porta et al. (1998) point out that in a concentrated ownership, conflicts of interest as are common in Anglo-Saxon countries are no more meaningful. The reason lies in that large shareholders have both the incentive and the ability to control the management. But a blockholder's interests, as argued by Shleifer and Vishny (1997), must not coincide with the interests of other shareholders in the same firm. While using his control rights to maximize his own welfare, a blockholder can act contrarily to small shareholders' interests. Especially when the blockholder has more voting rights than cash-flow rights, expropriation of minority shareholders tend to be more often (Zingales 1994; Bianco et al. 1997; Burkart et al. 1997, La Porta et al. 1998; Wolfenzon 1999; Bebchuk 1999; Bebchuk et al. 2000; Claessens et al. 2002).

To prevent blockholder overmonitoring or expropriation, some researchers suggest that it is often possible to design the corporate ownership structure or charter to limit the power of the blockholder (Aghion & Tirole 1997; Burkart et. al 1997; Pagano & Röell 1998). Yet Bebchuk (1999) and Bebchuk & Roe (1999) retort that although theoretically corporate charts can restrain self-dealing by blockholders, in practice they are likely to be of no effect and therefore regulations limiting blockholder are called for.

Apart from its benefits and problems, it has also been discussed in the literature why blockholding or concentrated ownership, instead of dispersed ownership, is so dominant around the world. Most of the researchers have associated this dominance to the local cost and regulatory factors. Black (1990) argues that if local regulations mainly increase the costs of hostile takeovers but do not substantially restrict blockholder rights then a market based on blockholder monitoring may arise. Bolton & von Thadden (1998) argue that the choice is dependent on the value of monitoring, the need for intervention, the demand for liquidity and the regulatory structure in place. La Porta et al. (1998) argue that the ways in which corporate finance and corporate governance evolve in a country are fundamentally determined by (1) the extent to which that country's laws protect investor rights, and (2) the extent to which those laws are enforced. They then find evidence that ownership structure in countries with low investor protection tend to be highly concentrated. John & Kedia (2000) puts that the choice relies on un-

derlying conditions defined by two factors: the costs of bank monitoring and the effectiveness of hostile takeovers. They argue that the optimal ownership structure is (1) concentrated ownership, if bank monitoring is costly and takeovers are ineffective; (2) bank monitoring, if costs of bank monitoring are low and takeovers are ineffective; or (3) diffused ownership, if monitoring is costly and takeovers are effective.

B) International Empirical Researches

In the empirical literature, many surveys directly address the link between blockholding and firm performance in different countries. In the USA, evidence on the relation between blockholders and the value of listed firms has come up mixed (Holderness 2003). However, block trades in the USA are typically priced at a premium to the exchange price, indicating that blockholders can enjoy significant private benefits of control (Barclay & Holderness 1989; Mikkelson & Regassa 1991; Chang & Mayers 1995). Kang & Shivdasani (1995) report that blockholded firms in Japan react more quickly to performance declines than do those without blockholders. In Germany, firm performance is positively related to concentrated ownership (Gorton & Schmid 2000), while there is no relation between ownership structure and management turnover (Kaplan 1994). Claessens & Djankov (1999) report that in the Czech Republic, firm profitability and labor productivity are both positively related to ownership concentration. Lins & Servaes (1999) examine the impact of concentrated ownership by insiders on the value of diversified firms in Germany, Japan, and the UK. They document a positive effect of concentrated ownership on the value of diversification in Germany, but not in the UK or Japan.

In studying the impact of blockholding on firm performance, a number of researches draw a distinction between types of blockholders such as corporations, institutions, families and government. Mehran (1995) reports no significant relations between firm performance and the holdings by a variety of different types of blockholders in the USA. Claessens et al. (1998) study firms in nine East Asian countries and report that ownership by corporations is negatively related to performance, whereas ownership by the government has a positive impact on performance. They find no evidence that institutional ownership influences firm performance in these countries. Dewenter & Malatesta (2001) examine Fortune magazine's largest industrial firms outside the USA for the years 1975, 1985 and 1995 and report state-owned firms are significantly less profitable and exhibit significantly greater labor

intensity than privately owned firms. Morck et al. (2000) document positive relation between high ownership by banks and firm performance in Japan. Gorton & Schmid (2000) report that in case of blockholding by banks, the positive relation between ownership concentration and firm value is particularly strong for German firms. Gibson (2003) examines firms in eight emerging market countries and documents that there is no relation between CEO turnover and firm performance when firms have a domestic blockholder. These studies imply that the blockholder identity has a significant impact on firm performance.

In the frame of blockholding, a very different set of governance-related empirical studies focuses on ownership change by privatization. This may have great reference for China, where primarily former SOEs have gone public at the domestic stock market. Megginson et al. (1994) examine 61 privatized SOEs from 18 countries over the period 1979-1990 and report increases in profitability, efficiency and work force in those sample companies after privatization. Boubakri & Cosset (1998) compare 79 privatized firms in 21 developing countries to various benchmarks and report increases in profitability, operating efficiency, employment levels and dividends following privatization. Similar findings have been documented by La Porta & Lopez-de-Silanes (1999) for 218 Mexican firms over the period 1983-1991, and by Claessens & Djankov (1998) for 6354 Eastern European firms over the period 1992-1995.

Overall, the empirical evidence on firm performance suggests: (1) the relation between blockholding and firm performance differs according to blockholder identity and country; (2) concentrated ownership mostly has a positive effect on firm value; and (3) private ownership is associated with better firm performance than is state ownership.

C) Evidence from China

Xu & Wang (1997) examine publicly traded firms in China over the period 1993-1995 and document that (1) there is a significantly positive relation between ownership concentration and profitability; (2) the effect of ownership concentration is stronger for companies dominated by legal person than for those controlled by the state; (3) firms' profitability is positively related to the fraction of legal person shares, but either negatively related or unrelated to the fraction of state shares and tradable A-shares held mostly by individuals; and (4) labor productivity tends to decline as the proportion of state shares increases.

Hu & Goergen (2001) analyze the seven-year evolution of stock concentration for 129 Chinese firms that went public in 1993. They report the following interesting findings. Firstly, smaller and modern industrial companies are concentrated with legal persons, employees and domestic individual investors, and are more widely held. Conversely, larger and traditional industrial firms are heavily concentrated with direct shareholding by the state. Secondly, smaller, growing and high-risk firms have a greater reduction of state control over the seven-year period. In comparison, the state retains overwhelming control in larger and strategically important firms even sever years after their IPO. Finally, the ownership by foreign entities displays the fact that the Chinese government has instituted favorable policies to support larger firms and given priority to them to acquire overseas funds.

Xu et al. (2002) analyze the data drawn from a national survey of the ownership reform in 40,246 industrial SOEs in China, conducted by the National Statistical Bureau in the summer of 1998. They document that in contrast to shareholding by the state, foreign ownership has a positive effect and employee shareholding has a negative effect on firm performance, whereas the effect of collective and legal person shareholding is indistinguishable from that of state shareholding.

Using a sample of Chinese listed firms in the period 1998-2002, Firth et al. (2002) document that turnover-performance sensitivity is higher in those firms where the blockholder is a legal person. Similarly, Chen & Wang (2004) examine a sample of 773 CEO changes in Chinese listed companies over the period 1995-2003 and provide evidence that CEO turnover is less sensitive to firm performance in firms controlled by the state than in those controlled by SOEs as well as legal persons.

Berkman et al. (2002) provide evidence that investors react positively to the announcement of the transfer of control rights from the government agency to a SOE.

Tian & Estrin (2005) examine the ownership structure of Chinese listed firms over the period 1994-1998 with a data set of 2660 firm-year observations in 21 industries and document a few interesting findings. First, state shareholding generally has a negative impact on a firm's value. Second, the firms with diffused ownership structure perform worse than both privately and state-owned firms. Third, the relation between state shareholding and firm value is non-monotonic. In fact, it is U-shaped, with a higher level of firm value with lower levels of state ownership than with higher ones. In other words, when the state shareholding is sufficiently large, the effect of government shareholding on corporate performance is marginally positive

in contrast to situations where private and state ownership are more equally balanced.

D) Hypotheses on Blockholding

Chinese SOEs have been subject to either direct or indirect (e.g. via state-owned holding groups) tight governmental control. Although many of them have been corporatized and gone public since the 1990ies, political influences on them have not significantly decreased due to the state's blockholding in those firms' ownership structure. As the political interests do not necessarily accord with and are sometimes against those of stock investors, we expect a negative correlation between the state blockholder and a listed firm's market value.

Similarily, a blockholder, either the state or a private one, does not necessarily act in accordance with the interests of smaller investors and can easily expropriate them. Expropriation of smaller investors is more likely in China, where the ownership structures of listed firms are extremely concentrated and the extern governance mechanisms, especially the legal protection for smaller investors, are weak. Therefore, we expect a negative correlation between blockholding and a listed firm's market value.

A higher shareholding by other bigger shareholders (the second to the tenth biggest shareholders) and a higher proportion of tradable shares (liquidity) can lessen the blockholder's control over the listed firm and thus his expropriation of other shareholders. For this reason, we expect positive influences of shareholding of second to tenth biggest shareholders and liquidity of shares on a listed firm's market value.

Blockholder change occurred only occasionally at China's stock market. Although it said nothing about the new blockholder, blockholder change at least replaced the previous "bad" blockholder who could not keep a listed firm profitable for years.

The hypotheses on blockholding are as follows:

H1: The blockholder State has a negative impact on a listed firm's market value.

H2: Blockholding has a negative impact on a listed firm's market value.

H3: Shareholding of second to tenth biggest shareholders has a positive impact on a listed firm's market value.

H4: Liquidity of shares has a positive impact on a listed firm's market value.

H5: Blockholder change has a positive impact on a listed firm's market value.

b) Board Composition

A) Theories

Most corporate charters require that shareholders elect a board of directors, who selects the CEO, monitors management, and votes on important decisions in corporate finance such as mergers and acquisitions, changes in the compensation package of the CEO, changes in the firm's capital structure like stock repurchases or new debt issues, etc. As Fama & Jensen (1983) put it, the board of directors is the apex of internal decision control systems of organizations. It controls managers' opportunistic behavior so as to align shareholders' and managers' interests (Jensen 1993), gives expert views and strategic advice to management (Lorsch 1995; Dalton & Daily 1999; Westphal 1999), and source critical resources and information (Pfeffer & Salancik 1978; Aldrich 1979; Dalton & Daily 1999), which can create sustainable competitive advantage (Conner & Prahalad 1996). In spirit, most corporate charters are designed to operate like a 'shareholder democracy', while the management and board serve as its executive branch and legislative branch, respectively (Becht et al. 2005).

Although the board is an effective corporate governance mechanism in theory, some facts speak against its value in monitoring management. First, the board can be partly or in some cases mainly composed by insiders who are to be monitored (Denis & McConnell 2003). Second, the CEO is often at the same time the chairperson of the board (Denis & McConnell 2003). Such a CEO/chair duality is thought to lean more towards self-dealing (Becht et al. 2005). Third, in firms with dispersed ownership, the board is often captured by management (and/or CEO) and cannot function as a truly independent legislature checking and balancing the power of management. The reasons lie in: (1) management has considerable influence over the choice of directors; (2) directors prefer to play a less confrontational 'advisory' role than a more critical monitoring role; (3) directors generally only have a very limited financial stake in the corporation (Becht et al. 2005).

In order to reduce management's influence over the board, regulators in many countries have required that a minimum proportion of the directors must be composed by independent or outside directors. An independent (or outside) director is neither employed by the firm, nor in a business relation with the firm or in familial relationship with any of the firm's employees. Fama & Jensen (1983) argue that boards would be more effective, it they are composed with more outside directors. Corporate governance in the USA has de facto developed toward independent boards that are mainly composed of independent directors (John & Senbet 1997). The rationale behind these regulations and changes in board composition is that directors, with less influence from management, are more likely to defend shareholders' interests.

Becht et al. (2005) summarize several weak points in this logic. First, independent directors appointed from outside the firm may lack the day-to-day information to monitor management effectively. Second, their reappointment may still be influenced by management. Third, they may not perform well in firms with a concentrated ownership structure. For one thing, directors may be dependent on both management and the controlling shareholder. For another, they not only monitor management, but also have to present the interests of minority shareholders. This complicates their job.

A few formal analyses have been conducted to model the role, effectiveness as well as formation of the board. In the model of Hermalin & Weisbach (1998), board appointments are determined through negotiations between the existing board and the CEO. As the firm runs better, the CEO's bargaining power grows and the independence of the board tends to diminish. As a result, the longer CEOs have been on the job, they tend to be less closely monitored by the board. The model of Warther (1998) assumes that minority directors who distaste management can be dismissed and directors prefer to stay on the board. Thus, it can be predicted that directors are not willing to oppose management, unless they are sure that a majority of the board members will do so. This model implies boards are active only in crisis situations. Adams (2001) argues in his model that the board's monitoring function can restrict its ability to extract information from management that is needed for its advisory function. The conflict between the monitoring and advisory roles of the board implies the possible advantages of a two-tier board system as is instituted in Germany. The model of Raheja (2002) considers project choice and CEO succession as the two types of board decisions and assumes that the CEO and executive directors have informational advantage over independent directors. The decision on CEO

succession is used to induce insiders to reveal their private information about project characteristics. Raheja derives the board composition and size that best educe insider information and argues that it may vary with underlying firm characteristics.

Besides board independence issues, board size and board diversity have also attracted much attention. With more directors added to the board, its size expands and its capacity for monitoring tends to increase as well. But this benefit may be outweighed by the higher cost of poorer communication and decision-making associated with larger groups. As argued by Jensen (1993), larger board size, i.e. a bigger number of directors on the board, is considered less effective, as the directors may be (1) slower in decisions that require an immediate course of action, (2) less direct and decisive in their operation, and (3) less critical of each other. Therefore, limiting the number of directors on the board may improve efficiency.

Board diversity is, compared with other board characteristics, a more recent issue and has been increasingly promoted by institutional shareholders and shareholder activists under the assumption that greater diversity leads to less insular decision-making processes in the board (Westphal & Milton 2000). According to Robinson & Dechant (1997), in the context of the fast–growing global market, diversity tends to include differences in gender, ethnicity, age, physical abilities, qualities, and sexual orientation, as well as differences in attitudes, perspectives and background. However, the current theoretical framework including agency theory can not clearly explain or predict the link between board-specific phenomena and firm value (Hermalin & Weisbach 2001).

B) International Empirical Researches

In the empirical corporate governance literature, proportion of independent directors, CEO/chair duality and board size are the most extensively studied board composition characteristics. With simple regression analysis, these characteristics are related to performance measures like stock market abnormal returns, Tobin's Q and usual accounting measures as well as discipline brought on top management like CEO turnover.

In the USA, empirical work can not confirm the relation between board independence and firm performance. Fosberg (1989) report no relation between proportion of outside directors and firm performance for 200 random firms listed in the 1979 Moody's Industrial Manual. Hermalin & Weisbach (1991) examine 142 NYSE firms for 1971-1983, but fail to find a relation

between board composition and stock market performance. Rosenstein & Wyatt (1990) document that announcements of outside director appointments in the "Wall Street Journal" over the period of 1980-1985 are significantly associated with increase in shareholder wealth. More indirectly, Brickley et al. (1994) provide evidence that the stock market reacts positively to the adoption of poison pills in case of a large independent director fraction.

In the rest of the world, evidence also appears inconsistent. Kaplan & Minton (1994) report that outside director appointments increase following poor stock performance and earnings losses of Japanese firms, and on average, such appointments stabilize and modestly improve corporate performance. In contrary, Kang & Shivdasani (1995) find no evidence for a definitive relation between the presence of outside directors and the sensitivity of CEO turnover to performance for Japanese firms. Hossain et al. (2001) document that a higher fraction of independent directors leads to better performance of New Zealand firms. Suchard et al. (2001) find that top management turnover in Australia is positively related to the presence of non-executive directors on the board. Franks et al. (2001) examine a sample of poorly performing firms in the UK and find that boards dominated by outside directors actually impede discipline of poorly performing managers.

Studies on the relation between CEO/chair duality and firm performance have shown mixed evidence, too. Daily & Dalton (1992) and Brickley et al. (1997) find no relationship between CEO/chair duality and firm performance. Rechner & Dalton (1991), however, document that a sample of Fortune 500 firms with CEO/chair duality have stronger financial performance compared with others.

With respect to board size, the generally tested hypothesis that smaller boards are more effective has been confirmed by many empirical researches. Hermalin & Weisbach (2001) review numerous studies in the USA and conclude that board size is negatively related to both general firm performance and the quality of decision-making. Eisenberg et al. (1998) report an inverse relation between board size and profitability for small and midsize firms in Finland. Mak & Yuanto (2002) document that board size has a negative impact on Tobin's Q in Singapore and Malaysia. Carline et al. (2002) document that board size is negatively related to operating performance improvements following UK mergers.

Empirical work in reference to board diversity and firm performance is very limited. In probably the first research of its kind, Carter et al. (2003) report a significant positive relation between the percentage of women

and/or minority races on the boards of directors, and firm value of the Fortune 1000 firms. Ramaswamy & Li (2001) document that greater foreign directorship appears to be able to influence firms by discouraging unrelated diversification of Indian firms.

All in all, the empirical literature on the board characteristics indicates: (1) the relation between board independence and firm performance is not widely confirmed; (2) new appointments of independent directors, especially following poor firm performance, can positively affect the firm value; (3) the impact of CEO/chair duality can be positive as well as negative for firm performance; (4) board size is negatively related to firm performance; and (5) board diversity tends to increase firm value, which is however in need of more investigations.

C) Evidence from China

Tian & Lau (2001) survey 207 firms that went public in either of China's two stock exchanges in 1996 and find no positive relation between the proportion of independent directors on the board and firm performance over the period 1996-1997. However, they provide evidence that CEO/chair duality has positive linear relationship with firm operation efficiency (ROA and ROE).

Li et al. (2001) investigate the board composition of 91 Chinese firms that went public in 1998 and 1999 and document that the fractions of executive and independent directors on the board have no direct link to firm performance. In contrast, they find non-executive directors who are hired by the blockholding firm are significantly related to accounting performance of the firms. This relation, however, is inverse U-shaped: with more non-executive directors on the board, firm performance increases up to a certain degree and then begins to decrease.

Lü (2004) uses a sample of 584 industrial firms that are publicly traded at the Chinese stock market to examine the conclusions drawn by Li et al. (2001). He reports that there is no relation of the fractions of executive and non-executive directors to firm performance. In contrast to the results found by Li et al (2001), it is rather independent directors that have a significant impact on firm performance. Liu (2007) surveys the 2002 annual reports of 74 Chinese listed firms in the utility industry and documents similar findings.

Kato & Long (2006) study China's publicly traded firms over the period 1998-2002 and report that the appointment of independent directors enhances the link between CEO turnover and firm performance, whereas turnover-performance link in weaker in listed firms with their CEOs holding additional positions at the controlling shareholders.

D) Hypotheses on Board Composition

So far, there is no evidence on the link between the board size and a firm's valuation in China. However, we believe that smaller boards are more effective, because fewer directors can communicate, make decisions and, in ad hoc situations, react more quickly. We expect that the size of the board of directors has a negative impact on a firm's value in China.

To improve corporate governance of Chinese listed firms, stock market regulators in China tried to enhance the independence of board of directors and promoted the separation of CEO/chair duality and introduced independent directors in the observation period. We assume these measures function well at China's stock market and can increase a listed firm's market value. We expect the proportion of executive directors to have a negative impact on a firm's value, as it lessens the independence of the board.

Directors positioning at the blockholder seem to impair the independence of the board and have a negative impact on a listed firm's value. However, whether the directors hold a position at the blockholder does not change the fact that in China, the blockholder can have a decisive influence on the choice of directors. In other words, the proportion of directors who also have a job at the blockholder cannot actually make the board more or less independent. But from a different point of view, more directors working at the blockholder can strengthen the link between the board and the blockholder and reinforce the monitoring of the management. So we expect a positive correlation between this proportion and a listed firm's market value in China.

Although a higher proportion of female directors increases the diversity of the board, we are neutral on their influences. In our opinion, gender is not a decisive factor for a director's performance. Meanwhile, we cannot find any theory works or evidence for or against more female directors on the board. Consequently, we expect that the proportion of female directors on board has no impact on a listed firm's market value.

The supervisory board is designed to monitor the board of directors and the management. However, we do not expect the supervisory board to have big influences on Chinese listed firms' market performance. The supervisors in Chinese listed firms, unlike their counterparts in the German model, (1) do not enjoy a higher position in the governance structure than the directors so as to better monitor the directors and the management, (2) they are often chosen and nominated by the board of directors, and (3) they do not have enough information on a listed firm's operation. In consideration of the ineffectivity of the supervisory board, we expect the size of supervisory board and supervisory board size/board of directors size to have a negative impact on a listed firm's market performance. Like the case of the board of directors, we expect no impact of female supervisors on a listed firm's market performance.

H6: Size of the board of directors has a negative impact on a listed firm's market value.
H7: CEO/chair duality has a negative impact on a listed firm's market value.
H8: The proportion of independent directors on board has a positive impact on a listed firm's market value.
H9: The proportion of executive directors on board has a negative impact on a listed firm's market value.
H10: The proportion of directors positioning at the blockholder has a positive impact on a listed firm's market value.

