STATE INTERVENTION AND BUSINESS GROUP PERFORMANCE IN CHINA'S TRANSITION ECONOMY

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Dedication

To Karen Chen and my parents

With love

ABSTRACT

Xinxiang Chen
290 words

The issue of effects of state intervention on economic development, especially in transition economy, has long been debated and remains unsettled. Beyond the old free market vis-à-vis state intervention debate, after reviewing related theories, this study examines the contingent nature of state intervention affecting business group performance in the context of transition economy by identifying different modes of state intervention in China's transitional economy. Using the data on China's 76 business groups collected in 2006, and methods such as logistic regression model, OLS regression model, and MIMIC model, the study finds that, at the group level, modes of state intervention have different economic effects on business group performance, depending on the specific modes of intervention and the context of institutional environment in China's transitional economy. Through direct intervention such as ownership and officials and Chinese Communist Party members at the group level, state failed to provide positive economic effects. In other words, these kinds of modes of state interventions make business group perform less well economically in current China's institutional context. However, the result demonstrates the state ability to provide positive economic effects by matching the functional demands of market in the emerging market such as loans from state-controlled banks as financial support. The interaction effects of party control and financial support further confirms that, with the increase of financial support from the state, high party control dramatically reduces the probability of high group performance comparing with how party control. My study contributes to the business group literature by offering a contingency perspective on how modes of state intervention affect economic performance in a specific institutional context such as China's transitional economy, moving beyond the debate between political economy perspective and developmental state theory of political sociologists and economic sociologists.

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CHAPTER ONE

INTRODUCTION

1.1 The Issue and Purpose

The issue of effects of state intervention on economic development, especially in transition economy, has long been debated and remains unsettled. The very fact that different modes of state intervention in a specific institutional context may result in different economic consequences, however, makes the relations of state intervention and its effects on economic performance complex. How and why, then, do state intervention in varying modes match the specific institutional context and improve economic performance?

The purpose of my thesis is to go beyond the old free market vis-à-vis state intervention debate and to derive a theory of state intervention in economic development with special application to Chinese business groups in the transition economy. According to the National Statistics Bureau of China (NSBC), a business group consists of legally independent entities that are partly or wholly owned by a parent firm and registered as affiliated firms of that parent firm. The State Administration for Industry and Commerce (SAIC) provides a more quantitative definition: to become a business group in China, the core company should have minimum capitalization required 50 million *yuan* (US$6 million, or the register capital of over 50 million yuan) and at least 5 affiliated companies, and the total register capital of the core and other affiliated companies should be over 100 million *yuan* (US$12 million) (Ma and Lu 2005). State intervention in a Chinese business group consists of state shareholding, financial control by a state-owned bank, and assignment of officials and Chinese Communist Party members. Different

modes of intervention in a specific institutional context may lead to different economic consequences. The theory may be generalized to all forms of economic organizations in a transition economy.

1.2 Why China and Business Groups

China's economic miracle has attracted broad reflection on the role of government in promoting transformative economic growth (Amatori 1997; Nee 2000; Nee, Opper and Wong 2007; Oi 1992, 1995; Walder 1995; Peng 2001; Che and Qian 1998). Especially China's contrast with Russia's transition significantly reinforced the important role of the state in the success of China's market transition from a poor agrarian state socialist economy to a dynamic capitalist economy (Burawoy 1996; Stiglitz 2002). "While in 1990 China's gross domestic product (GDP) was 60 percent that of Russia, by the end of the decade the numbers had been reversed. While Russia saw an unprecedented increase in poverty, China saw an unprecedented decrease" (Stiglitz 2002:6). Figure 1.1 demonstrates the contrast in GDP from 1989 through 1997 between China and Russia. Frye and Shleifer (1997), in their three ideal types of the economic role of the state during transition, take the Chinese state-guided economic reform as the role model of a "helping-hand state," comparing with Russia's "grabbing-hand state," and Poland's "invisible hand model."

China's transitional model clearly resembles core features of the developmental state paradigm derived from comparative studies in the development of East Asian Newly Industrialized Countries such as Japan, South Korea, and Taiwan, and other late industrialized countries such as Brazil and India (White and Wade 1988; Wade 1990;

Evans 1989, 1995; Johnson 1982). Instead of arguing "how much" states should intervene, this approach pursues "what kind" (I call it "what mode") of interventions should occur, taking state involvement as a given (Evans 1995). It also separates the desire from the capability of state intervention in economic transformations. Regarding intervention capability as a key factor, the developmental state approach builds on a strong authoritarian national leadership and an elite state bureaucracy.

The case of Japan's post-war economic development has often been taken as the highly visible role model of a successful developmental state. As Johnson (1982, 1995) observed, the Ministry of International Trade and Industry (MITI) intervened both at the firm level and at the level of macroeconomic policy to facilitate Japan's export-driven growth strategy during its post-war economic development. However, the great bubble economy that Japan experienced between 1986 and 1990 challenged this developmental state approach, with some scholars reconceptualizing "the Japanese state that Johnson proposes as the 'model example' of Castell's definition of developmentalism has become largely anti-developmental-retarding growth, fighting vainly against market trends, and acting selfishly to protect its vested interests" (Asher 1996:228). Nee et al. (2007), by examining the involvement of state actors—government and party—in the corporate governance of firms in China, also argued that, because the state is unable to provide positive economic effects through direct intervention at the firm level, then other factors improving economic growth should be found. Therefore, given the complicated state intervention in a developmental state, this theory has to explore which types of government action actually promoted transformative economic growth and how they affect industrial performance (Evans 1989; Wade 1990; Nee et al. 2007).

Exploring these questions may reveal the causal mechanisms of China's economic success. Preliminary to seeking answers for my analytic purposes, state interventions can be categorized as two ideal typical modes: direct and indirect intervention. The former is external restriction by law, regulations, and policy; and the latter direct involvement by state shareholding, assignment of public officials, and control of capital by state-owned banks. External restriction (in other words, the external environment), like public goods for economic development, has to be provided by the state (Olson 2000; Barzel 2002; Fukuyama 2004). During China's reform process, both modes of state intervention occurred. Walder (1995) and Oi (1995), in examining the relation between Chinese local governments and enterprises, argued that local governments as industrial firms overcome Kornai's soft budget constraints[1] --"soft budget constraint" means the refinancing of loss-making firms, and improve growth in output and productivity. This "corporate governance approach," as characterized by Peng (2001), supports direct state intervention, for example, where "government officials can replace the entrepreneur as the mechanism driving improvements in firms' economic performance … when government has clear incentives and the ability to monitor firms and enforce their interests as owners" (Nee et al. 2007:20). Based on their findings, Nee and his colleagues obviously disagreed with this approach and supported the political economy perspective. They argued that positive economic performance derives from the state's "capacity to construct and maintain institutional environments that provide positive incentives to entrepreneurs and managers at the firm level to invest in economic growth" (p. 44), not

[1] Kornai (1986) stressed the critical role of "soft budget constraints" in the former Soviet model: enterprise managers knew that if they ran deficits, the state would lend them the funds necessary to cover the shortfall.

from its direct intervention such as government officials' involvement in monitoring and intervening in corporate decisions.

The question of whether direct state intervention into economic activities has positive effects on the firm's performance is still unresolved. Like Evans (1995), who distinguished between "how much" and "what kind" questions, I argue that the positive or negative effects of direct state intervention on firm's economic performances should be examined by identifying different modes of intervention and their impacts. My basic proposition is that effects of direct state intervention on firm performance depend on both the specific mode of intervention and the state's institutional arrangements. As Evans wrote, "Outcomes depend both on whether the roles fit the context and on how well they are executed" (1995:11). Whenever a specific mode of state intervention fits or matches the functional demands of imperfect markets, the firm performance increases; otherwise, the firm performance decreases. I test this proposition by engaging in a business group-level study of state-guided economic development in China.

Why do I choose Chinese business groups as my research target?

Two main reasons drove me. First, business groups played a critical role and dominated the Chinese economy (Keister 2000; Ma and Lu 2005). By the mid-1990s, only a decade after they began, Chinese business groups had already come to dominate the Chinese transition economy and to play an active role in international trade. By the end of 1999, the number of business groups approved by the state at the provincial and departmental levels was 2,767 and their financial value was 51.3 percent of the combined assets of state-owned and large nonstate-owned enterprises. They currently contributed

approximately 60% of the nation's industrial output (Yiu, Bruton and Lu 2005). As in other late industrialized countries, in applying "borrowed" knowledge from the earlier industrializers to the development of production technology and capital resources, the later industrializers relied upon the intervention of a powerful state (Gerschenkron 1962). Developing business groups is one of the major strategies for Chinese industrialization. Examples of other nations that promoted business group formation for industrial development include Japanese *keiretsu* and Korean *chaebol*. The question of how state intervention affects the formation and development of business groups has previously been explored by many researchers and scholars (Fields 1995; Strachan 1976; Robison 1986; Fligstein 1990; White 1974; Amsden 1989; Keister 1998, 2000; Jones and Sakong 1980; Gerlach 1992a; Johnson 1982; Miyashita and Russell 1994). In late 1992, China's leaders formally endorsed private property rights and initiated ownership reforms in public enterprises. These reform policies, described as "grasp the large and let go of the small" (*zhuadafangxiao*), were reaffirmed during the 15th Congress of the Chinese Communist Party in September 1997 (Chung 2003). So my second reason for analyzing Chinese business groups is that state intervention played a critical role in their development because they received various kinds of government support. In the following section, on the background of Chinese business groups, we can see this point in more detail.

1.3 Background of Chinese Business Groups

In 1978 China's government began to experiment with market-oriented industrial reforms aimed at enhancing the financial performance and efficiency of the nation's enterprises.

Different from their Eastern European and former Soviet-union counterparts, which adopted sudden and drastic reforms to establish Western-style market systems, Chinese reformers took the gradual and often uneven path—growing out of a plan to develop a socialist market economy—to create a capitalist economy with features that are simultaneously market-based and Chinese (Jefferson and Rawski 1994; Naughton 1995). In its reform, the Chinese characteristic was to introduce market reform gradually because the reformers desired to preserve certain socialist ideals, for example, property ownership by the state or state-holding enterprises. With the transfer of responsibility for and control of formerly state-owned firms to managers, managers gained increasing autonomy. Starting in the mid-1980s, reformers also began to allow, and in some cases to encourage, mergers and acquisitions. At the same time, China's reformers also began to encourage the development of intricate webs of complex interactions that resemble those of neighboring Japan and South Korea. The concept of a "business group" appeared in the State Council's official documents for the first time in 1986.

Chinese policy makers studied the *keiretsu* and *chaebol* models during China's market-oriented industrial reform. Following the Japanese state's role in the post-World War II formation of the *keiretsu*, China's state officials began in the mid-1980s to encourage business groups with certain structural features to merge. By the early 1990s, there were more than 7,000 known business groups in China (Reform 1993). By the mid-1990s, only a decade after they began, Chinese business groups had already come to dominate the Chinese economy and play an active role in international trade.

During the early stages of reform, two types of business groups emerged in China. The first type consisted of groups of small, often private firms that resembled the *guanxi*

qiye (related enterprises) of Taiwan (Fields 1995). The second type consisted of groups of large, primarily state-owned firms[2] that resembled the Japanese *keiretsu.*[3] Both types of Chinese business groups formed in all industries and geographical regions (Keister 1998). Through adjustment of structure and combination, by the end of 2000, there were 2,655 Chinese business groups, and the total amount of assets and income respectively at the end of the year 2000 above 500 million *yuan* ($61 million)(China's Economic System Reform Committee, 2002:61-62).

Business groups had a variety of connections to the Chinese state. Some were affiliated with the central government, and some partially owned and controlled by provincial and municipal governments. In 2000, there were 1,735 business groups whose parent companies were state-owned or state-holding company; their total assets were 10,032.1 billion *yuan* ($1,223 billion), accounting for 93.8% of the assets held by all business groups (Bureau of Company Reform of National Economy and Trade Committee 2002). In 2003, the reform of business groups reached a new summit when the State-owned Assets Supervision and Administration Commission of the State Council (SASAC) was established. SASAC took over the supervisory function of all the former industrial ministries and performed its full responsibility as the shareholder of central-level state-owned enterprises. In this study, I view both central government and

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[2] Because to keep the state's ability of control the whole national economy, large firms usually are state-owned, or state holding enterprises.

[3] This is not to imply that there was direct correspondence between the Chinese groups and their Asian counterparts, or that any of the business groups were structurally simple enough to be characterized by a few basic features. In reality, there were considerable differences in structure both within and across national boundaries.

provincial and municipal governments as comprising the Chinese state.[4] Although having learned from Japan's *keiretsu* and Korea's *chaebol*, China's *qiyejituan* (business groups) were different from their counterparts in Japan, Korea, and other countries. Unlike Japan and Korea, China was a transitional economy, moving from a centrally-planed to a marked-based economy. As such, the state/government played and still plays a critical role in the economy. Regarding the complicated relations between state and business groups, my study focuses on direct state interventions into business groups.

1.4 Main Research Questions

For my research purposes, I narrow state intervention down to direct involvement plus one external restriction: property right arrangement (state ownership and mix of state-ownership and private ownership)—a key characteristic of the transition economy. The main research questions are:

In China's transitional economy,

- Does the state (in the Chinese context, I use "state" in the sense of government) make a difference in the economic performance of business groups?
- How do specific modes of direct state intervention affect the performance of business groups?
- Why do different modes of direct state intervention result in opposite economic consequences?

[4] Che and Qian (1998) identified three types of ownership of firms: "private ownership," "local government ownership," and "state ownership" (i.e., national government ownership). In my study, I do not make a distinction between state ownership and local government ownership. Both involve state ownership.

1.5 Overview of the Study

To accommodate the research foci described above, I organized my dissertation chapters in the following sequence. In Chapter Two, I review theories and research on business groups from a broader perspective. After a brief review of business groups concepts, I provide four theoretical perspectives on business groups: transaction cost theory, resource dependence theory, social network perspective, and neoinstitutionalism theory. The focus of Chapter Three is a review of theoretical approaches to state intervention in the transitional economy. Then in Chapter Four, I develop a conceptual framework of the "contingent nature between state and market," and explore modes and timing of state intervention in the economy and its implications for the transitional economy.

Chapter Five discusses my research hypotheses, research methods, and the multiple data sources I used. In Chapter Six, the empirical section tests which modes of direct government intervention yield positive and negative economic performance effects at the business group level. Chapter Seven summarizes and interprets the findings, and discusses their limitations and implications.

CHAPTER TWO

CONCEPTS, THEORIES, AND RESEARCH ON BUSINESS GROUPS

This chapter briefly reviews alternative concepts of business group, and summarizes theoretical and empirical literature on business groups. Four theoretical approaches are reviewed: transaction cost theory, resource dependence theory, social network perspective, and neo-institutionalism theory. Empirical research is divided in two sections: the positive vs. negative effects of business groups on the performance of their member firms, which thereby affect the group's own economic performance.

2.1 Business Groups: A Review of Concepts

What is a business group? What differences are there between business groups and other economic organizations? Answering these questions provides a backdrop for a discussion of Chinese business groups. In this section, I will briefly review alternative concepts of business group and have my own definition of business group to be used in this study.

Business groups had existed a long time before academics began to acknowledge and study them. Business groups were first recognized as a unique organization form in the late 1950s by observers of the Japanese and South Korean economies. However, in pre-war Japan, business groups called *zaibatsu*, or family-centered holding companies, dominated firm activity and the entire Japanese economy. Not until the late 1970s, when South Korean and Japanese business groups began to make their presence more apparent internationally, did academics begin to acknowledge and study business groups. As a matter of fact, business groups were common in both developed and developing

economies.

The earlier studies of business groups can give us a little bit of help in defining them. For example, Strachan (1976, 1979), one of the first researchers to acknowledge the existence and potential economic impact of business groups, identified three primary characteristics distinguishing the groups from similar organizational forms: diversity of activities, diversity of members, and a fiduciary atmosphere. The first criterion is that the business group's member firms (the set of members) must be involved in several economic activities, usually in more than one industry. In his study of Nicaraguan business groups, Strachan used this point to distinguish a *grupo* (a fully developed business group) from a *grupito* (a business group in formation, which he refered to as an emerging group). Strachan's second criterion is the variety of members: entrepreneurs and other business people with diverse interests and potential contributions. While a single firm or family may dominate the group, the business group is much more than a single firm and its subsidiaries. Each member firm has its unique capabilities and contributes in some way to the identity of the group and to the group's ability to achieve its common goals. The third criterion distinguishing business groups is a fiduciary atmosphere: the relations among member firms are characterized by loyalty and trust. This means that a business group is more than a group of firms with economic connections; social connections, trust and other relations are also included.

Recent studies of business groups conceived broadly follow Coase's transaction cost theory. Granovetter (1994; 1995) explored the concept of business groups as broadly viewed by scholars and researchers in this field. For Granovetter, the question of business groups is about the Coase question revisited. The answer for Coase's question, "why do

firms exist?", led to transaction cost theory and the emergence of neo-institutional economics. The reason why firms exist is that there are costs of using the pricing mechanism by individuals in a market, which are true for firms as well as for inter-organizational relations (and for business groups in particular; Granovetter 1994). Contrary to the myth of neoclassical economics -- the notion that economic agents are independent of one another -- both individuals and firms cannot be understood independently of their ties to other agents. According to Granovetter (1995), in every economy firms do not conduct business as insolated units. Rather, through repeated exchanges or more formal agreements, firms frequently enter into inter-firm alliances and conduct business as part of a group. Transaction cost theory seeks to draw economically efficient boundaries between an organization (hierarchy) and its environment (market). Then what does Granovetter mean by business groups? "A business group is a collection of firms bound together in some formal and/or informal ways", or in other words, through repeated transactions and by factors such as political party, kinship, geographic region, and/or other reasons (Granovetter 1994: 454). In this sense, a set of firms that are bound together merely by short-term strategic alliances is excluded; and so is a set of firms legally consolidated into a single one.

This definition is somewhat arbitrary. Let's understand it by comparing American-style conglomerates with other conglomerates, such as the Korean *chaebol*. While *chaebol* have varied stability and coherence, individual companies continuing to keep some separate identity are features of the profile of such business groups. American-style conglomerates are inherently unstable, as they eliminate the identity of the core firm as a sovereign actor, opening the way for shareholders and raiders to disassemble the parts

(Davis, Diekmann and Tinsley 1994). By contrast, other conglomerates, such as the Korean *chaebol*, are quite stable and fit the profile of a business group because they are the outcome of investments by a single family or a small number of allied families that, once having acquired the component companies, keep them together as a coherent group among which personal and resources may be shifted as needed (Steers, Shin, and Ungson 1989). Yet the individual companies continue to keep some separate identity. Although a marginal case, holding companies and trusts are also included in Granovetter's definition of business groups "where their constituent firms keep their own management and identity," but exclude "those firms whose components have become nothing more than units of the parent company and have lost the character of a federation" (Granovetter 1994:454-455). Stable cartels are classified as business groups but trade associations are excluded because "their activity has to do less with operations and more with negotiating and affecting the institutional and governance arrangements under which their industry proceeds" (Granovetter 1994:455). In Granovetter's concept, "many business groups are stable but quite loose coalitions of firms that have no legal status and in which no single firm or individual holds controlling interests in the other firms" (455). Many such groups operate in the middle range of coalitions and federations.

Applying Granovetter's definition, the business group is a widespread phenomenon. Those groups are known in many countries under various names, including: the old *zaibatsu* and their modern successors, the *keiretsu*,[5] in Japan; the *chaebol* in Korea; the

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[5] According to *Beyond the Firm: Business Groups in International and Historical Perspective* (Shiba and Shimotani 1997), there are three types or levels of Japanese interfirm relations called "keiretsu". One is the corporate complex that consists of loosely bound groups of huge companies from different industries (including major banks); the second is the pyramid-structured corporate groups with a major firm at the head of a large body of subsidiaries and affiliates; and

grupos económicos in Latin America; the "twenty-two families" of Pakistan; and so on.

Within Granovetter's tradition, Keister regarded business groups as "a particular type of inter-corporate alliance" and defined the business groups as "coalitions of firms bound together by varying degrees of legal and social connection that persist beyond the interactions required by short-term economic exchange" (Keister 2000:26). Moreover, she previously defined business groups as "coalitions of firms, bound together by varying degrees of legal and social connection, that transact in several markets under the control of a dominant, or core, firm" (Keister 1998:405). As Keister (2000:27-28) mentioned that, while a universally accepted business group definition is lacking, the groups share several characteristics: (1) typically alliances of firms that transact in several markets rather than focusing on a single product or market; (2) legally defined and recognized by national authorities as independent legal entities, or existing without legal recognition; (3) likely to be controlled by a dominant individual, family, or firm and to have a unified management; (4) member firms, by definition, are independent economic decision-making units; (5) usually connected through a variety of social, legal, and economic ties, typically, interlocking directorates reflecting ownership relations among firms in the group; and (6) long-term economic exchanges.

