

The Class of Shareholdings and its Impacts on Corporate Performance

— A Case of State Shareholding Composition in Chinese Publicly Listed Companies

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Abstract²

Does the class of shareholdings matter for corporate performance? To address the question, our paper starts by classifying shareholdings on the basis of the principle of ultimate ownership. At present, the shareholding structure of Chinese quoted companies is state-dominant in that 84% of public companies ultimately are found controlled by the state, compared with 16% of non-state-controlled ones. In contrast to our identified shareholdings, the Chinese official shareholding record only reports the state and the legal person share classes that are inevitably ambiguous for the identification of ultimate owners of public corporations, which in turn has misled many previous studies in assessing the impact of shareholding classes on performance. Based on our newly established shareholding classes, we make a nested performance comparison between these different classes, such as the state direct control versus the state indirect control, and find significant evidence from the Chinese data that the class of shareholdings does matter for company performance. The least inefficient shareholding class is the holding companies that are wholly listed and have focused industrial business through the state indirect control of the downstream public corporations. This finding provides ground for us to think more about how the corporate control mechanism could be further improved in China's current corporate governance reform.

Key words: Class of Shareholdings, Ownership and Control, Pyramid Shareholding Schemes, Corporate Governance, Chinese Publicly Listed Companies

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I. Introduction

The relationship of ownership and control to firm performance has long been a topic under intensive discussion in economic literature since Berle and Means (1932). Broadly speaking, two interrelated dimensions have been developed to analyse firms' ownership and control structure, namely the concentration of shareholdings/the degree of control and the identity or class of controlling shareholders. Regarding the former dimension, the traditional literature has mostly focused on the testing of the hypothetically different performance impacts between owner-controlled firms and manager-controlled firms by identifying a cut-off shareholding level to distinguish the two types (Short, 1994), while the recent discussion has centred on the merits and weaknesses of concentrated shareholdings with special reference to corporate performance (Shleifer & Vishny, 1986, 1997; Bolton & von Thadden, 1998).

Comparatively, the literature on the latter issue is rather underdeveloped. Although some hypothesis has been proposed that external controlling shareholders outperform internal ones in ensuring the firm's value-maximisation objective (e.g. Nickell, Nicolitsas & Dryden, 1997), and some research has been conducted on the effect upon corporate performance of a certain class of controlling shareholders, such as top management (e.g. Morck, Shleifer & Vishny, 1988), institutional investors (e.g. McConnell & Servaes, 1990), and banks (e.g. Edwards & Fischer, 1994; Franks & Mayer, 2001), systematic and conclusive evidence on the performance effects of various shareholding classes remains sparse, notably in emerging markets and developing economies.

Moreover, according to the recent development in the theory of firm's ownership structure and its associated control mechanism, La Porta, Lopez-de-Silanes, and Shleifer (1999) provide a detailed account on the various means controlling shareholders can use to maintain and extend their *de facto* control in firms, including superior voting rights, cross-shareholdings and pyramid shareholding schemes, etc. Specifically, the pyramid structure is applied by controlling shareholders to create a set of control chains, within which a publicly listed company may be controlled by another one, whose controlling shares in turn lie, directly or through several such similar chains, in the hands of the ultimate dominant shareholder group. So the immediate ownership data from the public corporations is not, in principle, adequate to present an accurate picture of the exact control pattern in these firms, and the tracing of ultimate shareholding structure is quite crucial to our understanding of the ownership and control in modern corporations. However, despite the pioneering work conducted by La Porta et al (1999) on establishing the stylised fact of the corporate ownership structure around the world³, there is little work investigating empirically whether there is any significant performance impacts induced by the various control mechanisms that are used by the dominant shareholders. For example, do different pyramidal structures, such as different types of shareholding identities in the intermediate control chain, tend to be associated with different firm performance, though the ultimate controlling shareholders being identical?

³ Their methodology has subsequently applied into the analysis of the corporate ownership structure in East Asian economies by Claessens, Djankov, & Lang (2000) and in West European economies by Faccio & Lang (forthcoming).

This is a key question that the paper aims to look at, a relationship between shareholding class and corporate performance, through the empirical investigation into the effect of the state as the ultimate controlling shareholder on the performance of Chinese public corporations. Indeed, the extensive state control has been found in a number of countries such as Austria and Singapore in La Porta et al's sample, but unfortunately, China is not included in their dataset. How could the government in China, the most populous country in the world with a fast growing power for economic prosperity, manage to maintain their control over most of the public listed companies during its economic transition? What are the characteristics of pyramidal structure the Chinese government employs to achieve its ultimate control? What are, if any, the complicated performance impacts upon the listed companies of the ultimate state control? Answers to these questions are worth exploring not only for the understanding of the interplay between ownership, control and corporate performance in general, but also for that of corporate governance mechanisms in emerging markets and transition economies in particular.

Our investigation begins with an attempt to identify the ultimate shareholding structure of Chinese publicly listed companies following the ultimate ownership principle proposed by La Porta et al (1999). Then we examine whether there is any discernable difference in company performance associated with different control forms used by the state. That is to say, is there any performance difference between companies directly controlled by government agencies and those indirectly controlled by the government via various pyramidal structures? And even within the pyramid category, the state can ultimately control the firms through different types of institutions in the intermediate control chain. Then, for example, does it matter for the government to choose state-controlled corporations or professional asset management firms as the intermediate agent to exercise its ultimate control rights? It is the performance variance among different control forms that we suppose is firstly investigated in the paper to add our understandings of the complex relationship between shareholding structure and firm performance.

The next section of the paper describes the main characteristics of the shareholding structure in Chinese public corporations, and casts doubt on the validity of the methodology applied by previous literature in discussing the relationship between ownership structure and corporate performance in China. In the third section, starting with the introduction of our analytical framework and a brief description of the data and performance indicators, we focus on the presentation of our empirical results and interpretations. Concluding remarks, as usual, are provided in the last part of the paper.

II. Shareholding Structure in Chinese Publicly Listed Companies

One basic feature of the shareholding structure in Chinese public corporations is the predominance of ultimate state control, which is quite different from other emerging markets and transitional economies where private ownership tends to be in a dominant position. The state-dominant structure, as we shall elaborate shortly, lies in the fact that the state is in the ultimate and absolute control of 84% of all publicly quoted companies via two control patterns: (1) government direct control of 8.5% of the quoted companies, and (2) government indirect control of 75.6% of the quoted companies via pyramid

shareholding schemes (see Table 1). Within the pyramid group of state indirectly controlled quoted companies, there are 15 companies identified according to La Porta et al's (1999) definition of pyramid shareholding schemes⁴, while 821 companies have non-listed state-owned institutions or companies as their largest controlling shareholders⁵.