H11: The proportion of female directors on board has no positive impact on a listed firm's market value.
H12: The size of the supervisory board has a negative impact on a listed firm's market value.
H13: S/D size ratio has a negative impact on a listed firm's market value.
H14: The proportion of female supervisors on supervisory board has no impact on a listed firm's market value.

c) Executive Compensation

A) Theories

Besides monitoring, another often suggested internal mechanism to reduce inefficiency or self-dealing of management and thus to raise shareholder protection is structuring executive compensation plans so as to align management's interests with those of shareholders. Most compensation packages in listed firms consists of a basic salary component, an annual bonus tied to short-term accounting performance, and stock options and long-term incentive plans including restricted stock plans and multi-year accounting-based performance plans (Murphy 1999).

Executive compensation in the USA has been rising continuously since the 1970ies. Murphy (1999) examine the compensation packages for CEOs in the S&P 500 over the period 1992-1996 and document that (1) CEO pay levels vary by industry; (2) CEO compensation increased substantially due to stock option grants; (3) the increase in stock options for CEOs and the increase in total compensation holds across size groups; and (4) not surprisingly, compensation increases with company size.

Using Tower Perrins Worldwide Total Remuneration Survey 1997 data, Murphy (1999) points out that US CEOs are not only paid more than their international counterparts, but differently than CEOs elsewhere: US CEOs receive a larger fraction of their pay in the form of stock options, and a lower fraction in the form of salaries than their international counterparts. Becht et al. (2005) examine the Tower Perrins Worldwide Total Remuneration Survey data of the year 2000 and report that US CEO salary component alone is higher than the total package in Germany, Spain, Sweden and Switzerland, and not much lower than in France or Japan. In contrast, the total compensation of management other than CEO is similar across OECD countries and only higher in Italy than in the USA (Abowd & Kaplan 1999).

One frequently voiced concern about high executive compensation, stock options in particular, is that it may, despite its incentives, be a simple and direct way for management to enrich themselves at the expense of decrease in shareholder value. In fact, practitioners consider a grant of an unusually large compensation package as a signal of poor corporate governance (Minow 2000). However, there is no attempt in existing theoretical work to analyze the determination of executive pay along the lines of Hermalin & Weisbach (1998), by explicitly modeling the bargaining process between the CEO, the remuneration committee and the board.

Instead, most formal analyses on executive compensation have drawn general conclusions about the structure of executive pay, relying on the theory of contracting under moral hazard of Mirrlees (1976, 1999), Holmström (1979) and Grossman & Hart (1983). It suggests that the pay for risk-averse and self-interested management are dependent on both firm performance (e.g. accounting returns) and stock-based firm value measures that provide useful information for shareholders to assess whether management has indeed taken the desired actions (Murphy 1999). It also highlights the trade-off between risk and incentives for management: incentives will be weaker for more risk-averse executives, and will also be weaker the greater the uncontrollable noise in firm value (Murphy 1999).

One complicating factor in designing compensation is that management is driven by both explicit and implicit incentives. Executives are concerned about firm performance not only because their pay is directly linked to it, but also because their future career opportunities are affected by it. The formal model of Gibbons & Murphy (1992) allows for both the explicit incentives from compensation contracts and the implicit incentives from career concerns. It suggests that optimal compensation contracts neutralize career concern incentives by optimizing the total incentives from the compensation and from career concerns: explicit contractual incentives are high when implicit career concern incentives are low, and vice versa. Therefore, explicit incentives should be strongest for management close to retirement, whereas implicit incentives are stronger where promotion opportunities are plentiful rather than scarce (Gibbons & Murphy 1992).

B) International Empirical Researches

The bulk of empirical literature on executive compensation has focused on the sensitivity of executive pay (explicit incentives) and CEO turnover or post-retirement board services (implicit incentives) to firm performance. The US research reviewed by Murphy (1999) and by Core et al. (2001) document that the sensitivity of pay to performance in the USA has increased over time, while the vast majority of this sensitivity comes through executive ownership of common stock and of options on common stock. Murphy (1999) documents that although CEO dismissals have become more commonplace in the 1990s the link between CEO turnover and performance has declined rather than increased over the same period. Brickley et al. (1999) report that in the USA, CEO careers continue after retirement with 75%

holding at least one directorship after two years, 49.5% stay on their own board after retirement, and 18% function as chairman.

The international evidence on executive compensation has also expanded recently. Kaplan (1994) reports that the sensitivity of top executive pay to stock returns and to earnings losses in Japan is similar to that in the USA. However, Japanese managers own less stock and stock options than do their counterparts in the USA. Conyon & Murphy (2000) compare executive compensation in the USA and the UK and document that the sensitivity of compensation to increases in shareholder wealth is much smaller in the UK than in the USA. They attribute the difference largely to greater share option grants in the US. Crespi et al. (2002) examine executive compensation in Spain and provide evidence of greater pay following increases in industry-adjusted stock price performance. This sensitivity of pay to performance, however, holds only in those firms with a strong blockholding. Bryan et al. (2002) survey the use of equity in the compensation packages of firms in 43 countries, reporting that firms in countries with more equity-oriented capital markets and firms with higher growth opportunities use more equity compensation.

Murphy (1999) reviews the limited literature on international differences in executive compensation practices and conclude that (1) the sensitivity of cash pay to company size is remarkably constant across countries; (2) the sensitivity of cash pay to stock price performance, and the relation between CEO turnover and performance is roughly comparable in the US, Japan, and Germany; (3) stock-based incentives from stock options and stock ownership are much higher in the US than in other countries; and (4) pay levels and structures are converging because of an increasingly global market for managerial talent and exploding interest in stock options worldwide.

C) Evidence from China

Groves et al. (1995) examine a sample of Chinese non-listed firms and find that executive turnover is negatively associated to firm performance.

Firth et al. (2002) study the replacement of chairmen in Chinese listed firms over a five-year period from 1998 to 2002 and report that there is a negative relation between chairperson turnover and a firm's profitability, but no relation between chairperson turnover and stock returns in China. They also find no evidence that a change of the chairperson improves profitability, which suggests that a firm's governance structure is ineffective as

it is unable to recruit suitable replacements that can turn around its financial performance.

Kato & Long (2006) study China's publicly traded firms over the period 1998-2002 and report that (1) CEO turnover is negatively related to firm performance; (2) the link between CEO turnover and accounting performance is stronger when the blockholding is larger; (3) the relation between CEO turnover and stock performance is weaker when the blockholder is the state; (4) the appointment of independent directors enhances the turnover-performance link; and (5) listed firms with CEOs holding additional positions in the controlling shareholders have weaker turnover-performance link.

D) Hypotheses on Executive Compensation

In China, most listed firms are transformed from former SOEs, and their directors and executives are usually appointed by the local governments or SOE holding groups who act as blockholders of the listed firms. In consideration of the political interferences in management appointment, a professional manager market does not actually exist for these listed firms. It is doubtful, whether the listed firms have hired the best executives they can find and whether the executives on the job are paid more than they should earn. Meanwhile, executives of a listed firm are able to pay themselves very high, because they, on behalf of the blockholder, exercise de facto the control rights of the firm. Too much compensation, either in form of salary or stock, for directors and executives, expropriates smaller shareholders. We expect the adjusted salary of the three most paid directors (H3D) and executives (H3M) to have a negative impact on a listed firm's market performance. Similarly, we expect higher director shareholder proportion, director shareholding, supervisor shareholding as well as management shareholding to have a negative impact on a listed firm's market performance. We expect non-paid director and supervisor proportions to have a positive impact on a listed firm's market value, because they are not financially bound with the listed firm and can better serve as monitors or supervisors. CEO turnovers are, as we will show in the following descriptive statistics, very common in China. We expect that frequent changes of CEO are a symbol of instability in business operation and will lead to lower market value of a listed firm.

H15: Adjusted H3D has a negative impact on a listed firm's market

value.

H16: Non-paid director proportion has a positive impact on a listed firm's market value.

H17: Director shareholder proportion has a negative impact on a listed firm's market value.

H18: Director shareholding proportion has a negative impact on a listed firm's market value.

H19: Non-paid supervisor proportion has a positive impact on a listed firm's market value.

H20: Supervisor shareholding proportion has a negative impact on a listed firm's market value.

H21: CEO turnover has a negative impact on a listed firm's market value.

H22: Adjusted H3M has a negative impact on a listed firm's market value.

H23: Management shareholding proportion has a negative impact on a listed firm's market value.

3. Clustering of Industries

Since the SOEs are dominant in some strategically important industries and have withdrawn from several others, the Chinese non-financial industries can be grouped into monopolistic and competitive industries. The aim of the industry clustering is to identify those monopolistic and those competitive industries in China, so as to observe whether corporate governance mechanisms differently influence listed firms' market value in different clusters. To identify those monopolistic and competitive industries, we utilize two dimensions – the political one as is reflected in the central government's industry policies and the market one as is measured by market shares of different participators.

a) Political Dimension

In February 2005, the Chinese State Council issued Some Opinions on Encouraging, Supporting and Guiding Non-State-Owned Economies such as Self-Employing and Private Sectors (Some Opinions 2005 in short), the

very first policy document to promote the private investments in China. In this document, it clearly states that non-state capitals should be allowed or encouraged to invest into monopolistic industries including mining, utilities, infrastructures, telecommunication, railway and civil aviation, financial services, social welfare, and national defense technology. From a very indirect way, this document officially defines the monopolistic industries in China that have been dominated by SOEs until then.

However, the policies in Some Opinions 2005 have not been fulfilled in the following years. One reason was that a concrete framework to realize these policies did not exist, making them inoperative. The private sector gave this phenomenon the nickname "glass gate", through which one can look into, but cannot actually pass.

Another reason lied in the paradox of the government's policies. In 2006, just one year after the issuance of Some Opinions 2005, the Commission of State-Owned Assets enacted Guide Opinions on Promoting Adjustment of State-Owned Capitals and Reorganization of SOEs, which points out that the state-owned capitals should absolutely control important industries and key fields so as to increase the controlling force of the state sector. These industries and fields are concerned with national security, important infrastructures and mineral resources, and big enterprises in pillar and hi-tech industries. In nature, this document excludes private investments in those monopolistic industries.

Later, seeing that Some Opinions 2005 had been ineffective, the central government, again, began to draft a document on promoting private investments. In May 2010, the State Council issued Some Opinions on Encouraging and Guiding the Healthy Development of Private Investments (Some Opinions 2010). It aims to open up basic industries and infrastructures, utilities, social services, financial services, goods wholesale and modern logistics, and defense technology for private investments. It also requires local governments to make equal and transparent policies for private investments.

For all that, Some Opinions 2010 does not notice to break up monopolies in common competitive industries, and the fulfilling framework is still not contained in this document. Therefore, the mentioned industries in Opinions 2005 and 2010 are very likely to be continuously controlled by SOEs.

b) Market Dimension

To identify the monopolistic and competitive industries in China, we define the state sector, the foreign direct investment (FDI) sector and the private sector as the three market participators in all industries and measure their market shares by total assets, equities, and main business turnovers. With respect to our observation period of 2000-2004, only the statistic 2004 on the website of the National Bureau of Statistics of China (NBSC) covers all the three sectors. It worth mentioning that this statistic covers only 14 industries which are not all included in our sample for the empiric research. But still, this available statistic can approximately describe the competition degree of 14 Chinese industries over our observation period.

Figures 6.03, 6.04 and 6.05 show, the state sector dominates in the industries of Utilities, Tobacco and Mining, while it is not very competitive in the industries of Timber & Furnishings, Textiles & Apparel, Stationary & Sport Devices, Paper & Printing, IT, Food & Beverage, and Electronics.

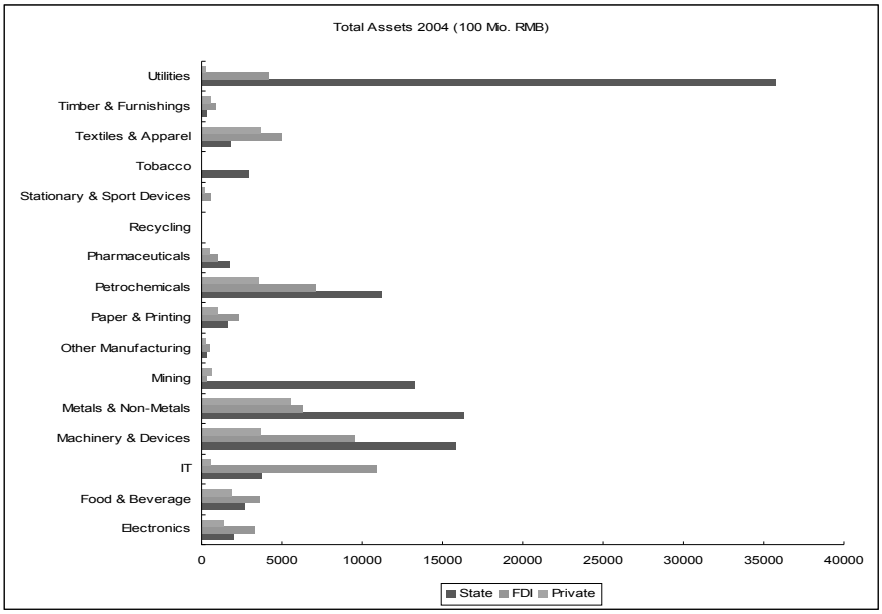
More precisely, we roughly divide the 14 industries into three groups according to the state sector's proportion in total assets, equities and main business turnovers: (1) the least competitive industries in which the state sector's proportion comes up to over 0.65, (2) the common competitive industries in which the state sector's proportion accounts between 0.35 and 0.65, and (3) the most competitive industries in which the state sector's proportion amounts to under 0.35. By doing so, we achieve the following groups:

Least competitive industries: Mining, Tobacco, Utilities.

Common competitive industries: Machinery & Devices, Metals & Non-Metals, Petrolchemicals, Pharmaceuticals.

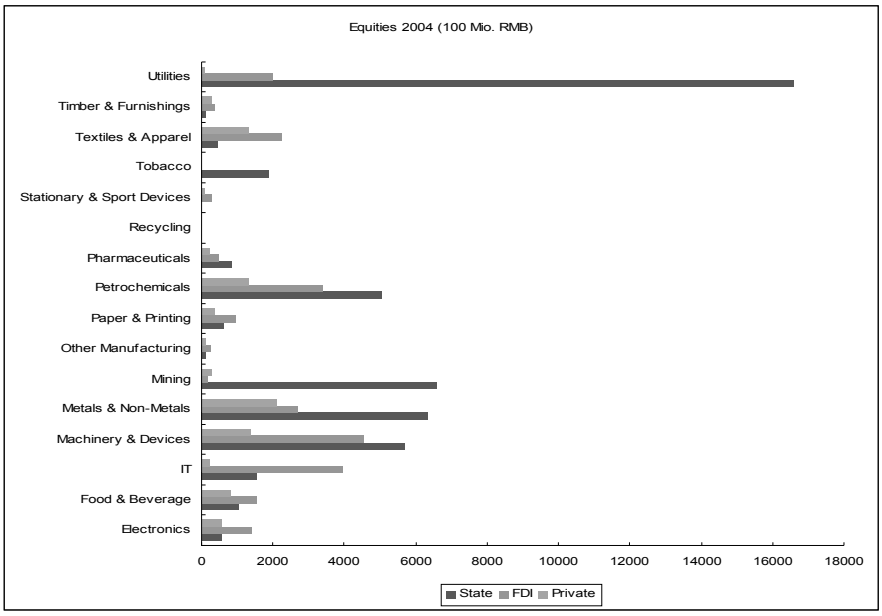
Most competitive industries: Electronics, Food & Beverage, IT, Other Manufacturing, Paper & Printing, Recycling, Stationary & Sport Devices, Textiles & Apparel, Timber & Furnishing

Figure 6.03 Total Assets of Different Sectors 2004



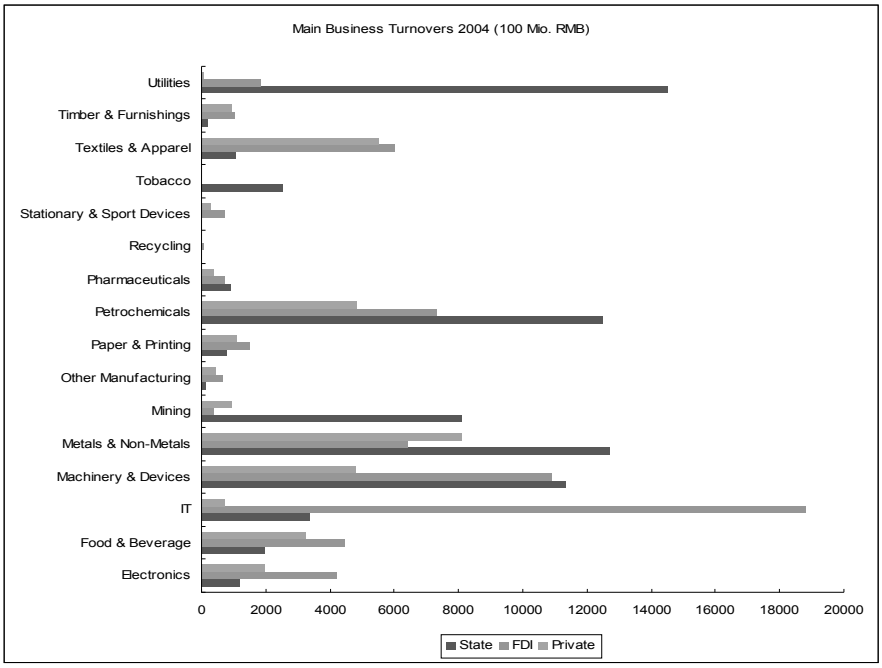
Data source: NBSC (2008)

Figure 6.04 Equities of Different Sectors 2004



Data source: NBSC (2008)

Figure 6.05 Main Business Turnovers of Different Sectors 2004



Data source: NBSC (2008)

Table 6.001: Total Assets, Equities and Main Business Turnovers of Different Sectors 2004

	Total Assets (100 Mio. RMB)				Equity (100 Mio. RMB)				Main Business Turnover (10 Mio. RMB)			
Industry	State	FDI	Private	state proportion	State	FDI	Private	state %	State	FDI	Private	state proportion
Electronics	1934	3299	1418	0.29	562	1404	539	0.22	1200	4223	1966	0.16
Food & Beverage	2746	3632	1921	0.33	1034	1553	828	0.30	1976	4479	3230	0.20
IT	3784	10934	547	0.25	1542	3934	235	0.27	3374	18798	723	0.15
Machinery & Devices	15851	9507	3680	0.55	5673	4538	1383	0.49	11357	10909	4809	0.42
Metals & Non-Metals	16289	6299	5546	0.58	6336	2675	2117	0.57	12700	6434	8121	0.47
Mining	13283	327	682	0.93	6620	189	308	0.93	8101	353	962	0.86
Other Manufacturing	304	509	259	0.28	105	257	106	0.22	138	660	459	0.11
Paper & Printing	1627	2269	947	0.34	623	953	361	0.32	784	1503	1127	0.23
Petrolchemicals	11219	7163	3484	0.51	5068	3398	1330	0.52	12520	7327	4836	0.51
Pharmaceuticals	1742	959	470	0.55	855	476	216	0.55	913	734	366	0.45
Recycling	5	41	22	0.07	2	11	8	0.11	9	77	56	0.06
Stationary & Sport Devices	74	570	177	0.09	30	277	72	0.08	42	719	293	0.04
Tobacco	2980	16	0	0.99	1876	10	0	0.99	2538	9	0	1.00
Textiles & Apparel	1776	5010	3718	0.17	431	2256	1321	0.11	1065	6007	5533	0.08
Timber & Furnishing	333	924	608	0.18	123	374	282	0.16	188	1034	932	0.09
Utilities	35764	4142	245	0.89	16598	1996	88	0.89	14528	1839	76	0.88

Data source: NBSC (2008)

c) Clustering of Sample Industries

Based on the division of industries under 3.b, we define three clusters for our 21 sample industries: monopoly, mix and competition. The monopoly cluster contains the least competitive industries which are dominated by the SOEs, while the competition cluster covers the most competitive industries in which SOEs only play a slight role. We also define a mix cluster. It comprises those industries whose sub-industries are partly dominated by the state sector and partly very competitive.

According to the political dimension, the transportation & storage industry is one of the most strategic industries for the central government and thus falls under the monopoly cluster. The agriculture industry is partly controlled by the state sector and partly by the FDI sector. Part of the industries of agriculture, construction, machinery & devices, metals and non-metals and petrolchemicals are also of strategic importance for the central government and thus strictly controlled by the state sector. Examples are construction of railway, ship-building and train-building, steel production, oil and gas production. Therefore, these industries are comprised in the mix cluster. All other industries in our sample, except for media and conglomerates, come under the competition cluster. We exclude media and conglomerates from the clustering, because we are not sure in which clusters these two should be included. According to the political dimension for clustering, the cultural services have been tightly controlled in China. However, the four listed media firms happen to be all private firms. The conglomerates industry actually contains listed firms who run a compound of different industries, which make it difficult to cluster it. Nevertheless, the data of the two industries are still utilized, when we are doing regressions with the total sample.