Because Keister came to her definition for studying Chinese business groups and her definition fits my study, in this paper, I follow Keister's definition of business group. As a particular type of inter-firm alliance, business groups are operationally defined as coalitions of firms that are legally independent decision-making units, bound together by

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the third is a subcontractor-type assembler-supplier relations. Even using the same word "keiretsu," in different contexts and for different audiences may be different. I use it here more similar to the second type meaning, but at the same time, not strictly excluding other types.

varying degrees of legal and social connections, that transact in several markets under the control of a dominant, or core, firm, and that persist beyond the interactions required by short-term economic exchanges. My definition includes most of the characteristics analyzed above, and this set of characteristics provides us a useful tool for distinguishing business groups from other organizational forms.

2.2 Four Theoretical Perspectives on Business Groups

Existing literature provides rich descriptions of business groups in various contexts (Amsden 1989; Fields 1995; Gerlach 1992b), but it has largely been limited by data unavailability to speculation about their performance implications (Aoki 1982; Hamilton and Biggart 1988; Steers, Shin, and Ungson 1989). Several theoretical perspectives seek to explain the performance of business groups. I briefly review four: transaction cost theory, resource dependence theory, social network perspective, and neo-institutionalism theory. Each approach provides some important elements in accounting for the nature, formation, pattern, and process of business groups, and their consequences for performance.

2.2.1 Transaction cost theory& efficiency analysis

Just as the reason why firms exist is that there are costs of using the pricing mechanism by individuals in a market (Coase 1937), so it is true for firms in inter-organizational relations in general, and in business groups in particular (Grannovetter 1994, 1995). Following Coase's insights into firm existence question, Williamson (1975, 1981, 1985) elaborated a transaction cost economics theory about where firms draw economically

efficient boundaries between an organization (hierarchy) and its environment (market).

Generally, the transaction cost theory tradition emphasizes legal arrangements or formal contracts that can promote market exchange and improve economic efficiency. It also highlights how inter-or intra-organizational governance structure arises from economic exchange in order to offset market uncertainties and opportunism (Williamson 1985). Opportunism is defined as “self-interest seeking with guile” (Williamson 1975:80; 1996:6). According to Williamson (1981, 1985), contractual arrangements in many instances can improve market efficiency because they reduce transaction costs arising from environmental uncertainty and opportunism. Particularly, three conditions encourage businessman to use institutional arrangements (or contracts) instead of pure market exchange: “frequency,” “asset specificity,” and “uncertainty” (Williamson 1985). Among three factors, asset specificity-- the extent to which a party is "tied in" in a two-way or multiple-way business relationship due to specific assets-- is the most important one driving organizational efforts to economize. The greater the asset specificity, the more likely are the parties to “make special efforts to design exchanges with good continuity properties” (Williamson 1981:553). As a result, organizations are effectively locked into prolonged bilateral exchanges.

Williamson built his approach on two simplified assumptions about human behavior (Knoke 2001:61). First, real economic actors have insufficient cognitive capacities to acquire, process, store, and retrieve all the relevant information, even though their best intentions to act rationally. This means that two exchanging parties can never write a perfect “contingent claims contract” that would cover their liabilities in all possible outcomes. The second assumption of transaction cost analysis is that at least some actors

are “given to opportunism” (Williamson 1981:553) because of uncertainty, or in a euphemism, actors have “bounded rationality” (Simon 1947). Because opportunistic actors are tempted to gain advantages by engaging in calculated efforts to mislead, deceive, and confuse their exchange partners, both exchange parties may demand that more explicit safeguards be written into the contract. In order to reduce transaction costs, bounded rational and opportunistic actors seek to build certain governance structures for regulating cooperation and competition among economic units. Therefore, reducing transaction costs provides justification for the emergence and development of business groups.

Then why don’t those firms that engaged in repeated, contract-based transactions of idiosyncratic assets with the same other partner organizations not simply use hierarchical arrangements and thereby save on transaction costs? Powell (1987) argued that a diverse set of business objectives, which require cooperation because of their reciprocal dependencies, are pursued by those firms. I argue that an inter-organizational relation is an economical balance between saving transaction costs and losing autonomy as an independent organization in pursuit of diverse business objectives. Therefore, inter-organizational governance that saves transaction costs is necessary and very important. Jones, Hesterly and Borgatti (1997:918), in their theoretical synthesis of transaction cost and social exchange principles, identified four conditions. These four conditions favor the emergence and flourishing of “network governance” (inter-firm coordination) and related social mechanisms to solve coordination and safeguarding problems. “These conditions are highly uncertain demand coupled with stable supply, customized (asset-specific) exchanges creating dependencies, complex tasks performed under intense time pressures,

and frequent exchanges among network members" (Knoke 2001:158). To some degree, these conditions play a role in the emergence of Chinese business groups.

Based on transaction cost theory, Ring and Van de Ven (1992) provided an abstract/theoretical typology of inter-organizational relations.[6] Considering reliance on trust and contract risk in the market, Ring and Van de Ven (1992) provided four forms of inter-organizational transactions: discrete market transaction, hierarchical managerial transactions, recurrent contracting transactions, and relational contracting transactions. For Ring and Van de Ven, trust refers to "confidence in the other's goodwill," and "a recurring source of risk in all transactions is the need to make decisions in the face of the uncertainty of accomplishing tasks that require sustained cooperation with others, particularly when they represent difficult or novel ventures" (1992:487). Ring and Van de Ven offered several propositions on the possible relationships between degrees of risk, reliance on trust, and the kind of governance structures employed by firms in a transaction. Low risk, low reliance on trust transactions will be governed by markets; high risk, low reliance on trust transactions will be governed by hierarchies; low risk, high reliance on trust transactions will be governed by recurrent contracts; high risk, high reliance on trust transactions will be governed by relational contracts (1992: 490). Following this framework of inter-organizational relations, transactions between firms in the same business group may be lie between those governed by markets and those governed by hierarchies, which is very similar to but not identical with relational-contracting transactions. Although business groups cannot be exactly categorized into any of the preceding four inter-organizational relations, to reduce transaction costs, risks, and

[6] Ring and Van de Ven (1992) also provided an excellent review of the adequacy of the TCE literature in treating those interorganizational relationships.

reliance on trust are also considered fundamental business group attributes.

Theoretically, one of the main critiques of transaction cost theory comes from network analysis, especially from Mark Granovetter. He pointed out that many economists automatically assume that the existing economic institutions are the most efficient ones, because of the long historical experience that agents' rational choices results in saving transaction costs. Transaction cost theory, in this sense, is similar to Darwin's evolutionary theory in explaining that surviving descendants are the fittest species. According to Granovetter, the economic institutions that are around today may have survived because of some historical conjuncture; because they were hooked up to a very powerful network at some crucial time; or for some similar reasons. "Embeddedness" of economic action is the key in his critique (Granovetter 1985).

However, I argue that Granovetter's critiques, of the assumption that the existing economic institutions are the most efficient ones, are actually wrong. In fact, transaction cost economists are very much concerned with social and institutional arrangements (for example, property rights arrangements) in which costs are involved. For example, in the last paragraph of his famous article "The Problem of Social Cost," Coase (1960: 44) wrote: "we have to take into account the costs involved in operating the various social arrangements (whether it be the working of a market or of a government department), as well as the costs involved in moving to a new system. In devising and choosing between social arrangements we should have regard for the total effect. This, above all, is the change in approach which I am advocating." What we need to criticize in transaction cost theory is that economic action is related not only to cost, but other significant factors, such as networks, cultural traditions, and politics. In this broader sense, Granovetter is

right.

Empirically, very few researchers have tested hypotheses about inter-organizational relations and their impact on firm performance from a transaction cost theory perspective. One notable study of alliance formation failed to support its expectations. Zaheer and Venkatraman (1995), using data from a mail survey of 329 independent insurance agencies, tested hypotheses about inter-organizational strategies drawn from transaction cost economics and social exchange perspectives. The results were opposite to the transaction cost hypotheses but consistent with social exchange theory. For example, transaction cost perspectives see business groups—because of their interlocking directorates, a common component of business group structure—as reducing transaction costs by enhancing inter-firm communication, which will improve firm performance. However, empirical studies of the interlocks-profits relationship have been inconclusive (Mizruchi 1996; see also Mizruchi and Galaskiewicz [1993] for an excellent review). Research in the United States has generally failed to find a positive effect of interlocks on firm profits, in part because interlocks often form when a firm is in financial decline (Dooley 1969; Richardson 1987). In contrast, research from countries where financial institutions behave differently than they do in the United States finds a positive interlocks-profits relation (Meeusen and Cuyers 1985). The reason in part why this is the case is that in the United States interlocks often form when a firm is in financial decline. For Chinese business groups, however, interlocks rarely result from financial crisis. Therefore, as Keister's (1998) study revealed, in Chinese business groups, interlocking directorates have a positive effect on firm performance and productivity.

From my analyses above, we can see that, although transaction cost theory provides

a perspective to explain why business groups exist and their impact on firm performance, it is unable by itself to complete this task and is too restricted to specific situations. Furthermore, except for the critique of transaction cost theory from network analysis, if we take resource dependence into account, inter-firm relations may decrease the autonomy of decision-making by individual firms within business groups and thereby increase transaction costs.

2.2.2 Resources dependence theory & strategic analysis

Resource dependence theory shares some ideas with transaction cost perspective in that both of them consider the linkage arising from economic exchange to be a result of corporate actors' self-interest in dealing with uncertain environments (Laumann, Galaskiewicz, and Marsden 1978; Lincoln, Gerlach, and Takahashi 1992). But, departing from transaction cost theory, the resource dependence model puts more emphasis on the importance of access to "critical resources" controlled by other organizations in driving the formation of inter-organizational bonds (Pfeffer and Salancik 1978; Laumann et al. 1978). From a resource based view, Chang and Hong (2000) and Guillén (2000) examined business groups and argued that business groups improve member firms by pooling and distributing heterogeneous resources through diversification. According to Preffer and Salancik (1978), resource exchange has two dimensions: the magnitude of the exchange and its criticality. Criticality measures the ability to survive without the resource. Thus, resource stability is very important and resource variability also affects interdependencies and threatens organizational coalitions.

Pfeffer (1987) stated that organizations are constrained by a network of

interdependencies but managers try to manage this interdependence in an attempt to create favorable external conditions for their organizations. Therefore, intercorporate relations arise from interdependencies and constraints among organizations. In other words, there are different situations in which one organization controls the critical resources or capabilities that are indispensable for another organization, such as money, information, patents and intellectual properties, production and distribution skills, labor and output markets. Therefore, alliance formation occurs more often between complementary firms than between similar firms. These arguments also can contribute to explaining the emergence and development of business groups.

Interdependencies are mutual dependencies that develop to reduce the uncertainty in the relationship. They arise when one organization doesn't control all the resources necessary for a desired action. There are two kinds of interdependence: outcome interdependence (between competitors) and behavior interdependence (between members in a business alliance). The typical solution to problems of outcome interdependence is increased coordination and mutual control over one another's resources (i.e., increasing behavioral interdependence) (Preffer and Salancik 1978). Pfeffer (1992) posited a New Golden Rule: the person with the gold makes the rules. Various resources, including allies, are vitally important as sources of power (Pfeffer 1992). Therefore, organizations that control more vital resources or reduce the most uncertainty often have the most power in a relationship.

The emphasis on power further distinguishes the resource dependence model from transaction cost theory. Some bases for power in terms of resources include possession of the resource, ownership (sometimes less powerful), control of access to a resource,

control of the actual use of the resource, and making the rules that regulate the resources ((Pfeffer and Salancik 1978: Chapter 3). Because of the introduction of power – either from asymmetric resources or from a third party outside of two interdependent organizations—an organization sometimes cannot gain access to the other organizations whose resources it wants the most. For example, in China under state intervention as a third party, some firms can get access to money from state-owned banks much easier than other firms even within the same business group. Although theoretically there is a possibility of equilibrium of power between two organizations because of equal control over resource allocation, equilibrium rarely happens. As a result, in many cases power coming from asymmetric control over resource allocation can clearly explain organizational behavior and performance.

By forming alliances for acquiring critical resources, organizations risk losing their autonomy and independence. "Organizations seek to form that type of interorganizational exchange relationship which involves the least cost to the organization in loss of autonomy and power" (Cook 1977:74). Logically we can infer that, given a set of potential partners, an organization will optimally choose an ally that can meet its resource needs while putting minimal constraint on its discretionary actions.

The networks between organizations are part of their environment that acts as "external control of organization" and "organizational activities and outcomes are accounted for by the context in which the organization is embedded" (Pfeffer and Salancik 1978:39). Laumann et al. defined the environment as an opportunity structure: "a sub-network within which exchange relations tend to be confined as a function of the resources involved, legal or institutional constraints on permitted partner, geographical

proximity, functional similarity, or preexisting organizational overlap"(1978:471). Within any opportunity structure, some actors may have better access to other parts of the complete network. From social network theory, we can see, although resource dependence theory emphasizes the dependence on resources controlled by other organizations, it ignores the resources generated from relations: social capital. Without their social capital relations, many of those resources organizations need would be lost.

Yet, there is one fatal shortcoming of resource dependence: it is probably a tautology. The reason why I regard it as a tautology is that this theory is so extremely generalized that it can't be falsified. The emergence and persistence of any inter-firm relations within business groups might always be explained by resource dependence. As a result, this theory is not refutable by evidence. It only can provide us with a perspective to view inter-organizational relations and from it we cannot develop any testable hypothesis for empirical research either to verify or falsify the theory. Although resource dependence theory has such disadvantages, it is really useful in explaining managers' behavior and decision-making in business groups, such as those business groups in China. Especially in terms of power in this theory, managers have a variety of powers.

2.2.3 Social network theory & social structural approach

Like transaction cost and resource dependence theories, network approaches also admit the importance of resource interdependence and uncertainties for generating institutional arrangements across different organizations (Laumann et al. 1978; Gulati 1999). However, social network theory puts more emphasis on economic actions that are embedded in networks of social relations (Granovetter 1985; Gulati and Gargiulo 1999).

What Granovetter means by “embeddedness” is “that the economic action of individuals as well as larger economic patterns, like the determination of prices and economic institutions, are very importantly affected by networks of social relationships” (Granovetter 1990:100). Moreover, social networks can facilitate firm performance by generating trust from those relations, while at the same time, they also can constrain firm performance. Here I use Lin, Coleman, and Johnson and Knoke’s social capital theories and Burt’s structural hole theory as well to illustrate this point.

Nan Lin (2001a) came up with a structural approach of social capital and built a network theory of social capital (2001b). Lin followed Bourdieu’s lead. Bourdieu (1986:249) defined social capital as “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition—or in other words, to membership in a group—which provides each of its members with the backing of the collectivity-owned capital.” In this approach, the volume of social capital possessed by an ego-actor depends on the number of its direct network connections to alters, and also on the volume of capital—economic, cultural, or symbolic—possessed by all the alters to whom ego is connected. Lin’s theory emphasized ego’s access to others’ resources. Lin (2001b:12) defined social capital as “resources embedded in a social structure which are accessed and/or mobilized in purposive action,” where he defined resources as material or symbolic goods. Lin typically examined how the occupational resources within hierarchical social structures could facilitate ego’s job search (Lin 2001a; see similar research by Flap and Boxman 2001; Renzulli, Aldrich and Moody 2000). In the same vein, but a less common perspective, was a study of the benefits to a corporation that

utilized its employees' social capital to reduce the screening costs in hiring new workers (Fernandez, Castilla and Moore 2000). So far, no study of business groups has used this social capital approach.

In Coleman's (1990:300-21) view, social capital is defined by its function of facilitating certain actions of individuals and collectivities within a social structure. Coleman emphasized obligations and expectations, norms and sanctions, trust, and authority relations that arise from social network connectedness. In this sense, dense, strong ties and network "closure" are important. Closure occurs in a three-actor network when reciprocal ties exist among all three, forming a strong component. When a group of actors is tied only to others in the group, and all ties within the group are characterized by high levels of communication and emotional bonds, social capital, such as trust, norms, and sanctions, is generated from these networks. Following Coleman's approach to social capital, some scholars specifically studied the value of the connectedness between students' parents and teachers in improving students' school performances (Sampson, Morenoff and Earls 1999; McNeal 1999; Coleman 1988).

In addition, some studied the value of this type of social structure in producing greater collective benefits to a local community (Rosenfeld, Messner and Baumer 2001; Putnam 2000; Hagan, MacMillan and Wheaton 1996). Moreover, this form of social structure as social capital within organizations also explain teamwork, higher employee morale, greater job satisfaction (Flap and Volker 2001), stronger organizational commitment, and creative solutions to organizational governance issues (Lazega and Pattison 2001). In terms of social capital from social relations, interfirm relations within business groups may generate social capital, such as trust, norms, and sanctions that

facilitate firm and group performance. And this social capital as resources needed by each firm is not controlled by any individual firm but is the result of interfirm relations. This view remedies the deficiency of resource dependence theory. In resource dependence theory, resource usually means those indispensable resources controlled by others, but does not include those resources generated only from relations with others and which are uncontrolled by each actor alone. For example, trust in a community, essentially reciprocal, cannot be kept by any lone individual.

Ronald Burt (1992:12) defined social capital as both "the resources contacts hold and the structure of contacts in a network.[7]" Ego's network is access to people (who) with resources, while the network is itself a form of social capital (how). Yet, Burt favored "how" and ignored "who." He further developed a concept that he labeled "structural holes" as a measure of an ego actor's social capital. Based on network brokerage ideas, structural holes are the separations between nonredundant contacts that provide ego with access to information and control opportunities because of unique connections not available to others. In this sense, ego's social capital is created by a network structure in which ego can broker new connections between otherwise disconnected alters.

Burt's definition combines access to alters' resources of information and referrals with the social control aspects of certain network structural configurations. His concept of structural holes in a competitive arena is a kind of social structure with rich rewards. Burt's research showed that, as a network configuration, structural holes are not only a kind of relational structure between individuals, through which advantageous conditions

[7] Burt (2005) explored the nature of brokerage and closure and how these elements work together to define social capital.

may contribute to an individual's promotion (Burt 1992: Chap. 4), but are also a relational structure between firms, through which market competitive advantage is promoted for entrepreneurs (Burt 1992: Chap.3). Hargadon and Sutton (1997:716) also found that the primary reason for success of a U.S. product development firm was "technology bordering," obtained by locating near structural holes. However, some studies utilizing Burt's structural holes approach had opposite results. For example, Flap and Volker (2001) found that this type of brokerage structure had negative effects on employee satisfaction. Ahuja's (2000) study of innovation in the chemical industry (measured by patent counts) discovered that having many structural holes was actually associated with a reduced innovation output, but that increased innovation was associated with the high-density ties described by Coleman's approach.

Johnson and Knoke (2004), taking their lead from organizational theories, refined network social capital. They argued that access to resources is the key feature of action within organizational environments, and that the normative aspects of social networks must be considered apart from the concept of social capital. They believed that a component to capture the uncertainty of social relations should be included. That is, the definition of social capital must take into account the probabilistic nature of ego's access to the resources of its alters. Therefore, Johnson and Knoke (2004) defined an *ego's social capital* as "the product of the resources controlled by an alter times the probability that ego could gain access to those resources, summed over all the alters in the ego-network. *Resource* is the total quantity of goods, services, or information sought by ego that all its alters control. The *probability* of access is ego's subjective belief about the likelihood that these alters will make those resources available for ego's use upon request

for assistance."

Coleman's social capital was criticized for his emphasis on closure of networks, because within the same community, people have very similar information and knowledge, while people in different communities will have a diversity of those resources. Therefore, openness of a community in some sense is better for its people than is closure. Keister (2000)'s study of Chinese business groups showed that groups with some firm members who have connections to foreign firms have higher performance than those groups without such connections. Burt's structural hole concept provided another perspective. But it seems to offer little help to my study because most empirical findings showed that structural holes do not necessarily have positive effects on actors. Johnson and Knoke's social capital concept excludes some elements of Coleman's social capital, such as trust and norms. Although they usefully consider the probability of accessing to other's resources, they neglected to note that this probability is the result of social capital and social network in specific context (and is not easily measured). In so doing, social capital becomes a concept of a circular cause-and-effect. Either social networks or social capital work necessarily in any specific context of institutions. For instance, consider the weak-strong tie model in job seeking. According to Granovetter (1973, 1974), job-seekers in the United States used their weak ties effectively. By contrast, in his study of job-seekers under Chinese state planning economy, Bian (1997) argued that strong ties matter more, calling that arrangement "bringing strong ties back in." Therefore, network analysis, as an analytical tool, must be used carefully in specific institutional contexts.