Table 1 shows that, on average, the top shareholder of each quoted company holds some 44% of the total shares outstanding, which is far above the 20% cut-off level used by La Porta et al (1999) to identify a controlling shareholder (see footnote 4). Based on the criterion, we group the largest shareholders into eight classes to indicate their economic status and their ultimate owners in Table 1. Our classification is shown to be markedly departed from the Chinese official grouping of shares according to state shares, legal person shares, employee shares and the tradable A shares (issued for individual investors), in which in 2001 they respectively accounted for 46%, 18%, 0.5% and 25% of the total shares outstanding⁶.

One problem of the official grouping is that it fails to identify the ownership identity of legal persons, defined as an enterprise or economic entity with a legal status, and it is unclear about if these legal entities are state-owned or non-state-owned institutions. It is quite possible that the owners of the legal person shares are enterprises or institutions ultimately controlled by the central or a local government. If so, grouping the legal person shares to an independent shareholding class in parallel with the state shares and public shares would be inappropriate, since the state controls the legal person who in turn controls the firm, and so the ultimate owner of the firm is the state, not the legal person itself. Therefore, the category of legal person shares is in effect an irrelevant concept when discussing the relationship of shareholding class to firm performance, because, to put it simply, they are not qualified to act as independent ultimate controlling shareholding identity for Chinese publicly traded companies. And classifying the shares held by the state controlled legal persons to a single share class independent from the state is misleading for the study of performance impacts of various share classes, but unfortunately this misunderstanding is fairly common in previous literature. For example, Xu & Wang (1997, 1999), Chen (2001), and Sun, Tong & Tong (2002)'s works are all based on such *ad hoc* classification⁷.

⁴ A pyramid on the 20 or 10 percent definition should satisfy two conditions: (1) there exists an ultimate owner of the firm in question; (2) there is at least one *publicly traded company* between the firm and the ultimate owner in the chain of 20/10 percent voting rights. So if the intermediate company within the control chain happens to be a non-listed company, the case cannot be designated as "pyramid".

⁵ In this paper, we relax the strict specification of pyramid in La Porta et al (1999) and let non-listed domestic holding companies enter our discussion due to the unique feature of China's shareholding structure and state control. We believe that the loose definition of pyramid is particularly instrumental in obtaining the real picture of the ultimate shareholding structure in Chinese public companies.

⁶ The figures are calculated from the data provided on the website of the China Securities Regulatory Commission: <http://www.csrc.gov.cn>.

⁷ As Tian (2001) rightly points out, "the above classification was to facilitate the regulation of the trading activities rather than classifying the investors".

Table 1. Who ultimately controls China's Public Listed Companies 2001?

| Status of the largest shareholder of a firm | No of firms as % of the total number listed in the market | Average shares held by the largest shareholder as % of total shares issued |
|--|---|--|
| State as the ultimate controlling shareholder | | |
| Direct control: | | |
| Government departments or agencies | 8.5% (94 firms) | 39.6% (16.1) |
| Indirect control: | | |
| State-owned enterprises | 75.6% (836 firms) | 47.3% (17.6) |
| In which of SOEs: | | |
| (1a) State-controlled public-listed firms | 1.4% (15 firms) | 52.3% (20.8) |
| (2a) State solely-owned companies ⁸ | 32.6% (360 firms) | 49.7% (16.7) |
| (3a) State controlled non-listed companies ⁹ | 40.6% (449 firms) | 45.4% (17.9) |
| (4a) State owned academic institutions | 1.1% (12 firms) | 39.0% (14.1) |
| Total of State Controlled Enterprises | 84.1% (930 firms) | 46.5% (17.6) |
| Non-State-Owned Organisations as the ultimate controlling shareholder | | |
| (1b) Non-state-controlled public-listed firms | 0.4% (4 firms) | 37.7% (24.9) |
| (2b) Non -listed collective firms & TVEs | 7.0% (77 firms) | 38.3% (16.9) |
| (3b) Non -listed domestic private firms | 7.5% (83 firms) | 33.3% (11.6) |
| (4b) Non -listed foreign private firms | 1% (10 firms) | 25.8% (6.5) |
| Total of Non-State Controlled Enterpris. | 15.9% (174 firms) | 34.8% (14.7) |
| Grand total of Number of firms in the sample | 100.0% (1105 firms) | 44.6% |

Note: (1) According to China Securities Regulatory Commission, the number of companies listed in December 2001 was 1160, in which 95.3% of the total listed companies have responded to our survey on the economic class of their largest shareholders in 2001. The survey was conducted by this study April 2002. (2) Brackets by the percentage of shares are standard deviation of the average shares.

To further elaborate the ultimate ownership classification which is proposed by La Porta et al (1999), we trace down the complex control chain of Chinese publicly listed companies to their ultimate owners. This enables us to illustrate, first, the serious misspecification of the legal person shares as an independent class from the state, and

⁸ This is a special type of company after the corporatisation in China, since there is no shareholders meeting in these firms, while the board of directors are directly appointed by state department or state-authorized investment institutions "to exercise a part of functions and powers of the shareholders meeting and to make decisions on important matters of the company". "However, the merger, dissolution, increase and reduction of capital, and issuance of company bonds must be decided by the state-authorized investment institution or by the department authorized by the State." (Company Law of the PRC, 1999)

⁹ Comparative to state solely-owned companies, the general state controlled non-listed companies shall have the shareholders meeting because various state departments may have different levels of stakes in these companies, and it even could be the case that some domestic or overseas non-state companies hold some minority shares in the firms. In the same vein, all the fundamental decisions concerning merger and dissolution etc should be at least formally decided upon in the shareholders meeting.

secondly, the picture of how the pyramid is applied by the state to reform its control mechanism.

Our first case is Inner Mongolia Mengdian Huaneng, a thermal power corporation listed on the Shanghai Stock Exchange. It is shown in Figure 1 that, the state asset bureau, as the third largest equity holder, directly controls 7.9% voting rights¹⁰ in 2000, while the two largest shareholders are the Inner Mongolia Electricity Company (62.4% of shares outstanding) and the Huaneng Group Corporation (13.2% of total shares). If we strictly