The clustering of our sample listed firms is as follows:

Monopoly cluster (68 listed firms): Mining, Transportation & Storage, and Utilities.

Mix cluster (296 listed firms): Agriculture, Construction, Machinery & Devices, Metals & Non-Metals, and Petrolchemicals.

Competition cluster (319 listed firms): Electronics, Food & Beverage, IT, Other Manufacturing, Paper & Printing, Pharmaceuticals, Real Estate, Social Services, Textiles & Apparel, Timber & Furnishings, and Wholesale & Retail.

4. Regression Models and Results

a) Blockholding

A) Description of Variables

Dependent Variable

Tobin's Q

Of all the 746 listed Chinese firms in our sample, the average Tobin's Q descends from 1.34 in 2000-2002 over 0.93 in 2003 to 0.80 in 2004 (Tables 6.003-6.005). Obviously, China's stock market was experiencing a bear market in our observation period.

Table 6.002: Tobin's Q 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	1.34	1.20	0.58	0.27	6.96
Monopoly	68	1.27	1.13	0.50	0.42	3.27
Mix	296	1.27	1.16	0.51	0.27	3.69
Competition	319	1.37	1.21	0.62	0.42	6.96

Table 6.003: Tobin's Q 2003

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.93	0.88	0.42	-0.18	6.49
Monopoly	68	1.04	0.98	0.32	0.52	2.36
Mix	296	0.90	0.87	0.32	-0.18	2.94
Competition	319	0.92	0.84	0.49	0.18	6.49

Table 6.004: Tobin's Q 2004

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.80	0.77	0.33	-0.32	4.12
Monopoly	68	0.90	0.86	0.28	0.48	1.86
Mix	296	0.76	0.76	0.28	-0.32	2.55
Competition	319	0.80	0.75	0.36	0.20	4.12

Control Variables

ROA

The average ROA is 0.03 in 2000-2002 and 0.02 in 2003 and 2004. Evidently, the average ROA of the listed firms in the Monopoly cluster is higher than those in the Competition clusters (See Tables 6.006-6.008). As far as ROA is concerned, listed firms in the least competitive industries (Monopoly cluster) in China are more profitable than those in more competitive industries.

Debt, Main Business Growth and Size

The debt ratio and main business growth of the listed firms in the monopolistic industries is by far lower than those in the most competitive industries, while the firm size of listed firms in the Monopoly cluster is much larger than in the competition cluster (See Tables 6.009-6.017).

It seems that the monopolistic listed firms in monopolistic industries are larger, more profitable and enjoying more financial resources, but growing more slowly than listed firms in competitive industries are.

Table 6.005: ROA 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.03	0.03	0.05	-0.42	0.20
Monopoly	68	0.05	0.04	0.04	-0.10	0.16
Mix	296	0.03	0.03	0.05	-0.14	0.20
Competition	319	0.03	0.03	0.05	-0.42	0.14

Table 6.006: ROA 2003

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.02	0.02	0.06	-0.41	0.22
Monopoly	68	0.04	0.04	0.07	-0.21	0.21
Mix	296	0.02	0.03	0.06	-0.41	0.15
Competition	319	0.01	0.02	0.05	-0.19	0.22

Table 6.007: ROA 2004

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.02	0.02	0.06	-0.46	0.21
Monopoly	68	0.04	0.03	0.06	-0.14	0.20
Mix	296	0.02	0.02	0.06	-0.34	0.18
Competition	319	0.01	0.01	0.07	-0.46	0.16

Table 6.008: Debt Ratio 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.45	0.45	0.16	0.02	0.89
Monopoly	68	0.37	0.37	0.16	0.02	0.80
Mix	296	0.45	0.44	0.15	0.10	0.89
Competition	319	0.45	0.47	0.15	0.07	0.85

Table 6.009: Debt Ratio 2003

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.49	0.50	0.18	0.01	0.94
Monopoly	68	0.41	0.43	0.22	0.01	0.92
Mix	296	0.49	0.50	0.17	0.05	0.94
Competition	319	0.49	0.51	0.18	0.05	0.89

Table 6.010: Debt Ratio 2004

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.51	0.52	0.18	0.01	0.97
Monopoly	68	0.42	0.46	0.22	0.01	0.92
Mix	296	0.52	0.52	0.17	0.06	0.94
Competition	319	0.51	0.52	0.18	0.02	0.97

Table 6.011: Main Business Growth 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.28	0.17	0.88	-0.64	18.63
Monopoly	68	0.19	0.17	0.17	-0.27	0.78
Mix	296	0.20	0.16	0.43	-0.64	4.74
Competition	319	0.34	0.18	1.22	-0.54	18.63

Table 6.012: Main Business Growth 2003

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.41	0.16	3.20	-1.00	77.81
Monopoly	68	0.26	0.14	0.73	-0.40	5.70
Mix	296	0.31	0.21	1.26	-0.97	20.90
Competition	319	0.53	0.11	4.71	-1.00	77.81

Talbe 6.013: Main Business Growth 2004

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.41	0.16	3.20	-1.00	77.81
Monopoly	68	0.26	0.14	0.73	-0.40	5.70
Mix	296	0.31	0.21	1.26	-0.97	20.90
Competition	319	0.53	0.11	4.71	-1.00	77.81

Table 6.014: Firm Size 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	2.66	2.61	0.83	-0.18	5.65
Monopoly	68	3.02	2.79	0.96	1.13	5.65
Mix	296	2.67	2.59	0.85	0.62	5.50
Competition	319	2.62	2.63	0.79	-0.18	5.17

Table 6.015: Firm Size 2003

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	2.87	2.82	0.89	-0.67	5.91
Monopoly	68	3.24	3.19	1.04	0.87	5.91
Mix	296	2.87	2.84	0.90	0.43	5.62
Competition	319	2.82	2.81	0.85	-0.67	5.36

Table 6.016: Firm Size 2004

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	2.87	2.82	0.89	-0.67	5.91
Monopoly	68	3.24	3.19	1.04	0.87	5.91
Mix	296	2.87	2.84	0.90	0.43	5.62
Competition	319	2.82	2.81	0.85	-0.67	5.36

Independent Variables

Blockholder

Of all our sample listed firms, about 1/3 are directly controlled by a governmental blockholder (See Table 6.018), while only 23% are not held by local governments or SOEs (See Table 6.019). Since SOEs are closely associated with the (local) governments, one can conclude that China's stock market is a state-controlled one.

Blockholding

On average, blockholders own 44% of all shares at China's stock market (See Table 6.020), while the next nine biggest shareholders together possess only 16% (See Table 6.021). Of all the shares, a bit more than 1/3 are available for transactions at the secondary market (See Table 6.022).

Blockholder Change

About 1/5 of our sample listed firms have experienced at least one Change of the Blockholder, whilst barely 1% have undergone two changes of the blockholder and very few (0.27%) have witnesses three times a change of the blockholder (See Tables 6.023 and 6.024). Only 10% of the listed firms in the Monopoly cluster saw a new blockholder during 2000-2002 (See ibid.), displaying that the ownership structure of these firms is very stable.

Table 6.017: Blockholder A 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.66	1.00	0.43	0.00	1.00
Monopoly	68	0.54	0.83	0.49	0.00	1.00
Mix	296	0.68	1.00	0.43	0.00	1.00
Competition	319	0.65	1.00	0.44	0.00	1.00

Table 6.018: Blockholder B 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.23	0.00	0.42	0.00	1.00
Monopoly	68	0.07	0.00	0.26	0.00	1.00
Mix	296	0.17	0.00	0.37	0.00	1.00
Competition	319	0.25	0.00	0.43	0.00	1.00

Table 6.019: Blockholding 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.44	0.44	0.17	0.04	0.85
Monopoly	68	0.46	0.41	0.17	0.13	0.81
Mix	296	0.49	0.51	0.16	0.10	0.85
Competition	319	0.42	0.40	0.16	0.06	0.80

Table 6.020: Shareholding 2-10 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.16	0.12	0.13	0.00	0.56
Monopoly	68	0.18	0.17	0.14	0.01	0.48
Mix	296	0.14	0.09	0.13	0.00	0.56
Competition	319	0.17	0.13	0.13	0.01	0.55

Table 6.021: Liquidity 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.36	0.36	0.14	0.02	1.00
Monopoly	68	0.32	0.32	0.12	0.05	0.58
Mix	296	0.34	0.34	0.12	0.02	0.69
Competition	319	0.38	0.37	0.14	0.04	1.00

Table 6.022: Blockholder Change 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.20	0.00	0.44	0.00	3.00
Monopoly	68	0.10	0.00	0.35	0.00	2.00
Mix	296	0.18	0.00	0.39	0.00	2.00
Competition	319	0.21	0.00	0.49	0.00	3.00

Table 6.023: Blockholder Change Frequency

Industry	Listings	0 Change	1 Change	2 Changes	3 Changes	Total
Total	746	81.90	16.89	0.94	0.27	100.00
Monopoly	68	91.18	7.35	1.47		100.00
Mix	296	82.77	16.89	0.34		100.00
Competition	319	81.50	16.30	1.57	0.63	100.00

B) Regression Models

As Table 6.025 demonstrates, three of the dependent variables, Blockholding, Shareholding2-10, and Liquidity are significantly correlative to each other. The rationale behind this is, the more shares the blockholder possesses, the less the smaller shareholders own and the less liquid the listed firm is.

Table 6.024: Correlations between Blockholding, Shareholding 2-10, and Liquidity

Correlations

		Blockholding	Shareholding2-10	Liquidity
Blockholding	Pearson Correlation	1.000	-.672**	-.428**
	Sig. (2-tailed)		.000	.000
	N	746.000	746	746
Shareholding2-10	Pearson Correlation	-.672**	1.000	-.138**
	Sig. (2-tailed)	.000		.000
	N	746	746.000	746
Liquidity	Pearson Correlation	-.428**	-.138**	1.000
	Sig. (2-tailed)	.000	.000	
	N	746	746	746.000

**. Correlation is significant at the 0.01 level (2-tailed).

Due to this correlation between the measured variables, we build up three regression models to test the impacts of the three independent variables on the listed firms' market value, respectively. By use of a quadratic term, we also expand the regression model to test the non-linear impact of blockholding on a listed firm's market value. Since we have two different dummy variables to measure the nature of the blockholder, we have indeed two similar equations for each model, which are marked with A and B. The regression models are as follows:

Model Blockholding A (non-linear):

$$Q_i = \beta_0 + \beta_1 BlockholderA_i + \beta_2 Blockholding_i + \beta_3 Blockholding^2{}_i + \beta_4 BlockholderChange_i + \beta_5 ROA_i + \beta_6 Debt_i + \beta_7 Growth_i + \beta_8 Size_i + \varepsilon_i \quad (6.06)$$

Model Blockholding B (non-linear):

$$Q_i = \beta_0 + \beta_1 BlockholderB_i + \beta_2 Blockholding_i + \beta_3 Blockholding^2{}_i + \beta_4 BlockholderChange_i + \beta_5 ROA_i + \beta_6 Debt_i + \beta_7 Growth_i + \beta_8 Size_i + \varepsilon_i \quad (6.07)$$

Model Blockholding A:

$$Q_i = \beta_0 + \beta_1 BlockholderA_i + \beta_2 Blockholding_i + \beta_3 BlockholderChange_i + \beta_4 ROA_i + \beta_5 Debt_i + \beta_6 Growth_i + \beta_7 Size_i + \varepsilon_i \quad (6.08)$$

Model Blockholding B:

$$Q_i = \beta_0 + \beta_1 BlockholderB_i + \beta_2 Blockholding_i + \beta_3 BlockholderChange_i + \beta_4 ROA_i + \beta_5 Debt_i + \beta_6 Growth_i + \beta_7 Size_i + \varepsilon_i \quad (6.09)$$

Model Shareholding2-10 A:

$$Q_i = \beta_0 + \beta_1 BlockholderA_i + \beta_2 Shareholding2-10_i + \beta_3 BlockholderChange_i + \beta_4 ROA_i + \beta_5 Debt_i + \beta_6 Growth_i + \beta_7 Size_i + \varepsilon_i \quad (6.10)$$

Model Shareholding2-10 B:

$$Q_i = \beta_0 + \beta_1 BlockholderA_i + \beta_2 Shareholding2-10_i + \beta_3 BlockholderChange_i + \beta_4 ROA_i + \beta_5 Debt_i + \beta_6 Growth_i + \beta_7 Size_i + \varepsilon_i \quad (6.11)$$

Model Liquidity A:

$$Q_i = \beta_0 + \beta_1 BlockholderA_i + \beta_2 Liquidity_i + \beta_3 BlockholderChange_i + \beta_4 ROA_i + \beta_5 Debt_i + \beta_6 Growth_i + \beta_7 Size_i + \varepsilon_i \quad (6.12)$$

Model Liquidity B:

$$Q_i = \beta_0 + \beta_1 BlockholderA_i + \beta_2 Liquidity_i + \beta_3 BlockholderChange_i + \beta_4 ROA_i + \beta_5 Debt_i + \beta_6 Growth_i + \beta_7 Size_i + \varepsilon_i \quad (6.13)$$

C) Regression Results

Other variables controlled, tables 6.026-6.033 report the following results of the regressions on blockholding variables.

First, blockholding generally has a significant negative impact on a listed firm's market value (cf Tables 6.028 and 6.029). However, this impact in not linear, but inverse U-shaped. More precisely, the market value of a listed firm initially increases when the blockholder's shareholding grows. After the blockholding reaches about 60%, a higher blockholding can only witness a lower market value (See Tables 6.026 and 6.027). It suggests that to a

certain degree of blockholding, the interests of the blockholder and other shareholders are aligned, but extending a blockholding can finally lead to expropriation of smaller shareholders.

Second, a non-state blockholder (the dummy variable equals 1) enhances a listed firm's market value (See Tables 6.026-6.033). This result is significant, when we count SOEs for state blockholders (See Tables 6.027, 6.029, 6.031, and 6.033). Therefore, investors at China's stock market prefer non-state blockholders than state blockholders.

Third, shareholding of the second to the tenth biggest shareholders might have a positive impact on a listed firm's market value, but this result is not significant (See Tables 6.030 and 6.031). The reason could be that bigger shareholders might monitor or bargain with the blockholder more actively to protect their own interests, while smaller shareholders could take a free ride. Therefore, the stock market tends to give such a firm a higher valuation. It is also interesting to see that the coefficient of shareholding2-10 might be negative in the Monopoly cluster (See ibid.). It suggests that a dominant blockholder is in favor of monopolistic firms. Since blockholders in these firms are mostly local governments or SOEs, we surmise that they could enjoy more political advantages than non-state blockholders.

Fourth, the liquidity variable has a significantly positive effect on its market value (See Tables 6.032 and 6.033) and its coefficient is higher than those of other variables in our blockholding regressions, suggesting that investors welcome more tradable shares issued by a listed firm. Interestingly, this result is significant in the Competition cluster, but not in the Monopoly cluster. We believe that the logic is as same as that in the third point. With more tradable shares, market participants other than the blockholder could have more control rights and thus better protect their own interests. In the monopolistic industries, however, more concentrated ownership by means of more non-tradable shares could consolidate the state ownership and gain the listed firm more advantages.

Fifth, listed firms that have experienced a change of the blockholder enjoy a higher market value. This result is significant for the total sample and again, for listed firms in the Competition cluster. It suggests that the stock market welcomes a new blockholder, although the change does not necessarily mean that the new blockholder will do better than the former one. The rationale behind this could be that the blockholder change at least kicks out the former blockholder who could not make the listed firm profitable or as profitable as competitors, and the change itself became good news for the investors.

Table 6.025: Regression Results of Model Blockholding A (non-linear)

	Listings	(Constant)	ROA	Debt	Growth	Size	Blockholder A	Blockholding	Blockholding^2	Blockholder Change	Adjusted R^2
Total	746	2.942	0.940	-0.402	-0.024	-0.397	0.055	-1.779	1.458	0.168	0.516
(Sig.)		0.000	0.008	0.000	0.125	0.000	0.091	0.000	0.002	0.000	
Monopoly	68	2.068	1.568	0.290	-0.186	-0.331	0.128	-0.001	-0.221	0.163	0.505
(Sig.)		0.000	0.182	0.325	0.508	0.000	0.144	1.000	0.875	0.191	
Mix	296	2.854	0.116	-0.433	0.114	-0.415	0.086	-1.494	1.322	0.094	0.594
(Sig.)		0.000	0.800	0.002	0.014	0.000	0.064	0.026	0.051	0.091	
Competition	319	2.801	1.183	-0.481	-0.031	-0.384	0.014	-1.024	0.620	0.248	0.508
(Sig.)		0.000	0.048	0.002	0.083	0.000	0.775	0.138	0.426	0.000	

Table 6.026: Regression Results of Model Blockholding B (non-linear)

	Listings	(Constant)	ROA	Debt	Growth	Size	Blockholder B	Blockholding	Blockholding^2	Blockholder Change	Adjusted R^2
Total	746	2.922	0.887	-0.422	-0.023	-0.396	0.103	-1.648	1.390	0.155	0.520
(Sig.)		0.000	0.012	0.000	0.145	0.000	0.004	0.000	0.002	0.000	
Monopoly	68	2.209	1.612	0.230	-0.098	-0.346	0.079	-0.213	0.066	0.171	0.488
(Sig.)		0.000	0.177	0.438	0.726	0.000	0.610	0.878	0.963	0.182	
Mix	296	2.790	0.075	-0.440	0.121	-0.420	0.200	-1.173	1.141	0.069	0.606
(Sig.)		0.000	0.868	0.002	0.009	0.000	0.000	0.079	0.087	0.213	
Competition	319	2.773	1.150	-0.488	-0.030	-0.381	0.047	-0.928	0.539	0.243	0.509
(Sig.)		0.000	0.054	0.002	0.087	0.000	0.371	0.184	0.491	0.000	

Table 6.027: Regression Results of Model Blockholding A

	Listings	(Constant)	ROA	Debt	Growth	Size	Blockholder A	Blockholding	Blockholder Change	Adjusted R^2
Total	746	2.656	0.995	-0.387	-0.023	-0.392	0.069	-0.462	0.172	0.510
(Sig.)		0.000	0.005	0.000	0.154	0.000	0.033	0.000	0.000	
Monopoly	68	2.118	1.548	0.283	-0.189	-0.331	0.125	-0.211	0.166	0.513
(Sig.)		0.000	0.181	0.327	0.495	0.000	0.143	0.399	0.178	
Mix	296	2.544	0.111	-0.437	0.119	-0.407	0.100	-0.209	0.112	0.590
(Sig.)		0.000	0.810	0.002	0.011	0.000	0.029	0.104	0.043	
Competition	319	2.694	1.260	-0.470	-0.030	-0.385	0.018	-0.486	0.248	0.508
(Sig.)		0.000	0.032	0.003	0.088	0.000	0.715	0.000	0.000	

Table 6.028: Regression Results of Model Blockholding B

	Listings	(Constant)	ROA	Debt	Growth	Size	Blockholder B	Blockholding	Blockholder Change	Adjusted R^2
Total	746	2.653	0.934	-0.413	-0.021	-0.392	0.117	-0.382	0.157	0.514
(Sig.)		0.000	0.008	0.000	0.183	0.000	0.001	0.000	0.000	
Monopoly	68	2.195	1.619	0.232	-0.096	-0.346	0.079	-0.150	0.170	0.497
(Sig.)		0.000	0.169	0.426	0.726	0.000	0.604	0.558	0.177	
Mix	296	2.525	0.072	-0.447	0.126	-0.413	0.215	-0.052	0.083	0.604
(Sig.)		0.000	0.874	0.001	0.006	0.000	0.000	0.695	0.132	
Competition	319	2.679	1.211	-0.479	-0.030	-0.382	0.052	-0.457	0.242	0.510
(Sig.)		0.000	0.040	0.002	0.092	0.000	0.313	0.001	0.000	

Table 6.029: Regression Results of Model Shareholding2-10 A

	Listings	(Constant)	ROA	Debt	Growth	Size	Blockholder A	Shareholding 2-10	Blockholder Change	Adjusted R^2
Total	746	2.434	0.919	-0.342	-0.019	-0.401	0.067	0.095	0.208	0.491
(Sig.)		0.000	0.011	0.001	0.236	0.000	0.042	0.410	0.000	
Monopoly	68	2.045	1.336	0.323	-0.149	-0.339	0.118	-0.039	0.171	0.507
(Sig.)		0.000	0.246	0.264	0.591	0.000	0.169	0.892	0.167	
Mix	296	2.432	0.076	-0.442	0.124	-0.410	0.094	0.165	0.122	0.587
(Sig.)		0.000	0.869	0.002	0.008	0.000	0.043	0.315	0.030	
Competition	319	2.466	1.177	-0.419	-0.029	-0.392	0.017	0.109	0.273	0.488
(Sig.)		0.000	0.050	0.009	0.107	0.000	0.737	0.549	0.000	

Table 6.030: Regression Results of Model Shareholding2-10 B

	Listings	(Constant)	ROA	Debt	Growth	Size	Blockholder B	Shareholding 2-10	Blockholder Change	Adjusted R^2
Total	746	2.474	0.843	-0.375	-0.018	-0.399	0.159	0.004	0.183	0.502
(Sig.)		0.000	0.018	0.000	0.261	0.000	0.000	0.975	0.000	
Monopoly	68	2.140	1.461	0.262	-0.072	-0.352	0.093	-0.031	0.172	0.494
(Sig.)		0.000	0.210	0.365	0.793	0.000	0.540	0.915	0.174	
Mix	296	2.498	0.061	-0.445	0.127	-0.414	0.221	0.008	0.088	0.603
(Sig.)		0.000	0.893	0.002	0.006	0.000	0.000	0.963	0.114	
Competition	319	2.465	1.107	-0.434	-0.028	-0.388	0.086	0.053	0.262	0.492
(Sig.)		0.000	0.064	0.007	0.116	0.000	0.104	0.770	0.000	

Table 6.031: Regression Results of Model Liquidity A

	Listings	(Constant)	ROA	Debt	Growth	Size	Blockholder A	Liquidity	Blockholder Change	Adjusted R^2
Total	746	2.149	0.798	-0.378	-0.014	-0.384	0.073	0.737	0.207	0.527
(Sig.)		0.000	0.022	0.000	0.378	0.000	0.021	0.000	0.000	
Monopoly	68	1.602	1.530	0.270	-0.214	-0.282	0.163	0.809	0.215	0.541
(Sig.)		0.000	0.167	0.332	0.424	0.000	0.058	0.040	0.078	
Mix	296	2.365	0.036	-0.429	0.123	-0.404	0.102	0.175	0.142	0.587
(Sig.)		0.000	0.937	0.003	0.009	0.000	0.028	0.290	0.006	
Competition	319	2.207	0.959	-0.494	-0.024	-0.384	0.030	0.754	0.275	0.527
(Sig.)		0.000	0.097	0.001	0.173	0.000	0.527	0.000	0.000	

Table 6.032: Regression Results of Model Liquidity B

	Listings	(Constant)	ROA	Debt	Growth	Size	Blockholder B	Liquidity	Blockholder Change	Adjusted R^2
Total	746	2.197	0.743	-0.413	-0.013	-0.382	0.139	0.700	0.181	0.534
(Sig.)		0.000	0.031	0.000	0.389	0.000	0.000	0.000	0.000	
Monopoly	68	1.786	1.672	0.193	-0.105	-0.307	0.157	0.713	0.208	0.521
(Sig.)		0.000	0.139	0.494	0.693	0.000	0.303	0.073	0.096	
Mix	296	2.433	0.027	-0.444	0.126	-0.408	0.220	0.151	0.088	0.605
(Sig.)		0.000	0.952	0.001	0.006	0.000	0.000	0.351	0.095	
Competition	319	2.211	0.897	-0.511	-0.023	-0.379	0.078	0.740	0.264	0.530
(Sig.)		0.000	0.120	0.001	0.184	0.000	0.118	0.000	0.000	

b) Board Composition

A) Description of the Variables

Board Size

Article 112 of China's Company Law 1993 stipulates that "A joint stock limited company shall have a board of directors composed of five to nineteen members" (CLPRC, Article 112). The average size of the board of directors does not change much in our observation period (See Tables 6.034-6.037). It begins with about 9.5 directors in a board in 2000 and increases to 10 in 2002. In the total sample, about 9.7 directors sit in a board in our whole observation period. The frequency statistics show that 7-, 9-, 11-, and 13-director board size prevail in our observation period (See Tables 6.038-6.040, Figures 6.06-6.08).