2.2.4 Institutional approach & property right arrangement

Institutional economists of all kinds—old and new—are unanimous in the view that institutions matter. Institutions are typically conceptualized as "the rules of the game in a society" (North 1990:3; Scott 1995). From institutional and neo-institutional perspectives, organizational behaviors and relations are constrained by legal or formal arrangements as well as by cultural and normative forces, including some taken-for-granted characteristics (Jones 1997; North 1986; Powell and DiMaggio 1991; Scott 1995; Strong and Sine 2002). By drawing on previous researchers' ideas and findings, Williamson (1998; 2000) provided a framework for an economics of institutions involving four levels of social analysis.

The first level is the social embeddedness level in which the norms, customs, mores, traditions, and religions are located. Because institutions at this level change very slowly, on the order of centuries or millennia, most institutional economists just take them as given. However, some economic historians and other social scientists have been challenging this analysis, such as Banfield (1958), North (1990), Putnam, Leonardi, and Nanetti (1993), Huntington (1996), and Nee (1998). According to Williamson (2000:596-599), the new institutional economics has been concerned principally with the second level, the institutional environment: formal rules of the game—especially property (polity, judiciary, bureaucracy); and the third level, Governance: play of the game—especially contract (aligning governance structures with transactions). At the second level beyond the "informal constraints (sanctions, taboos, customs, traditions, and codes of conduct)" of the first level, there are "formal rules (constitutions, laws, property rights)" (North 1991:97). Those rules including the executive, legislative, judicial, and bureaucratic functions of government as well as the distribution of powers across

different levels of government (federalism) are the design instruments at the second level. According to Williamson, "the definition and enforcement of property rights and of contract laws are important features" (2000:598).

Much of the economics of property rights is at the second level. In this sense, what about the functions of the government? A strong version of the argument is that "a private-enterprise system cannot function properly unless property rights are created in resources, and, when this is done, someone wishing to use a resource has to pay the owner to obtain it. Chaos disappears; and so does the government except that a legal system to define property rights and to arbitrate disputes is, of course, necessary" (Coase 1959:12). This interpretation means that once property rights have been defined and their enforcement assured, the government steps aside. But, as Williamson pointed out that, although this statement illustrates the strength of the property rights literature, its weakness is overplaying its hand. Therefore, not only the rules of the game (property) but also the play of the game (contract) must be included.

This distinction leads to the third level: the institutions of governance. The governance of contractual relations becomes the analytic focus. "Governance is an effort to craft order, thereby to mitigate conflict and realize mutual gains"[8] in a transaction (Williamson 2000:599). A governance structure obviously reshapes incentives, which then leads to the fourth level[9]: resource allocation and employment (prices and quantities; incentive alignment). Williamson pointed out that the agency theory tradition emphasizes *ex ante* incentive alignment and efficient risk-bearing, rather than *ex post* governance. To

[8] Here order, conflict and mutual gains are the three principals of the ultimate unit of activity in a transaction (Commons 1932:4).
[9] Williamson (2000:597) labeled it as LA, that is, level A.

focus entirely on *ex ante* incentive alignment is "a truncated way to study organization—especially if all complex contracts are unavoidably incomplete and adaptation is the central problem of economic organization"[10] (Williamson 2000:599). *Ex ante* incentive alignment is insufficient because of contractual incompleteness. Contractual incompleteness means that contract cannot cover all possible conditions and consequences because of actors' bounded rationality limitation and future uncertainty. A complete contract refers to that contract describing accurately all possible states of the world relevant to the transaction, and, under each of the states, the rights and responsibilities of each of the actors. The definition of the firm is a form of contractual arrangement of factors of production and the contract is incomplete (Cheung 1983). Contractual incompleteness brings about such problems as "adverse selection, moral hazard, shirking, subgoal pursuit, and other forms of strategic behavior" (Williamson 2000:601). Therefore, Williamson suggested that the new institutional economics take stock and look ahead.

The new institutional economics is not an all-purpose construction. The reform of the economies of Eastern Europe and the former Soviet Union illustrate this point. For example, privatization turns out not to be an all-purpose solution (Goldberg 1976; Priest 1993; Black, Kraakman and Tarassova 2000). Both Coase and North expressed similar precautions. Coase in his Nobel Prize lecture observed that: "The value of including … institutional factors in the corpus of mainstream economics is made clear by recent events in Eastern Europe. These ex-communist countries are advised to move to a market economy, and their leaders wish to do so, but without the appropriate institutions no

[10] Williamson here synthesized the ideas from both Barnard (1938) and Hayek (1945).

market economy of any significance is possible. If we knew more about our own economy, we would be in a better position to advise them" (Coase 1992:714). According to North, even if we are confident that "polities significantly shape economic performance because they define and enforce the economic rules," whereupon "an essential part of development policy is the creation of polities that will create and enforce efficient property rights," there is the further problem that "we know very little about how to create such polities" (North 1994:366).

A good example is economic reform in Russia. Although accepting the recommendation that the Russian economy should be privatized quickly and massively—"the goal of privatization was to sever the links between enterprise managers and politicians…There was no other way to achieve restructuring and efficient operation of firms" (Boycko, Shleifer and Vishny 1995:11) — post-Soviet Russia was deeply problematic. It did not develop a prosperous economy and social order, but experienced massive corruption and social disorder[11] (Ding 2000b). In Russia's reform program, according to Boycko et al. (1995), there were two strategic actors: the official bureaucracy and the stakeholders. The former was regarded as "the enemy to be fought at all costs" and the latter included managers, employees, and local governments.

About Russia's reform—privatization, let's consider the literature on franchise bidding for natural monopoly, "the property rights approach and the governance approach reach very different conclusions" (Williamson 2000:609). The property rights approach to the problem of natural monopoly emphasizes the *ex ante* arrangement. In Williamson's words, this approach is "to conduct an *ex ante* bidding competition and award the right to

[11] Ding in his 2000 article titled *The Law and Order in Transitional Society: A Case from Russia*, analyzed two trends in Russia: the feudalization of the state and the criminalization of society.

serve the market to the group that tenders the best bid" (Williamson 2000:609; see also Demsetz 1968; Stigler 1968; Posner 1972). Similarly, Boycko et al. (1995) also believed that once the privatization of assets has been realized in this way, the future will go its own way well (whatever way we don't know now; anyway, its own way is well). However, this conclusion excludes the *ex post* implementation problems.

For the governance approach, it "entails looking ahead and uncovering *ex post* contractual hazards, thereafter working out the ramifications for alternative modes of governance" (Williamson 2000:610). According to Black, Kraakman, and Tarassova (2000), the "triumphant completion" of privatization in Russia was a premature verdict. Therefore, Williamson (2000:610) argued, "the effort to reform Russia would have proceeded in a more modest, slow, molecular, deliberate way." In this sense, although the merits of privatization are real, they are not uniform and need to take both the rules of the game and the play of the game into account.

From my analysis above, especially Williamson's framework of four levels of social analysis, I conclude that institutional approach is very broad and complex, and has different dimensions of vision. Furthermore, property rights and governance are especially concerned by the new institutional economics. Moreover, property rights and governance are really important factors in transitional economies, such as those of Russia and Eastern Europe.

Empirically many business group studies can be regarded as in this perspective. For example, to some degree, the state's role in the formation and development of business groups explored by many researchers and scholars takes an institutional perspective, such as the study of antitrust law in the United States discouraging routinized cooperation

among sets of firms (Fligstein 1990). In Japan, the state's encouragement and coordination facilitated the creation of a cooperation system, Japan's *keiretsu* (Lincoln, Gerlach and Ahmadjian 1996). In Indonesia under Sukarno (Robison 1986), business groups were organized around state-granted monopolies embodied in exclusive import licenses, foreign-exchange credits, government contracts, and state-bank credit. Korea's *chaebol* (Kim 1991) and Taiwan's *guanxi qiye* (Fields 1995; Hamilton and Kao 1990) had similar developmental trajectories. But, far less research has been conducted on the same kind of research on China's transitional economy.

In this study, I use this approach to investigate Chinese business groups by taking state intervention as the arrangements of institutions.

2.3 Empirical Research on Business Group Performance

This section briefly reviews empirical research, conducting during past decades by economic sociologists, political economists, and political scientists as well, on the beneficial effects of business groups on economic development via their effects on the member firm performance.

2.3.1 Positive effects for performance

Group-affiliated companies' performance is shaped by two sets of factors: the sharing of group-based resources/liabilities and various forms of intra-group business transactions (Chang and Hong 2000). Empirical studies about the effects of business groups on economic development via their effects on the member firm performance have mixed findings (Aoki 1982; Caves and Uekusa 1976; Chang and Choi 1988; Khanna and Palepu

2000; Leff 1978; Stark 1996; Yiu et al. 2005). Some studies following different theoretical approaches have shown that business groups helped to create positive effects for member firms' performance by which group performance was improved and then benefit economic development. For example, from transaction cost perspective, Chang and Choi (1988) empirically showed that business groups with a multidivisional structure that reduces transaction costs result in superior performance. Following network perspective and using panel data from 1988 to 1990 on China's business groups, Keister (1998, 2000) demonstrated that the presence and predominance of interlocking directorates in business groups improved the financial performance and productivity of member firms, and more centralized groups performed better than others. By integrating resource-based view with the institutional perspective and based on over 224 business groups in the emerging economy context of China, Yie et al. (2005) found that those business groups with strategic actions to develop a unique portfolio of market-oriented resources and capabilities are more likely to have higher group performance. Using Russia's case, Perotti and Gelfer (2001) also provided evidence that group members have higher values of Tobin's q than otherwise comparable independent firms. According to Ma, Yao and Xi (2006), based on a sample of 1,119 publicly-listed Chinese companies, while the state ownership status has a significant negative effect on firm performance, affiliating with business groups has positive effects on firm performance.

2.3.2 Negative effects for performance

Theoretically speaking, business groups should have positive effects on their member firms and then improve economic development. However, there is evidence that business

groups result in a negative impact on firm performance. For example, by studying Japan's keitetsu, Caves and Uekusa (1976) and Nakatani (1984) found that group membership had a negative impact on firm performance. Isobe, Makino, and Goerzen's recent study (2006) provided evidence that horizontal keiretsu membership has a negative effect on firm profitability.

2.4 Summary and Direction

2.4.1 Brief Summary

This chapter briefly reviewed concepts of business groups, four theoretical approaches, and some empirical research on business groups. The four theories were transaction cost theory, resource dependence theory, social network approach, and institutional theory. Of these theories, institutional theory may contribute most to explaining transitional economies. Although transaction cost theory has relatively strong power in explaining economic action and phenomenon of transition economy, measuring costs is very difficult and so is distinguishing between sources from market exchange and from system transition. In addition, different institutional arrangements result in different costs in organizations. Cost is only one indicator of institutional arrangements.

Resource dependence theory is basically a tautology in which any interorganizational relations can be seen as resource dependence. For social network theory, without knowing the institutional arrangements, the functions and working of networks cannot be understood and explained. Using a unique data set compiled largely from local sources, Khanna and Rivkin (2000) tested for the effects of group affiliation on firm profitability in 14 emerging markets: Argentina, Brazil, Chile, India, Indonesia, Israel, Mexico, Peru, the Philippines, South Africa, South Korea, Taiwan, Thailand, and

Turkey, and found evidence that business groups indeed affect the broad patterns of economic performance in 12 of the markets they examined. Their findings suggested that the roots of sustained differences in profitability may vary across institutional contexts. Therefore, I chose institutional theory as the starting point of my theory. Economic performance of business groups should be considered within a specific institutional context.

2.4.2 Direction: Performance and Institutional Contexts of Business Groups

Based on my review above, I will put emphasis on institutional theory and link it with other relevant theories. In a transitional economy, state intervention, either the external or the internal version, is a vital feature of institutions. In fact, many factors may affect business group performance. In this study, I examine the effects of different modes of state intervention as an institutional condition on business group performance. This is my direction of theorizing and analysis. Before defining my theoretical framework, in the next chapter, I will review the theories and research on the role of state in economic development.

CHAPTER THREE

THEORETICAL APPROACHES TO STATE INTERVENTION IN ECONOMY

Because of the impact of the state intervention on business groups' forms, characteristics, and behaviors, state intervention in business groups must be considered. As Granovetter (1994) stated, the relations between governments and business groups are central in shaping the business group's ownership, its authority structure, and the relations of business groups to financial institutions. In my study, I will mostly pay attention to the impact of state intervention on business group performance[12]. But to provide a broad theoretical background, in this chapter, I shall first review some theoretical approaches to state intervention in the economic development, and then focus on state intervention and business groups.

3.1 Theoretical Approaches to State Intervention

Regarding the role of the state in economic development, two schools historically have contended: one is neo-classical economics from the perspective of the liberal political economy, and the other political and economic sociology from the perspective of the developmental state. The former takes for granted that the critical function of the state is to provide a favorable external economic environment, but to resist any direct intervention by the state into the economy in any way, on the grounds that self-interested bureaucrats who seek to maximize their own interests will lead to negative performance

[12] About the role of state in the economic development in late industrialized countries, see detailed discussion in Gerschenkron (1962) and Fields (1995).

at firm level. The developmental state theorists argue that safeguards – specific structural features of bureaucratic organization and such social norms as trust, reputation and loyalty – constrain the abuse of power and enable beneficial state involvement in the economy.

3.1.1 Neo-classical economics approach

This approach can be traced to Adam Smith's *Wealth of Nations* (Smith 1776), followed mainly by Hayek (1945, 1989), Buchanan (1980), and Stiglitz (1989, 1998), among others. In a liberal political economy, according to Smith, the main role of the state/government is to provide external restrictions (or necessary conditions) such as a regulatory environment in which firms compete for survival and profits, but should not directly be involved in a firm's decisions and transactions. State control over economic activity will lead to economic failure, in particular decreasing firm performance.

What is the rationale behind this argument? Two key reasons are provided. The first reason, based on the premise of self-interested economic man, focuses on bureaucratic incentives. According to public choice theory, bureaucrats and politicians have incentives not to maximize firm profit, but their own financial gains. For example, bureaucrats maximize their own budgets (Niskanen 1971) and politicians give priority to securing political support (e.g., votes) in order to increase their chances for staying in power (Buchanan, Tollison and Tullock 1980). Their self-interested behavior results in an inefficient economy. Further, the rent-seeking activities[13] of organized interest groups

[13] "Rent seeking generally implies the extraction of uncompensated value from others without making any contribution to productivity, such as by gaining control of land and other pre-existing natural resources, or by imposing burdensome regulations or other government decisions that

and politicians make impossible a state capable of acting as a neutral arbitrator between competing factions (Krueger 1974; Shleifer and Vishny 1994). Sappington and Stiglitz (1987) also argued that direct involvement of state officials who impose multiple political interests on the firm (e.g., job creation) dilutes profit-making motives when social objectives collide with the firm's profit goals. In addition, state involvement may have a soft budget constraints problem[14] with well-known negative effects on the firm's efficiency (Kornai 1980).

The second reason lies in the inability of government to plan and coordinate micro-economic activities. From the perspective of information and uncertainty, asymmetric information and uncertainty critically limits the effectiveness of government coordination of economic activity at the firm level. As Hayek (1945, 1989) argued, it is impossible for government to have the requisite information to plan and coordinate complex economic activity effectively. This point leads to the consequence that, even if bureaucrats and politicians had a pure motive to maximize firm profits, and no self-interested goals, they still cannot possess sufficient professional expertise to achieve profit maximization. That's why centrally planned economies ultimately failed in communist countries such as the Soviet Union. In Hayek's eyes, it is the market, through the price system, which serves as the only effective communication mechanism, coordinating relevant facts and promptly signaling changes in the economic structure and the emergence of new profit opportunities. Bureaucrats differ from entrepreneurs in this regard. Based on Zhang's (1995) entrepreneurial/contractual theory of the firm, a qualified bureaucrat is not

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may affect consumers or businesses." Retrieved July 28, 2008 (http://en.wikipedia.org/wiki/Rent-seeking). In this paper, rent seek refers to those activities by imposing burdensome regulations or other government decisions, or in other words, the exchange between power and money.

[14] See note 1.

necessarily qualified as an entrepreneur because of different recruitment criteria. Substituting bureaucrats for entrepreneurs distorts the entrepreneurial-competitive discovery process, "either on a society-wide scale or by means of discretionary intervention, government officials 'are at the same time both smothering the market's ability to transcend the basic knowledge problem and subjecting themselves helplessly to that very problem'"(Kirzner 1984; quoted in Nee et al. 2007:22).

Because of those two main reasons, this approach treats state intervention in economic development as generating negative consequences. Actually here state intervention refers only to direct intervention. I will discuss this point below.

3.1.2 Developmental state approach

This approach views state intervention in economic life in a positive light. It originated from Weber, with subsequent contributions by Polanyi, Gerschenkron and Hirschman, and currently by Evans and others. This theoretical approach starts from Weber's rational-legal bureaucracy ([1922]1978). Weber argued that modern societies would be trapped within an iron cage of bureaucratic rationalism and "bureaucracy in its rational-legal form was a core institution of modern capitalism because it enabled government to intervene to support markets with technical efficiency and rigorous calculation" (Nee et al. 2007:23). Fukuyama (2005:85), however, pointed out that Weber's view about the importance of centralized bureaucracy was mostly wrong, and postindustrial economies went in a rather different direction: "decentralized markets and individuals within those markets have proven to be much more efficient allocators of resources than rational bureaucrats". Fortunately, Fukayama's critique is about postindustrial economy, not

about transformative economy of industrialization.

Beyond Weber, followers of this approach focus mainly on the study of the process of industrialization in late-development countries (Gerschenkron 1962; Evans 1995). The developmental state theory pays attention to the effects of state intervention on economic development. Evans (1989, 1995) criticized the neo-utilitarian vision of the state, which is the basis of public choice theory, as driven by self-interested maximizers. Such a one-sided focus on the self-interest seeking of politicians cannot explain the state's sustained long-term commitment to corporate goals and the positive interventionist role of the state in late-development countries[15]. Generally speaking, in economic history, as Polanyi ([1944]1957:140) argued, "The road to the free market was opened and kept open by an enormous increase in continuous, centrally organized and controlled interventionism." Gerschenkron (1962) emphasized the specific contributions of the state apparatus to overcoming problems created by a disjunction between the scale of economic activities required for development and the effective scope of existing social networks. Hirschman (1958) put his attention on the absence of entrepreneurship in the development of those late developers, while government officials to some extent can play the role of entrepreneurs in promoting economic activities.

Integrating Weber's insights on the close positive relationship between bureaucracy and markets with central themes of development economics contributed by Gerschenkron and Hirschman, Evans (1989) came up with the key to the developmental state's effectiveness: embedded autonomy. In his view, given opportunistic behavior and the justified concerns of the public choice school, with specific structural features of

[15] The first wave included such countries as France, Germany, Russia (see Gerschenkron 1962); the second-wave nations included Japan, Korea, Brazil (see Evans 1995).

bureaucratic organization that serve to constrain the developmental state and the bureaucracy has sufficient autonomy, bureaucrats can pursue long-term objectives. In addition, being sufficiently connected to private capital enables those bureaucrats respond to how changing economic realities affect entrepreneurial interests (Evans 1995). Evans used Japan's MITI as an illustration of how a highly disciplined elite state bureaucracy can motivate and guide firm development, with bureaucrats directly involved in the strategic action of firms. He asserts asserted that "entrepreneurial activity on the part of the state is a necessary part of economic transformation" (1989:562).

From the two preceding theoretical traditions, I derive two opposing general claims: First, in the neo-classical economics vein, state intervention in the business group results in negative consequences on its economic performance. Second, the contrasting helping-hand version of the developmental state argument suggests that state intervention in the business group results in positive consequences on its performance. Neither of these two approaches, however, originated from analyses of a transitional economy moving from planned to market-oriented economy. China has been experiencing a double transformation: industrialization and marketization. So my third approach borrows and integrates insights from both the developmental state approach, which originated from the study of late developers, and from the analytical framework of neo-classical economics explanation of the emergence of market economies in Western societies (Qian 2002).