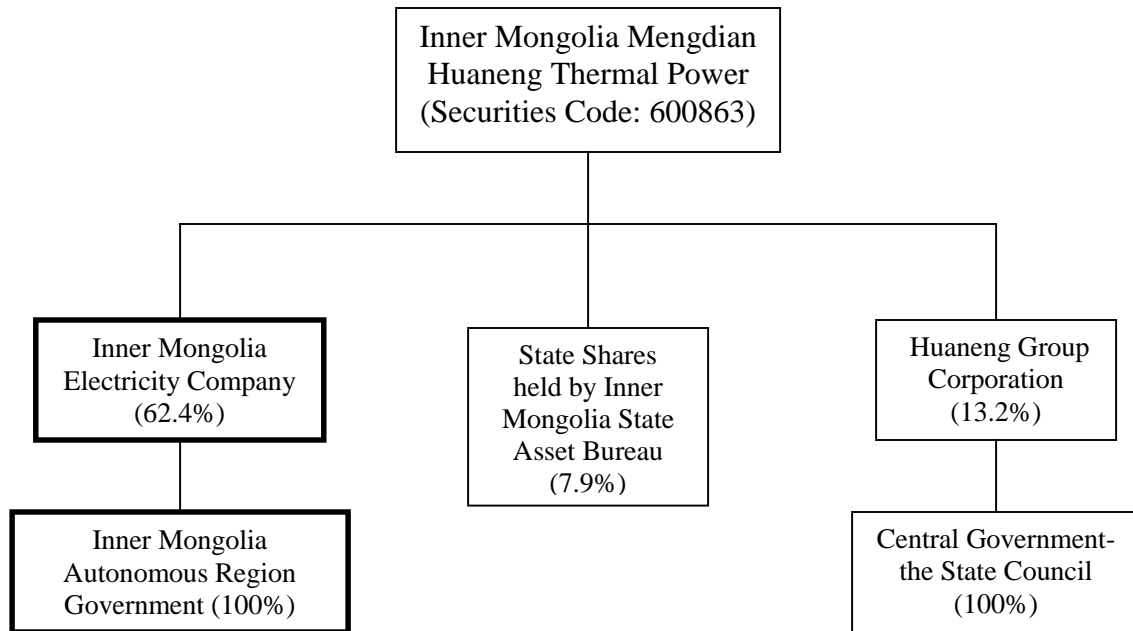


Figure 1. Inner Mongolia Thermal Power Corporation. Apparently, based on La Porta et al (1999), the ultimate owner of the company is Inner Mongolia Autonomous Region Government that owns entirely the non-listed company, Inner Mongolia Electricity Company, which in turn holds 62.4% of the quoted company in the top box. Overall, the Inner Mongolia Thermal Power Corporation is controlled ultimately by the state that holds 83% (62.4%+7.9%+13.2%) shares in the total, rather than the legal person of Inner Mongolia Electricity Company that is regarded by the official shareholding classification as an independent entity in parallel with the state.

follow the official classification of state shares and legal person shares, the firm should be regarded as to be under the control of the legal person – the Inner Mongolia Electricity Company, since it is the majority shareholder of the firm. A closer inspection, however, reveals that the firm is actually controlled ultimately by the state, because its two largest legal person shareholders, the Inner Mongolia Electricity Company and the Huaneng Group Corporation themselves are respectively solely controlled by the Inner Mongolia local government and the central government (the State Council). Hence, the ultimate voting rights the state has in the thermal power corporation seems amount to 83.5%

¹⁰ China does not permit the existence of multiple classes of voting rights. The Article 106 of the Company Law stipulates, “shareholders attending a shareholders’ general meeting shall have the right to vote for each share held” (Company Law of the PRC, 1999). So shareholding rights and voting rights are interchangeable in China.

(62.4% + 13.2% + 7.9%) rather than 7.9% alone shown in the official statistical record, and the company in question should not be expected to operate too differently from a wholly state-owned company. Nevertheless, if we are misled to just uncritically refer to the state stockholding size of 7.9%, the exact magnitude of state shareholding and its control will be severely underestimated and unbiased assessment of the relationship between shareholding structure and firm performance is therefore hard to obtain.

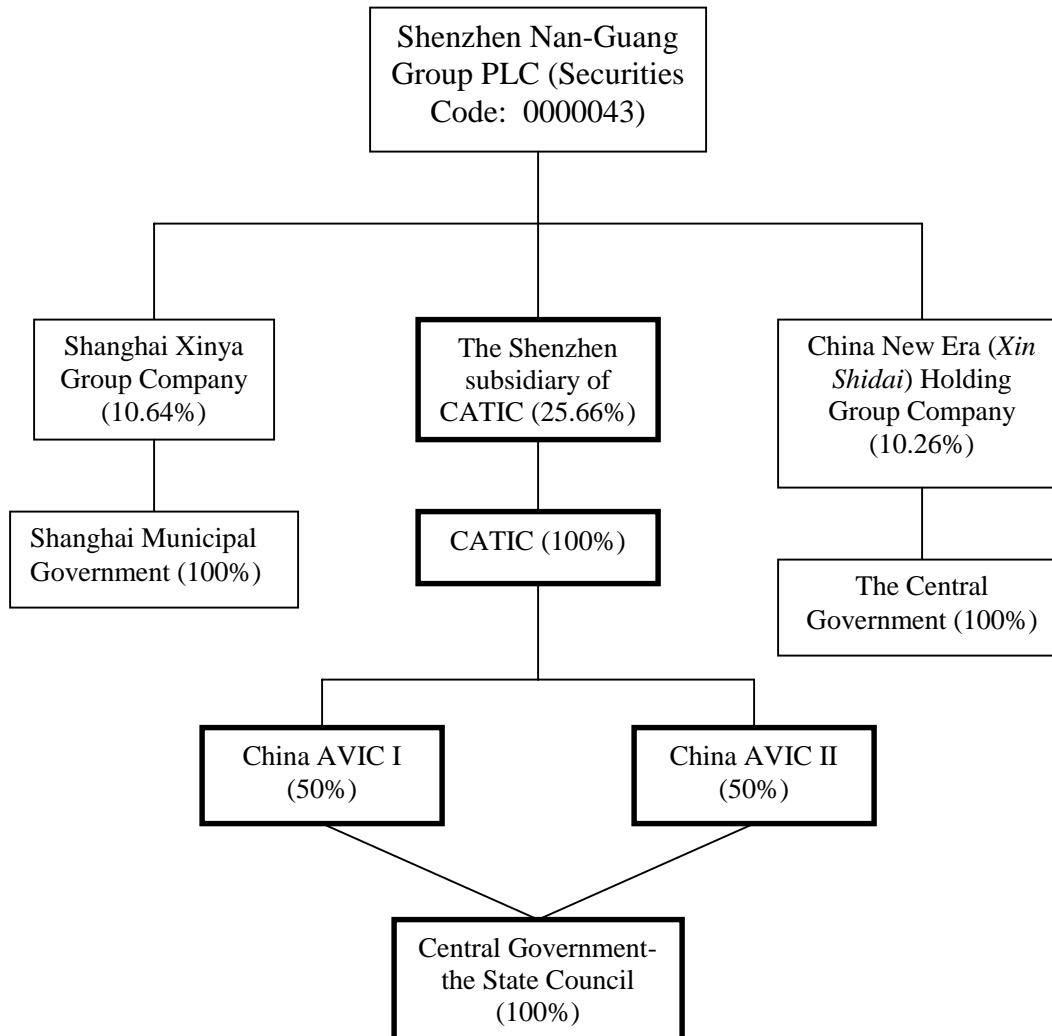


Figure 2. Shenzhen Nan-Guang Group Plc. The company in question is ultimately owned by the central government, the State Council, since the Council controls respectively 100% of China AVIC I and II, and each of these two companies owns 50% of CATIC, in which CATIC owns 100% of its Shenzhen subsidiary company that is the top shareholder (25.6% of shares) of the Nan-Guang Group Plc. In contrast, the 2000 statistical data of the official shareholding classification reported that the state shares of the company is zero, implying that it would be a non-state controlled company.