Table 6.033: Board Size 2000

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	9.54	9.00	2.60	5.00	19.00
Monopoly	68	9.57	9.00	2.46	5.00	17.00
Mix	296	9.54	9.00	2.57	5.00	19.00
Competition	319	9.49	9.00	2.68	5.00	19.00

Table 6.034: Board Size 2001

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	9.47	9.00	2.50	4.00	19.00
Monopoly	68	9.62	9.00	2.57	5.00	17.00
Mix	296	9.44	9.00	2.40	5.00	17.00
Competition	319	9.42	9.00	2.63	4.00	19.00

Table 6.035: Board Size 2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	10.05	9.00	2.36	5.00	19.00
Monopoly	68	10.68	10.00	2.75	5.00	19.00
Mix	296	9.97	9.00	2.28	5.00	19.00
Competition	319	9.94	9.00	2.36	6.00	19.00

Table 6.036: Board Size 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	9.69	9.33	2.28	5.00	19.00
Monopoly	68	9.96	9.67	2.46	5.00	17.67
Mix	296	9.65	9.50	2.19	5.00	17.00
Competition	319	9.62	9.33	2.34	5.00	19.00

Table 6.037: Frequency Statistics Board Size 2000

Industry	Listings	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total
Total	746	4.16	2.41	19.57	5.90	28.95	4.83	16.76	2.95	7.64	1.74	2.82	0.40	1.07	0.27	0.54	100.00
Monopoly	68	5.88	1.47	11.76	8.82	32.35	5.88	16.18	4.41	7.35	1.47	2.94		1.47			100.00
Mix	296	3.72	2.36	20.95	5.74	27.03	5.07	17.91	3.04	7.43	1.35	3.38	0.68	0.68	0.34	0.34	100.00
Competition	319	4.39	2.82	20.69	4.70	29.78	5.02	15.67	2.82	7.21	1.88	2.19		1.57	0.31	0.94	100.00

Table 6.038: Frequency Statistics Board Size 2001

Industry	Listings	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total
Total	746	0.13	3.89	2.82	20.38	4.96	28.15	4.96	18.77	2.55	7.24	2.14	2.41	0.27	0.94	0.13	0.27	100.00
Monopoly	68		7.35	4.41	8.82	4.41	29.41	10.29	19.12	1.47	7.35	2.94	2.94		1.47			100.00
Mix	296		4.05	2.03	20.27	5.07	30.41	3.72	19.93	2.03	6.76	1.35	3.38	0.34	0.68			100.00
Competition	319	0.31	3.45	3.13	24.14	5.64	23.51	5.02	18.50	2.51	7.52	2.51	1.25	0.31	1.25	0.31	0.63	100.00

Table 6.039: Frequency Statistics Board Size 2002

Industry	Listings	5	6	7	8	9	10	11	12	13	14	15	16	17	19	Total
Total	746	1.07	1.34	10.32	8.45	32.71	4.83	19.44	6.03	8.45	2.01	3.22	0.67	0.80	0.67	100.00
Monopoly	68	1.47	1.47	7.35	5.88	25.00	11.76	17.65	4.41	10.29		11.76		1.47	1.47	100.00
Mix	296	2.36	0.34	8.78	10.81	31.76	4.39	21.62	6.08	6.08	3.38	3.38		0.68	0.34	100.00
Competition	319		2.51	12.23	7.52	35.42	4.08	17.55	5.02	10.34	1.25	0.94	1.25	0.94	0.94	100.00

Figure 6.06: Frequency of Board Size 2000

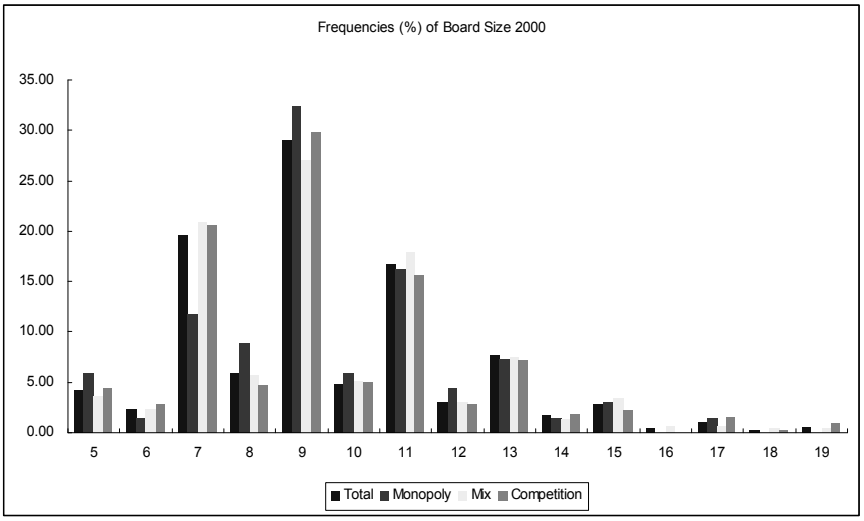


Figure 6.07: Frequency of Board Size 2001

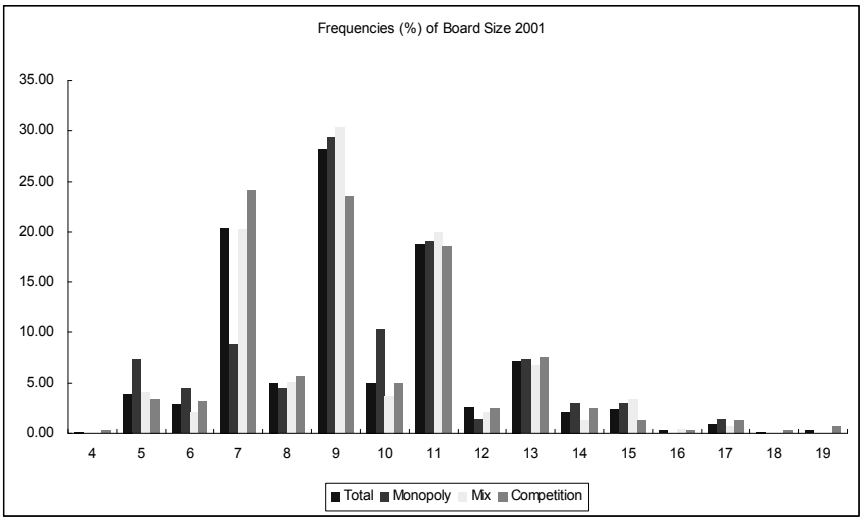
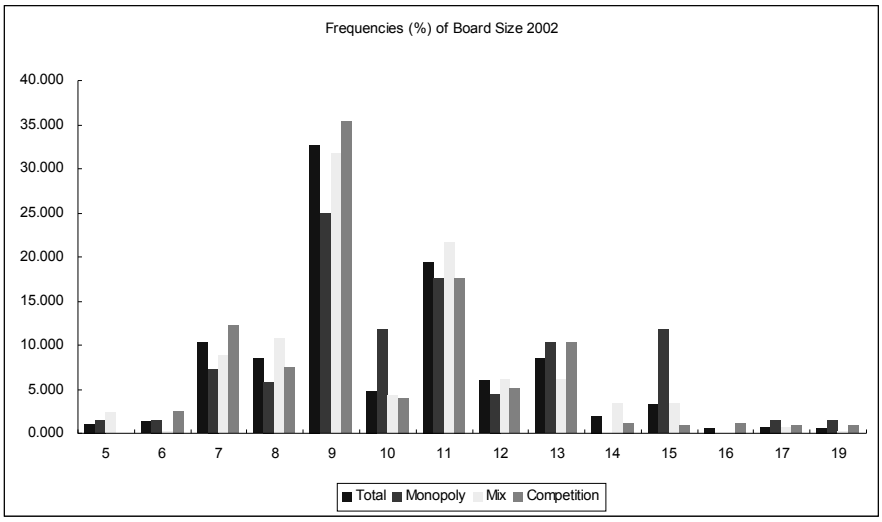


Figure 6.08: Frequency of Board Size 2002



Independent Directors

In our observation period, the independent director number increases rapidly from 0.14 in 2000 over 0.58 in 2001 to 2.27 in 2002 (See Tables 6.041-6.044). Tables 6.045-6.047 report that in 2000, more than 90% of all listed firms in our sample do not have any independent director, and in 2001, over 70% still have no independent director (See Tables 6.045 and 6.046, Figures 6.09 and 6.10). But in 2002, the independent director number booms. More than 95% of the sample firms have at least two independent directors. (See Table 6.047, Figure 6.11). Accordingly, the proportion of independent directors in the board rises speedily from 0.01 in 2000 and 0.06 in 2001 to 0.23 in 2002 (See Tables 6.048-6.051).

The push for independent directors comes from the in 2002 issued Code of Corporate Governance for Listed Companies in China in which Article 49 states: "A listed company shall introduce independent directors to its board of directors in accordance with relevant regulations" (CSRC 2002). Therefore, the big boost of independent directors in 2002 was indeed a reaction to new corporate governance regulations.

Table 6.040: Independent Director Number 2000

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.14	0.00	0.54	0.00	4.00
Monopoly	68	0.10	0.00	0.46	0.00	3.00
Mix	296	0.15	0.00	0.59	0.00	4.00
Competition	319	0.14	0.00	0.52	0.00	3.00

Table 6.041: Independent Director Number 2001

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.58	0.00	1.02	0.00	6.00
Monopoly	68	0.32	0.00	0.80	0.00	4.00
Mix	296	0.60	0.00	1.08	0.00	6.00
Competition	319	0.61	0.00	0.98	0.00	5.00

Table 6.042: Independent Director Number 2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	2.27	2.00	0.73	0.00	6.00
Monopoly	68	2.28	2.00	0.59	1.00	5.00
Mix	296	2.29	2.00	0.70	0.00	5.00
Competition	319	2.24	2.00	0.78	0.00	6.00

Table 6.043: Independent Director Number 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.99	0.67	0.58	0.00	4.33
Monopoly	68	0.90	0.67	0.50	0.33	3.33
Mix	296	1.01	0.67	0.62	0.00	4.33
Competition	319	1.00	0.67	0.56	0.00	3.00

Table 6.044: Frequency Statistics Independent Director 2000

Industry	Listings	0	1	2	3	4	Total
Total	746	92.76	2.28	3.62	1.07	0.27	100.00
Monopoly	68	94.12	2.94	1.47	1.47		100.00
Mix	296	92.57	2.70	2.70	1.35	0.68	100.00
Competition	319	92.16	1.88	5.33	0.63		100.00

Table 6.045: Frequency Statistics Independent Director 2001

Industry	Listings	0	1	2	3	4	5	6	Total
Total	746	70.91	8.71	14.08	4.96	0.94	0.27	0.13	100.00
Monopoly	68	82.35	7.35	7.35	1.47	1.47			100.00
Mix	296	71.62	6.76	13.51	6.76	0.68	0.34	0.34	100.00
Competition	319	67.40	10.66	16.93	4.08	0.63	0.31		100.00

Table 6.046: Frequency Statistics Independent Director 2002

Industry	Listings	0	1	2	3	4	5	6	Total
Total	746	2.14	1.74	70.38	19.84	4.83	0.80	0.27	100.00
Monopoly	68		1.47	73.53	22.06	1.47	1.47		100.00
Mix	296	1.69	1.35	70.61	20.27	5.07	1.01		100.00
Competition	319	3.45	0.94	72.10	17.24	5.33	0.31	0.63	100.00

Figure 6.09: Frequency of Independent Director Number 2000

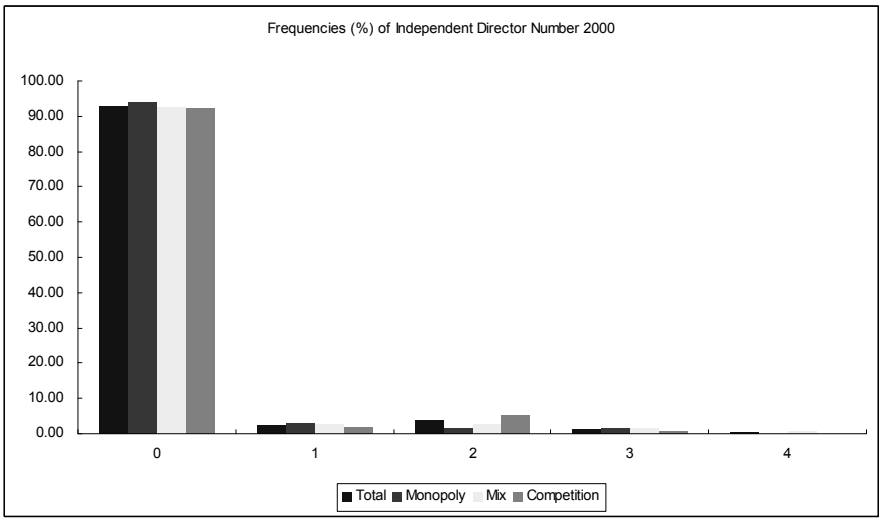


Figure 6.10: Frequency of Independent Director Number 2001

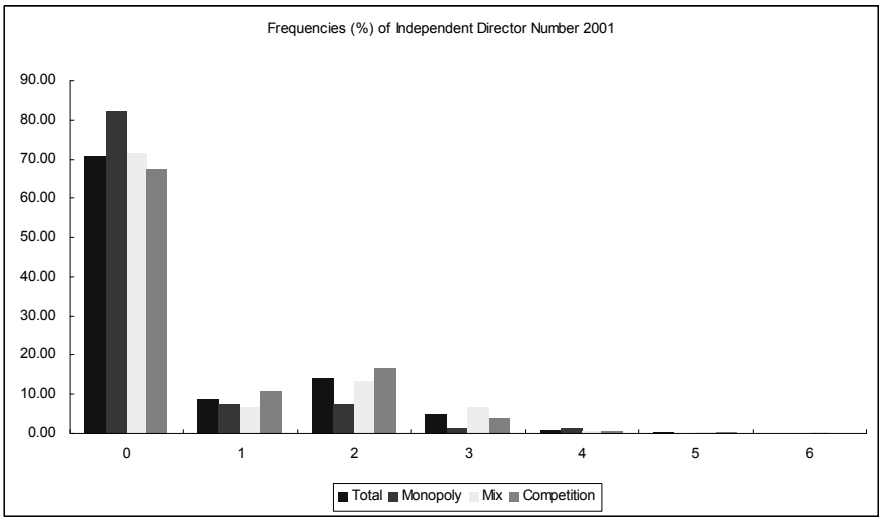


Figure 6.11: Frequency of Independent Director Number 2002

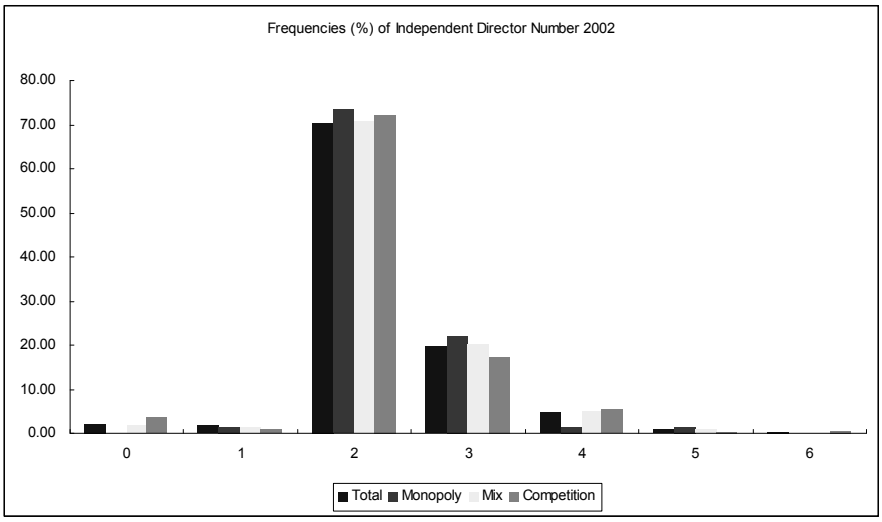


Table 6.047: Independent Director Proportion 2000

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.01	0.00	0.05	0.00	0.43
Monopoly	68	0.01	0.00	0.04	0.00	0.27
Mix	296	0.01	0.00	0.05	0.00	0.33
Competition	319	0.01	0.00	0.05	0.00	0.33

Table 6.048: Independent Director Proportion 2001

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.06	0.00	0.10	0.00	0.50
Monopoly	68	0.03	0.00	0.08	0.00	0.40
Mix	296	0.06	0.00	0.11	0.00	0.44
Competition	319	0.06	0.00	0.10	0.00	0.50

Table 6.049: Independent Director Proportion 2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.23	0.22	0.08	0.00	0.67
Monopoly	68	0.23	0.22	0.07	0.10	0.40
Mix	296	0.24	0.22	0.07	0.00	0.50
Competition	319	0.23	0.22	0.08	0.00	0.67

Table 6.050: Independent Director Proportion 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.10	0.08	0.06	0.00	0.39
Monopoly	68	0.09	0.07	0.05	0.03	0.30
Mix	296	0.10	0.08	0.06	0.00	0.33
Competition	319	0.10	0.08	0.06	0.00	0.39

Executive Directors

In our observation period, the executive director number stays stable between two and three, while most sample listed firms have one to three executive directors sitting in the board (See Tables 6.052-6.058, Figures 6.12-6.14). Over the same period, the proportion of executive directors in the board is about 1/4 (See Tables 6.059-6.062). However, with more independent directors in the board, the proportion of executive directors decreases in 2002 (See Table 6.062).