3.1.3 Transitional economy approach

This approach has inconsistent arguments, borrowing insights either from neo-classical economics or developmental state theories, or from both. It's currently expressed in the

tradition of Douglass North's institutionalist theory (North 1990, from Qian 2002). It says that the restructuring of economic and political institutions -- for example, secure property rights -- is necessary to account for the negative lessons of post-communist Russia's "shock therapy." Privatization alone is not enough for a successful transition. Before privatization, the infrastructure (or external environment) which can support and sustain a market economy must be developed (Black, Kraakman and Tarassova 2000). So far, one point seems commonly accepted: that a high state political and economic capacity is one indispensable prerequisite for successful economic development (Burawoy 1994; Frye 2004; Bunce 1999, Fukuyama 2004; Qian 2002). Frye's (2004) findings suggested that the state's capacity to protect private property might be strengthened by increasing its constraints on state agents. Shleifer and Vishny (1998) were so skeptical of granting decisionmaking authority to state bureaucracies during the transition that they recommend limiting the discretionary authority of regulatory bureaucracies. However, Stiglitz (1999/2000), drawing on the Chinese case, supported giving state regulatory bureaucracies far greater sway.

In Walder's (1995) arguments, China's rapid industrial growth led by public enterprises can be explained by the government's clearer incentives and greater capacity to monitor firms and to enforce its ownership interests. This observation prefers the East Asian developmental model that places an even larger role for government in motivating and guiding China's industrial growth. In Walder's view, Kornai's (1980) problem of soft budget constraints for public enterprise is rooted in weaker financial incentives for government officials and difficulty in securing firm-level information of higher

administrative units of government. He claims that the validity of Kornai's organizational assumptions varies across levels of the governments. At the local level, given the size and scope of local industry, Kornai's soft budget constrains can become hard to achieve. Consequently, lower-level governments are to a far lesser extent troubled with problems such as weak financial incentives, the pursuit of non-financial objectives, and weak monitoring capabilities commonly associated with central ministries. Walder's argument, responding to Hirschman's (1958) observations about the absence of entrepreneurs in developing countries, regards Chinese government officials as the functional equivalent of entrepreneurs. His theoretical logic of the state-centered argument, about why government can act in an entrepreneurial style to promote rapid industrial growth, "bears upon the *incentives for government officials*" and the capacity for localized access to firm-level information and capability for effective monitoring (Walder 1995:265).

Following Walder's logic, Nee et al. (2007) found that the involvement of state actors (including government and party in the corporate governance of firms listed on the Shanghai Stock Exchange) resulted in negative economic effects. Regarding the lacking incentive and low capability assumption about local bureaucrats on which Walder's local-corporatist state hypothesis hinges, they conclude that "weakness in the local state corporatism hypothesis lies in the fact that fiscal federalism and the resulting incentive effects do not substantially affect the government's ability to actively intervene in an entrepreneurial way" (Nee et al. 2007:43). In contrast to Walder's argument, they claimed that direct interference "is often connected with localist tendencies inhibiting a firm's market oriented development and expansion. Close connections with government and

party are therefore increasingly regarded as not being particularly helpful" (pp. 43-44). Direct intervention into firms cannot explain the success of China's developmental state in promoting rapid growth. Therefore, other modes of government intervention external to the firm must explain that outcome. Whether direct intervention really has a positive or negative effect on economic performance in transition economy is still not resolved and needs to be further explained.

3.2 State Intervention and Business Groups

To obtain a wider view of state intervention and business groups in particular, in this section I briefly review some empirical research on state intervention and business groups. Besides the economic consequence of state intervention in business groups, this review also includes some consequences for business group structure.

From the prevalent growth of business groups in late economic development, some analysts provided a view that treats business groups as a way for the state to support, or secure support from, entrepreneurs (Amsden 1989). The state's role in the formation and development of business groups and its consequences on business group performance has previously been explored by many researchers and scholars (Strachan 1976; Robison 1986; Fligstein 1990; White 1974; Amsden 1989; Keister 1998, 2000; Jones and Sakong 1980; Gerlach 1992a; Johnson 1982; Miyashita and Russell 1994). The general orientation of the state toward economic development and business interests is likely to shape the structure of business groups.

According to Fligstein (1990), antitrust law in the United States, although a somewhat inconsistently enforced rule, has discouraged routinized cooperation among

sets of firms. In Japan, on the other hand, the state's encouragement and coordination has facilitated a cooperation system, such as Japan's *keiretsu* (Lincoln, Gerlach and Ahmadjian 1996). States with strong patrimonial overtones, but with less single-minded devotion to extraction of resources from the economy for its own purposes, may foster weak but nonnegligible business groups. For example, in Indonesia under Sukarno (Robison 1986), business groups were organized around state-granted monopolies embodied in exclusive import licenses, foreign-exchange credits, government contracts, and state-bank credit. Government and military officials and party officers actively participated in setting up their own business groups and took advantage of their obvious ability to secure government favors, not purely seeking rents on the part of business from public funds. Then what Robison called "politico-economic empires" came into existence. In situations like Indonesia under Sukarno, the structure of interfirm relations of business groups was more likely to be hierarchical and power centralized in the strong support of autarchic government. Therefore, these business groups could not survive but collapsed once their patrons fell from power. Another similar case is Korea under Syngman Rhee, from 1948 to 1960 (Amsden 1989). By the end of the 1950s the Korean economy was deeply depressed. As Robison suggests for Indonesia, the persistent need to gain protection from generals had pushed business groups in the direction of becoming large conglomerates "clustered around centers of politico-bureaucratic power" (1986:267), especially for the important Chinese-owned groups in the Suharto period. Similar trends happened in post-Syngman Korea (Jones and Sakong 1980).

The Japanese enterprise groups have been regarded as successful models and at the same time *zaibatsu* and *keiretsu* provided classic examples of state intervention into business groups. In addition, the formation of Chinese business groups was learned from Japan's enterprise groups. Let's take a look at the two Japanese enterprise groups: *zaibatsu* and *keretsu* (Shiba and Shimotani 1997; Thorson 2003). *Zaibatsu* generally refers to the large pre-WWII clusterings of Japanese enterprises, which controlled diverse business sectors in the Japanese economy. The emergence and early development of *zaibatsu* was a governmental program fostered by bureaucrats. The Meiji government did not rely on the free market, but used land tax revenues to fund the state planning, building, and financing of industries as determined by bureaucrats. At that time, in terms of property rights, they were state-owned business groups. In the 1880s they sold some government-owned enterprises on special terms to private families or clans. Then those business groups were typically controlled by a singular holding company structure and owned by families and/or clans of wealthy Japanese. These private parties and enterprises crystallized over time into large, integrated complexes steered by the government bureaucrats into areas of development desired for the reformation of Japan.

Here I should notice a fundamental change—property right arrangements for *zaibatsu* while the state still controlled them. To secure compliance, the government provided inducements such as exclusive licenses, capital funding, and other privileges. That was a very complicated situation. Therefore, even though stockholding relations cemented together the companies within *zaibatsu* complexes, *zaibatsu* holding companies directed the enterprise complexes in a pyramid fashion.

Because the zaibatsu entered the political arena during the Allied occupation after World War II, the *zaibatsu* were liquidated in order to "democratize" Japan's economy and for its bureaucrats to gain control of Japan's economy. Not long after the dissolution of the *zaibatsu*, new and powerful corporate groups emerged in Japan with the support of the state. In contrast to *zaibatsu*, each *keiretsu* had a large financial institution that played a central role in corporate governance (Thorson 2003). Considering this point, as I pointed out above, financial aid is a key way that the state intervenes in China. Financial aid and investment combines with officials (and party officers) assigned to business groups and concrete firms. Officials are delegates of state-owned property. Chinese business groups emerged and developed under this form of state intervention.

3.3 Summary

In this chapter, I reviewed three theoretical approaches to state intervention and its economic consequences. State intervention in three approaches, explicitly or implicitly, means direct intervention. The first approach is neo-classical economics, from the perspective of the liberal political economy. This approach does not support direct state intervention, but the rule of law. The main role of the state/government is to provide external restrictions, but not directly to control economic activities. The second approach is developmental state theory. It argues that specific structural features of bureaucratic organization and such social norms as trust, reputation and loyalty can constrain the abuse of power and enable beneficial state involvement in the economy. Especially for transitional economies and for late developers, due to the absence of entrepreneurship,

government officials to some extent can play the role of entrepreneurs in promoting economic activities. The third approach is transitional economy theory. This approach borrows insight from the former two approaches, and treats the effects of state intervention on economic development as contingent effect, dependent on a specific institutional context and the modes of state intervention.

In the section on state intervention and business groups, I reviewed some empirical research on the relevant topic. In different states with different political and economic institutions, state may play a different role in affecting the success or failure of business groups. All those analyses demonstrate that state intervention in different modes, which may be the reflection of the state's institutional context, can lead to different economic consequences of business groups.

CHAPTER FOUR

MODES AND TIME OF STATE INTERVENTION AND ITS ECONOMIC CONSEQUENCES

In this chapter, I develop a theoretical framework for analyzing state intervention and economic development. This framework will be used in my empirical study. After theoretically developing the theory of interaction between state and market, I define my concept of transition economy (and emerging economy as well). Then I theoretically examine the special characteristics of a transitional economy—property right arrangement and its effects on incentives in economic activities examined. Last but not least, modes and time of state intervention are considered and lay a base for my empirical study.

4.1 Contingent Nature between State and Market

4.1.1 State and market

The relationship of state and market has been broadly explored by scholars (Fligstein 1990; Fligstein and Brantley 1992; Fligstein 1996; Walder 1995; Guthrie 1997, 1999; Dobbin and Dowd 2000; Nee 2000). Actually, "(N)owhere in the world do markets operate independent of state action" (Guthrie 1999:23) and they are socially constructed and shaped by the institutional, political, and cultural environments in which they are embedded (Fligstein 1996; Guthrie 1999). Fligstein (1996) made the metaphor "markets as politics" and viewed "the formation of markets as part of state-building", and Fligstein

(1990) and Fligstein and Brantley (1992) took firms' more formal relations to the state as one of the pivotal factors for understanding how stable markets emerge. As Lindenberg (2000) synthesized in his comment on Nee's work (2000) on the role of the state in making a market economy, there are two points of general agreement in a long tradition of institutional analysis: "(a) a market economy needs considerable autonomy for economic transactions, free of state interference; (b) for a capitalist market economy, the space within which this autonomy can arise and function needs to be created and maintained by the state" (p. 89). The question thus is whether and, if yes, how state should directly intervene economic activities, in particular Chinese business groups, in China's transition economy.

As Walder, citing Stiglitz, argued, "the real issue in transitional economies is not whether government should play a role but what that role should be, for government action is pervasive in market economies as well (Stiglitz 1994; from Walder 1995:294-295). I introduce the contingent nature between state and market to understand better the state's role in transitional economies. To do this, the specific market situation and the alternative modes of state intervention have to be considered. In other words, we must put specific modes of state intervention into a specific institutional context. To reiterate Evans: "Outcomes depend both on whether the roles fit the context and on how well they are executed" (1995:11).

Markets can be defined as a nexus of institutions and their functions. A perfect market is one in which each of its institutions plays a particular function. Otherwise,

market failure happens[16]. Markets do not exist in nature. From the perspective of social constructionist --which argues that institutions are not the objective, "external" realities that they at first sight may see, instead they are typically the result of a social creation (Berger and Luckmann 1966), a (perfect) market is socially produced (Dobbin and Dowd 1997, 2000), or socially constructed (Garcia-Parpet 2007[1986]). They are created by individuals' taken-for-granted expectations and assumptions (for example, about what was value) and the prevailing institutional logic and the degree of institutionalization of the practice (for example, a study of stock market reactions as the social construction of market value (Zajac and Westphal 2004). Through a case of the strawberry auction at Fontaines-en-Sologne in France-- a very modern situation with buyers and sellers of strawberries negotiating with each other via electronic screen in a building specially constructed for this purpose, Garcia-Parpet (2007[1986]) explored a social construction of a perfect market. She found that the history and power struggle embodied in the different individual actors that intervene in the construction of a market and materialized

[16] "Market failure is a term used by economists to describe the condition where the allocation of goods and services by a market is not efficient" Retrieved July 28, 2007 (http://en.wikipedia.org/wiki/Market_failure). Health insurance, education, environmental protection and the like are taken as examples of market failure. This belief is often used to justify state/government intervention. But government failure makes it very controversial. Stiglitz (1998), as one of leading supporters of government intervention, argued that government intervention may correct market failure, "Significantly, there are desirable government interventions which, in principle, can improve upon the efficiency of the market. These restrictions on the conditions under which markets results in efficiency are important—many of the key activities of government can be understood as responses to the resulting market failure (Stiglitz 2002: 73-74)". This statement has been criticized as Demsetz's (1969) "Nirvana Fallacy (by comparing the imperfect version of one alternative with the ideal version of another; in this case, calling a problem with the market an imperfection while not having a clear government solution that would make things better)." About the discussion of market failure also see Medema (2004). However, in a transitional economy, not just only does market failure happen, but also the market is developing, for example, Chinese financial market. If without state bank support, a great amount of money capital for business groups is not possible. Labor market, in particular, entrepreneur market, is also developing, and not as their counterpart in the Western nations.

in the construction process. Using the case of the 167 railroad acquisitions in Massachusetts between 1852 and 1922 with the policy shift, Dobbin and Dowd (1997, 2000) demonstrated that a market is socially produced through public policy -- as state intervention—and power play an important role in shaping key market features. Ironically, as Dobbin and Dowd (2000) pointed out that the “market, built by antitrust, became the prototype for the neoliberal ideal of the unregulated economy” (p. 631).

> This popular vision of the relationship between state and economy, in which economic laws precede human society and dictate public policy, colored America’s perception of antitrust policy. Antitrust policy was soon cast not as a protection against the rise of baronial economic power, but as the foundation of a true market economy. It was transformed from an intervention into the human-made incarnation of the natural laws of the market (Dobbin and Dowd 2000: 653).

It is by now commonplace to recognize that a free market has both utopian and dystopian aspects (Hirschman 1986). Under ideal conditions, a market entails the exchange of goods and/or services via demand and supply, with the price mechanism serving to locate an equilibirum (Bator 1958; Khanna, Palepu and Sinha 2005) and without the interference of extra-market mechanisms such as regulations, or other factors. However, such conditions seldom prevail across a broad spectrum of industries especially in emerging economies (Khanna et al. 2005; Stiglitz 1989). In a transitional country that is moving from a central-planning to a market-oriented economy, market failure takes place more often than in Western developed market economies. And according to

Gerschenkron's observations (1962), the more backward the economy, to improve economic performance under the condition of backwardness of economy in a late industrialized country, the more likely that intervention by the state is necessary to properly channel physical capital and human capital to industries. Further, because of higher uncertainty during a transitional period, as Fligstein (1996) argued and empirically supported by Guthrie's findings (1999), economic actors are as likely to seek stability in emerging markets as to seek profits, and role of state playing in creating and maintaining markets is essential. That's why state intervention into economic activity is more likely to occur in a transitional economy.

4.1.2 State intervention and types of economy

State intervention has a variety of ways of intruding into the economy. The extent of both direct and indirect intervention varies along a continuum from low to high. Combining these two axes produces a four-quadrant matrix of possible types of economy, as illustrated in Figure 4.1. *Indirect* intervention, as I use the concept here, refers only to providing external economic environment by legislating, enforcing laws and regulations, and so on. Borrowing Olson's (2000) term, the type of government with indirect intervention needed to achieve prosperity is a market-augmenting government which is powerful enough to create and protect private property rights and to enforce contracts, yet constrained so as not, by its own actions, to deprive individuals of these same rights. Direct intervention means government involvement in both politics and economics. With low indirect and low direct state intervention (i.e., a weak state, most likely with extensive social disorder), the market depends on spontaneously generated order. A

small-scale economy is possible, but a large-scale and prosperous economy is, if not impossible, very difficult to attain. The type of economy characterized by both high indirect and high direct state intervention theoretically does not exist, because direct state intervention would destroy the economic environment provided by indirect intervention. Western economies are generally typified by high indirect intervention and low direct intervention, while a central-planning communist economy exhibit high direct intervention and low indirect intervention. The transitional economy locates somewhere between the Western and communist economies: with indirect intervention higher than a communist economy and lower than a Western economy, and with direct intervention lower than communist and higher than Western economies.

4.1.3 Contingent nature of state intervention and market

While neo-classical economists object to direct state intervention, one important point ignored by those scholars is that different forms of intervention by the developmental state may have either positive or negative consequences in a transitional economy, not solely negative consequences, as what I show below. Whether positive or negative outcomes occur depends on the specific modes of state intervention and the institutional arrangements governing them. If the specific form of intervention fits or matches the functional demands of an imperfect market, then firm performance increases; otherwise, the firm performance decreases. The relations of market and state intervention are summarized in Figure 4.2. In cell 1 of Figure 4.2, state intervention fits the perfect market, which is the best economic institution. In reality, this ideal market economy cannot exist, because no market is perfect. The second cell shows that, given an imperfect

market, if state intervention matches the functional demand of an imperfect market, the economic performance is high.

The case of China's economic transition presents a clear example of the importance of the state in constructing markets. As a transitional economy, China has a higher direct and lower indirect state intervention than Western economies. Then how does direct intervention affect economic performance? I use direct state intervention over Chinese business groups as a case to examine this question. State intervention here consists of state shareholding (or ownership), financial resource from state-controlled (or state-owned) banks and assignment of CCP officials or party members to a group, or appointing leading members of a group as state officials.

4.2 Emerging Economy and Transition Economy

According to Hoskisson, Eden, Lau and Wright (2000:249), emerging economies are "low-income, rapid-growth countries using economic liberalization as their primary engine of growth." Transition economies, according to the World Bank (2002), are a subset of "emerging economies" and include formerly socialist countries in East Asia, Central and Eastern Europe, and the newly independent states of the former Soviet Union. In addition to "transition economies," "emerging economies" include those economies in Latin America, Middle East, and Southeast Asia. As far as the role of state is concerned, there are dramatically different strategies and the roles of state adopted by different countries and thereby resulting in different consequences in the transition economy. For example, the obvious contrast is between Russia and China. Russia chose to "drop" central planning through shock therapies, which led to low, or negative,

economic growth, while China adopted gradual reform and achieved an economic miracle. China has actually been experiencing both transition from central-planning economy to market-oriented economy and industrialization and modernization.

Thus, the role of the state matters very much (about the role of the state in establishing property rights, see Rapaczyski 1996). From my review in Chapter 2 of theoretical approaches to business group performance, we can see that transaction cost theory, network theory, and resource dependence theory and even institutional theory all lack a theory of politics and agency. Neo-institutional theory takes state and agency theories, but fails to pay more attention to the contingent nature between state and market, especially in a transitional economy. Therefore, below in this chapter I will treat agency theory seriously, especially about property rights arrangements, and bring state intervention back in the analysis of transitional economy.

4.3 Property Rights Arrangement and Incentives

Under the circumstances of a transition economy, public and private property sometimes mix together, while managers from both public firms and private firms face different incentives. In this section, I present my organization theory of the transition economy by integrating property rights economics, incentive theory, and collective action theory.

First, consider a high-ability manager. Obviously selecting a high-ability manager or entrepreneur is necessary and very important for organizational success. For different types of firm ownership, there is a basic difference. For state-owned firms, especially in China, the selection of managers with high (marketing) ability is impossible (see Zhang 1986, 1995). Under public ownership, the managers selected have the same average

ability as the average ability in the population. For theoretically proving this theorem of impossibility of selecting entrepreneurs by firms under public ownership, Zhang (1995) developed an entrepreneurial/contractual theory of the firm. In his theory, Zhang assumed that individuals in the economy differ in (1) their marketing ability (entrepreneurial ability); (2) personal assets; and (3) risk-attitudes. According to Zhang, entrepreneurial ability is hidden information, and personal assets such as signaling information, function as the rationale of identifying managerial (entrepreneurial) abilities. Although some people without personal assets also are potential high-ability entrepreneurs, the firm's selection committee, does not want to allow them to face that risk. In terms of risk attitudes, managers with their own personal assets are more careful and devote more efforts to their firms than those managers without personal assets invested in their organizations. Therefore, following Zhang, I assume: (1) managerial ability in state-owned firms is lower than that in private firms; and (2) managerial devotion to firm performance in state-owned firms is lower than that in private-owned firms. Although ability and effort do not inevitably lead to high productivity, statistically at the aggregate level, on the basis of the preceding analysis, private-owned firms are more likely have higher productivity and better firm performance than the state-owned firms.

Zhang's theory emphasizes the issue of different incentives in state-owned and private-owned firms, respectively. For example, personal assets determine a manager's residual claim. What I mean by residual claim is the right of claiming firm assets left after a firm pays out its fixed contractual obligations, such as material cost, fixed salary, and interest. Therefore ownership matters very much in valuing managerial incentives.