Another example is the Shenzhen Nan-Guang Group PLC (Figure 2), which is a diversified corporation involving in tourism, real estate, building industry etc., listed on the Shenzhen Stock Exchange. The largest stockholder of the company is the Shenzhen

subsidiary of China National Aero-Technology Import & Export Corporation (CATIC), holding more than a quarter of the total shares. And the next two large shareholders are respectively the Shanghai Xinya Group Company and the China New Era (*Xin Shidai*) Holding Group Company, in which each holds roughly the same amount of 10% shares. Once again, the three holding institutions are found subject to the ultimate control of central and local government. Specifically, the CATIC is owned by two parts of China Aviation Industry Corporation (AVIC), which is in turn under the direction of the State Council. The Shanghai Xinya Group is established by the Shanghai Municipal Government, majoring in hotel industry and tourism, and the New Era Group is a diversified firm ranging from high-technology business to real estate development, also fully controlled by the central government. But ironically, the state shareholding level in the Shenzhen Nan-Guang Group is reported *zero* in the official record! Obviously, the real scale of state control in the group should at least take into account the legal person shares held by the three state-controlled companies.

Our third case is Tianjin Jinbin Development Co. Ltd, shown in Figure 3, which has two large shareholders: one with 40.5% shares is TEDA Construction Group Company that is a 100% subsidiary of Tianjin Economic-and-Technological Development Area (TEDA), and TEDA itself is a subsidiary department of the Tianjin Municipal Government. For the second largest shareholder, the Tianjian Huatai Group, is truly a non-state company holding 33.5% of the total shares outstanding. In this case the official report on state shares in Jinbin Development is 40.5%, exactly equal to the fraction of shares held by the solely state-owned TEDA Construction Group.

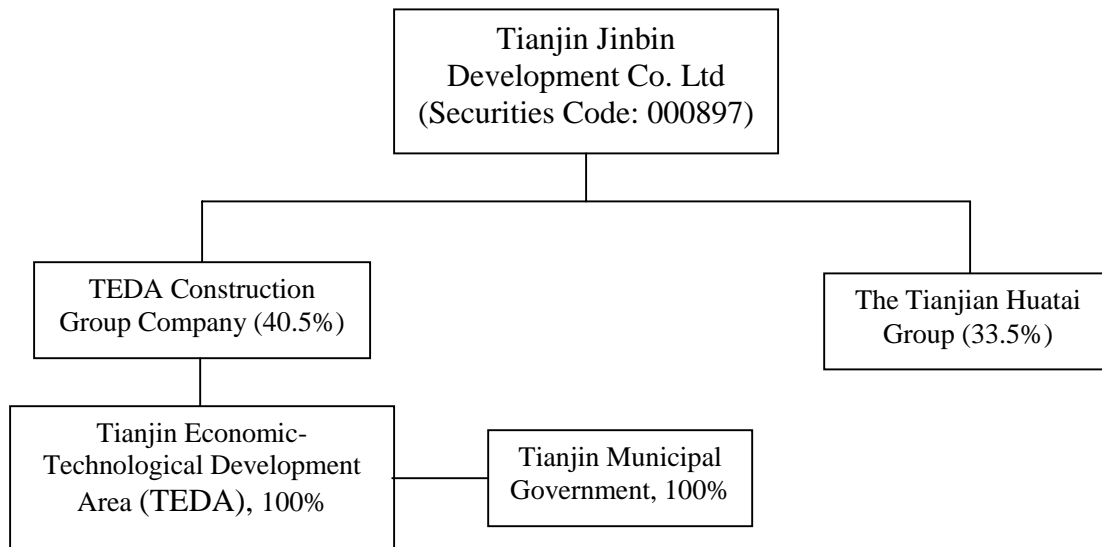


Figure 3. Tianjin Jinbin Development Co.Ltd. This company is ultimately controlled by Tianjin Municipal Government who owns 100% of TEDA. In turn, TEDA owns 100% of its subsidiary of TEDA Construction Group Company that holds 40.5% of the stake in the Jinbin Development. The Tianjian Huatai as the second largest shareholder is a non-state controlled company. In this case, the official report on the company’s state shares was 40.5%, exactly equal to the number of shares held by the largest shareholder that is state-owned.

The illustration of the three cases raises three points. First, the state has extended its ownership from direct control to non-direct control via a pyramid shareholding scheme, and the control via the pyramid structure has become prevalent in Chinese quoted companies as suggested in Table 1.

Secondly, China's official shareholding classification is inconsistent with the ultimate ownership principle. One example is the official defined concept of legal person shares that is ambiguous about who is an ultimate controlling shareholder of 'the legal person'. The ambiguity could result in misconceptions in analysing the shareholding structure for China's quoted companies. For instance, one influential study of the relationship between ownership structure and corporate performance, Xu and Wang (1997, 1999) found a positive correlation between the fraction of legal person shares and firms' profitability, and a negative correlation between the fraction of state shares and profitability. They interpreted the results by equating the legal person shares to institutional shares, and so ascribed all the merits of institutional shareholders in industrial countries to the Chinese legal persons. The interpretation of legal person shares in this way is inconsistent with China's institutional context, because the legal person shares could represent a degree of state control via an indirect control form, as shown in our three cases, in which they are fundamentally different from the widely held institutional shareholders in western economies, such as insurance companies, mutual funds, pension funds and so on.

Thirdly, it is not correct to classify all legal person shares to 'the class of the state holding', since Table 1 shows that there were 174 non-state-owned quoted companies in 2001, and they are also called 'the legal person' by the official classification. To pool the state holding and the legal person holding into one class in parallel with other classes for comparative performance study was evident in the study of Sun, Tong and Tong (2002). The study proposed indifference between state shareholders and legal person shareholders in Chinese public corporations, so that they regressed the sum of state shareholdings and legal person shares, as a proxy of government control, with performance measures of Chinese PLCs. Apparently, the work is arbitrary or biased since it overestimates the exact shareholding size of the state in their firm sample, as the class of legal person entities consists of 16% of the quoted companies that are non-state-controlled.

To sum up, previous studies on Chinese shareholding structure and corporate performance failed to achieve an accurate identification of the ultimate state shareholding size and control power in Chinese PLCs to varying degrees. Therefore their empirical findings on the relationship between state shareholding and firm performance, whether the unambiguous negative correlation (Xu & Wang; 1997,1999) or the U-shaped correlation (Tian, 2001)¹¹ or even the inverse U-shaped one (Sun et al, 2002), must be treated with a pinch of salt, if not deemed as outright spurious.