Table 6.051: Executive Director Number 2000

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	2.45	2.00	1.47	0.00	9.00
Monopoly	68	2.22	2.00	1.41	0.00	6.00
Mix	296	2.42	2.00	1.58	0.00	9.00
Competition	319	2.50	2.00	1.36	0.00	8.00

Table 6.052: Executive Director Number 2001

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	2.31	2.00	1.46	0.00	10.00
Monopoly	68	2.07	2.00	1.34	0.00	6.00
Mix	296	2.23	2.00	1.49	0.00	8.00
Competition	319	2.42	2.00	1.45	0.00	10.00

Table 6.053: Executive Director Number 2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	2.07	2.00	1.30	0.00	7.00
Monopoly	68	1.81	2.00	1.08	0.00	5.00
Mix	296	2.06	2.00	1.29	0.00	7.00
Competition	319	2.10	2.00	1.31	0.00	7.00

Table 6.054: Executive Director Number 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	2.28	2.00	1.24	0.00	8.00
Monopoly	68	2.03	2.00	1.12	0.00	4.67
Mix	296	2.23	2.00	1.27	0.00	7.33
Competition	319	2.34	2.00	1.19	0.00	8.00

Table 6.055: Frequency Statistics Executive Director Number 2000

Industry	Listings	0	1	2	3	4	5	6	7	8	9	Total
Total	746	4.29	26.01	26.27	20.51	14.08	5.90	1.74	0.80	0.27	0.13	100.00
Monopoly	68	5.88	32.35	22.06	23.53	8.82	4.41	2.94				100.00
Mix	296	6.42	28.72	22.30	17.91	13.85	7.43	2.36	0.68		0.34	100.00
Competition	319	2.82	21.94	30.41	22.88	15.36	4.39	0.63	1.25	0.31		100.00

Table 6.056: Frequency Statistics Executive Director Number 2001

Industry	Listings	0	1	2	3	4	5	6	7	8	10	Total
Total	746	6.30	26.68	28.02	20.11	11.13	5.50	1.21	0.40	0.54	0.13	100.00
Monopoly	68	8.82	30.88	25.00	20.59	10.29	2.94	1.47				100.00
Mix	296	9.46	26.35	26.01	19.26	11.15	5.74	1.35		0.68		100.00
Competition	319	4.08	24.14	31.03	21.00	10.97	6.58	0.94	0.63	0.31	0.31	100.00

Table 6.057: Frequency Statistics Executive Director Number 2002

Industry	Listings	0	1	2	3	4	5	6	7	Total
Total	746	7.64	29.49	29.89	20.91	7.64	2.55	1.34	0.54	100.00
Monopoly	68	8.82	32.35	36.76	14.71	5.88	1.47			100.00
Mix	296	9.46	27.03	29.39	21.96	8.45	2.36	1.01	0.34	100.00
Competition	319	6.58	30.41	29.78	20.38	7.84	2.82	1.88	0.31	100.00

Figure 6.12: Frequency of Executive Director Number 2000

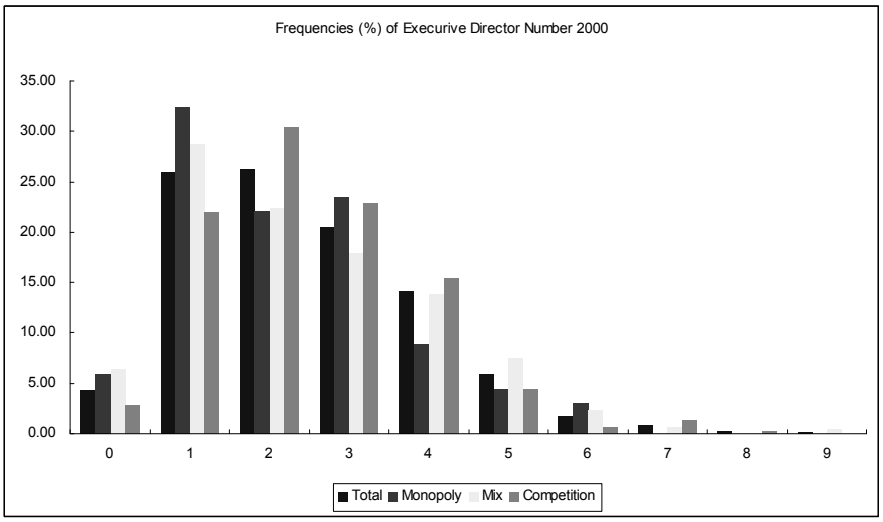


Figure 6.13: Frequency of Executive Director Number 2001

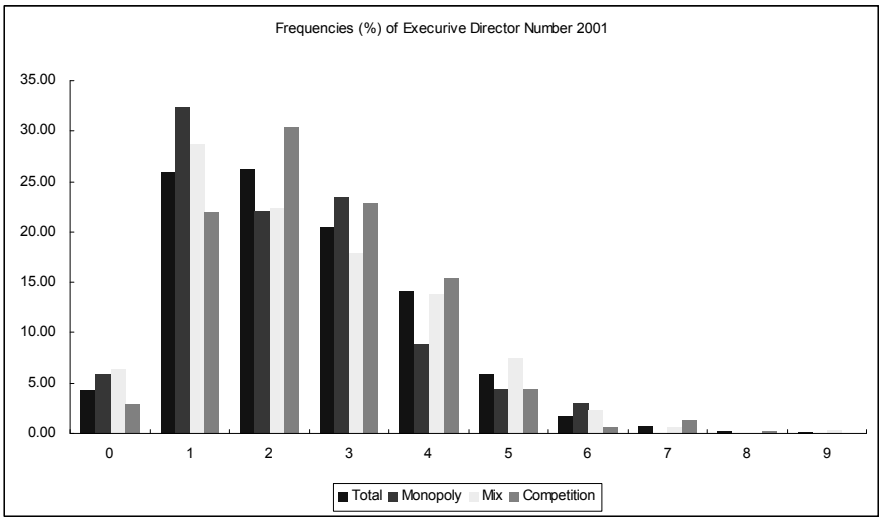


Figure 6.14: Frequency of Executive Director Number 2002

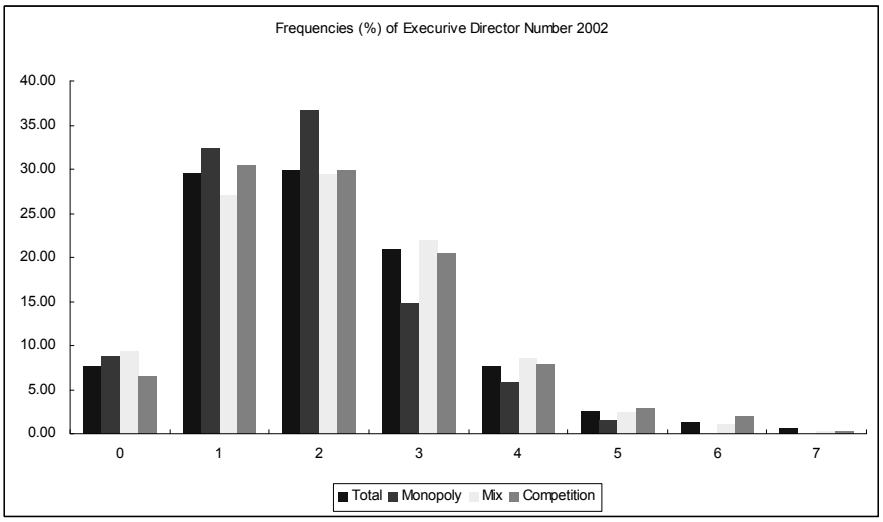


Table 6.058: Executive Director Proportion 2000

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.26	0.25	0.15	0.00	0.80
Monopoly	68	0.24	0.22	0.15	0.00	0.71
Mix	296	0.26	0.22	0.16	0.00	0.80
Competition	319	0.27	0.27	0.14	0.00	0.67

Table 6.059: Executive Director Proportion 2001

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.25	0.22	0.15	0.00	0.80
Monopoly	68	0.22	0.21	0.15	0.00	0.67
Mix	296	0.24	0.22	0.16	0.00	0.80
Competition	319	0.26	0.23	0.14	0.00	0.71

Table 6.060: Executive Director Proportion 2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.21	0.20	0.13	0.00	0.70
Monopoly	68	0.17	0.15	0.10	0.00	0.44
Mix	296	0.21	0.22	0.13	0.00	0.70
Competition	319	0.21	0.20	0.13	0.00	0.64

Table 6.061: Executive Director Proportion 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.24	0.22	0.12	0.00	0.73
Monopoly	68	0.21	0.18	0.12	0.00	0.59
Mix	296	0.24	0.22	0.13	0.00	0.73
Competition	319	0.25	0.23	0.11	0.00	0.63

Directors Positioning at Blockholder (DPAB)[1]

In the period of 2001-2002, about 2.7 directors in each listed firm also hold a position at the blockholder (See Tables 6.063-6.065). The number of DPAB is almost equably distributed in one, two, three, or four (See Tables 6.066 and 6.067, Figures 6.15 and 6.16). About 28% of all the directors in our sample listed firms hold a position at the blockholder (See Tables 6.068-6.070). Directors of listed firms in the Monopoly cluster are more likely to possess a position at the blockholder (See ibid.). The reason could be that the government or SOE who is the blockholder of a listed firm prefers to choose representatives from inside the government or SOE to sit in the board of directors.

Table 6.062: Director Positioning at Blockholder Number 2001

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	2.80	2.50	2.22	0.00	13.00
Monopoly	68	3.09	3.00	2.33	0.00	13.00
Mix	296	3.11	3.00	2.26	0.00	11.00
Competition	319	2.53	2.00	2.21	0.00	11.00

Table 6.063: Director Positioning at Blockholder Number 2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	2.61	2.00	2.06	0.00	13.00
Monopoly	68	2.99	2.00	2.38	0.00	13.00
Mix	296	2.86	3.00	2.07	0.00	12.00
Competition	319	2.40	2.00	2.02	0.00	11.00

Table 6.064: Director Positioning at Blockholder Number 2001-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	2.70	2.50	2.07	0.00	13.00
Monopoly	68	3.04	2.50	2.25	0.00	13.00
Mix	296	2.99	3.00	2.08	0.00	11.50
Competition	319	2.46	2.00	2.05	0.00	11.00

[1] Information on directors who also hold a position at the blockholder was not available in the annual reports of Chinese listed firms until 2001. For this reason, we do not provide the 2000 statistics here or involve them in the regressions. Instead, we employ the average data of 2001 and 2002. It is similar for a few other variables in the following parts of this dissertation.

Table 6.065: Frequency Statistics Director Positioning at Blockholder Number 2001

Industry	Listings	0	1	2	3	4	5	6	7	8	9	10	11	13	Total
Total	746	13.54	20.64	15.82	17.29	12.73	9.65	4.42	1.61	2.41	0.40	0.94	0.40	0.13	100.00
Monopoly	68	7.35	23.53	14.71	13.24	17.65	14.71	2.94		4.41				1.47	100.00
Mix	296	11.15	17.23	15.54	15.54	14.86	11.82	7.77	1.69	2.36	0.34	1.01	0.68		100.00
Competition	319	17.24	22.88	15.05	18.18	10.34	7.84	2.51	1.88	1.88	0.63	1.25	0.31		100.00

Table 6.066: Frequency Statistics Director Positioning at Blockholder Number 2002

Industry	Listings	0	1	2	3	4	5	6	7	8	9	10	11	12	13	Total
Total	746	13.56	20.94	19.06	17.85	13.02	7.11	3.89	2.15	1.07	0.27	0.54	0.27	0.13	0.13	100.00
Monopoly	68	7.35	23.53	22.06	8.82	16.18	13.24	2.94	1.47	1.47		1.47			1.47	100.00
Mix	296	11.49	17.57	19.26	15.88	16.22	9.46	5.41	2.36	1.35	0.34		0.34	0.34		100.00
Competition	319	16.35	22.96	16.67	22.33	9.12	5.03	3.46	1.57	0.94	0.31	0.94	0.31			100.00

Figure 6.15: Frequency of Director Positioning at Blockholder Number 2001

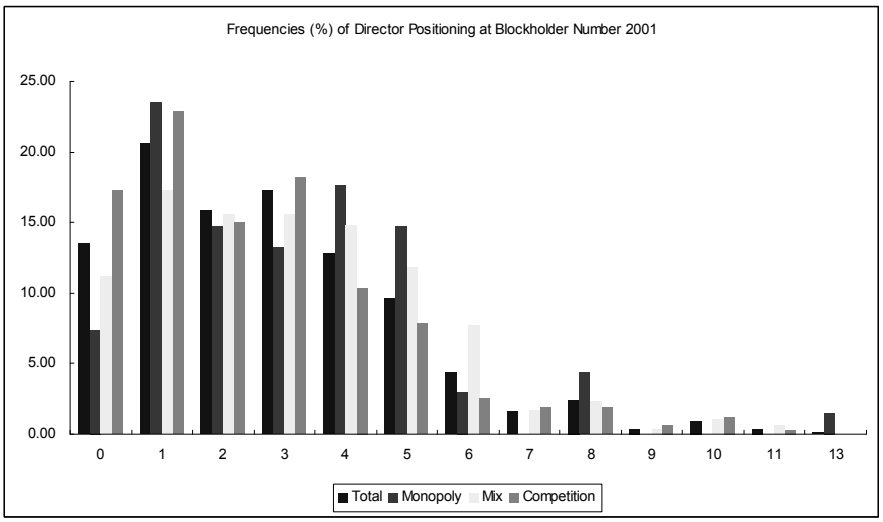


Figure 6.16: Frequency of Director Positioning at Blockholder Number 2002

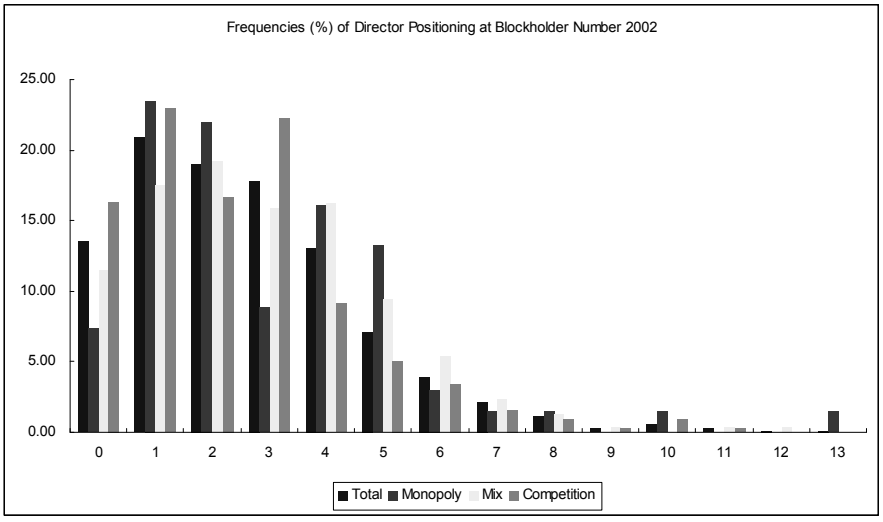


Table 6.067: Director Positioning at Blockholder Proportion 2001

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.30	0.28	0.23	0.00	1.00
Monopoly	68	0.33	0.33	0.23	0.00	0.89
Mix	296	0.34	0.33	0.24	0.00	1.00
Competition	319	0.27	0.23	0.22	0.00	1.00

Table 6.068: Director Positioning at Blockholder Proportion 2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.26	0.23	0.19	0.00	0.89
Monopoly	68	0.27	0.23	0.18	0.00	0.70
Mix	296	0.29	0.27	0.20	0.00	0.89
Competition	319	0.24	0.22	0.19	0.00	0.83

Table 6.069: Director Positioning at Blockholder Proportion 2001-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.28	0.26	0.20	0.00	0.89
Monopoly	68	0.30	0.28	0.20	0.00	0.79
Mix	296	0.31	0.29	0.21	0.00	0.89
Competition	319	0.26	0.24	0.20	0.00	0.86

Female Directors

Chinese listed firms have very few women directors sitting in the board. On average, each board has less than one female director (See Tables 6.071-6.074). Barely half of all the boards have no women director at all (See Tables 6.075-6.077, Figures 6.17-6.19). However, listed firms in the Competition cluster are more likely to welcome women in the board: On average, each listed firm in the Competition cluster has one female director, whilst the number of female directors in the monopolistic listed firms is only 0.66 (See Table 6.074). About 10% of all directors in our smaple listed firms are females (Tables 6.078-6.081).

Table 6.070: Female Director Number 2000

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.86	1.00	1.06	0.00	7.00
Monopoly	68	0.60	0.50	0.67	0.00	2.00
Mix	296	0.63	0.00	0.87	0.00	4.00
Competition	319	1.09	1.00	1.21	0.00	7.00

Table 6.071: Female Director Number 2001

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.83	1.00	1.02	0.00	7.00
Monopoly	68	0.60	0.00	0.72	0.00	3.00
Mix	296	0.63	0.00	0.87	0.00	4.00
Competition	319	1.04	1.00	1.15	0.00	7.00

Table 6.072: Female Director Number 2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.90	1.00	1.03	0.00	7.00
Monopoly	68	0.78	1.00	0.88	0.00	3.00
Mix	296	0.72	0.00	0.89	0.00	5.00
Competition	319	1.09	1.00	1.14	0.00	7.00

Table 6.073: Female Director Number 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.86	0.67	0.94	0.00	6.33
Monopoly	68	0.66	0.50	0.69	0.00	2.67
Mix	296	0.66	0.33	0.79	0.00	4.00
Competition	319	1.07	1.00	1.06	0.00	6.33

Table 6.074: Frequency Statistics Female Director Number 2000

Industry	Listings	0	1	2	3	4	5	6	7	Total
Total	746	46.65	32.57	13.54	4.42	1.88	0.67	0.13	0.13	100.00
Monopoly	68	50.00	39.71	10.29						100.00
Mix	296	56.76	28.04	11.49	2.70	1.01				100.00
Competition	319	37.62	34.80	15.99	6.90	2.51	1.57	0.31	0.31	100.00

Table 6.075: Frequency Statistics Female Director Number 2001

Industry	Listings	0	1	2	3	4	5	6	7	Total
Total	746	47.32	32.57	12.73	5.36	1.47	0.27	0.13	0.13	100.00
Monopoly	68	51.47	38.24	8.82	1.47					100.00
Mix	296	56.76	28.72	9.80	4.05	0.68				100.00
Competition	319	38.56	35.42	15.05	7.52	2.19	0.63	0.31	0.31	100.00

Table 6.076: Frequency Statistics Female Director Number 2002

Industry	Listings	0	1	2	3	4	5	6	7	Total
Total	746	41.96	37.00	13.14	5.76	1.34	0.54	0.13	0.13	100.00
Monopoly	68	45.59	36.76	11.76	5.88					100.00
Mix	296	50.34	33.78	11.15	3.72	0.68	0.34			100.00
Competition	319	33.86	40.44	15.05	6.90	2.19	0.94	0.31	0.31	100.00

Figure 6.17: Frequency of Female Director Number 2000

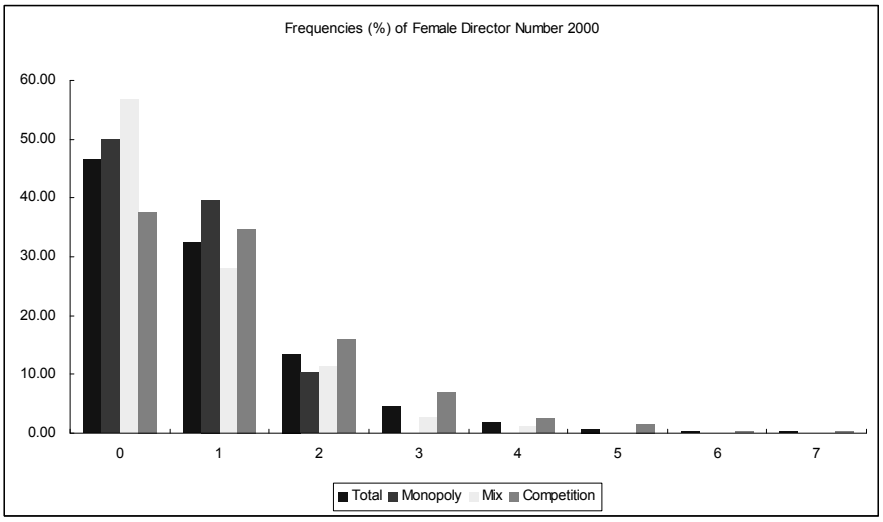


Figure 6.18: Frequency of Female Director Number 2001

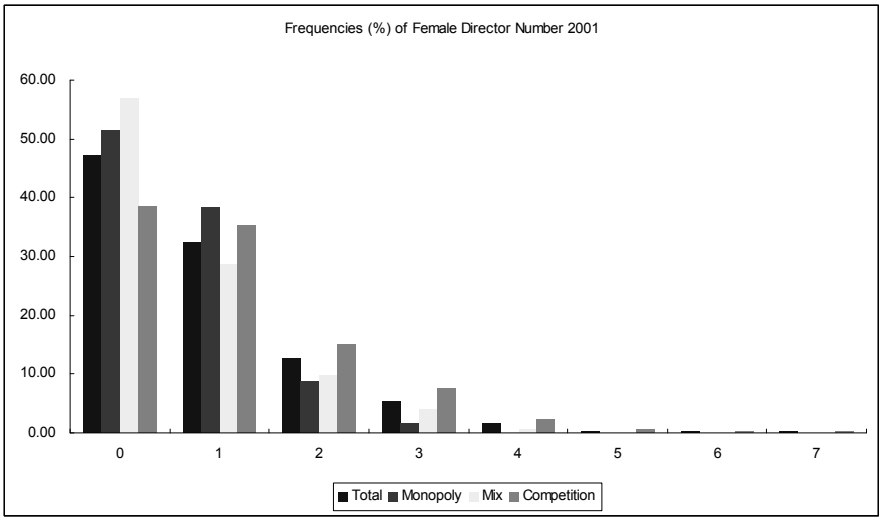


Figure 6.19: Frequency of Female Director Number 2002

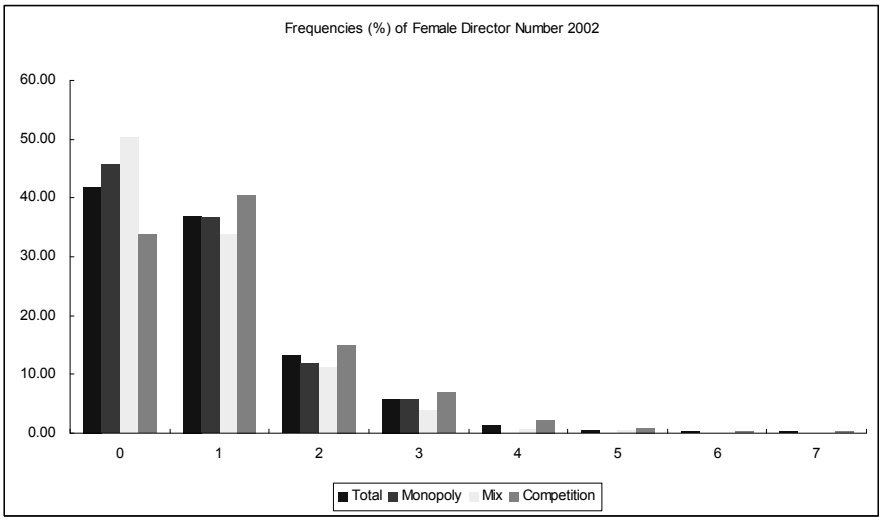


Table 6.077: Female Director Proportion 2000

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.09	0.08	0.11	0.00	0.64
Monopoly	68	0.07	0.04	0.08	0.00	0.25
Mix	296	0.07	0.00	0.09	0.00	0.50
Competition	319	0.11	0.11	0.12	0.00	0.64