I now introduce Olson's collective action theory to clarify the meaning of incentive.

Olson (1965) analyzed the relationship between group size and the behavior of the individual in a small group and developed the concept of "free rider." Olson showed that "if there is some quantity of a collective good that can be obtained at a cost sufficiently low in relation to its benefit that some one person in the relevant group would gain from providing that good all by himself, then there is some presumption that the collective good will be provided" (1965:22). In other words, if that assumption is satisfied, the collective good will be provided albeit perhaps not at an optimal level. According to Olson (1965:25), the presumption is, when

$$dVg/dT = 1/Fi(dC/dT) \text{ and}$$

$$Vg/C > Vg/Vi \text{ or } Vi > C$$

where C is the cost of obtaining the collective good; T is the rate or level at which the collective good is obtained; V_g is the gain to the group; V_i is the gain to individual *i*; and F_i is the fraction of the group gain received by individual *i*.

The result means that an individual will be rationally motivated to contribute to the collective good if he shares a sufficiently large fraction of the group's gain and his gain is more than his cost of obtaining the collective good. In this sense, managers in state-owned firms will not be willing to pay the cost of improving their firms' performance as a collective good, because they only have their wages (which usually are not linked to any gain in the firm's performance) and thus they do not share in a sufficiently large fraction of the gain to their firm's performance. However, managers in private owned firms, typically have a claim on the residual (i.e., to share in the firm profits), because they own their firms or at least they own a sufficiently large share of the stock. This is the case in

China. Therefore, I assume that theoretically the relationship between the percentage of assets shared by state in a firm and managers' motivation of obtaining firm performance is negative (Figure 4.3).

After analyzing incentives, I move on to the constraints on managers' behaviors. Incentive and constraint are two sides of one nickel. We also can say that this constraint is a "negative" incentive. This means that punishing a manager's economic failure should occur. If they were not held responsible for their economic failure and went unpunished, individuals would have no incentives to avoid mistakes and waste. For example, managers in Chinese state-owned firms usually are not punished for their economic failures and government often attempts to bail out failed and ailing state-owned firms and rescuing them to save the workers' jobs. As a result, as Kornai (1986, 1992) wrote, the "soft budget constraint" problem comes into play. On the other hand, market competition holds the manager-owners of private firms responsible for their economic failures.[17]

4.4 Modes of State Intervention and Time

Not only do property rights arrangements as institutions matter very much, but also the modes and timing of state intervention in economic activities greatly matters. "Emerging economies" suggests a temporal, indeed historical, process (Hoskisson, et al. 2000). To further understand the contingent nature of state and market in the transition economy, the temporal dimension cannot be ignored. State intervention and business performance

[17] For discussion in detail about the role of competition in market in punishing firm's (and manager's) economic failures and see Qian's (1999) *Incentive and Constraint*. Part of it see Qian and Weingast (1997).

are matters of path dependence[18]. Different from a process study, my research method and data take "a variance model or 'outcome-driven' explanation of the input factors (independent variables) that statistically explain variations in some outcome criteria (dependent variables)" (Van de Ven 2007:145). Empirically and theoretically, time of state intervention should also be considered from at least two aspects of temporality: timing and time-duration, while state intervention takes different forms as described above. Timing of intervention really matters. Change is the normal state of affairs. The right mode of state intervention at right time, or in other words, state intervention matches the functional demand of an imperfect market is ideally a perfect timing. Actually state intervention may take place at different time points and in different modes. The same mode of intervention may benefit group performance at time-point one, but may reduces performance at time-point two. Its impact depends on time-specific context. Assuming only modes and time considered and other things being equal, state intervention taking mode m_i at time t_0, the consequences of group performance at time t can be theoretically expressed as below:

$$Y_p = \int_{t0}^{t} \sum_{i=1}^{N} f(m_i, t)$$

where Y_p is group performance at time t; $f(m_{i,}\ t)$ is the function of modes and time.

It is a very complicated business to demonstrate the effects of state intervention on long-term business performance[19]. Therefore, in practice I should admit that those

[18] About the detailed description of path dependence in China's economic transition, please see Guthrie (1999: Chapter two).
[19] Zhu (2005) provided a case of the different government-business relations in South Korea and Taiwan and their different consequences in different developmental stages and specific contexts

performances of different modes of intervention are defined in certain periods as given in the current situation. In theory the complex world is simplified into an appropriate abstract level and some assumptions are given. In my study, I assume that state intervention in different modes occurs in the reform era from 1978 to 2005 in temporal terms -- I do not identify each concrete intervention time during this period, while independent variables statistically explain dependent variables[20].

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such as facing Asian crisis. To one degree or another, the case of modes and time of state intervion is similar to Zhu's observation about the different government-business relations.

[20] For the discussion of the differences between variance and process approaches, please see Abbott (2001) and Van de Ven (2007: Chapter 5).

CHAPTER FIVE

RESEARCH HYPOTHESES, RESEARCH METHODS, AND DATA

In this chapter I formally propose a number of testable research hypotheses based on my proceeding discussion of state intervention and business group performance. All of the hypotheses address the issue of contingent effects of the modes of state intervention on business group performance. I also describe my research methods, data collection, and measures of variables. This chapter critically connects the literature review and theoretical discussions in previous chapters and empirical investigation in later chapters.

5.1 Research Hypotheses

As a transitional economy, in the typology of state intervention and type of economy, China has a higher direct and lower indirect state intervention than Western economies. Then how does higher direct intervention affect economic performance? I use direct state intervention over Chinese business groups as a case to examine this question. As Andrew Walder argued, “the real issue in transitional economies is not whether government should play a role but what that role should be, for government action is pervasive in market economies as well (Stiglitz 1994)” (Walder 1995:294-295). To answer “what that role should be,” specific market situation and modes of state intervention have to be considered. In other words, we must put specific modes of state intervention into a specific institutional context. In China’s transitional economy, the modes of direct state intervention consist of four specific mechanisms: (1) state shareholding (or ownership); (2) assignment of government officials, or appointment of leading business group

members as state officials; (3) assignment of Communist Party members to a business group; and (4) financial resources from state-controlled (or state-owned) banks. To get further insight, I examine (5) the interaction of party membership and financial resources. Then how does each mechanism of the direct mode of state intervention affect economic performance?

5.1.1 Ownership

To keep China's socialist society with Chinese characteristics[21], the central government usually retains a large proportion of ownership shares in business groups, and it is not Chinese state policy to privatize those property rights[22]. In institutional theory, property rights arrangement is a key factor in explaining China's transitional economy. Different property rights arrangements may lead to different incentives for entrepreneurs and managers and to constraints on their behavior. In other words, ownership really matters. On the one hand, government as a firm owner tends to place more emphasis on allocating financial resources to achieve non-profit goals, such as provisions for social welfare and employment opportunities[23], than for shareholder value

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[21] Another possible reason why government has a large proportion of ownership is a lack of exit mechanisms for full ownership in the external capital market. But, as China's policy aims to "grab the big, release the small"(zhuada fangxiao), for Chinese business groups, I argue the reason is to grab the big and keep a socialist society with Chinese economy, while at the same time having all entities participate within a market economy.

[22] Yanjie Bian pointed out in a personal conversation (October 2007) that, currently in China, material control is almost totally open and exposed on the market, but personnel control (such as assigning managers) is not. In some sense, he is right. But in terms of firm ownership, for Chinese business groups, the state still tries to control them through state-ownership.

[23] Since 1992, China has faced the issue of unemployment among workers while the economy was restructured. While transferring policy burden (such as a heavy burden on retirement pensions, other social-welfare costs, and redundant workers on which the

and profit maximization (Boycko, Shleifer and Vishny 1995). Andrews and Dowling (1998) provided empirical evidence supporting the argument that government favors maintaining employment levels rather than creating new resources and capabilities in the firms that it owns. On the other hand, based on the capitalist economic assumption that human beings are self-interested and pursue maximization of their interests, managers in charge of state-owned firms may seek to realize their own interests through various ways, such as those analyzed by Ding (2000a), rather than trying to maximize firm profits.

Ding (2000a) explored the relationship between entrepreneurship and ownership, and hence organizational economic behavior, in a transitional economy with mixed property rights arrangements. For example, in his study of the illicit asset stripping of Chinese state-owend firms, Ding analyzed some forms of Chinese business groups. The managers could and did strip off a firm's best equipment or most profitable business segments and turn those assets into new companies under their private ownership. They could allocate productive assets to the relatives of the firm's employees and set themselves up as subcontractors; for example, the state firm's *zi gongsi* (subsidiary companies), *fushu qiye* (appended enterprises), *fuzhu qiye* (auxiliary enterprises), *sanchan* (business in the tertiary sector), *fuwu gongsi* (service companies), and so on. Through these methods, state-owned property flows into the manager's private cashbox. As a result, the state firms have poor performance and productivity relative to the privatized enterprises.

Agency theory suggests that, due to incomplete and asymmetric information and uncertainty, two problems arise: adverse selection and moral hazard (Eisenhardt 1989).

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state-owned enterprises bear) to society from firms, to maintain a stable society, state-owned firms still have many policy burdens (Lin 1998).

Adverse selection is the condition under which the principal can not ascertain whether the agent accurately represents his ability to do the work for which he is being paid. Moral hazard is the condition under which the principal cannot be sure if the agent has put forth maximal effort. To solve these problems, agency theory introduced the concept of ownership incentive, for example, by compensating top management with company stock. In China's case, to deal with the problem of managerial incentive misalignment between public and state-owned firms, some strategies such as shareholding systems, asset contract responsibility, and the enterprise contract responsibility system have been adopted by reformed state-owned enterprises (Lin 1998; Lin et al. 2003).

Mancur Olson's theory of collective action also concludes that individuals will become "free riders" in groups, that is, they will very likely put forth little effort on behalf of the organization if active participants cannot receive sufficient selective benefits that are available only to them (Olson 1965). Drawing from Olson's theory of collective action, we would also expect that managers of state-owned firms, who own insufficient shares of those firms' assets and/or have no right to claim residual assets, thus lack sufficient incentives to contribute to improving their firm's performance. As we know, ideologically, China proclaims itself to be a socialist market economy, dominated by the Communist Party (CCP). The Chinese state asserts that it tries to keep more assets under its direct control by holding a certain proportion of the stock in public and business organizations. Where the state shares a substantial portion of firm assets, it typically wants to intervene in the business groups' management and operation. Under the reform of China, the state withdraws from other activities very slowly. Zhang (1999) theoretically indicated the relationship of entrepreneurship and ownership and proclaims

an impossibility theorem of entrepreneurship under public ownership. Under public ownership, the selected managers have the same average ability as the average ability in the population. For theoretically proving this theorem of impossibility of entrepreneurship under public ownership, Zhang (1995) developed an entrepreneurial/contractual theory of the firm. He assumed that individuals in the economy differ in their (1) entrepreneurial ability; (2) personal assets for investment in the firm; and (3) risk-taking attitudes. According to Zhang, entrepreneurial ability is hidden information, and personal assets, as signaling information, function as the rationale of identifying the managers' (entrepreneurial) abilities. Although some people without personal assets also are potential high-ability entrepreneurs, the firm's management selection committee does not want to allow them to take great risk. In terms of risk attitudes, managers with their own personal assets are allegedly more careful and risk-averse, and more likely to devote greater efforts to their firms than those managers without personal assets invested in their organizations. As Nee et al. (2007:32) pointed out, "the proportion of state ownership affects the state's chances for direct interference and is positively correlated to the intensity and quality of state intervention exerted by the local state asset operating companies that manage public shares." But Nee et al. only used state ownership—the percentage of state shares—as a control variable, not as a primary explanatory measure. However, ownership is really a major mode of state intervention.

Before providing my first hypothesis, it is worth noting that some observations suggested that the higher profitability a business group has, the greater proportion of shares the state tends to own[24]. This could be a logical outcome of the Chinese state

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[24] If we just take a look at the share structure of the listed child companies of these

policy of "grasping the big, letting go the small and medium," which implies that the state's tight grip would remain only on those strategically important, monopolistic, and therefore highly profitable, business groups such as oil, utilities, energy, and telecom industries. To some extent, this change seems to be the case. However, this outcome is logically impossible. If the groups with low state shareholding have high profitability, they would be less likely to allow the state to enlarge its proportion, unless the state originally had a high proportion of shares. On the contrary, the groups with poor performance are more likely to be owned by the state in order to maintain employment and social stability. In addition, Lin et al. (2003) found that big groups transformed from the traditional heavy-industry-oriented development strategy to a modern enterprise strategy based on services. Even though strategically important and monopolistic, the business groups with a high state ownership are less likely to be able to take comparative advantage in the international arena. In my observations and interviews, I found that state ownership is still a difficult issue (particularly, an agency problem) in current Chinese business groups and firms. Therefore, I provide my first hypothesis:

Hypothesis 1: In China's transitional economy, the greater the proportion of business group assets owned by the state, the lower the economic performance of the business group.

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business groups in recent years— groups like PetroChina or China Mobile were listed in China's domestic stock exchanges (some of the groups in my sample)— proportions of state shares for such companies on average are actually higher than other listed firms. Also they usually have higher profitability. However, I should note that, first, they comprised just a small portion of all groups; and second, their profitability fluctuates, such as PetroChina (sometimes its net profit is negative because of high prices in the international oil market. A debate continues concerning the oil tax rate in China).

5.1.2 Official involvement

The human resources of a Chinese business group, particularly its leadership, are one of the key factors affecting group performance. In China's reform economy, officials and party members have been substitutes for entrepreneurs/firm managers. They must have incentives to maximize firm profits and the capability of doing so. In addition, firm performance is affected by leader's strategic choices which are affected by leader's views of the world (Hambrick and Mason 1984). Thus, the background of top management is very important for performance and research reveals that the number of top managers who previously worked for the government has a negative impact on the performance of the business group (Yiu, Bruton and Lu 2005). Therefore, rebuilding and modernizing China's bureaucracy has been the government's top priority since the start of state-guided economic reform in 1978. As a result of the administrative reforms carried out in the 1980s, government regulations and procedural guidelines have become increasingly precise and transparent (Yao 2001). This trend has increased the predictability of bureaucratic decisions and reduced the uncertainty of economic planning. To push out Maoist bureaucrats who were impeding progress in market-oriented economic reforms, strict retirement ages for government officials and a one-time buy-out strategy to retire old veterans were introduced in the 1980s.

A modernized bureaucracy, based on meritocratic rather than political criteria, was built by implementing merit-based entrance exams and promotion schemes (Li 1998; Li and Lian 1999; Nee 2000). As a result, average education levels increased tremendously with university graduates eventually being the majority of new entrants. A high turnover in bureaucratic personnel reduced the risk of bureaucratic inertia and commitment to the

old planning mentality of state socialism (Lipton and Sachs 1990). However, bureaucrats, as well as excellent officials, are not necessarily entrepreneurs/managers with high capabilities of management and operation. Also, as explained above in discussing ownership, bureaucrats cannot receive sufficient incentives to maximize firm performance, or are required to reach sociopolitical goals such as full employment and social welfare. In China, to preserve the so-called Chinese characteristics of the socialist market economy, managers in charge of state-owned firms are paid much lower salaries (official income) than the remuneration paid by private firms for comparable work. This gap further reduces the incentives of officials as firm managers to pursue superior economic performance[25].

In Walder's (1995) arguments, China's rapid industrial growth led by public enterprises can be explained by the government's clearer incentives and greater capacity to monitor firms and to enforce its ownership interests. Regarding the incentive and the assumption of capability of local bureaucrats on which Walder's local-corporatist state hypothesis hinges, Nee et al. conclude that "weakness in the local state corporatism hypothesis lies in the fact that fiscal federalism and the resulting incentive effects do not substantially affect the government's ability to actively intervene in an entrepreneurial way" (Nee et al. 2007:43). In contrast to Walder's argument, they claimed that direct interference "is often connected with localist tendencies inhibiting a firm's market oriented development and expansion. Close connections with government and party are therefore increasingly regarded as not being particularly helpful" (Nee et al. 2007:43-44).

[25] Kornai (1986) stressed the critical role of "soft budget constraints" in the former Soviet model: enterprise managers knew that, if they ran a deficit, the state would lend them the funds necessary to cover that shortfall.

In the case of Chinese business groups, not only does the top management of the group often come from the government, especially in the initial stage of establishing business groups, but also other employees probably came from the government during the early years of market economy reform. To lighten government's burden, some proportion of officials in different levels of government were transferred to state-owned enterprises. Those employees who previously worked in the government sector lacked the corporate mindsets and incentives to engage in market-oriented activities and/or create the resources and capabilities suitable to the changing economic environment. They even lacked the knowledge and skills necessary to make efficient use of those resources and capabilities correctly if they were developed (Zahra, Ireland, Gutierrez and Hitt 2000). In addition, in failing to master required skills and "political replacement effects," employees who previously worked in the government settings may have actively blocked technological and institutional development (Acemoglu and Robinson 2006). Hence, the greater the state's control of business groups, the more likely those business groups are to have officials transferred from government, and the more likely such employees do not satisfy the requirements for successful business performance.

In addition, in China's transitional economy, managers of Chinese business groups cannot be viewed as rational profit-maximizing economic actors (Guthrie 1999), because they may pursue power and plenty in the new Chinese institutional environment. Facing uncertain institutional transformation, they may see the survival and stability of their organizations more important than profit-maximization or economic efficiency.

Some scholars argued that when the downsizing of the government apparatus occurred in China, officials were often able to secure good positions for themselves in a

more profitable corporation because of the persistence of power (e.g., Bian and Logan 1996). At the same time, many corporations welcomed these officials in the hope that their political connections could help the private businesses to overcome bureaucratic hurdles or to receive preferential treatments from the state (Li, Meng, Wang and Zhou [2008] provided an example of the value of political connections in China). From my observations, to some degree this dynamic occurred. However, because of limited opportunities, only a small number of officials who had both strong political power and opportunities were able to find positions in more profitable corporations. These few officials were welcomed by some corporations due to their political connections,[26] which could be used by those businesses.

In my study, I did not use this small subset of officials as the measure of government official involvement, but instead used the proportions of officials in a business group. This latter measure can exclude an alternative hypothesis that government officials exert a positive effect on business group performance. That hypothesis is appropriate only for the subset of officials with political connections, but not for all government officials who transferred from government to business. This consideration leads to my second hypothesis:

[26] Regarding the effect of political connections on economic performance (sometimes as corruption), it is difficult to separate managers' ability and their connections with government. Some scholars used Suharto's Indonesia as a case study to figure out how much economic profit from political connections, about 25% (see Fisman and Miguel [2008, Chapter 2]). Some scholars (e.g., Li, Meng, Wang and Zhou 2008) treated the Party membership of private entrepreneurs as political connections, and found that it has a positive effect on the performance of their firms. In my study, I put more emphasis on ordinary officials, not on that small portion of the elite who have rich political connections.

Hypothesis 2: In China's transitional economy, the higher the proportion of government officials in a business group, the lower the economic performance of the business group.

5.1.3 Party involvement

China ideologically proclaims itself as a socialist market economy, dominated by the Chinese Communist Party (CCP). In addition to the classical bureaucratic channel of intervention—in common with other East Asian developmental states—local Communist Party committees provide another channel of state intervention in China. As Nee et al. (2007) pointed out, in its post-Mao structural reform, the Chinese state has evolved into a developmental state similar in its core features to its East Asian counterparts in Taiwan, South Korea and Singapore. However, the CCP still retains coordination rights alongside the government bureaucracy, which makes China very different from those other East Asian states. The Chinese state can draw on party committees, which are in essence networks of political actors internal to the firm, to support its policy initiatives and to provide timely and detailed information about personnel and other matters, thus controlling the state-owned firms' social and economic activities. Article 17 of the Company Law (1994) guarantees the party committees' formal authority position within firms and business groups. It specifies that "the activities of the local branch units of the CCP in a company shall be carried out in accordance with the Constitution of the CCP." Article 31 expresses that the CCP constitution specifically delegates the implementation of higher party decisions to local party committees and grants them the right to "supervise cadres and any other personnel." This provision formally confers on the local party committee the right to

control personnel decisions inside state-owned firms (Bian, Shu and Logan 2001).