¹¹ Although Tian (2001) attempted to deal with the ambiguous shareholding classification of the legal person shares by strictly applying La Porta et al's pyramid concept to define those under public state corporation control to be state-owned, he missed a large number of corporations under the control of non-public-listed state owned companies. As a result, either his study might be biased by defining the missing

As a result, departing from the legal-person-based studies, we apply the ultimate ownership classification proposed by La Porta et al (1999) to redefine the shareholding structure of Chinese quoted companies in terms of the state ultimate control versus the private ultimate control. Furthermore, we break down the state holdings to two classes of shareholdings: (1) government direct control via its agencies to directly hold more than 20% voting shares, and (2) government indirect control via its owned or controlled corporations to exercise their decisive voting shares. Within the category of government indirect control, intermediate companies used in the control chain include: state solely owned companies (33% of the total quoted firms in 2001), state controlled publicly listed companies (1.4%), non-quoted state owned companies (44%), and state-owned academic institutions (1.1%). These four types of intermediate companies consist of *the Chinese-styled pyramid shareholding schemes*, which extends La Porta et al's pyramid concept to the context of China's enterprise reform.

III. Does the Class of Shareholdings Matter for Performance?

3.1 Analytical framework

One advantage of establishing *the Chinese-styled pyramid shareholding schemes* is to enable us to examine the agency problem of the ultimate owner in using different classes of shareholdings as 'controlling instruments' to direct the public companies. A specific class of shareholding represents an economic status of the controlling shareholder in a firm. For example, the class of the government direct shareholding implies that a government department or agency is chosen to be the proxy for the ultimate owner of the state to control the firm. Alternatively, the ultimate owner can choose a business enterprise as "the controlling shareholder" to act on behalf of the owner in monitoring the firm. If a firm has (1) an ultimate owner and (2) a controlling shareholder that is an intermediate institution or company chosen to act on behalf of the ultimate owner, then agency problems will arise in the pyramid control chain. Since a shareholding class represents a certain type of holding companies' strength of motivation and monitoring in corporate control, a level of business knowledge, and advantage in accessing resources brought to its controlled firms, the quality of control will certainly vary among different classes of the controlling companies or shareholders. Thus, how to find a controlling shareholder as an agent capable of maximising the ultimate owner's interests will then be a basic concern in determining a shareholding class and the control structure of the firm.

Following this line of reasoning, if a shareholding class is given and the interest of the ultimate owner of the state is to improve efficiency and so profitability of the firms, we can then assess which shareholding class has the least agency costs relative to others by comparing profit performance of different shareholding classes. For most of the Chinese quoted companies with the identical ultimate ownership of the state, this means that the performance comparison of different shareholding classes will reveal information on the least inefficient class of the controlling mechanisms applied by the Chinese government

part of the corporations as non-stated controlled, or unrepresentative of the population since its pyramid sample of 19 companies (and 4 of 19 are non-state-controlled) was too small to mean something.

on reforming its corporate control. Therefore, Chinese state controlled quoted companies are the focus of our comparative analysis.

Figure 4 provides a nested framework of different shareholding mechanisms taken by the governments to retain the state ultimate control of Chinese PLCs. This provides a unique opportunity for us, as suggested before, to examine the complicated impacts of various shareholding schemes upon corporate performance. First of all, our performance comparison is made on the basis of the group of quoted companies under the state direct control versus the group of quoted companies under the state indirect control, and in Figure 4 we call it Class 1 of shareholdings versus Class 2 of shareholdings. The state direct control means that the state uses government departments, such as state asset management bureau, to hold controlling voting shares directly. Alternatively, the control of the PLCs can be achieved by creating pyramidal schemes, in which the state employs a corporation or institution to act on behalf of him in exercising the share-voting power. How this indirect control differs from the direct control in affecting corporate performance is an interesting question to be looked at.

Secondly, within the broad category of the indirect control, the Chinese government employs two types of domestic institutions to act as the controlling shareholders of the companies. One is the Asset Management Companies established and solely owned by local governments, whose official objective is to “preserve and enhance the value of state assets” through portfolio investment in various companies of different industries¹². The other type of entities in the intermediate layer of the control chain is the state-controlled industrial companies. Within the indirect control, the companies are further grouped according to their controlling shareholders: asset management companies (Class 22) versus industrial companies (Class 21), for performance comparison.

Why do firms diversify? Can diversified firms outperform non-diversified or specialised (or focused) firms? These are the third question addressed by our comparative analysis of two classes of shareholdings: the diversified conglomerates as the controlling shareholders (Class 211) versus the specialised or focused corporations as the controlling shareholders (Class 212), in which corporations in these two groups are selected from the Class 21 of industrial companies under the state indirect control.

Fourthly, within the specialised group of industrial companies, we further break the group down to two classes according to the firms’ listing structure: the category of wholly listed corporations (Class 211-2) that refers to the companies or company groups which are initially floated on the stock market *as a whole*, evidenced by the fact that the controlling shareholder of these companies are substantively the listed firms themselves from the business point of view, notwithstanding the *de jure* different legal person identities. On

¹² For example, the Shenzhen Asset Management Company is the majority shareholder (59.95%) of the Shenzhen Shenbao Industrial Co. Ltd (Securities Code 0019), a publicly quoted company in food and beverage industry. Directly managed by the Shenzhen Municipal Government, the asset management firm also holds varying amount of shares in another 21 companies listed in the Shenzhen Stock Exchange and 3 companies listed in Hong Kong, ranging from telecommunication industry to pharmaceutical and petrochemical industries.

the contrary, the partially listed corporations (Class 211-1), as the name suggests, are in fact *affiliated* with their larger parent/holding companies.

For example, the Chongqing Taiji Industry (Group) Co. Ltd (Securities Code: 600129) can be identified as a wholly listed corporation. This is due to the fact that the its controlling shareholder, which holds 58.81% of the company shares, is also called the Taiji Group Limited, and a further inspection reveals that the board chairman of the listed Taiji is concurrently the board chairman and CEO in the holding Taiji Group Limited and most of the board directors in the listed Taiji come from the top management in the holding Taiji¹³. In contrast, as a case of partially listed company, the Qilu Petrochemical Company Ltd. (Securities Code: 600002) has the China Petroleum & Chemical Corporation (Sinopec) as its parent company to hold 82.05% of its total shares. Actually before the floatation the Qilu Petrochemical Company was just a subsidiary of the Sinopec in the Shandong Province.

From an agency point of view, one distinction between the two classes is that an inside corporate agency who is directly involved in business is delegated the voting power to direct the use of the owner's assets in the wholly listed case; in contrast, an outside corporate agency, who in turn hires another agency to operate business, is delegated the voting power to decide use of the owner's assets in the partially listed case.

3.2 Data and Performance Indicators

Accounting data on all Chinese quoted companies from 1993 to 2000, and top-10 shareholder information from 1997 to 2000, are provided by the Securities Intelligent Unit of China Economy Daily that collects data from each company's annual report and edits them into a panel dataset.