Table 6.078: Female Director Proportion 2001

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.09	0.08	0.11	0.00	0.64
Monopoly	68	0.07	0.00	0.08	0.00	0.33
Mix	296	0.07	0.00	0.10	0.00	0.60
Competition	319	0.11	0.11	0.12	0.00	0.64

Table 6.079: Female Director Proportion 2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.09	0.09	0.10	0.00	0.57
Monopoly	68	0.08	0.07	0.09	0.00	0.33
Mix	296	0.07	0.00	0.09	0.00	0.44
Competition	319	0.11	0.11	0.11	0.00	0.57

Table 6.080: Female Director Proportion 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.09	0.07	0.10	0.00	0.58
Monopoly	68	0.07	0.05	0.08	0.00	0.29
Mix	296	0.07	0.04	0.08	0.00	0.43
Competition	319	0.11	0.10	0.11	0.00	0.58

CEO/Chair Duality 2000

In about 90% of all the sample listed firms, the CEO and the board chair positions are separately held by two persons (See Tables 6.082-6.085). The proportion is higher in the Monopoly cluster than in the Competition cluster (See ibid.), suggesting that non-state-controlled listed firms are more likely to integrate the two positions into one.

Table 6.081: CEO/Chair Duality 2000

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.85	1.00	0.36	0.00	1.00
Monopoly	68	0.94	1.00	0.24	0.00	1.00
Mix	296	0.88	1.00	0.32	0.00	1.00
Competition	319	0.82	1.00	0.39	0.00	1.00

Table 6.082: CEO/Chair Duality 2001

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.88	1.00	0.32	0.00	1.00
Monopoly	68	0.93	1.00	0.26	0.00	1.00
Mix	296	0.91	1.00	0.29	0.00	1.00
Competition	319	0.86	1.00	0.35	0.00	1.00

Table 6.083: CEO/Chair Duality 2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.90	1.00	0.30	0.00	1.00
Monopoly	68	0.96	1.00	0.21	0.00	1.00
Mix	296	0.93	1.00	0.26	0.00	1.00
Competition	319	0.88	1.00	0.33	0.00	1.00

Table 6.084: CEO/Chair Duality 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.88	1.00	0.29	0.00	1.00
Monopoly	68	0.94	1.00	0.22	0.00	1.00
Mix	296	0.91	1.00	0.25	0.00	1.00
Competition	319	0.85	1.00	0.31	0.00	1.00

Supervisory Board Size

On average, about 4.3 supervisors are conducting the supervising function in a Chinese listed firm (See Tables 6.086-6.089). Listed firms in the Monopoly cluster tend to have more supervisors than those in the Competition cluster do. Usually, the listed firms have three or five supervisors (See Tables 6.090-6.092, Figures 6.20-6.22). This setup comes from Article 52 of China's Company Law 1993 which stipulates that "A limited liability company with a relatively large-scale business shall have a supervisory board composed of no less than three members" (CLPRC, Article 52). The listed firms in the Monopoly cluster tend to have more supervisors than those in the Competition cluster do (See Tables 6.090-6.092). The reason could be that the monopolistic firms are much bigger and hire more employees including supervisors.

Table 6.085: Supervisory Board Size 2000

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	4.34	5.00	1.40	2.00	13.00
Monopoly	68	4.66	5.00	1.42	3.00	9.00
Mix	296	4.47	5.00	1.44	2.00	13.00
Competition	319	4.17	4.00	1.36	2.00	9.00

Table 6.086: Supervisory Board Size 2001

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	4.37	5.00	1.39	2.00	11.00
Monopoly	68	4.87	5.00	1.39	3.00	9.00
Mix	296	4.50	5.00	1.49	2.00	11.00
Competition	319	4.17	4.00	1.30	2.00	9.00

Table 6.087: Supervisory Board Size 2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	4.32	5.00	1.37	2.00	10.00
Monopoly	68	4.85	5.00	1.41	3.00	9.00
Mix	296	4.40	5.00	1.40	2.00	10.00
Competition	319	4.17	4.00	1.35	2.00	9.00

Table 6.088: Supervisory Board Size 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	4.34	4.67	1.32	2.33	9.33
Monopoly	68	4.79	5.00	1.34	3.00	9.00
Mix	296	4.45	5.00	1.35	2.67	9.33
Competition	319	4.17	4.33	1.28	2.33	9.00

Table 6.089: Frequency Statistics Supervisory Board Size 2000

Industry	Listings	2	3	4	5	6	7	8	9	11	13	Total
Total	746	0.54	41.42	4.69	42.76	2.55	6.17	0.40	1.21	0.13	0.13	100.00
Monopoly	68		30.88	8.82	39.71	7.35	11.76		1.47			100.00
Mix	296	0.34	37.16	3.72	46.96	3.04	7.09	0.34	0.68	0.34	0.34	100.00
Competition	319	0.94	47.34	5.33	37.93	1.25	5.02	0.63	1.57			100.00

Table 6.090: Frequency Statistics Supervisory Board Size 2001

Industry	Listings	2	3	4	5	6	7	8	9	10	11	Total
Total	746	0.54	40.62	4.16	43.70	2.01	6.97	0.80	0.80	0.27	0.13	100.00
Monopoly	68		25.00	5.88	44.12	10.29	13.24		1.47			100.00
Mix	296	0.34	38.18	3.38	45.27	1.35	8.45	1.35	0.68	0.68	0.34	100.00
Competition	319	0.94	45.77	5.02	40.75	0.94	5.02	0.63	0.94			100.00

Table 6.091: Frequency Statistics Supervisory Board Size 2002

Industry	Listings	2	3	4	5	6	7	8	9	10	Total
Total	746	0.40	42.76	4.02	42.36	2.28	6.17	0.54	1.34	0.13	100.00
Monopoly	68		26.47	4.41	44.12	10.29	13.24		1.47		100.00
Mix	296	0.34	40.20	3.38	44.93	2.03	6.76	0.68	1.35	0.34	100.00
Competition	319	0.31	48.28	4.08	39.50	0.94	4.70	0.63	1.57		100.00

Figure 6.20: Frequency of Supervisory Board Size 2000

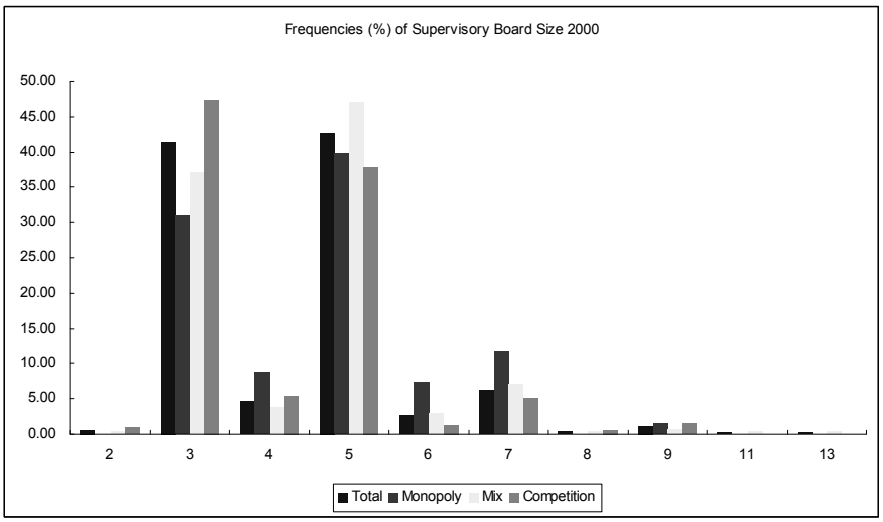


Figure 6.21: Frequency of Supervisory Board Size 2001

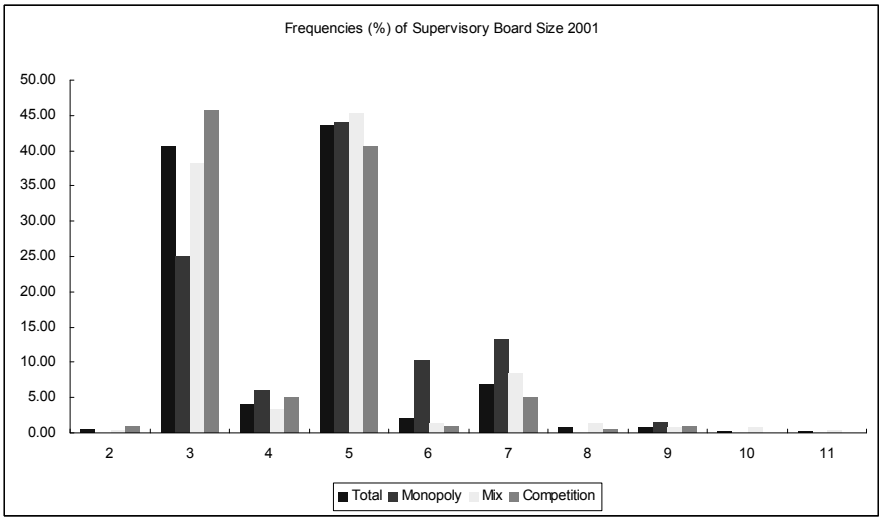
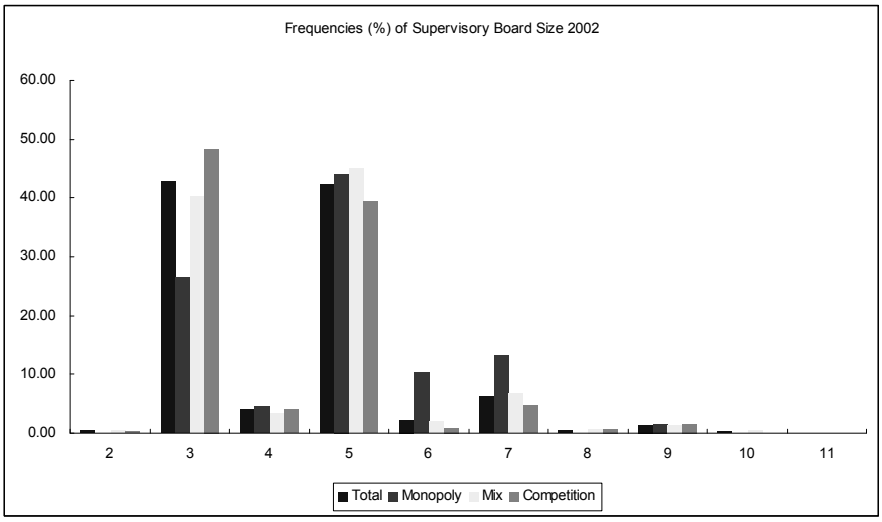


Figure 6.22: Frequency of Supervisory Board Size 2002



Supervisor/Director Ratio (S/D Ratio)

In our sample listed firms, the size of the supervisory board is nearly half of the size of board of directors (See Tables 6.093-6.096).

Table 6.092: Supervisor/Director Ratio 2000

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.48	0.45	0.16	0.16	1.20
Monopoly	68	0.51	0.50	0.17	0.23	1.00
Mix	296	0.49	0.45	0.16	0.18	1.20
Competition	319	0.46	0.43	0.16	0.16	1.00

Table 6.093: Supervisor/Director Ratio 2001

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.48	0.45	0.16	0.16	1.40
Monopoly	68	0.53	0.56	0.18	0.23	1.00
Mix	296	0.49	0.45	0.17	0.18	1.40
Competition	319	0.47	0.43	0.16	0.16	1.00

Table 6.094: Supervisor/Director Ratio 2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.44	0.43	0.14	0.16	1.00
Monopoly	68	0.47	0.45	0.14	0.20	0.83
Mix	296	0.45	0.45	0.14	0.18	1.00
Competition	319	0.43	0.43	0.14	0.16	1.00

Table 6.095: Supervisor/Director Ratio 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.47	0.45	0.14	0.16	1.20
Monopoly	68	0.51	0.50	0.15	0.22	0.90
Mix	296	0.48	0.45	0.14	0.18	1.20
Competition	319	0.45	0.43	0.14	0.16	0.94

Female Supervisors

Similar to the situation of female directors, Chinese listed firms generally have approximately only one female supervisor on average (See Tables 6.097-6.100, Figures 6.23-6.25), while listed firms in the Competition cluster are likely to employ a few more female supervisors (See ibid.). The listed firms have mostly one or two female supervisors, if they have any (See Tables 6.101-6.103, Figures 6.23-6.25). The female supervisor proportion is a bit more than 1/5 (See Tables 6.106-6.107). Since listed firms in the Competition cluster have more female supervisors, the proportion of them is higher than in the Monopoly cluster (See ibid.).

Table 6.096: Female Supervisor Number 2000

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.94	1.00	1.04	0.00	9.00
Monopoly	68	0.84	1.00	0.89	0.00	3.00
Mix	296	0.74	1.00	0.85	0.00	4.00
Competition	319	1.17	1.00	1.18	0.00	9.00

Table 6.097: Female Supervisor Number 2001

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.95	1.00	1.04	0.00	9.00
Monopoly	68	0.88	1.00	0.99	0.00	4.00
Mix	296	0.75	1.00	0.87	0.00	4.00
Competition	319	1.16	1.00	1.16	0.00	9.00

Table 6.098: Female Supervisor Number 2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.96	1.00	1.03	0.00	9.00
Monopoly	68	0.91	1.00	0.96	0.00	4.00
Mix	296	0.76	1.00	0.86	0.00	5.00
Competition	319	1.13	1.00	1.15	0.00	9.00

Table 6.099: Female Supervisor Number 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.95	1.00	0.96	0.00	9.00
Monopoly	68	0.88	1.00	0.89	0.00	3.33
Mix	296	0.75	0.67	0.78	0.00	3.67
Competition	319	1.15	1.00	1.09	0.00	9.00

Table 6.100: Frequency Statistics Female Supervisor Number 2000

Industry	Listings	0	1	2	3	4	6	9	Total
Total	746	40.48	35.66	16.35	5.23	2.01	0.13	0.13	100.00
Monopoly	68	44.12	32.35	19.12	4.41				100.00
Mix	296	47.97	34.80	13.51	3.04	0.68			100.00
Competition	319	32.29	37.30	18.50	7.52	3.76	0.31	0.31	100.00

Table 6.101: Frequency Statistics Female Supervisor Number 2001

Industry	Listings	0	1	2	3	4	5	9	Total
Total	746	39.14	37.94	15.15	5.09	2.28	0.27	0.13	100.00
Monopoly	68	42.65	36.76	11.76	7.35	1.47			100.00
Mix	296	46.62	37.50	11.15	3.72	1.01			100.00
Competition	319	31.35	38.56	19.75	5.96	3.45	0.63	0.31	100.00

Table 6.102: Frequency Statistics Female Supervisor Number 2002

Industry	Listings	0	1	2	3	4	5	7	9	Total
Total	746	37.80	39.68	14.88	5.63	1.47	0.27	0.13	0.13	100.00
Monopoly	68	39.71	38.24	14.71	5.88	1.47				100.00
Mix	296	45.27	38.51	12.16	3.38	0.34	0.34			100.00
Competition	319	31.35	40.44	17.87	7.21	2.19	0.31	0.31	0.31	100.00

Figure 6.23: Frequency of Female Supervisor Number 2000

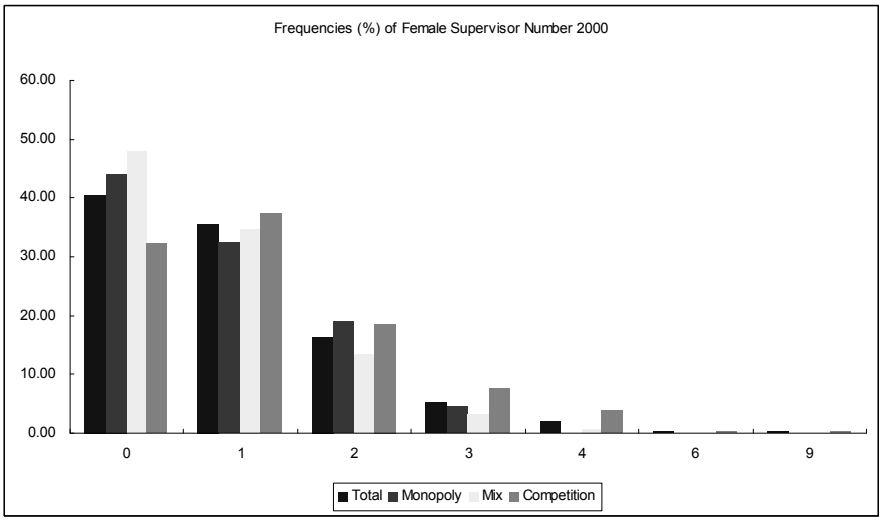


Figure 6.24: Frequency of Female Supervisor Number 2001

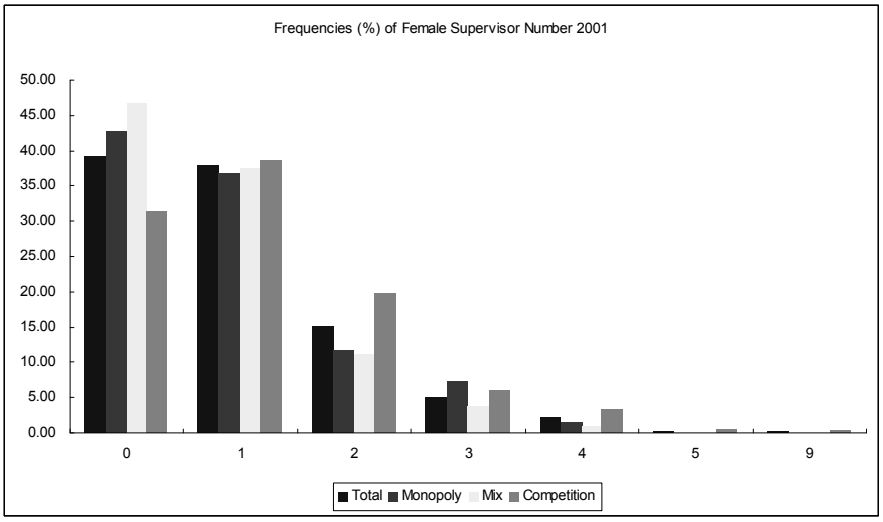


Figure 6.25: Frequency of Female Supervisor Number 2002

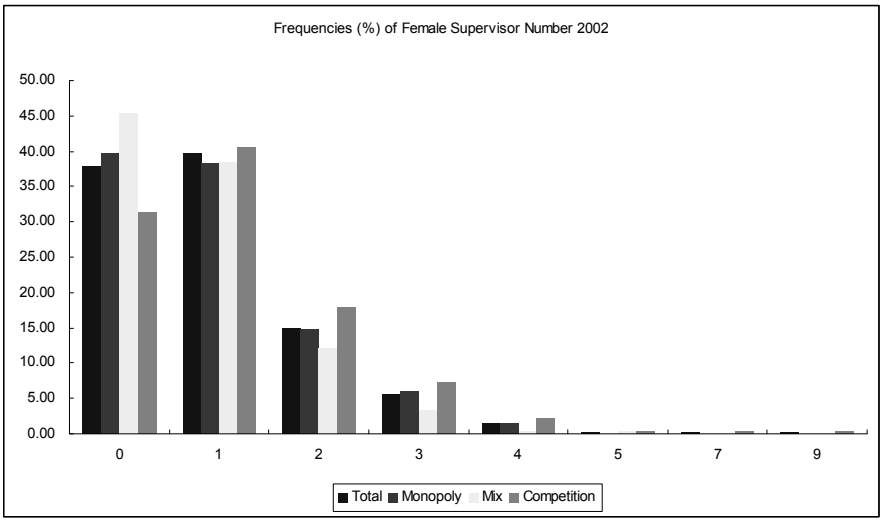


Table 6.103: Female Supervisor Proportion 2000

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.22	0.20	0.25	0.00	3.00
Monopoly	68	0.18	0.20	0.19	0.00	0.67
Mix	296	0.17	0.17	0.19	0.00	0.80
Competition	319	0.28	0.29	0.29	0.00	3.00

Table 6.104: Female Supervisor Proportion 2001

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.22	0.20	0.24	0.00	3.00
Monopoly	68	0.18	0.20	0.20	0.00	0.67
Mix	296	0.16	0.18	0.18	0.00	0.80
Competition	319	0.27	0.25	0.28	0.00	3.00

Table 6.105: Female Supervisor Proportion 2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.23	0.20	0.25	0.00	3.00
Monopoly	68	0.19	0.20	0.19	0.00	0.67
Mix	296	0.18	0.20	0.20	0.00	1.00
Competition	319	0.27	0.20	0.28	0.00	3.00

Table 6.106: Female Supervisor Proportion 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.22	0.20	0.23	0.00	3.00
Monopoly	68	0.19	0.14	0.18	0.00	0.67
Mix	296	0.17	0.14	0.17	0.00	0.78
Competition	319	0.27	0.23	0.27	0.00	3.00

B) Regression Models

Since the two variables Blockholder B and Blockholding have significant impact on a listed firm's market value (See 4.a.C), we add them to regression models as complementary control variables. The regression models of the board of directors and the supervisory board are as follows:

Model Board of Directors

$$Q_i = \beta_0 + \beta_1 BlockholderB_i + \beta_2 Blockholding_i + \beta_3 DBoardSize_i + \beta_4 CEO/ChairDuality_i + \beta_5 Independent\_proportion_i + \beta_6 Executive\_proportion_i + \beta_7 DPAB\_proportion_i + \beta_8 Female\_D\_proportion_i + \beta_9 ROA_i + \beta_{10} Debt_i + \beta_{11} Growth_i + \beta_{12} Size_i + \varepsilon_i \quad (6.14)$$

Model Supervisory Board

$$Q_i = \beta_0 + \beta_1 BlockholderB_i + \beta_2 Blockholding_i + \beta_3 SupervisoryBoardSize_i + \beta_4 S/D\_Ratio_i + \beta_5 Female\_S\_proportion_i + \beta_6 ROA_i + \beta_7 Debt_i + \beta_8 Growth_i + \beta_9 Size_i + \varepsilon_i \quad (6.15)$$

C) Regression Results

Other variables controlled, tables 6.108-6.110 represent the results of the regressions on blockholding variables.