Although Nee et al. (2007) argued that the incentives of local party committees may differ significantly from the local government jurisdictional unit with shareholding interests in the firm, party members and government officials actually are very similar to one another because they largely overlap and each derives its own power and rights from either the Constitution of the CCP or State, or both. Nee et al. also emphasized that party members "are insufficiently insulated from patron-client ties and may easily be 'captured' by interest groups or be tempted to maximize their own self-interests" (Nee et al. 2007:28). In examining the effects of involvement of local CCP party committees in the decision-making of China's listed firms on performance, Chang and Wong (2004) found that prevailing party control is excessive and that the political costs associated with party control over managers are more detrimental to firm performance than are agency problems. Therefore, I provide my third hypothesis:

Hypothesis 3: In China's transitional economy, the higher the proportion of members of a business group who are also CCP members, the lower the economic performance of the business group.

5.1.4 Financial resources

Most emerging economies have quite weak and shallow capital markets that significantly limit any organization's potential to obtain money to fuel expansion and growth (Khanna and Palepu 1997; Khanna et al. 2005; Stiglitz 1989). Financial resources are a necessary condition for improving firm performance in any emerging economy. As Oi (1992) showed, by giving officials both incentives and the investment funds to become effective

promoters of local industry, an economic foundation for rapid, local government-led economic growth, especially at the township and village level, might be provided by the fiscal contracting system. Often, the access to debt capital is controlled by a handful of banks which act in concert with the government to support political initiatives and priorities in the industrial sector (Ramaswamy, Li and Pécherot Petitt 2004; Whitley 1999). To control assets in a business group or firm, the Chinese state keeps banks under its direct control. In China's transitional economy under "socialism with Chinese characteristics," both lenders and borrowers are very likely to be controlled by the state in an environment with severe information asymmetry.

China's financial intermediaries were either absent or not fully evolved in firm financing (Khanna and Palepu 1997). Keister (2000, 2002) also found that the reform of the financial and bank systems was very slow in China. The state banking system only recently underwent very limited property rights diversification and was still under intermittent pressure from the government to expand loans to rescue ailing state-owned firms (Woo 2002). The limitations of the market for public securities makes it difficult for firms to raise money with equity or public debt because the stock market is relatively small and corporate issues are almost nonexistent (Allen, Qian, and Qian 2005). The undeveloped financial market in China forces firms to rely largely on retained earnings and bank loans for financing, regardless of whether the firm is healthy or distressed. If a big investment for any program is needed by a business group, whether it is potentially profitable or not, bank loans would most likely be considered to meet that need. The total amount of outstanding bank loans is significantly greater than the volume of equity or corporate bonds. For example, according to a Federal Reserve Bank of Dallas report

(2005), at the end of 2004, total bank loans in China comprised 138.1% of GDP while the combined market value of China's two stock exchanges was only 27.1% of GDP. Although financial support from those state-owned banks does not necessarily lead to high economic performance, without it, a firm's potential profit would be very difficult to realize. Therefore, financial support from the state in the form of loans from state-controlled banks is crucial to firm performance. My observations and interviews also indicate that capital from state banks remains an important source of financing for business group firms. Based on this point, I propose my fourth hypothesis:

Hypothesis 4: In China's transitional economy, the greater a business group's financial support from banks controlled by the state, the higher the economic performance of the business group.

Regarding this hypothesis, the positive impact of bank loans might be capturing some selection effect. Since 2003, to improve Chinese state-owned banks' competitive ability in the world economy, China has begun to reform those banks to operate on market-based commercial principles. Were this reform achieved, state-owned banks would extend loans primarily to selected profitable firms, rather than on the basis of sociopolitical considerations. In other words, it is not the bank loans that could make a firm perform better, but rather good performers would have easier access to bank loans. Unfortunately, this situation is not the current case in China. Although China began reforming the largest state-owned commercial banks in 2003 to improve their competitiveness in anticipation of China joining the World Trade Organization, bank

behavior has not substantially changed (Podpiera 2006; also see Dobson and Kashyap 2006). Therefore, a possible causal effect in the reverse direction is unlikely. Those firms which are advantaged by state financial support have better performance in contemporary China's undeveloped capital markets.

5.1.5 Interaction of the CCP member and financial support from state-controlled banks

In China's transitional economy, financial support as economic intervention may significantly differ from political intervention such as personnel control by assigning bureaucrats and CCP members. To gain further insight into the effects of state intervention in different aspects and ways on firm performance, I examined the interaction of CCP membership and financial support from state-controlled banks. Party membership in China implies a measure of political status, which can be used as political connections for managers to get access to bank loans and to help their businesses overcome bureaucratic hurdles (Li, Meng, Wang and Zhou 2008). To some degree, it is also an indicator of human capital because of the Party's strict and merit-based selection process. Allegedly, for a business group, increasing party control also increases performance. However, this hypothesis is not plausible for two specific reasons. First, although China's reform rapidly increased economic freedom and individual wealth, China remains an avowedly socialist regime, and its economic policy-making is still controlled by the Central Committee of the Communist Party. Therefore, while firms now focus on pure economic gain, the managers affiliated with the CCP have to follow the rules of the Communist Party's ideology and social policy. Even at the firm level, their

business decisions can be interfered with by Party leaders. As a result, their first priority might not be a firm's profitability, but maintaining social stability in employment and social welfare.

Second, the Party members with political power and control of key resources were often tainted by corruption, and only a very small proportion of them (20%) were expelled from the party, while most of them got only warnings at most (Pei 2007). This situation makes corruption a high-return, low-risk activity. Therefore, financial support from the state may be embezzled or abused by CCP members because of their personal self-interests especially under a mixed economy in China, even though state actors provide an important network for obtaining bank loans through political connections (e.g., Communist Party membership). With an increase in the proportion of CCP members in business groups, the positive effect of financial support from the state decreases. In conjunction with hypothesis 3, I formulate the following hypothesis:

> ***Hypothesis 5: In China's transitional economy, greater party control (measured by the CCP members) decreases the positive impacts of the financial support from the state-controlled banks on the economic performance of the business group.***

5.2 Methods and Data

I analyze data collected in four cities in China in summer 2006, following initial fieldwork in summer 2004. To achieve representative data from different areas and political and economic contexts, four cities were selected, as shown in Figure 5.1: Shenzhen, Guangdong province; Zhengzhou, Henan province, Shanghai and Beijing (both municipalities that are directly under the jurisdiction of the central government) (for basic information of these four cities, see Table 5.1). Therefore, the population is business

groups whose core firms were identified in these four cities. The reasons for choosing these locations are: (1) they cover both inland and coastal cities, and both northern and southern cities; (2) each represents a relatively different economic and political context and numerous business groups' core firms are located in these cities. Given the difficulty of data collection in emerging economies (Wright, Filatotchev, Hoskisson and Peng 2005) and the great sensitivity of Chinese informants to social surveys, I made personal contact with business group informants, believing that information about companies obtained by personal interviews and personal networks is more accurate and trustworthy than could be obtained only by mailing questionnaires to firms. A total of 146 general managers (or equivalent positions) of business groups agreed to take part in the study. I completed 95 personal interviews. Nineteen informants were excluded because they failed to provide essential information (state intervention and performance) or contained inconsistent information. As a result, the data obtained 76 valid responses yielding a response rate of 52%. A total of 21 business groups were from Beijng, 19 from Shenzhen, 19 from Zhengzhou and 17 from Shanghai.

There are two reasons to justify the generalization of results from my research. First, all areas of China are currently engaged in transition and institution-building project with state intervention. Although there is certainly regional variation in many aspects, for example, the structure of institutional environments (e.g., Beijing and Zhengzhou), I am interested in exploring the different modes of state intervention and their impacts on group economic performance. Under common central government and Chinese culture, the relationships of state intervention and business group behavior in different areas share the same national dynamics and constraints. Second, although regional variation certainly

occurs, the four selected cities reflect very different institutional contexts as described above and thus capture the important variation in several major aspects in China. Third, respondents from different cities reported very similar observations such as the significance of financial support from state-owned banks. As a manager in Beijing put it:

> In current China, capital markets are not fully developed, and to get a huge amount of money to invest in a long-term project, private capital is almost impossible and at the same time, it is not easy to control private capital flow. Business groups have to get help by gaining financial support from state-owned banks. (Interview: June 2006)

This informant spoke specifically about capital market development, but my interviews showed that strikingly similar situations also extend to other realms in China's economic transition. I believe that these three arguments are sufficient to justify the generalizability of the results of my sample.

5.3 Measures of Variables

5.3.1 Dependent variables

I evaluated the effects of state interventions with two indicators of a business group's profitability: Return on assets (ROA) measures a company's net profit divided by its total assets including foreign capital in 2005; return on investment (ROI) measures a company's net profit divided by the cost of investment in 2005. Briefly, both measures are aggregations of all the business group member firms' performance and indicate how

well the business groups' management has performed relative to its total assets and to the financial resources provided by investors, respectively. Skeptics may have reservations about these measures owing to China's still-immature accounting standards. However, according to Lin, Chen and Tang (2001), empirical work suggested that China had devoted serious efforts to making national accounting standards consistent with international standards. Because the OLS-BLUE assumption of normally distributed error terms in multiple regressions is not satisfied and logistic regression does not require this assumption, logistic regression is preferred (Hosmer and Lemeshow 2000; Knoke, Bohrnstedt, and Mee 2002). I collapsed both continuous indicators into dichotomous categories: high (≥ mean) coded as 1 and low (< mean) coded as 0, because both variables are not normally distributed but those cases below the mean values are clearly clustered (For ROI, the mean=0.14 or 14%; For ROA, the mean=0.05 or 5%. see Figure 5.2)[27].

5.3.2 Independent variables

I used data on Communist Party and government involvement, and ownership and loans from state-controlled banks received by the 76 groups to construct four measures of state intervention. Researchers usually consider only party and government bureaucrat involvement to be state intervention. Because, in the transitional economy, ownership and

[27] I used robust regressions and power transformations (for example, Box-Cox power transformation) to correct for undue influence of outliers. The results show that all trends for each predictor, with all control variables, are consistent with the results of logistic regressions (please see the Appendix B1 and B2: Model 3). Governmental officials for ROA, bank loans and the interaction term of CCP members for both return on investment and return on assets are significant, while others are not significant at the conventional level due to small sample size, but most of them have relative low degree of uncertainty level. Please see the appendix B1 and B2.

financial control are also important means of state intervention, I include them as additional indicators of state intervention. *Government official intervention* is measured as the percentage of business group employees who are current or past government officials. *Party involvement* is measured by the percentage of CCP members in a group. *Ownership* is measured by the percentage of a business group's stock owned by the Chinese state. *Financial intervention* is measured by the percentage of loans from state-controlled banks.

5.3.3 Control variables

I held constant the following control variables in analyzing the performance effects of the four state intervention indicators:

Group size. Size may count. Large firms may benefit from economies of scale and may have better access to financial resources, which could improve their performance (Fama and French 1995). They may be associated with a higher level of state intervention because they can deliver more benefits to politicians and bureaucrats (Lioukas, Bourantas and Papadakis 1993). To capture the possible confounding effect of group size, I controlled the number of firms, the number of employees, and the total assets held by the business groups (all transformed to natural logarithms).

Regions. In China, coastal and inland areas have differing levels of economic development because of either priority policies, resources, or both. I use dummy variable indicators of the four regions as control variables: Beijing (capital city of China, which may experience state intervention much more than other cities) is the omitted reference category. Shanghai (a coastal city but different from Shenzhen in economic policy after

the reforms) is, like Beijing, a municipality directly under the jurisdiction of the central government. Shenzhen is coastal city and one of four initial Special Economic Zones. Only Zhengzhou in Henan province is an inland city.

Overseas firm(s). Keister's (2000) study of Chinese business groups showed that groups with some firm members which have connections to foreign firms have higher performance than those groups without such connections. A dichotomous indicator of overseas firm(s) within a business group is coded yes=1, no=0.

CHAPTER SIX

FINDINGS

This chapter discusses the results of my statistical analyses of the data to test the research hypotheses. It contains descriptive statistics for the variables, a MIMIC model, and logistic regression models.

6.1 Descriptive Statistics and Preliminary Assessments

Table 6.1 presents descriptive statistics for the variables (means, standard deviation, and Pearson correlations). For ROI (return on investment: measured by percentage), its Pearson correlation with state-shared holdings is -0.24, significant at the $p < .05$ level; with percentage of government officials, -0.08 but not significant; with percentage of party members, -0.30 significant at $p < 0.01$; with financial support from state-controlled bank, 0.06 but not significant; with the interaction of party member and financial support, the correlation is -0.18, but not significant.

For ROA (return on assets: measured by percentage), its Pearson correlations with state-shared holdings is -0.29 significant at $p < 0.05$; with percentage of government officials, -0.10 but not significant; with percentage of party members, -0.17 significant at $p < 0.01$; with financial support from state-controlled bank, 0.02 but not significant; with the interaction of party member and financial support, the correlation is -0.07, but not significant. Considering simple correlations, it appears that greater state involvement in enterprises depresses returns. An exception to the overall pattern is state involvement that

takes the form of financial support.

Examining only these correlations, we would not have great confidence statistically to conclude that my hypotheses are supported, even though the individual directions are consistent with each of my hypotheses. So I will demonstrate multivariate statistics results below.

6.2 Mimic Model of State Intervention and Business Group Performance

Before estimating multivariate logit models, I examine the relationship of state intervention and business group performance by using a MIMIC (multiple indicator, multiple cause) model. Figure 6.1 presents the results of this latent structural analysis. In this model, I used a latent variable "Business Group Performance" (with economic performance, return of investment, and return of assets as its three indicators) as the dependent variable and used four independent variables of state intervention (ownership, party membership, assignment of government officials, and financial support) as directly observed predictors of performance. I chose return on assets as the reference indicator for the unobserved "Business Group Performance" factor. The results show that the minimum fit function chi-square test=2.08 for 4 degrees of freedom, and p value=0.72082, which is a good fit; GFI=0.99 and AGFI=0.95 suggest a very good fit; RMSEA=.0.000 indicates a very close fit.

At the measurement level, the indicator of latent "Business Group Performance" has a significant factor loading 0.63 ($p<.01$). At the structural level, three of four path coefficients are significant at differing probability levels. The proportion of ownership

shared in business groups by government is significant at $p < .10$, and its negative sign indicates that the higher the proportion of ownership shared by government, the lower the business group economic performance. These results support hypothesis 1 that when the state owns more business group assets, the business group performs less well economically. While the percentage of members of a group who are also CCP members is significant at $p < .05$ and has a negative sign, the percentage of loan from state-controlled banks has an opposite sign and is significant at $p < .05$. The indicator of CCP members has the largest standardized effect (0.25), and loan as financial support has the second highest standardized effect (0.20).

These results support my hypotheses 3 that the more state involvement in business group by personnel such as CCP members, the business group performs less well economically, and 4 that the more state support in finance for business group, the business group performs better economically. However, the percentage of officials is not significant, has the weakest standardized effect (0.12), and a negative sign. So my second hypothesis cannot be supported with reasonable confidence that state involvement by officials decreases business group performance. As revealed by the residual arrow coming into "Business Group Performance," the predictors jointly explain about 12 percent of the variation in business group performance ($(R)^2=1-(.94)^2=.12$).

6.3 Logistic Regressions

I used logistic regressions to test my hypotheses. I conducted preliminary assessments to make sure the data met basic statistical assumptions. To control for potential sources of

correlated error in each of cities' samples, I used a robust estimation option to improve my estimates of the standard errors. The multicollinearity among independent and control variables was also detected by using the *collin* command in Stata 10. The least tolerance is 0.4207 (which means the largest VIF = 2.38)[28]. For multiple logistic regression models, an estimated logit coefficient can be easily converted to a predicted probability by the formula:

$$Pr(y=1) = \exp(X'b)/[1+\exp(X'b)]$$

where Pr(y=1) is the probability that the high performance, **X** is a vector of the explanatory variables, and the b are the estimated logit coefficients of the explanatory variables.

6.3.1 ROI as Indicator of Performance

Table 6.2 presents the results of the effects of state intervention on the return on investment (ROI) of business groups. I tested my hypotheses in four logistic regression models. For models 1 and 3, the significant levels are close to $p < .05$ and $p < .10$ respectively; model 2 and model 4 are significant at $p < .05$ and $p < .01$, respectively ($p < .05$ for model 2, and $p < .01$ for model 4).

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[28] The tolerance or variance inflation factor (VIF) is a generally accepted practice for testing for multicolinearality. However, there is no "critical" value for which one could conclude with any certainty if multicolinearality is a "significant" problem. Many researchers (for example, Allison 1999) suggest that, as a general "rule of thumb," multicolinearality becomes a "significant" issue (i.e., one that would "trigger" reconsideration of the model specification) when the VIF is greater than 2.5, while some suggest that multicolinearality is problematic when a VIF is greater than 10 (or a tolerance which is equal to the inverse of the VIF smaller than 0.1).

Model 1 is the baseline model with only control variables. Model 2 supports Hypotheses 1 and 4 at $p < .10$, and Hypothesis 2 at $p < .05$. This means that in China's transitional economy, ownership and government officials have negative impacts on Chinese business groups' economic performances. However, financial support more likely increases business group performance. When the independent variable measuring CCP members was added in model 3, Hypotheses 4 and 1 are still supported. However, the significant negative effect of government officials disappeared. This result can be explained by distinguishing between political power (of CCP members) and administrative power (of government officials). Political power matters more than administrative power, which is consistent with my observations. Model 4 added an interaction term (of CCP members and loans). The two main effects support both Hypothesis 1 and Hypothesis 4 at $p < .05$, and the regression coefficient changed only a small amount compared with model 2. In model 4, the effects of officials and CCP members are insignificant, but have the same trends, and for CCP members, the degree of uncertainty is very low ($p=0.1075$ one-tailed test). With those control variables, ownership still has significant impact on the return on investment of a business group. Moreover, model 4 supports my interaction Hypothesis 5 with a negative coefficient at $p < .05$. This result means we can confidently say that party control decreased the positive effect of financial support from those state-owned banks on the return of investment of a business group.

To gain further insight into the significant interaction effect, I constructed Figure 6.2 based on the parameter estimates of model 4, but here collapsing the proportion of CCP members into two categories: high (≥ mean) coded as 1, and low (< mean) coded as 0.

Figure 2 depicts the interaction between CCP members and loans from state-controlled banks. Support for Hypothesis 5 is shown by the differential probability of a high ROI between business groups with high and low proportions of CCP members, while the more financial support from the state, the more likely the business group performance (measured as ROI) is high. The figure clearly shows that when the proportion of CCP members within business groups is low, loans from state-controlled banks have a substantially greater impact on high business group performance than when a group has a high proportion of CCP members. It also illustrates that the probability gap of high profitability between low and high proportions of party members increases explicitly with the interaction between party members and bank loans. In other words, the more the financial support from the state, the much more likely the high business group performance with low party control than with high party control.

6.3.2 ROA as Indicator of Performance

Table 6.3 presents the results of the effects of state intervention on the return on assets (ROA) of business groups. I also tested my hypotheses in four logistic regression models. From models 2 through 4, the significant levels are all at $p < .05$ and the levels for model 1 are close to $p < .05$.

Model 1 is also the baseline model with only control variables. Models 2, 3 and 4 test Hypothesis 1 and support it at $p < .05$ level. Ownership has a negative association with the return on assets of a business group. The coefficients of the effects of officials on performance are negative, as Hypothesis 2 argues, at $p < .05$. I can be relatively confident

that government officials have a negative impact on the return on assets of a business group. Models 2, 3 and 4 also support hypothesis 4 at $p < .05$. I'm also confident that bank loans increase the return on assets of a business group. Model 3 shows that the effects of CCP members on performance are negative as Hypothesis 3 states, but they are not significant at conventional levels. In addition, after interaction with loans from state-controlled banks, the coefficient becomes positive and still not significant; my hypothesis 3 cannot be supported in these models. Thus, the effect of party members on the return on assets of a business groups seems to be nil. In model 4, the coefficient of the interaction term is negative and significant at $p < .10$. My interaction hypothesis is thus supported for ROA. Party control also decreases the positive impact of state-owned bank loans on the return on assets in a business group, as it does for return on investment.

To gain further insight into the significant interaction effect, as I did my analysis of ROI, I constructed Figure 6.3 based on the results of model 3, but again collapsing the proportion of CCP members into two categories: high (≥ mean) coded as 1, and low (< mean) coded as 0. Figure 6.3 depicts the interaction between CCP members and loans from state-controlled banks. Support for hypothesis 5 is shown by the difference of probability of high ROA between high and low proportion of CCP members within business groups. It clearly shows that, when the low proportion of CCP members within business groups is low, loans from state-controlled banks have greater impact on high business group performance than when the proportion of CCP members is high. But the gap between high and low proportions of the CCP members within business groups is much smaller for ROA than it is for ROI (the coefficient changes from -0.003 for ROI to

-0.001 ROA). This difference may arise from returns on investments depending more on how firms use their money than does the return on assets. When more people are CCP members in a business group means, they may be investing the money in projects that mainly benefit themselves rather than improve firm performance.