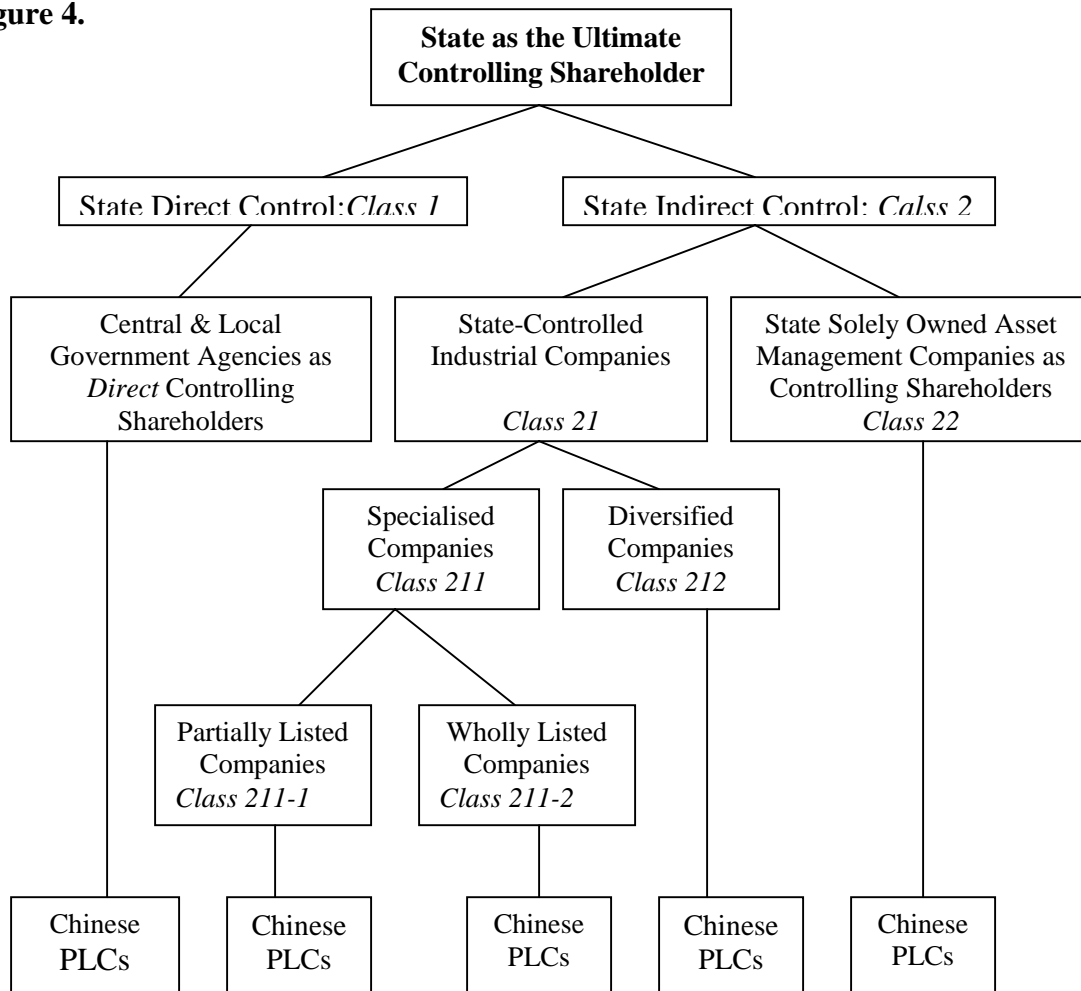
To demonstrate performance information as much as possible, we employed a set of performance indicators computed from our dataset for the period of 1997 to 2000. Our firm-level performance indicators include: profits made during a year, economic value added during a year, a rate of profit return to the net assets, a rate of economic value added to invested capital, sales growth, profit margin in the total sales revenue.

Profits and a profit-asset rate per annum are straight given by the annual report of each quoted company, and then we averaged the profits and the profit return rate of the companies in terms of a subject group in question. By taking into account the sample size (observations) different between the two comparing groups, the mean values of different groups of the companies are compared with p-statistic values.

Profit margin is the ratio of profits to sales revenue, aimed to look at if high profit performance is a result of good market, or the market power of the suppliers, that enables the firm to raise prices. Sales growth indicates competitiveness of firms' products or services in the market.

¹³ One interesting finding is that the two Taijis share the same website and the same company address in the Chongqing city.

Figure 4.



In considering the highly speculative feature of the Chinese stock market (the turnover ratio was 153 in 2001, ranked as the third highest in the world), in which share prices are likely to be misleading for performance, we employ economic value added (EVA) instead. EVA is defined as the sum of the net operating profits after tax (NOPAT) less the capital costs that are obtained by multiplying the invested capital by the weighted average capital cost rate (WACC). A detailed approach to compute NOPAT, invested capital and average capital cost rate, in particular, estimation of an opportunity cost rate of equity capital, using Chinese accounting data is discussed in the study of the value creation of Chinese quoted companies (Liu & Cong, 2002), so that we applied its computed results of EVA for our comparative study. The EVA capital ratio measures the value created by every one unit of capital input, indicating capital productivity of a company. One major distinction of using EVA as performance measurement is reflective of how efficient the corporations are in using investors' capital, especially, the corporate ability to create value for shareholders.

3.3 Empirical Results and Interpretations

As can be seen in Table 2, on the average of the annual performance of the listed companies from 1997 to 2000, the profits per firm, the rate of profit return to capital, EVA-capital ratio and sales growth of the indirect control shareholdings are significantly higher than the group of the corporations under the direct control. The finding is not at all surprising, which is consistent with the existing economic literature on the defects of governmental bureaucrats in company management. In general, bureaucrats are not

Table 2 Performance Comparison between the Government Direct Control and the Government Indirect Control (Shareholding Class 1 Versus Class 2)

| | EVA per firm million yuan | Profits per firm million yuan | EVA-capital ratio | Profit-asset ratio | Profit margin | Sales growth | No of observations |
|----------------------------|---------------------------|-------------------------------|-------------------|--------------------|---------------|--------------|--------------------|
| Direct Control (Std Dev) | -16.516 (39.826) | 36.993 (48.213) | -0.019 (0.055) | 0.073 (0.071) | 0.26 (0.148) | 1.15 (0.644) | 1602 34.4% |
| Indirect Control (Std Dev) | -13.899 (69.428) | 67.127 (96.229) | -0.012 (0.061) | 0.084 (0.072) | 0.259 (0.151) | 1.36 (1.478) | 1995 34% |
| P-value | 0.486 | 0.001 | 0.024 | 0.005 | 0.862 | 0.008 | |

granted any cash flow rights of the firms they control so they have meagre incentives to guarantee the firms in line with the efficient improvement, a classic agency problem pervasive in reality. Secondly, relative to professional managers, government officials are lack of sufficient business knowledge and skills required for the effective monitoring and management of the companies under their control, exacerbating the further agency problem between them and their managed firms.