First, the size of the board of directors and the size of the supervisory board might have no impact on a listed firm's market value (See Tables 6.109 and 6.110). The rationale could be that the quality instead of the number of board members is decisive for the boards' impacts on a listed firm's value. Yet the results are not significant.

Second, as we expect in the hypotheses, the proportion of independent directors and the proportion of directors positioning at the blockholder (DPAB) might be me-

chanisms which positively affect a listed firm's market value (See Table 6.109), while the S/D ratio might have a negative impact on a listed firm's market value (See Table 6.110). Again, these results are not significant.

Third, to our big surprise, the female proportion of directors does not have a neutral, but a significantly negative impact on a listed firm's market value (See Table 6.109). Especially for the listed firms in the Competition cluster which actually have more women directors, the coefficient is even higher (See ibid.). Similarly, the female proportion of the supervisory board might have a negative influence on a listed firm's market value as well, although this result is not significant (See Table 6.110). As previously mentioned, the link between gender diversity and firm value is not explainable or predictable by the current theoretical framework, and there is only very limited empirical work on this topic. The regression result, however, provides new evidence on the impact of female directorship on a firm's value which differs from that documented by Carter et al. (2003). We would argue that the negative impact of female directorship could be attributed to the educational disadvantages for females born before 1979, the year in which the one-child policy was enacted. Suppose that a girl was born before 1979 in China and she was as clever as her elder brothers and sisters. In this situation, the odds that she went to college when she grew up was quite low. One reason is that during the plan economy phase, most of the Chinese families could not afford several college students who practically only expended and did not earn their families any income. If the family could only afford one college student, the parents would prefer sending a boy instead of a girl to college, for sons had been regarded as familial hares. Another reason is that the entrance examination for colleges ceased during the Cultural Revolution (1966-1976) and was not relaunched until 1977, which made it more impossible for women born before 1979 to have best education. In comparison, a girl who came into the world after 1979 is the one and only child in the family and would be supported by the whole family to study at college. Since female directors currently sitting in a board of the listed firms are very likely to have been born before 1979, the average qualification of this generation could be seen as poor due to educational disadvantages. We expect that female directorship would not have a negative impact on listed firms' market value, for the younger generations will not have educational disadvantages anymore. However, we believe that the phenomenon needs more research work.

Table 6.107: Regression Results of Model Board of Directors

	Listings	(Constant)	ROA	Debt	Growth	Size	Blockholder B	Blockholding
Total	746	2.775	0.776	-0.381	-0.018	-0.424	0.135	-0.506
(Sig.)		0.000	0.030	0.000	0.252	0.000	0.000	0.000
Monopoly	68	2.011	0.734	0.122	0.033	-0.392	0.087	-0.312
(Sig.)		0.000	0.550	0.703	0.908	0.000	0.584	0.327
Mix	296	2.640	-0.051	-0.388	0.130	-0.439	0.228	-0.124
(Sig.)		0.000	0.910	0.006	0.005	0.000	0.000	0.366
Competition	319	2.948	0.803	-0.391	-0.029	-0.431	0.063	-0.623
(Sig.)		0.000	0.182	0.016	0.103	0.000	0.235	0.000

Table 6.108: Regression Results of Model Board of Directors (Continuation)

	D Board Size	CEO/Chair Duality	Independent Proportion	Executive Proportion	DPAB Proportion	Female Proportion	Adjusted R^2
Total	0.004	-0.007	0.426	-0.075	0.083	-0.467	0.508
(Sig.)	0.564	0.884	0.090	0.547	0.290	0.002	
Monopoly	0.024	0.026	1.628	0.237	0.143	-0.450	0.483
(Sig.)	0.199	0.899	0.103	0.551	0.568	0.438	
Mix	0.001	-0.021	0.331	-0.266	0.114	-0.350	0.605
(Sig.)	0.874	0.796	0.325	0.091	0.269	0.124	
Competition	0.004	-0.036	0.180	-0.037	0.071	-0.805	0.489
(Sig.)	0.645	0.615	0.645	0.857	0.569	0.000	

Table 6.109: Regression Results of Model Supervisory Board

	Listings	(Constant)	ROA	Debt	Growth	Size	Blockholder B	Blockholding	Supervisory Board Size	S/D Ratio	Female Proportion	Adjusted R^2
Total	746	2.870	0.861	-0.377	-0.018	-0.412	0.132	-0.465	-0.008	-0.116	-0.115	0.504
(Sig.)		0.000	0.016	0.000	0.255	0.000	0.000	0.000	0.615	0.391	0.060	
Monopoly	68	2.500	0.938	0.216	-0.055	-0.350	0.055	-0.169	0.007	-0.392	-0.392	0.511
(Sig.)		0.000	0.413	0.457	0.837	0.000	0.714	0.505	0.855	0.239	0.090	
Mix	296	2.594	0.076	-0.419	0.130	-0.425	0.236	-0.097	0.006	-0.072	-0.077	0.599
(Sig.)		0.000	0.868	0.003	0.005	0.000	0.000	0.458	0.751	0.702	0.488	
Competition	319	2.988	0.982	-0.381	-0.026	-0.427	0.062	-0.554	-0.011	-0.083	-0.208	0.479
(Sig.)		0.000	0.105	0.018	0.147	0.000	0.255	0.000	0.638	0.697	0.011	

c) Executive Compensation

A) Description of Variables

In alignment with Chinese listed firms' annual reports, we count directors, the management and supervisors to a firm's executives. We define remuneration and shareholding as part of the compensation package for the executives. Although the CEO Turnover is not a certain payment for the CEO, we regard it as an incentive tool which has similar functions as the executive compensation does. Hereby, we include CEO turnover in this point.

Unlike in the former points, we employ here only the average data. There are two reasons. On one hand, Chinese listed firms did not publish detailed compensation information until 2001. Therefore, only the 2001 and 2002 data are available in the annual reports of the listed firms. On the other hand, compensation can be very fluctuate from year to year due to fluctuations in a firm's own business operation or in factors (e.g. policies by the government, demand by consumers) that can affect the whole industry.

On average, a Chinese listed firm in our total sample pays about one million RMB to all its executives (See Table 6.111). The firms in the Competition cluster pay more to their executives than those in the Monopoly cluster do (See ibid.). Comparably, total of the three highest remunerations for directors, managers, and supervisors are higher in the Competition cluster than in the Monopoly cluster as well (See Tables 6.112 and 6.118). The rationale behind this could be that there exists a professional manager market for listed firms in the Competition cluster where they have to pay a higher compensation to compete for qualified executives on the job market. The appointment of executives in the Monopoly cluster, however, is more or less influenced by the political functions that also tend to restrict compensation packages in SOEs.

In our total sample, 45% of all non-independent directors are not paid by the listed firms (See Table 4.113). This is comprehensible, for 28% of all the directors already hold a position at the blockholder (See former sections), the rest could come from other bigger shareholders. 38% of all supervisors are not paid by the listed firms (See Table 6.120). Similarly, these non-paid supervisors come from the blockholder or other bigger shareholders.

With regard to shareholding by the executives, each listed firm has about 3.6 directors who own the firm's shares (See Table 6.114). That is about 38% of all directors (Table 6.115). But the shareholding by the executives is quite low in China. All directors possess 0.028% of all the shares issued by the listed firms in our total sample, whilst all the managers and supervisors own 0.014% and 0.007%, respectively. That the executives own very limited shares of the firms they serve is because equity incentives have been rarely used by Chinese listed firms. It was not until 2008 that the Sate-owned Assets Supervision and Administration Commission of the State Council

(SASAC) issued the first document to regulate equity incentives of state-controlled listed firms (SASAC 2008).

On average, each listed firm in our total sample experiences 0.29 CEO Turnover in a year (See Table 6.117). That means, approximately, a Chinese listed firm will have a new CEO every three years. As shown in Table 6.117, listed firms in the Monopoly cluster have less often CEO Turnover than those in the Competition cluster do. This difference could be rooted in the different competition environments for the two clusters. Those monopolistic firms enjoy more comfortable market environments and do not need to often reorganize the management, while the listed firms in the competitive industries would have to frequently adjust the management to new market situations.

Annual reports 2001 and 2002 of the listed firms in our sample also provide information on how much salary the most paid three directors and three managers earn. The former earn about 0.33 million RMB, whereas the latter are paid 0.35 million RMB (See Tables 6.112 and 6.118). Considering that salary levels differ from industry to industry, we employ in the regressions data which are obtained by dividing original data through the industry average.

Table 6.110: Total Remuneration (Mio. RMB) of Boards and Management 2001-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.96	0.71	0.84	0.10	7.06
Monopoly	68	0.97	0.69	0.72	0.16	3.70
Mix	296	0.78	0.57	0.67	0.10	4.89
Competition	319	1.11	0.80	0.98	0.13	7.06

Table 6.111: Total of Highest 3 Director Remunerations (Mio. RMB) 2001-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.33	0.24	0.31	0.00	2.62
Monopoly	68	0.30	0.22	0.22	0.04	0.97
Mix	296	0.26	0.17	0.28	0.00	2.62
Competition	319	0.38	0.28	0.34	0.00	2.15

Table 6.112: Non-Paid (Non-Independent) Director Proportion 2001-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.45	0.46	0.26	0.00	1.33
Monopoly	68	0.46	0.52	0.29	0.00	0.97
Mix	296	0.45	0.44	0.27	0.00	1.23
Competition	319	0.45	0.46	0.25	0.00	1.07

Table 6.113: Director Shareholder Number 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	3.63	3.33	2.80	0.00	13.67
Monopoly	68	3.73	4.00	2.64	0.00	10.33
Mix	296	3.97	3.67	2.95	0.00	13.67
Competition	319	3.40	3.00	2.70	0.00	11.00

Table 6.114: Director Shareholder Proportion 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.38	0.37	0.27	0.00	1.00
Monopoly	68	0.38	0.36	0.26	0.00	0.90
Mix	296	0.42	0.41	0.29	0.00	0.96
Competition	319	0.35	0.36	0.26	0.00	1.00

Table 6.115: Director Shareholding Proportion 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.00028	0.00011	0.00075	0.00000	0.01261
Monopoly	68	0.00015	0.00009	0.00019	0.00000	0.00102
Mix	296	0.00020	0.00009	0.00034	0.00000	0.00228
Competition	319	0.00034	0.00014	0.00080	0.00000	0.00714

Table 6.116: CEO Turnover 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.29	0.33	0.25	0.00	1.00
Monopoly	68	0.22	0.33	0.23	0.00	0.67
Mix	296	0.30	0.33	0.24	0.00	1.00
Competition	319	0.30	0.33	0.25	0.00	1.00

Table 6.117: Total of Highest 3 Manager Remunerations (Mio. RMB) 2001-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.35	0.26	0.31	0.02	2.50
Monopoly	68	0.36	0.30	0.28	0.05	1.74
Mix	296	0.27	0.19	0.28	0.02	2.50
Competition	319	0.40	0.30	0.33	0.03	2.15

Table 6.118: Manager Shareholding Proportion 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.00014	0.00004	0.00035	0.00000	0.00434
Monopoly	68	0.00009	0.00003	0.00014	0.00000	0.00083
Mix	296	0.00011	0.00004	0.00022	0.00000	0.00209
Competition	319	0.00017	0.00005	0.00044	0.00000	0.00434

Table 6.119: Non-Paid Supervisor Proportion 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.38	0.40	0.27	0.00	1.44
Monopoly	68	0.41	0.45	0.27	0.00	1.00
Mix	296	0.39	0.40	0.27	0.00	1.44
Competition	319	0.37	0.33	0.27	0.00	1.00

Table 6.120: Supervisor Shareholding Proportion 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.00007	0.00003	0.00016	0.00000	0.00238
Monopoly	68	0.00005	0.00002	0.00007	0.00000	0.00031
Mix	296	0.00005	0.00003	0.00009	0.00000	0.00093
Competition	319	0.00008	0.00003	0.00020	0.00000	0.00238

B) Regression Models

We build up three regression models to test how the disclosed compensation packages for directors, managers, and supervisors influence the listed firms' market value, respectively.

Model Director Compensation:

$$Q_i = \beta_0 + \beta_1 BlockholderB_i + \beta_2 Blockholding_i + \beta_3 Adjusted\_H3D_i + \beta_4 Non\_Paid\_D\_proportion_i + \beta_5 D\_Shareholder\_proportion_i + \beta_6 D\_Shareholding\_proportion_i + \beta_7 ROA_i + \beta_8 Debt_i + \beta_9 Growth_i + \beta_{10} Size_i + \varepsilon_i \quad (6.16)$$

Model Management Compensation:

$$Q_i = \beta_0 + \beta_1 BlockholderB_i + \beta_2 Blockholding_i + \beta_3 CEO\_Turnover_i + \beta_4 Adjusted\_H3M_i + \beta_5 M\_Shareholding\_proportion_i + \beta_6 ROA_i + \beta_7 Debt_i + \beta_8 Growth_i + \beta_9 Size_i + \varepsilon_i \quad (6.17)$$

Model Supervisor Compensation:

$$Q_i = \beta_0 + \beta_1 BlockholderB_i + \beta_2 Blockholding_i + \beta_3 Non\_Paid\_S\_proportion_i + \beta_4 S\_Shareholding\_proportion_i + \beta_7 ROA_i + \beta_8 Debt_i + \beta_9 Growth_i + \beta_{10} Size_i + \varepsilon_i \quad (6.18)$$

C) Regression Results

Fist, Higher executive compensation in form of remuneration and shareholding might have a negative impact on a listed firm's market value, while non-paid director and supervisor proportions might have a positive impact (See Tables 6.122-6.125). As we have expected in the hypotheses, the stock market seems to worry about too much pay for the executives which could militate against the interests of shareholders. However, these results are not significant. The reason could be that the compensation packages for executives were generally low in our observation period.

Second, CEO turnover might negatively affect a listed firm's market value (See Table 6.124). As we have explained in the hypotheses, higher CEO turnover frequency is a symbol of instability of a listed firm and could lower its market value. Again, this result is not significant.

Table 6.121: Regression Results of Model Director Compensation

	Listings	(Constant)	ROA	Debt	Growth	Size	Blockholder B	Blockholding
Total	746	2.739	0.899	-0.388	-0.020	-0.404	0.141	-0.450
(Sig.)		0.000	0.014	0.000	0.207	0.000	0.000	0.000
Monopoly	68	2.273	0.777	0.214	-0.047	-0.382	0.093	-0.118
(Sig.)		0.000	0.561	0.484	0.870	0.000	0.564	0.665
Mix	296	2.552	0.165	-0.402	0.128	-0.419	0.241	-0.116
(Sig.)		0.000	0.725	0.005	0.006	0.000	0.000	0.375
Competition	319	2.819	1.112	-0.404	-0.030	-0.412	0.068	-0.540
(Sig.)		0.000	0.075	0.013	0.102	0.000	0.217	0.000

Table 6.122 Regression Results of Model Director Compensation (Continuation):

	Adjusted H3D	Non-Paid D Proportion	D Shareholder Proportion	D Shareholdinging Proportion	Adjusted R^2
Total	-0.035	0.030	-0.052	-6.055	0.500
(Sig.)	0.510	0.597	0.351	0.759	
Monopoly	0.204	0.063	0.160	-141.326	0.465
(Sig.)	0.370	0.688	0.442	0.625	
Mix	-0.067	0.052	-0.013	-45.845	0.600
(Sig.)	0.380	0.488	0.859	0.446	
Competition	-0.025	0.074	-0.125	5.205	0.469
(Sig.)	0.746	0.444	0.183	0.859	

Table 6.123: Regression Results of Model Management Compensation

	Listings	(Constant)	ROA	Debt	Growth	Size	Blockholder B	Blockholding	CEO Turnover	Adjusted H3M	M Shareholdinging Proportion	Adjusted R^2
Total	746	2.745	0.891	-0.381	-0.018	-0.406	0.147	-0.466	-0.015	-0.044	-3.301	0.500
(Sig.)		0.000	0.015	0.000	0.273	0.000	0.000	0.000	0.795	0.405	0.938	
Monopoly	68	2.332	0.635	0.143	-0.068	-0.362	0.101	-0.120	-0.037	0.171	-65.673	0.472
(Sig.)		0.000	0.644	0.656	0.810	0.000	0.517	0.660	0.856	0.332	0.830	
Mix	296	2.616	0.123	-0.408	0.135	-0.422	0.243	-0.144	-0.068	-0.024	-120.829	0.601
(Sig.)		0.000	0.793	0.004	0.004	0.000	0.000	0.278	0.406	0.755	0.180	
Competition	319	2.782	1.007	-0.414	-0.027	-0.410	0.092	-0.545	0.062	-0.058	32.589	0.468
(Sig.)		0.000	0.107	0.012	0.144	0.000	0.086	0.000	0.503	0.464	0.536	

Table 6.124: Regression Results of Model Supervisor Compensation

	Listings	(Constant)	ROA	Debt	Growth	Size	Blockholder B	Blockholding	Non-Paid S Proportion	S Shareholdinging Proportion	Adjusted R^2
Total	746	2.745	0.844	-0.388	-0.020	-0.410	0.143	-0.462	0.036	-47.057	0.500
Sig.		0.000	0.018	0.000	0.226	0.000	0.000	0.000	0.492	0.595	
Monopoly	68	2.173	1.264	0.211	-0.028	-0.356	0.096	-0.138	0.169	50.442	0.483
Sig.		0.000	0.286	0.476	0.923	0.000	0.535	0.595	0.265	0.933	
Mix	296	2.602	0.098	-0.427	0.131	-0.422	0.226	-0.120	-0.018	-184.565	0.600
Sig.		0.000	0.830	0.002	0.005	0.000	0.000	0.351	0.798	0.381	
Competition	319	2.821	0.980	-0.403	-0.029	-0.422	0.081	-0.565	0.071	-0.832	0.469
Sig.		0.000	0.114	0.013	0.115	0.000	0.140	0.000	0.396	0.994	

d) Overall Corporate Governance Rating

A) Description of the Rating Index

By far, we have done a series of regressions to examine the correlation between single corporate governance mechanisms and a listed firm's market value. As shown by the regression results in the previous points, large part of the corporate governance mechanisms is not significantly correlated with a firm's market value. These mechanisms appear not to draw much attention from the investors. But this does not necessarily mean that these mechanisms are not effective at all. We believe that such minor mechanisms can still contribute to a cumulative impact on a listed firm's market value.