CHAPTER SEVEN

DISCUSSION AND CONCLUSIONS

7.1 Summary of Results

State intervention and economic development is a complex and multifaceted phenomenon. I have examined the interplay between modes (and also time, in an important sense) of state intervention and business group performance in China's transition economy. I sought to contribute to empirical research on the Chinese transitional economy by identifying different modes of state intervention, one of the institutional environments in which business groups are embedded. Summarizing my results, I found support for the contingent nature of the effects of state intervention on economic performance, emphasizing the state's inability to provide positive economic effects at the business level through direct intervention such as ownership, government officials, and Communist Party members. However, I demonstrated the state's ability to provide positive economic effects by matching financial support to the functional need of the market in the emerging economy. Inverse significant effects occurred in the case of government involvement by ownership and of party involvement. They partially support the political economy perspective. State intervention in the form of loans from state-controlled banks to business groups yields significant positive effects on both the ROI and ROA measures.

In taking into consideration only the involvement of state actors—government and party—my results are mostly consistent with the findings of Nee et al. (2007), although I

used a different sample and measures. Given their definition of state intervention (only government officials and party members), their tests, based on a sample of 66 firms listed on the Shanghai Stock Exchange, indicated no positive economic effects of state involvement at firm level. They used state ownership—the percentage of state shares—as a control variable, which yielded negative but nonsignificant effects on firm performance. My results confirm Nee et al.'s (2007) findings and generalized their implications beyond the limited number of publicly traded firms listed on the Shanghai Stock Exchange. My investigation also confirms Peng's (2001) study of rural industry. However, in taking into account the Chinese government's financial support function, I hesitate to claim that my results contradict Walder's (1995) conclusion that a government can enhance the economic performance of firms through direct involvement in corporate governance as financial incentives increase in intensity and monitoring capacity improves. Capital and financial factors were more helpful for understanding the positive economic performance of firms in an earlier ear, especially before 1992 when the socialist market ideology became official.

Given these divergent findings among the various research investigations, I infer that historical periods matter greatly, under the assumption that, with the progressive development of a market economy in China, the role that direct state intervention plays has been functionally gradually changing from more positive to less positive to negative in economic development[29]. In the early period of reform in China (before 1992),

[29] At the early stage of reform in China, bureaucrats played a more positive role in economic development. There are two main reasons: first, they have higher level of capability of managing economy than the average because of based-education recruitment. However, entrepreneurs trained in the developing market have higher capability of management and operation than those bureaucrats. Second, they did not have private properties defined by law because of all owned by

bureaucrats played a more positive role in economic development. There are two main reasons: first, they have greater capability of managing an economy than the average party official because of education-based recruitment. However, entrepreneurs trained in the developing market have even higher capability of management and operation than those bureaucrats. Second, they did not have private properties defined by law because all firms were owned by the state at that period. With the development of privatization, the illicit asset-stripping of Chinese state firms became one of the major sources from which some corrupted bureaucrats filled their private cashboxes (Ding 2000a). As a result, the bureaucrats' role in economic development became relatively negative. This may help in explaining why Walder's findings for the period before 1992 are opposite to Nee at el.'s results and my findings for the periods of 1999 and 2005.

The market is a nexus of institutions. In the transition from central-planning to market-oriented economy, the institutional void must be filled. According to Ma, Yao and Xi (2006), business groups fill the ownership void. Based on a sample of 1,119 publicly-listed Chinese companies, they found that the state ownership status had a significant negative effect on firm performance. My results are also consistent with theirs. But in their study the interaction of business group affiliation and state ownership had a significant and positive effect on firm performance. That result supports business groups' substitution role in filling ownership voids in China's transition economy, given the state's ownership status. This discovery can help us better understand the contingent

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state at that period. With the development of privatization, the illicit asset stripping of Chinese state firms became one of major sources of filling some corrupted bureaucrats' private cashbox (Ding 2000a). As a result, bureaucrats' role in economic development became relatively worse and worse. This may help in explaining why Walder's findings are opposite to Nee at el.'s results and my findings.

perspective on how state intervention affects business group performance in a specific institutional context. Therefore, in any discussion of the effect of state intervention on economic performance, the specific institutional context and specific modes of direct state intervention must be identified. These contexts and modes will likely change through the historical developmental stages of a transitional economy.

The financial support of the Chinese state has positive effects on economic performance at the business group level. However, if we take government and party involvement into consideration, this kind of financial support lies in the special institutional environment: networks, government, party, and enterprises. The negative effects of government bureaucrats and party members on economic performance tells us that, in spite of the positive function of loans from state-controlled banks, we should think twice before advocating any strengthening of direct state intervention. Indeed, we can get the suggestive conclusion that the success of a developmental state lies less in direct state intervention, but more in providing a robust external economic environment, including such features as the gradual liberalization of product and labor markets, increasing openness to foreign trade, creation of commercial codes enforced by a rule-of-law system, investment in infrastructure and institutional reforms (e.g., property reforms and privatization which offer people sufficient security for planning, investing, and economic risk taking).

7.2 Limitations

The greatest limitation in my study is that I derived my empirical results from a small sample of business groups in only four cities, raising some concern about the

generalizability of my findings. But considering the regions of four cities and different institutional arrangements – such as Shenzhen as a Special Economic Zone and Beijing as capital of China – I believe that my findings would be applicable to other emerging economies experiencing institutional transitions from a planned to a market system and where business groups are prominent. Future research should explore state intervention in more specific detail, especially in decision making dimension, through business group governance structure, and scrutinize other dimensions of group/firm performance such as innovation and productivity (Carney and Gedajlovic 2003; Mahmood and Mitchell 2004).

Another limitation is the lack of longitudinal data to tease out how specific changes in the institutional and economic environment influence the relationship of state intervention and group/firm performance. In addition, the small sample size did not allow for using industry as a control variable and I could not take lagged performance as a control variable. Nee et al. (2007) argued that a high level of state intervention may affect firm performance and conversely firm performance may affect the level of state intervention. To partially deal with this reverse-causality problem, lagged performance should be included as a control variable[30].

7.3 Some Implications

Despite these limitations, my study extends theory and empirical research on state intervention and business group performance to the context of institutional transitions. It contributes to the business group literature by offering a contingency perspective on how modes of state intervention affect economic performance, moving beyond the debate

[30] Nee and his colleagues' findings showed that firm performance does not affect the level of state intervention at any conventional significant level.

between political economy perspective and developmental state theory of political sociologists and economic sociologists. By identifying different specific modes of direct state intervention – that is, measuring government officials, party, ownership structure, and loans from state-controlled banks as indicators of capital structure – I tested their net effects on group economic performance. When direct intervention matches the functional needs of China's emerging market, the effects are positive; otherwise they are negative. The implications for policy and practice are that reformers must identify the requirements of market operations in a transitional economy. They must decide how the developmental state can best intervene in economic affairs, while further facilitating transformation to indirect modes of state intervention, instead of rigidly emphasizing only direct intervention modes.

When it comes to direct state intervention, the question why some modes of state intervention do not meet the needs of markets but are uncorrected should be explored. That is, why do some state interventions not match the needs of markets but still persist? Two factors should be considered: state capability and motive. State capabilities include to anticipate a problem raised by its direct intervention before the problem actually arrives; to perceive it when the problem does arise; and to solve the problem after perceiving it. If it lack of those capabilities, a state may try to solve its intervention issues but may not succeed; as a result, those direct state interventions which mismatch the needs of markets will remain uncorrected. Motives for state intervention depend more or less on the multiple goals. Ownership, for instance, is one problem that I illustrated in this study. However, if the Chinese state (or Chinese Communist Party, more precisely) is to keep Chinese characteristics of socialist market economy, Chinese state cannot be

motivation to privatize property rights. In the transitional economy, nonprofit goals may be more important for managers of state-owened enterprises. For example, managers of Chinese business groups cannot be viewed as rational profit-maximizing economic actors (Guthrie 1999), because they may pursue power and plenty in the given Chinese institutional environment, and facing uncertain institutional transformation, the survival and stability of organizations may be much more important than either profit-maximization or efficiency.

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APPENDIX A:
QUESTIONNAIRE

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2006 CHINESE BUSINESS GROUPS SURVEY

I would appreciate your cooperation in this study of the Chinese business groups by completing this survey. It should take about 20-30 minutes to complete. Some questions can be answered by simply circling the number that reflects your best judgment on the answer scale provided.

All questions are straightforward and there are no right or wrong answers. Some questions on this survey are very similar to others. This is an established measurement technique in survey research and helps in the analysis of the results.
I promise that the information you provide will remain confidential. Data will be averaged across individuals and organizational units and no individual will be identified in any of the study findings.

Thank you very much!

Xinxiang Chen

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PART A: PERSONAL INFORMATION

1. Date: ______________

2. Gender? 1) Male 2) Female

3. Year of birth? 19____

4. Your position/job title: ____

5. What was the highest level of education you have achieved when you got your current job?

1)	no formal school	6)	4-year college
2)	elementary school	7)	graduate school
3)	middle (junior) school	8)	law school
4)	high school/ technical-vocational school	9)	business school
5)	2-year college		

PART B: BACKGROUND INFORMATION OF YOUR BUSINESS GROUP

6. When was your business group founded? ______________

7. The number of employees in your business group: ______________

8. The total assets of your business group: ______________

9. Location of the core firm of your business group: ______________

10. In what industries does your business operate: ______________

11. How many vertical levels does your business group have? ______________

12. How many member firms does your business group have? ______________

13. Does your group have oversea member firm(s)? ______________

Part C: State Intervention Measurement

14. Now I will ask some information about your business group:

Questions:	Answer (%)
1) The percentage of stock owned by state (%)	
2) The percentage of financial resources from banks that controlled by state(%)	
3) The percentage of members who are government officials (%)	
4) The percentage of CCP members (%)	

Part D: Economic Performance Measurement

15. The 2005 profitability (revenues less expenses) and productivity of your group:

Questions:	Answer (%)
Return on Investment (%)	
Return on Assets (%)	

16. Comments and Recommendations:

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That is all the questions. Thank you for your cooperation and your time in completing the survey!

APPENDIX B1:

Estimated Coefficients of OLS Regression Models Predicting Effect of State Intervention on Return on Investment of Business Groups

Independent Variables	(1)	(2)	(3)
Constant	1.4900 (0.1081)***	1.5900 (0.1170)***	1.5373 (0.1842)***
Effect of State Intervention			
Ownership		-0.0021 (0.0011)**	-0.0008 (0.0012)
Loans	0.0026 (0.0022)	0.0039 (0.0023)**	0.0038 (0.0024)*
Government officials		-0.0035 (0.0037)	-0.0041 (0.0044)
CCP members	-0.0008 (0.0038)	0.0006 (0.0035)	0.0028 (0.0035)
Interaction of CCP and Loans	-0.0003 (0.0001)***	-0.0003 (0.0001)***	-0.0004 (0.0001)***
Control Variables (groups)			
Number of firms (logged)			0.1397 (0.0844)*
Number of employees (logged)			-0.2573 (0.1028)***
Total assets (logged)			-0.0715 (0.0804)
Location of Core firms (Beijing as reference category)			
Shenzhen			0.2299 (0.1134)**
Zhengzhou			0.0288 (0.1193)
Shanghai			0.3184 (0.1173)***
Firm(s) overseas			0.0770 (0.1026)
R^2	0.0925	0.1394	0.3528
P	0.0070	0.0079	0.0006

Number of Observations: 76. *p<.10, **p<.05, ***p<.01 (one-tailed tests).

Notes: Robust Standard errors in parentheses

APPENDIX B2:

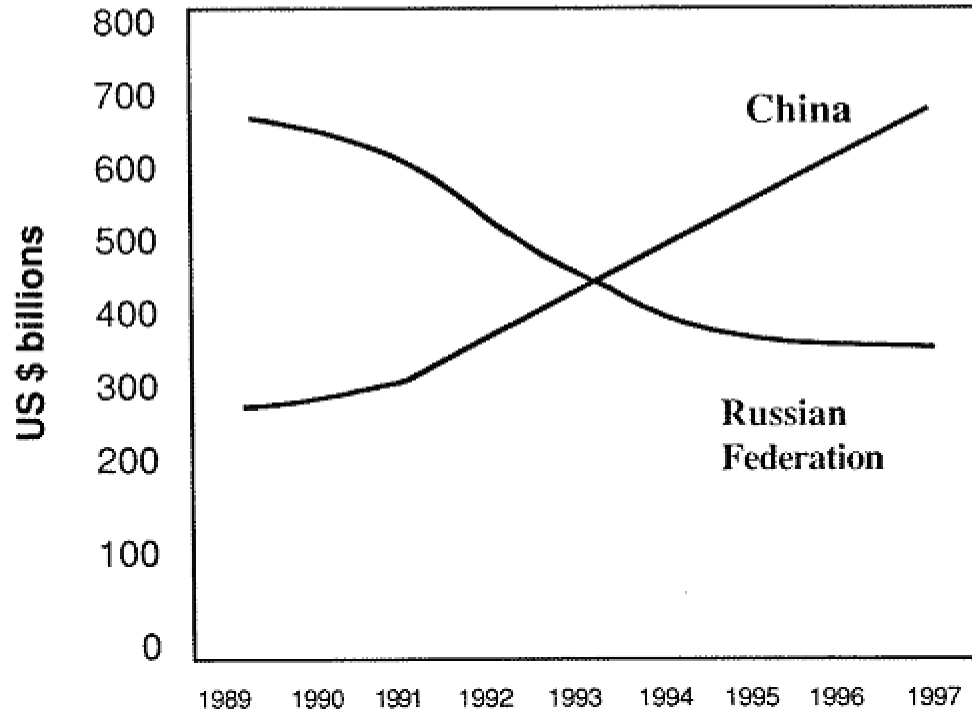
Estimated Coefficients of OLS Regression Models Predicting Effect of State Intervention on Return on Assets of Business Groups

Independent Variables	(1)	(2)	(3)
Constant	1.1938 (0.0194)***	1.2187 (0.0230)***	1.1973 (0.0381)***
Effect of State Intervention			
Ownership		-0.0005 (0.0002)**	-0.0003 (0.0003)
Loans	0.0006 (0.0004)*	0.0009 (0.0004)**	0.0010 (0.0006)**
Government officials		-0.0012 (0.0010)	-0.0016 (0.0010)*
CCP members	-0.0012 (0.0008)*	-0.0008 (0.0008)	-0.0001 (0.0008)
Interaction of CCP and Loans	-0.00007 (0.00004)**	-0.00008 (0.00004)**	-0.00009 (0.0004)***
Control Variables (groups)			
Number of firms (logged)			0.0574 (0.0268)**
Number of employees (logged)			-0.0388 (0.0245)*
Total assets (logged)			-0.0078 (0.0166)
Location of Core firms (Beijing as reference category)			
Shenzhen			0.0163 (0.0313)
Zhengzhou			-0.0058 (0.0245)
Shanghai			0.0176 (0.0318)
Firm(s) overseas			-0.0166 (0.0247)
R^2	0.1372	0.1882	0.3241
P	0.0507	0.0091	0.0007

Number of Observations: 76. *p<.10, **p<.05, ***p<.01 (one-tailed tests).

Notes: Robust Standard errors in parentheses

Figure 1.1: Russian and Chinese Gross Domestic Product*



*Measured in constant 1987 US$.
Source: Statistical Information and Management Analysis (SIMA) database.

SOURCE: Stiglitz (1999/2000)

Figure 4.1: Typology of Economy and State Intervention

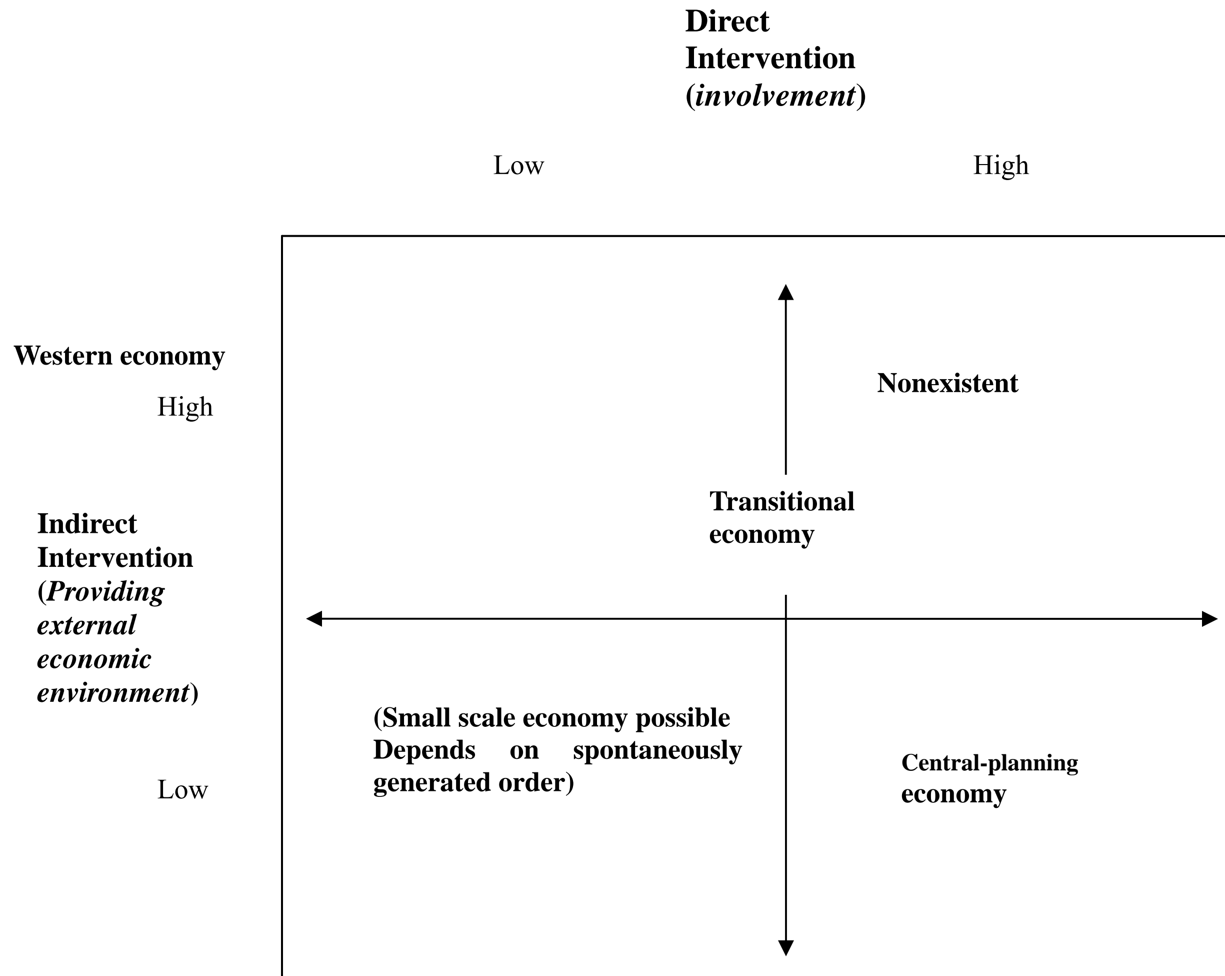
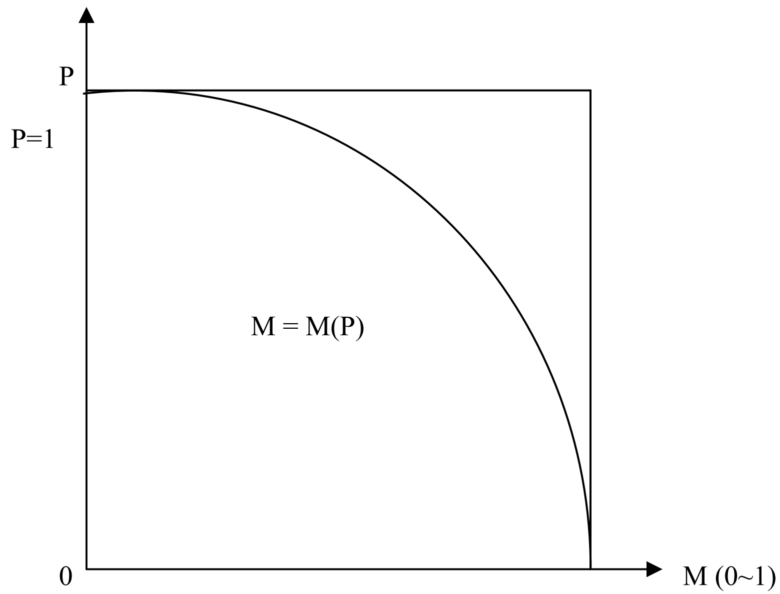


Figure 4.2: Typology of Institutions by Interaction of State intervention and Market

State Intervention	Market: Perfect	Market: Not perfect
Fit	(1) Ideal market economy, best one (difficult if not impossible)	(2) Good one: high performance.
Not fit	(4) non exist (market distort with not-fit SI)	(3) Bad one: low performance.