Our results clearly indicate that bureaucrats in the central and local governments are less capable of performing the role of a dominant shareholder that is supposed to perform in monitoring or supervising the firm when compared with the managers of state-controlled but commercialized companies such as state-owned asset management firms. This is not to say that the latter are totally immune to the aforementioned fundamental defects, but the situation does seem milder because they are comparatively more business-oriented than government officials. Focused on “preserving and enhancing state asset values” as the namely foremost objectives of these organisations, managers there might be less vulnerable to the arbitrary political interference and policy burdens. More importantly, considering that their own promotion prospects might be influenced by the performance of the firms they once controlled, these managers may have some incentives to monitor their affiliated public corporations on the basis of profitability. On the other hand, although they are not entirely as same as the professional managerial class in Western countries, they are definitely more competent and informed than government officials to supervise and control the public corporations.

With the gradual progress of the economic reform in China, it becomes less and less popular for the central government and local governments to directly involve in the enterprise management. For the part of central government, it chooses to incorporate the SOEs and create state holding companies, in the hope of transforming the large SOEs into real modern business organisations while still maintaining at least indirect state control and avoiding the devastating mass privatisation that happened in East-European transition economies. It is hoped that the separation of enterprise and government can be achieved through the corporatisation of large SOEs by the creation of state holding companies, which may serve as a “firewall” between the operating companies and politicians.

On the other hand, the regional decentralization in the 1980s, the fiscal reform in the 1990s and the intensification of the cross-regional competition in the product markets all contributed to the hardening of the budget constraints on local governments, which means that local governments have to assume the primary responsibility for managing local economies and are entitled to part of their own regional revenues as well. Then motivated by the Chinese-style Federalism (Cao, Qian & Weingast, 1999), local governments have established a variety of firms and asset management companies to further control the downstream firms in promising and lucrative industries they deem¹⁴. Among all kinds of the intermediate companies the state has formed, a further detailed comparison of the performance impacts upon the Chinese PLCs that different classes of controlling shareholders may exert is further explored below.

Table 3. Performance Comparison between the Asset Management Company Shareholdings and the Industrial Company Shareholdings (Shareholding Class 21 VS Class 22)

| | EVA per firm (million yuan) | Profits per firm (million yuan) | EVA-Capital Ratio | Profit-asset ratio | Profit margin | Sales growth | No of observations |
|---------------------------------|--------------------------------|------------------------------------|--------------------|--------------------|------------------|-----------------|--------------------|
| Asset Mnmgt companies (Std Dev) | -12.464 (29.934) | 43.331 (37.218) | -0.0078 (0.035) | 0.081 (0.045) | 0.235 (0.121) | 1.28 (1.011) | 141 |
| Industrial companies (Std Dev) | -12.139 (71.527) | 70.323 (99.878) | -0.011 (0.061) | 0.085 (0.072) | 0.262 (0.154) | 1.37 (1.518) | 1824 |
| P-value | 0.957 | 0.0014 | 0.472 | 0.481 | 0.047 | 0.4474 | |

As Table 3 has shown, in terms of the profits made per firm, the significant underperformance of public corporations controlled by asset management company shareholdings appears when compared with those held by the industrial company ones. One possible reason to the underperformance is that asset management companies are likely to indulge themselves in controlling a large number of corporations in a wide range

¹⁴ It is also argued that such factors of institutional change are the driving force of local governments to privatise their enterprises to supply more incentives with the managers and to improve the enterprises' competitiveness, which in turn increase their fiscal revenues (Li, Li & Zhang, 2000).

of mutually unrelated projects or industries, like the case mentioned in the footnote 12. Although the rudimentary principle of portfolio management and risk diversification could justify their wide range of business involvement, the risk of business failure is likely to fuel up owing to the lack of monitoring input and management competence in project control.

Another possible interpretation of the underperformance is that, managers in asset management firms may neither have enough information nor required expertise to exercise effective control of their subsidiaries, apart from the common incentive problem inhabited in all kinds of state-controlled shareholders. Specifically, our conjecture is that the managers in asset management firms are more likely to come from former government bureaucrats rather than managers in traditional State-owned Enterprises (SOEs).

Table 4 shows the performance comparison between the group of corporations controlled by the focused or specialised industrial enterprises as holding companies and the group controlled by the diversified conglomerates as holding companies. Obviously, the specialised shareholding class outperforms those controlled by the diversified conglomerates in profit performance and sales growth. Although a stylised empirical fact shows that focused public corporations perform better than diversified ones in emerging markets, there has been little evidence to show that public corporations under the shareholding control of the focused companies outperform significantly the ones under the control of the diversified companies, implying the importance of the class of shareholdings to the performance of be-controlled firms.

Table 4. Performance Comparison Between the Specialised Industrial Company Shareholdings and the Diversified Conglomerate Shareholdings (Shareholding Class 211 VS Class 212)

| | EVA per firm (million yuan) | Profits per firm (million yuan) | EVA-Capital Ratio | Profit-Asset Ratio | Profit margin | Sales growth | No of observations |
|--------------------------------|--------------------------------|------------------------------------|-------------------|--------------------|------------------|-----------------|--------------------|
| Specialised firms (Std Dev) | -10.71 (86.091) | 78.768 (109.45) | -0.011 (0.057) | 0.087 (0.066) | 0.256 (0.147) | 1.33 (1.35) | 1402 |
| Diversified firms (Std Dev) | -10.937 (57.846) | 48.167 (81.674) | -0.012 (0.068) | 0.079 (0.087) | 0.282 (0.171) | 1.52 (1.973) | 422 |
| P-value | 0.959 | 0.0001 | 0.777 | 0.049 | 0.002 | 0.027 | |

Nevertheless, existing theories on the *raison d'être* and the performance consequence of corporate diversification still serve as a good starting point. Why do firms diversify? Theoretically, they may diversify to substitute external markets by establishing internal capital markets in the hope of saving market transaction costs (Coase, 1937; Williamson, 1985). Empirically, Khanna and Palepu (2000) find such hypothesis testified by the fact that affiliates of the most Indian diversified groups outperform unaffiliated firms in their 1993 sample. Equally important, it is also traditionally legitimate to justify corporate

diversification by elaborating the potential gains of economies of scope and scale, the learning-by-doing effect and the like (e.g. Penrose, 1959).

The costs of corporate diversification, however, always outweigh the potential gains in reality, as evidenced by the pernicious effects of diversification upon corporate performance documented in Asian emerging markets (e.g. Claessens, Djankov, Fan & Lang, 1998; Lins & Servaes, 2002; Mitton, 2002). In fact, as a substitute of external markets, the internal capital allocation within diversified groups is far from efficient and may result in higher transaction costs due to the particularly poor internal governance mechanism of firms in emerging markets. For example, Rajan, Servaes, & Zingales (2000) and Scharfstein & Stein (2000) have respectively developed their own models to characterise the real internal capital allocation process and have reached the similar conclusion: the capital within diversified groups is allocated among divisions not so much on the basis of divisional efficiency as on that of complex 'political' interaction among headquarter officers and division managers, which leads funds to be transferred from stronger divisions to weaker ones.