Based on our hypotheses on the link between corporate governance and a Chinese listed firm's market value (See Section 2 of this chapter) as well as empirical results in this chapter, we develop an index of corporate governance mechanisms to rate the overall corporate governance quality of a listed firm in China.

Table 6.126 presents the 21 mechanisms in our corporate governance index for Chinese listed firms. Since the corporate governance literature does not document which mechanism is more important than the others are, we give for each of the first 20 mechanisms an equal full note of 0.05. The last mechanism, blockholder change, is an extra component of the index which is given a full note of 0.02. We do this, because block change might have a positive impact on the market value those listed firms that have experienced it, but does not mean the other firms without it should have a worse governance performance. Therefore, we give firms with a blockholder change in our observation period only a plus note of 0.02.

The impacts of single corporate governance mechanisms accord with our hypotheses except for the female proportion in the board of directors and the supervisory board. Although we are neutral on women directorship and have no doubt that women directors can do an excellent job in listed firms, we accept the fact that China's stock market might dislike female directors, at least in our observation period.

For mechanisms that might have a positive impact on a listed firm's market value, we multiply the mechanism value by 0.05 to obtain the mechanism score. For mechanisms that might be negatively linked to a listed firm's market value, we utilize the scoring formula (1-value)*0.05.

Table 6.125: Corporate Governance Index for Chinese listed firms

Corporate Governance Mechanisms	Impact (+ for positive, - for negative)	Scoring Formula
Blockholder B	+	value*0.05
Blockholding	-	(1- value)*0.05
Shareholding2-10	+	value*0.05
Liquidity	+	value*0.05
CEO/Chair Duality	+	value*0.05
Independent Director Proportion	+	value*0.05
Executive Director Proportion	-	(1- value)*0.05
Director Positioning at Blockholder Proportion	+	value*0.05
Female Director Proportion	-	(1- value)*0.05
S/D Board Ratio	-	(1- value)*0.05
Female Supervisor Proportion	-	(1- value)*0.05
Adjusted H3D	-	(1- value)*0.05
Non-Paid Director Proportion	+	value*0.05
Director Shareholder Proportion	-	(1- value)*0.05
Director Shareholding Proportion	-	(1- value)*0.05
CEO Turnover	-	(1- value)*0.05
Adjusted H3M	-	(1- value)*0.05
Management Shareholding Proportion	-	(1- value)*0.05
Non-Paid Supervisor Proportion	+	value*0.05
Supervisor Shareholding Proportion	-	(1- value)*0.05
Blockholder Change (PLUS)	+	0.01 or 0 for none

Lastly, we sum up the scores for each single mechanism to obtain a corporate governance rating for the listed firms. As Table 6.126 shows, corporate governance ratings of Chinese listed firms are nearly the same. On average, listed firms have a score between 0.62 and 0.63, which does not differ much from cluster to cluster.

Table 6.126: Corporate Governance Rating 2000-2002

Industry	Listings	Mean	Median	S.D.	Min.	Max.
Total	746	0.627	0.625	0.061	0.405	0.814
Monopoly	68	0.627	0.627	0.051	0.484	0.771
Mix	296	0.624	0.621	0.053	0.405	0.785
Competition	319	0.625	0.623	0.068	0.443	0.814

B) Regression Models

We build up three regression models to test the link between the corporate governance rating and market value of a listed firm in the same period, the first year after the period as well as the second year after the period.

Models Rating to Tobin's Q:

$$Q_{i\_00-02} = \beta_0 + \beta_1 Rating_{i\_00-02} + \beta_2 ROA_{i\_00-02} + \beta_3 Debt_{i\_00-02} + \beta_4 Growth_{i\_00-02} + \beta_5 Size_{i\_00-02} + \varepsilon_i \quad (6.19)$$

$$Q_{i\_2003} = \beta_0 + \beta_1 Rating_{i\_00-02} + \beta_2 ROA_{i\_2003} + \beta_3 Debt_{i\_2003} + \beta_4 Growth_{i\_2003} + \beta_5 Size_{i\_2003} + \varepsilon_i \quad (6.20)$$

$$Q_{i\_2004} = \beta_0 + \beta_1 Rating_{i\_00-02} + \beta_2 ROA_{i\_2004} + \beta_3 Debt_{i\_2004} + \beta_4 Growth_{i\_2004} + \beta_5 Size_{i\_2004} + \varepsilon_i \quad (6.21)$$

C) Regression Results

First, the overall corporate governance rating has a positive impact on a Chinese listed firm in our sample. For our total sample, the coefficient amounts to 1.532 and is significant on the 0.001 level (See Table 6.127), which means that an improvement of 1% in overall corporate governance could lead to 1.5% higher market value. This result suggests that investors at China's stock market might not care about a listed firm's corporate governance performance in single mechanisms, but they do pay attention to the overall corporate governance quality.

Second, the positive link between overall corporate governance rating and a listed firm's market value is significant for the Competition cluster, but not significant for the Monopoly cluster. In the regression results for the Competition cluster, the coefficient is even higher than in the results for the total sample, whereas the coefficient is much lower in the regression results for the Monopoly cluster (See ibid.). It suggests that better corporate governance performance in competitive industries receives endorsement from China's stock market, in form of a higher valuation. In contrast, the stock market participants seem not to pay much attention to the corporate governance performance of monopolistic firms. The rationale behind this could be that competitive firms seriously improve their corporate governance to enhance the firm value and attractiveness for investors. Monopolistic firms, however, comfortably enjoy their monopoly positions and do not really have any incentives to better their corporate governance.

Third, other variables controlled, ratings of China's listed firms in a certain period (2000-2002 in our example) are positively linked to the their market value in the next year. Although the coefficient decreases by half (See Table 6.128), this result is still significant. But in two years, the ratings do not have a significantly positive influence on the listed firms' market value any more. It suggests that listed firms with a better

corporate governance performance tend to have a lasting higher market value, but only in the short run.

Table 6.127: Rating to Tobin's Q 2000-2002

	Listings	(Constant)	ROA	Debt	Growth	Size	Rating	Adjusted R^2
Total	746	1.574	0.900	-0.299	-0.020	-0.414	1.532	0.488
Sig.		0.000	0.013	0.003	0.213	0.000	0.000	
Monopoly	68	1.620	1.281	0.234	-0.034	-0.351	0.852	0.499
Sig.		0.007	0.257	0.412	0.899	0.000	0.300	
Mix	296	1.700	0.180	-0.378	0.125	-0.423	1.329	0.589
Sig.		0.000	0.695	0.008	0.007	0.000	0.000	
Competition	319	1.587	1.048	-0.380	-0.031	-0.413	1.585	0.470
Sig.		0.000	0.085	0.019	0.091	0.000	0.000	

Table 6.128: Rating to Tobin's Q 2003

	Listings	(Constant)	ROA	Debt	Growth	Size	Rating	Adjusted R^2
Total	746	1.213	0.252	-0.461	-0.001	-0.184	0.732	0.241
Sig.		0.000	0.345	0.000	0.853	0.000	0.001	
Monopoly	68	1.002	1.282	0.000	-0.011	-0.152	0.767	0.237
Sig.		0.047	0.068	1.000	0.820	0.000	0.287	
Mix	296	1.318	0.904	-0.264	-0.038	-0.196	0.423	0.342
Sig.		0.000	0.004	0.010	0.002	0.000	0.144	
Competition	319	1.264	-0.201	-0.474	0.000	-0.221	0.802	0.225
Sig.		0.000	0.698	0.002	0.943	0.000	0.038	

Table 6.129: Rating to Tobin's Q 2004

	Listings	(Constant)	ROA	Debt	Growth	Size	Rating	Adjusted R^2
Total	746	1.197	0.476	-0.424	-0.005	-0.123	0.270	0.235
Sig.		0.000	0.009	0.000	0.001	0.000	0.109	
Monopoly	68	0.859	1.847	-0.028	-0.027	-0.121	0.618	0.229
Sig.		0.054	0.007	0.867	0.500	0.000	0.331	
Mix	296	1.153	0.576	-0.289	-0.004	-0.141	0.264	0.281
Sig.		0.000	0.040	0.001	0.000	0.000	0.312	
Competition	319	1.265	0.122	-0.419	-0.036	-0.123	0.154	0.209
Sig.		0.000	0.626	0.000	0.217	0.000	0.519	

5. Conclusions

Using a sample of 746 Chinese listed firms, we have done a series of linear regressions on the links of single corporate governance mechanisms and overall corporate governance performance to listed firms' market value. The conclusions we draw from the regression results are as follows.

First, among all the single corporate governance mechanisms, we find that blockholding variables can evidently influence listed firms' market value. Stock market investors in China care much more about the blockholder nature, blockholding, liquidity of shares, and blockholder change than other corporate governance mechanisms. Chinese stock investors prefer listed firms with a non-state blockholder, lower blockholding, more tradable shares, and blockholder changes and tend to give these firms a premium in their stock valuation. The rationale behind this is that smaller shareholders wish to have more control rights through higher shareholding so as to protect their own interests. Our empirical evidence reveals the fact that from the perspective of investors, the key issue of China's corporate governance is the highly concentrated ownership by the state and SOEs.

Second, gender diversity in the board of directors significantly influences listed firms' market value. More precisely, the proportion of women directors in the board is negatively associated to the listed firms' market value. To our knowledge, ours is the very first empirical evidence on the negative link between female directorship and listed firms' market value. We trace this back to the once educational disadvantages for women of the elder generations. However, we expect that such a negative link will not exist in the coming future. As the more younger female directors will sit in the boards of Chinese listed firms, the educational disadvantages will disappear.

Third, overall corporate governance performance, as measured with our rating index, has a strong impact on the listed firms' market value. Although most of the single corporate governance mechanisms are not significantly correlated to the market value of listed firms, our empirical evidence shows that they do contribute to a cumulative impact on it. We also document evidence that the overall corporate governance performance of a period (2000-2002 in our research) is positively correlated to a listed firm's market value in the next year. However, this correlation does not apply for the year after the next. These findings support the conclusion that it may make sense to invest in listed firms with better corporate governance.

Fourth, impacts of corporate governance mechanisms on listed firms' market value are not significantly positive in monopolistic industries but in competitive industries. While single corporate governance mechanisms such as blockholding, liquidity, and blockholder change are significantly correlated to the market value of listed firms in competitive industries, they have no significant impact on the market value of monopolistic firms. A more important finding is that whereas the overall corporate governance performance, as measured by our rating index, of firms in monopolistic industries is even better that in other industries, it is not significantly correlated to

firms' market value. One may conclude that corporate governance in monopolistic industries in China is rather decorative than effective.

VII. Summary and Outlook

1. Summary

In the early 1990s, China's stock market was established to broaden the external financing channels for SOEs. Ever since, it has been booming in respect of listings, market capitalization, and investors. Lately, the long lasting bear market 2000-2005 and a few scandals of Chinese listed firms drew the public's and the government's attention to corporate governance issues. Meanwhile, academic studies on China's corporate governance are emerging rapidly.

This dissertation, with limitations in spectrum though, intends to combine three main research questions of the emerging studies on corporate governance at China's stock market so far:

1. What does corporate governance look like at China's stock market?

2. How have corporate governance practices evolved and what has backed this development?

3. Does corporate governance have an impact on listed firms' valuation in China?

Especially for the second and third research questions, we provide new insights into formal and empirical analyses of corporate governance practices in China.

Compared with the western models, the corporate governance model at China's stock market has weak external mechanisms. On the one hand, the product market and the capital markets are still underdeveloped and therefore providing insufficient market forces to improve listed firms' performance. On the other hand, the shareholder protection in China is strong on paper, but weak in practice, as far as law enforcement is concerned. The internal governance of Chinese listed firms has a two-tier board structure: the board of directors is responsible for important decisions and part of management functions, while the board of supervisors conducts the monitoring of directors and managers. Considering the parallel structure of the internal governance, it is doubtful whether the supervisors can efficiently monitor the directors. In common with the entire financial system, the ownership structure of the Chinese stock market is dominated by the state, who owns a big stake in the listed firms through its central and local asset management agencies or holding SOEs/SOE Groups.

Corporate governance practices at the Chinese stock market have been evolving with the SOE reforms, which have undergone three stages since 1978: the incentive stage (1978-1983), the contracting stage (1984-1992), and the corporatization stage (since 1993). We consider this evolvement as a path-dependent process that is characterized by the state's dominance. The main changes happened in governance practices of Chinese SOEs have not changed the state's dominance in the ownership structure. At the very beginning of China's reform era, this dominance equalized the state's full control over all SOE assets and operations, through various levels of its agencies

though. At the incentive and contracting stages of SOE reforms, the state's dominance or full control remained unchanged in a way that the central government made efforts to enhance management incentives instead of clarifying SOEs' ownership structure. It was not until the corporatization stage that the central government began to deal with the ownership issues. At this current stage, the state's dominance in SOEs lessened, since (1) countless small SOEs were privatized during the restructuring of the state sector, and (2) non-state shareholders have been introduced into the ownership structure of SOEs after their corporatization. New governance bodies such as the board of directors and the board of supervisors were introduced. Nonetheless, the state, owing to its blockholding of shares, still dominates in the operation of those corporatized, big-sized SOEs, which further features the Chinese stock market where most of the listed firms are former SOEs.

Based on the finished and ongoing SOE reform practices, we work out a path-dependence to dig into the deeper reasons why China's stock market is so state-dominant. The state's dominance in the SOE governance was determined as Chinese government chose to start with incremental reforms in the non-state sector instead of restructuring the state sector at the beginning of the reform era. Two radical campaigns, the Great Leap Forward and the Cultural Revolution, had significantly affected this choice. On the one hand, the disasters caused by the two movements taught the Chinese government a bitter lesson that they must be cautious with radical reforms. On the other hand, two waves of decentralization during the two campaigns facilitated local reforms on experimental basis rather than radical reforms of the entire planned economy. Further SOE reforms at contracting and corporatization stages, which led to changes in SOE governance, were largely backed by a learning process during the transition. Experiences gained in successful reforms of the non-state sector, including agriculture, rural industries, and foreign investment, were transplanted into the SOE reforms by the government. Changes and mechanisms, however, have been introduced along the reforming path to enhance the SOE effectiveness rather than to topple down the state's dominance.

By means of linear regression models, we examine the impacts of both single governance mechanisms and the overall governance performance on the listed firms' market value which is measured by Tobin's Q. We also study the link between overall corporate governance performance in the first three years and market value in the following two years. We define and quantify totally 21 single mechanisms within the three scopes of Blockholding, Board Composition, and Executive Incentives. Our sample consists of 746 firms that were listed at the Shanghai or the Shenzhen Stock Exchange over the period from 2000 to 2004.

We contribute to the empirical literature in that we cluster the non-financial industries according to the market competitiveness. Since the state still firmly controls some strategically important industries and has withdrawn to different extent from others, Chinese non-financial industries can be divided into more competitive industries and less competitive ones. Based on the political and market dimensions, we group 19 out of the 21 industries of all the listed firms in our total sample into Monopoly, Mix, and Competition clusters. To our knowledge, this is the first attempt of

clustering industries in the empirical literature on corporate governance. In analyzing the regression results, we mainly compare those of the Monopoly and Competition clusters with each other and with those of the total sample. Given the strong influence of the state in determining governance practices of listed firms, we do not think the endogeneity problem is an important issue and exclude it from our regression models.

As for the scope of Blockholding, we find that the state nature of a blockholder has a negative impact on a firm's market value. The results are significant, when both government and SOE holding companies fall under the state nature. Blockholding is negatively linked to a firm's market valuation, whereas this correlation is inversely U-shaped. The liquidity of a firm, i.e. to which extent its total shares are tradable at the market, is positively associated to Tobin's Q. If a blockholder change happens, the listed firm is significantly higher valued at the stock market.

Although Board Composition variables experience vital changes in our observation period due to the government's efforts to enhance governance qualities of listed firms, most of the variables in this scope do not demonstrate a significant correlation to the market valuation of a firm. It seems that these changes are rather decorative than effective. Nonetheless, we provide very surprising evidence that the female proportion in the board of directors significantly reduces a firm's market value. To our knowledge, this evidence is completely new in corporate governance literature. We attribute this finding to the social situation before the reforming era and the introduction of one-child-policy, where women generally had limited access to good education.

With respect to Executive Incentives, we cannot provide any significant evidence that the remuneration and shareholding of board members and senior managers affect a firm's market value. It might be traced back to the generally low compensations for executives of listed firms in China.

With regard to the influences of single corporate governance mechanisms on listed firms' market value, we find evident differences between the Monopoly and the Competition clusters. The regression results for the Competition cluster report significant links of blockholding, liquidity, blockholder change, and female director proportion to stock value, suggesting that Chinese stock investors recognize the effectiveness of single corporate governance mechanisms in the competitive industries and not in the monopolistic industries. The regressions on overall corporate governance performance show that participants at China's stock market pay a higher price for firms with better corporate governance performance. This positive link is significant for listed firms in the competitive industries but not for those in the monopolistic industries.

We originally conduct the empirical research on the link between corporate governance in a certain time period and stock value in the following years. Our studies document evidence that the 3-year overall corporate governance performance can, to a weaker extent though, foretell the stock valuation in the next year. But for the year after the next, this link is not significant any longer. It suggests that listed firms with better corporate governance performance tend to have a higher valuation in the very near future, provided other conditions do not change.

2. Outlook

Despite our observation period appearing to be somewhat "old", we believe that several conclusions are still a useful reference for researchers as well as investors. For example, we chose this time period due to the non-tradable share reform since 2005. By now, almost all shares of the Chinese listed firms are legally tradable, although there are official limitations for the timing to sell the previous non-tradable shares. Liquid shares, however, does not change the fact that the ownership structure at China's stock market is still highly concentrated. All the disadvantages caused by block-holding, for example expropriation of smaller shareholders, might remain the same as before. Thus, our conclusions on the impact of single corporate governance mechanisms might still provide useful reference despite the non-tradable share reform.

We will keep studying the link between single corporate governance mechanisms and listed firms' market value. As the regulations at China's stock market are becoming stricter and transparency is not only wished by investors but also required by the regulators. We expect that more information will be available for example in listed firms' annual reports, which will facilitate further empirical researches on other corporate governance mechanisms.

In this dissertation, we made the first attempt to examine how different corporate governance as well as its impacts can be in different industries. We have drawn our first conclusions that there exist such differences across industries. Corporate governance seems to function better in the non-state sectors. However, we still believe there can be improvements in the clustering of industries. The industries defined by the CSRC are too simplistic. For example, we cannot groupe firms from the industry of petrolchemicals either of the Monopoly and Competition clusters, because the petrol business is quite monopolistic in China, while the chemicstry branch is free of competition. We believe there is a need to improve the classification of industries. Since more firms have gone public over the past years, we believe that we can still obtain a sample which is, after a finer classification, still big enough for us to do the research work.

So far, we exclude financial firms such as banks, security firms, and insurance companies, from our empirical research. The reason is that financial firms have very different debt structures and business models from the others. But it remains an interesting research question how corporate governance mechanisms affect financial firms' market value. Until end of 2010, 16 banks, 17 security firms, and 3 insurance companies are listed in Shanghai or Shenzhen, which makes empirical researches more feasible than before.

Another interesting research object relates to the family-controlled firms. China's Small & Medium-sized Enterprise Board (SME Board), established in 2004 in Shenzhen currently has more than 1100 listed firms. Since all these firms are from the non-state sector, we believe that corporate governance researches on them will provide different formal and empirical evicence than those on the A-share companies.

List of Abbreviations

ABC	Agricultural Bank of China
bn.	billion
BOC	Bank of China
CBRC	China Banking Regulatory Commission
CCB	China Construction Bank
CEO	Chief executive officer
CFFEX	China Financial Futures Exchange
CNPC	China National Petroleum Corporation
CPC	Communist Party of China
CSRC	China Securities Regulatory Commission
FDI	foreign direct investment
e.g.	exempli gratia
GDP	gross domestic product
GEM	Growth Enterprises Market
GLF	Great Leap Forward
HKD	Hong Kong Dollar
ibid	ibidem
ICBC	Industrial and Commercial Bank of China
IMD	International Institute for Management Development
IPO	initial public offering
LLDPE	linear low-density polyethylene
LLSV	La Porta, Lopez-de-Silanes, Shleifer, and Vishny
m.	million
NBSC	National Bureau of Statistics of China
NPC	National People's Congress
NPL	non-performing loan
NYSE	New York Stock Exchange
OTC	over-the-counter
p.	page
pp.	pages
OECD	Organization for Economic Cooperation and Development
PBOC	People's Bank of China
PRC	People's Republic of China
PTA	purified terephthalic acid
Q	Tobin's Q
QDII	Qualified Domestic Institutional Investor
QFII	Qualified Foreign Institutional Investor
RMB	Renminbi (Chinese currency)
SEZ	Special Economic Zone

SHFE	Shanghai Futures Exchange
SINOPEC	China Petroleum & Chemical Corporation
SME	small and medium-sized enterprises
SSE	Shanghai Stock Exchange
SOE	state-owned enterprise
SZSE	Shenzhen Stock Exchange
T-bond	treasury bond
TVE	Township and Village Enterprise
USD	US Dollar
WEF	World Economic Forum
WTO	World Trade Organization
YGX	Yinguangxia (a listed firm's name)

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