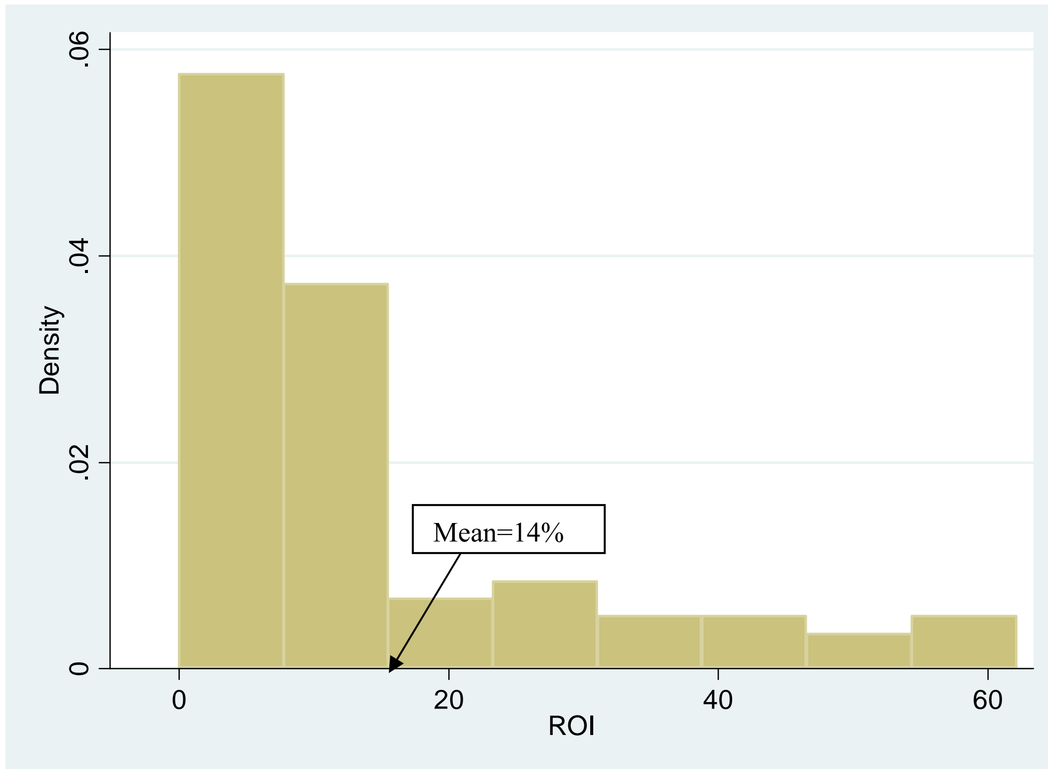
Figure 4.3: The Relationship between Ownership and Motivation*



*The relationship between the percentage of assets (P) shared by state in a firm (where $0 \leq P \leq 1$) and managers' motivation (M) for increasing firm performance (where $0 \leq M \leq 1$).

Figure 5.1: Map of China Indicating the Four Research Sites

Figure 5.2: Distributions of ROI (%) and ROA(%)



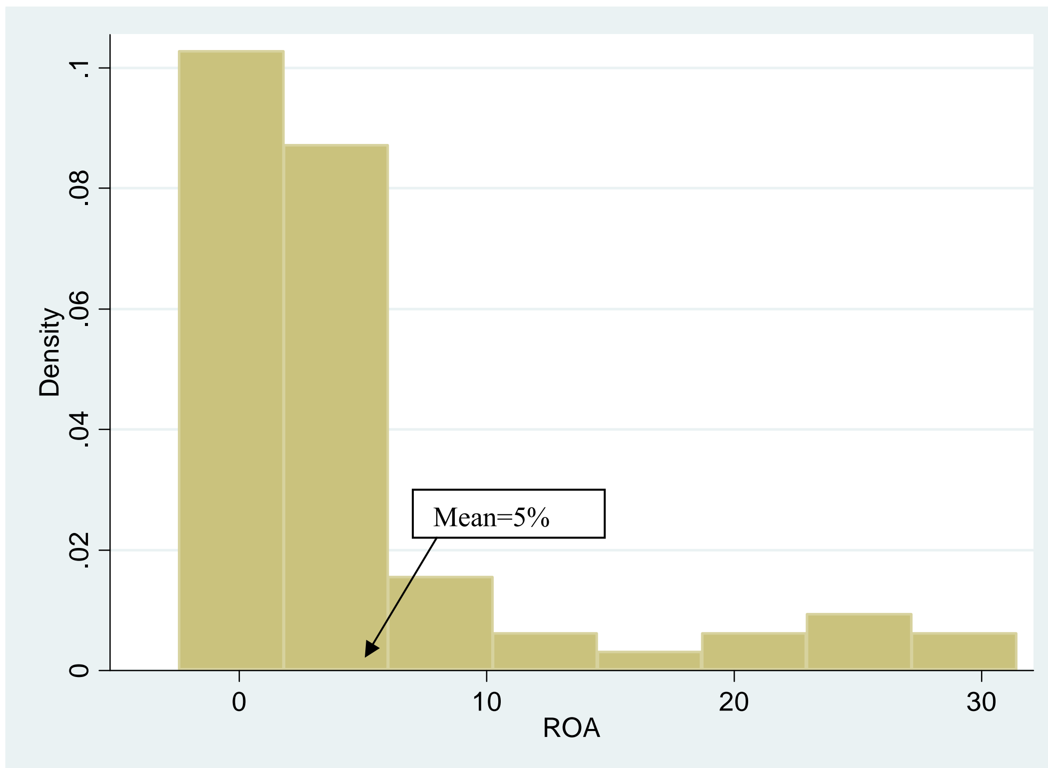
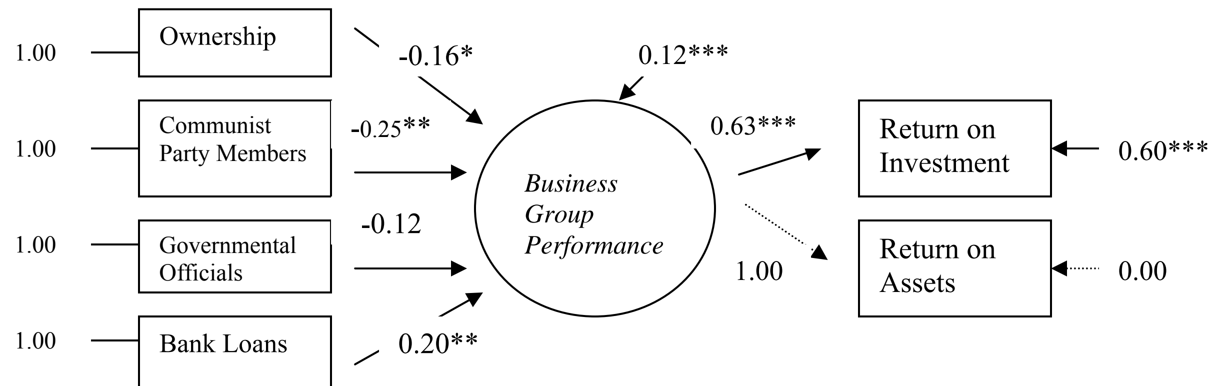


Figure 6.1: MIMIC Model of State Intervention and Business Group Performance



Notes: *p<.10, **p<.05, ***p<.01 (one-tailed tests).
Chi-Square=2.08, df=4, p-value=0.72082, RMSEA=0.000.

Figure 6.2: Interaction of CCP members and Loan from State-controlled banks for ROI

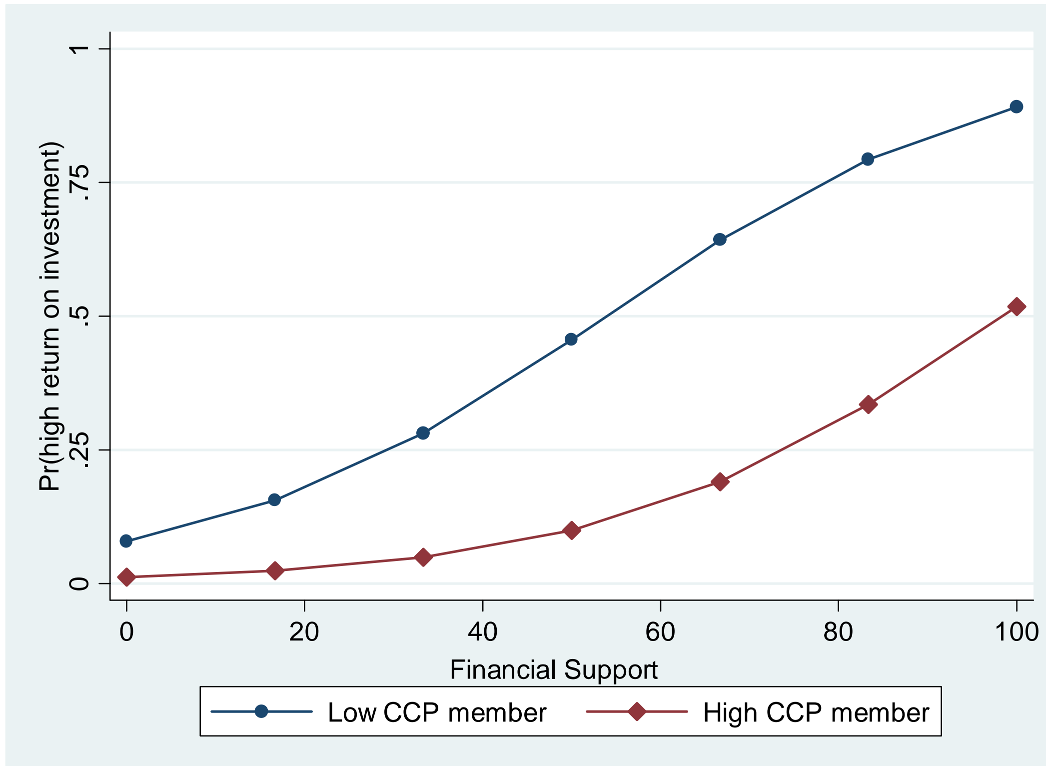


Figure 6.3: Interaction of CCP members and Loan from State-controlled banks for ROA

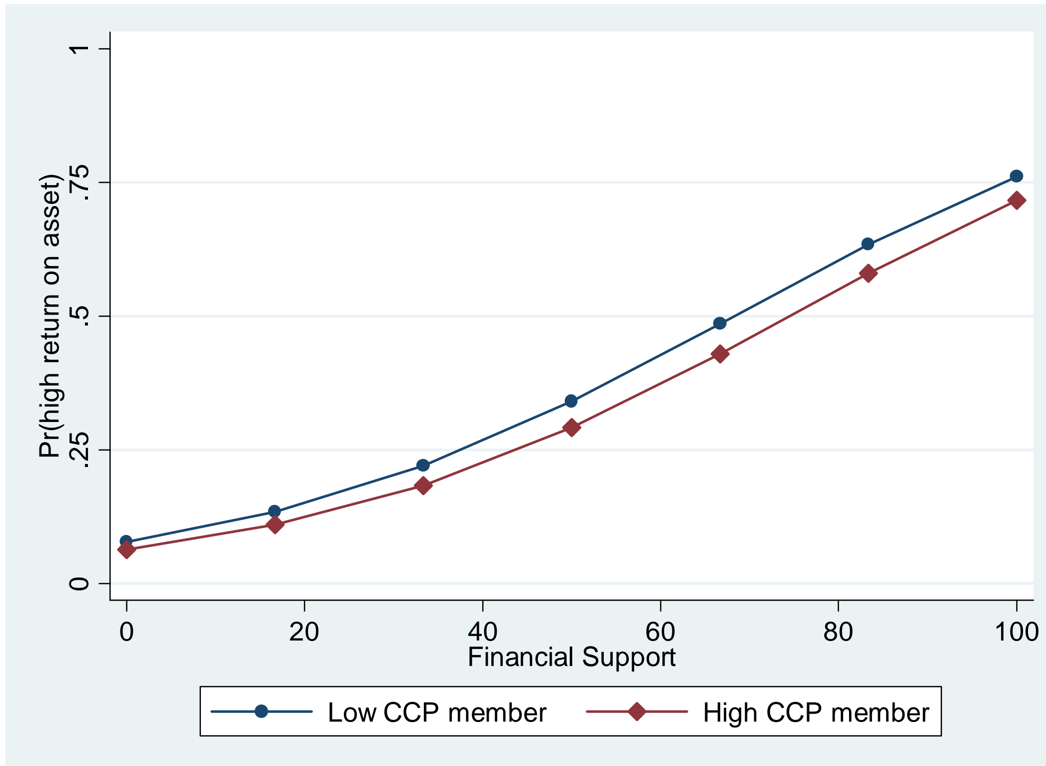


Table 5.1: Basic Information about the Four Cities

	Population (2005)	GDP (100 million Yuan)		GDP Per Capita (Yuan)		*Number of Cases*
		2004	2005	2004	2005	
Beijing*	**15,380,000**	**6060.3**	**6886.3**	**41099**	**45444**	**21**
Shenzhen**	**8,278,000**	**4282.1**	**4950.9**	**54236**	**60801**	**19**
Zhengzhou***	**6,530,000**	**1335.2**	**1660.6**	**20575**	**25474**	**19**
Shanghai****	**17,780,000**	**8072.8**	**9154.2**	**46338**	**51474**	**17**
Total	**-----**	**-----**	**-----**	**-----**	**-----**	**76**

Sources:
******Beijing Statistical Yearbook*** **(2006). (Pp. 12, 75). Beijing Municipal Bureau of Statistics, and Beijing General Team of Investigation under the NBS (National Bureau of Statistics). China Statistics Press.**

*******Shenzhen Statistical Yearbook*** **(2006). (Pp. 48, 60). Shenzhen Statistics Bureau. China Statistics Press.**

********Henan Statistical Yearbook*** **(2006). (Pp. 48, 81). Henan Statistics Bureau. China Statistics Press.**

*********Shanghai Statistical Yearbook*** **(2006). (Pp. 10, 11). Shanghai Municipal Statistics Bureau. China Statistics Press**

Table 1 Descriptive Statistics and Pearson Correlations (N=76)

variable	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 ROI (high=1)	0.14 0.28	0.15 0.45														
2 ROA (high=1)	0.05 0.29	0.07 0.46	0.71***													
3 Number of firms (logged)	0.82	0.62	0.22†	0.25*												
4 Number of employees (logged)	0.97	0.54	-0.07	-0.15	0.34**											
5 Total assets (logged)	1.95	0.71	-0.05	-0.08	0.36***	0.61***										
6 Beijing	0.28	0.45	-0.12	-0.07	-0.06	-0.27*	-0.06									
7 Shanghai	0.22	0.42	0.23*	0.21†	0.29*	0.13	0.30**	0.33**								
8 Shenzhen	0.25	0.44	0.12	0.03	0.14	0.34**	0.10	-0.36**	-0.31**							
9 Zhengzhou	0.25	0.44	-0.22†	-0.17	-0.35**	-0.18	-0.33**	-0.36**	-0.31**	-0.33**						
10 Firm(s) overseas	0.57	0.50	0.19	-0.03	0.22†	0.27*	0.31**	0.13	-0.04	0.20†	-0.29*					
11 Ownership	68.72	38.58	-0.24*	-0.29*	-0.23*	0.15	0.22†	-0.08	-0.00	0.05	0.04	-0.20†				
12 Loan	31.07	23.53	0.06	0.02	0.24*	0.31**	0.44***	0.00	0.05	0.14	-0.19†	0.43***	0.21†			
13 Government officials	3.83	9.15	-0.08	-0.10	0.08	0.06	0.10	0.08	0.02	0.03	-0.14	0.01	0.00	0.26*		
14 CCP members	16.08	13.54	-0.30**	-0.17**	-0.24*	-0.13	-0.19	0.15	-0.22†	-0.12	0.16	0.02	0.13	0.21†	0.24*	
15 Loan×CCP	64.34	413.4	-0.18	-0.07	0.12	0.13	0.19†	0.09	-0.06	0.12	-0.16	0.24*	0.06	0.52***	0.14	0.44***

†p<.10, * p<.05, ** p<.01, *** p<.001 (two-tailed tests).

Table 6.2: Estimated Coefficients of Logistic Regression Models Predicting Effects of State Intervention on Return on Investment of Business Groups

Independent Variables	Model 1	Model 2	Model 3	Model 4
Constant	1.29(0.84)*	-0.90(0.97)	0.81(1.28)	0.27(1.45)
Control Variables (groups)				
Number of firms	0.82(0.51)*	0.63(0.54)	0.10(0.60)	0.05(0.67)
Number of employees	-1.10(1.00)	-1.27(0.98)*	-1.30(1.05)	-1.77(0.95)**
Total assets	-0.92(0.55)**	-0.96(0.60)*	-1.58 (0.90)**	-1.05(0.85)
Location of Core firms (Beijing as reference category)				
Shenzhen	1.78(0.96)**	2.49(1.07)***	2.57(1.13)**	3.14(1.16)***
Zhengzhou	-0.18(1.04)	0.05(1.14)	0.01(1.22)	-0.09(1.14)
Shanghai	2.49(1.05)***	3.11(1.14)***	3.21(1.29)***	3.26(1.23)***
Firm(s) overseas	1.50(0.78)**	1.10(0.90)	1.39(1.00)*	1.16(0.92)
Effect of State Intervention				
Ownership		-0.02(0.01)*	-0.02(0.01)*	-0.02(0.01)**
Loans		0.03(0.02)*	0.05(0.03)**	0.05(0.02)**
Government officials		-0.07(0.04)**	-0.04(0.04)	-0.03(0.04)
CCP members			-0.08(0.04)**	-0.05(0.04)
Interaction of CCP and Loans				-0.003(0.001)**
Pseudo R^2	0.21	0.26	0.33	0.38
Log Pseudolikelihood	-35.22	-33.06	-29.83	-27.96
P (chi2)	0.0633	0.0293	0.108	0.0063
Number of Observations	76	76	76	76

*p<.10, **p<.05, ***p<.01 (one-tailed tests).

Notes: Standard errors in parentheses

Table 6.3: Estimated Coefficients of Logistic Regression Models Predicting Effect of State Intervention on Return on Assets of Business Groups

Independent Variables	Model 1	Model 2	Model 3	Model 4
Constant	-0.81(0.80)	-0.04(0.97)	0.30(1.28)	-0.17(1.35)
Control Variables (groups)				
Number of firms	1.25(0.59)**	1.07(0.66)*	1.00(0.71)*	1.11(0.74)*
Number of employees	-1.45(0.92)*	-1.56(0.80)**	-1.53(0.80)**	-1.66(0.76)**
Total assets	-0.51(0.48)	-0.54(0.54)	-0.64(0.64)	-0.50(0.62)
Location of Core firms (Beijing as reference category)				
Shenzhen	1.16(0.84)*	1.80(0.89)**	1.70(0.90)**	1.89(0.96)**
Zhengzhou	-0.08(0.97)	-0.03(1.13)	-0.06(1.16)	-0.17(1.17)
Shanghai	1.61(0.97)**	2.09(1.01)**	2.00(1.01)**	2.03(1.03)**
Firm(s) overseas	0.39(0.71)	-0.37(0.91)	-0.35(0.93)	-0.46(0.94)
Effect of State Intervention				
Ownership		-0.02(0.01)**	-0.02(0.01)**	-0.02(0.01)**
Loans		0.03(0.02)**	0.04(0.02)**	0.04(0.02)**
Government officials		-0.08(0.04)**	-0.07(0.04)**	-0.08(0.05)**
CCP members			-0.01(0.03)	0.01(0.03)
Interaction of CCP and Loans				-0.001(0.001)*
Pseudo R^2	0.17	0.25	0.25	0.27
Log Pseudolikelihood	-37.78	-34.25	-34.10	-33.58
P (chi2)	0.0783	0.0219	0.0406	0.0274
Number of Observations	76	76	76	76

*p<.10, **p<.05, ***p<.01 (one-tailed tests).

Notes: Standard errors in parentheses