What's more, the cost of diversification can also stem from managers' empire-building desires for their private benefits of control, another manifestation of the prevalent agency problem (Shleifer & Vishny, 1989). In other words, firms may have gone beyond their optimal sizes as their managers deliberately diversifies business in a way to entrench and benefit themselves at the expense of shareholders value.

Our empirical result again lends support to the negative hypothesis of corporate diversification in the Chinese context. Managers in state-controlled companies, like their counterparts in wildly held corporations, have their own utility functions quite different from the interests of the whole company group. Moreover, since the state lacks both an effective incentive scheme such as managerial shareholding plan and a well-functioning managerial labour market to align managers' interests with those of shareholders, it is managers' rational choice to focus on the pursuit of various pecuniary and non-pecuniary private benefits of control, which are precisely an increasing function of, among others, firm size. Consequently, diversified companies may choose to establish or hold a public traded company not according to pure business consideration, but for serving the managers' private interests. And even if on some occasions it is justifiable for a diversified group to hold a PLC from the business point of view, it could be expected *a priori*, from the above discussion about the internal capital misallocation hypothesis, that the performance of the PLC is only secondary to the interests of the *entire* business group, whereas a PLC controlled by a specialised firm may exhibit a better performance record due to a larger degree of convergence of interests with its holding firm. Put differently, profits earned and funds raised from the PLCs are more likely to be transferred to their holding companies if they are diversified groups, since there is a natural tendency for them to tap money from the PLCs they control to subsidise their other subsidiaries.

Table 5. Performance Comparison Between the Wholly Listed Company Shareholdings and the Partial Listed Company Shareholdings (Shareholding Class 211-1 vs Shareholding Class 211-2)

| | EVA per firm (million yuan) | Profits per firm (million yuan) | EVA-Capital Ratio | Profit-Asset ratio | Profit margin | Sales growth | No of observations |
|-----------------------------|--------------------------------|------------------------------------|-------------------|--------------------|------------------|-----------------|--------------------|
| Wholly-Listed (Std Dev) | -12.325 (70.877) | 89.898 (106.44) | -0.006 (0.053) | 0.094 (0.059) | 0.266 (0.148) | 1.35 (1.594) | 567 |
| Partial-Listed (Std Dev) | -13.618 (72.626) | 69.448 (98.405) | -0.014 (0.058) | 0.084 (0.069) | 0.25 (0.145) | 1.32 (1.161) | 828 |
| P-value | 0.742 | 0.0009 | 0.011 | 0.004 | 0.02 | 0.712 | |

The significant underperformance of partially listed corporations relative to the wholly listed corporations, as suggested in table 5, may be explained as follows: On the one hand, from the traditional agency perspective, one of the crucial distinctions of the partially listed companies from the wholly listed ones is that, there is an additional agency chain between the ultimate principal of the state and the downstream listed companies. That is, while the managers in the wholly listed companies are directly involved in the listed companies' business, in the partially listed case managers in the industrial holding companies would further delegate their control of the business in listed companies to another group of managers¹⁵. Intuitively, other things being equal, agency costs would rise with the increase of principal-agent chains, especially when various incentive alignment mechanisms, such as management stock options and ownership, are not generally put in place in China.

Apart from the perspective of the agency chain argument, the inside-outside agency view may also provide compelling explanation. The wholly listed companies is controlled by an inside agency who is delegated the voting power by the ultimate owner of state to direct the use of assets. In contrast, the partially listed companies is controlled by an outside corporate agency who is in turn to employ another corporate agency to operate business under the outside agency's authority. Although the latter management may be argued for being conducive to monitoring, its side effects of the lower intensity of effort, or the higher motivation to tunnelling resources to other places due to different interests on business between the two agencies, may offset the positive impacts.

In fact, the asset stripping from partially listed companies to other uses is widely reported in China, which can adversely affect the growth of the company and its long-run performance. For example, the large corporatised SOEs, such as the Sinopec, are common to raise external funds for subsidising their non-profitable subsidiaries and

¹⁵ Regarding the partially listed example in section 3.1, only one board director in the Qilu Petrochemical comes from Sinopec, its holding company, and most of the executive officers are managers of the subsidiary company, in sharp contrast to the wholly listed case mentioned above.

social welfare expenditures by pooling all its core business to create a listed company that is under the parent company's control. This explains largely why the tunnelling behaviour of state-controlled group companies is quite prevalent that the Chinese stock market has been called 'a cash machine' by which the state holding companies tap public savings to finance their other poorly performed subsidiaries.

To mitigate tunnelling behaviour of state controlled companies, our empirical finding that is consistent with the explanation above seems to suggest that, before full privatisation, the control mechanism of wholly listed companies should be considered for promotion to other quoted companies.

Overall, the nested performance comparison conducted through Table 2 to 5 enables us to rank out the least inefficient shareholding class from the 8 different categories, and the final result is the holding companies that are wholly listed and have focused industrial business through the indirect state control of their downstream public corporations.

IV. Conclusions

Based on the principle of the ultimate ownership and control that is suggested by La Porta et al (1999), the paper establishes a new analytical framework on the shareholding structure of Chinese quoted companies and finds that the main feature of the structure is state dominance in terms of both the number of state ultimately controlled firms in the stock market and the proportion of the voting shares. On the other hand, although the private ultimate-controlled corporations are small at present, only 16% in 2001, it still raises a question that needs further scrutiny: is the current state-dominant shareholding structure in Chinese public companies transitional or endurable?

In contrast to the shareholdings given by the paper, the Chinese official reported shareholdings of the state or the legal persons are ambiguous in identifying ultimate owners of corporations. For instance, the absence of state shares shown in a company's annual report does not necessarily indicate the non-existence of the ultimate control by state. And the class of legal person shares is just a cover of various identities of ultimate owners including both state and private. This ambiguity has seriously misled many previous studies in assessing the impact of shareholding classes on performance.

Based on our newly established shareholding classes, we compared performance of four different pair-classes: the state direct control versus the state indirect control, the state industrial company shareholdings versus the state solely owned asset management company shareholdings, the focused or specialised company shareholdings versus the diversified company shareholdings, and the wholly listed company shareholdings versus the partial listed company's parent shareholdings. The performance comparison of different classes of shareholdings on the Chinese companies exhibits consistent and significant evidence that the class of shareholding does matter for performance. The least inefficient shareholding class among the 8 different classes ranked by the study is the indirect state control of the wholly listed industrial companies with focused business as

the controlling shareholder of the public corporations. This finding provides public corporations with a lesson to think of how to improve their corporate control mechanism, and the same is true for China's government on how to choose an efficient shareholding structure while trying to maintain the ultimate control of the state.

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