The Impact of Political Connections on Chinese Listed Firms

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Abstract

This thesis investigates the impact of a new type of "princeling" political connection on Chinese listed companies. Three specific issues are examined through three interconnected essays: characteristics of "princeling" politically connected firms (PCFs) with respect to accounting numbers in financial statements and corporate governance; the expropriation on earnings by PCFs; and the impact of political connections on stock returns.

Firstly, to examine the characteristics of PCFs, this thesis systematically examines the differences between PCFs and their matching firms with respect to financial statement accounts and corporate governance during the period from 1992 to 2011. This thesis finds that PCFs have significantly greater profitability and market valuation, but they have significantly lower net investments and net fixed assets compared to non-connected firms. Moreover, board directors are on average older and have higher educational levels in PCFs, relative to non-connected firms. Surprisingly, PCFs exhibits larger percentage of directors with academic backgrounds.

Secondly, an investigation is made on the link between political connections and value expropriation. This thesis finds PCFs stockpile disproportionately larger retained earnings but pay lower cash dividends, compared to unconnected firms. This thesis further finds such behaviour in PCFs is not due to either investment or precautionary motives. These results immediately give rise to the question of what happens to the retained earnings. By examining the components of retained earnings, this thesis identifies a new form of tunnelling in the form of a discrepancy in the accounting for changes in retained earnings, newly defined as "grey usage". Specifically, PCFs have higher average grey usages on retained earnings than matching firms, by CNY 4.68 million. The findings provide important information for investors that PCFs may potentially increase the risk of expropriation through grey usages.

The final examination investigates the market response to the "princelings" political connection. This thesis compares the cumulative abnormal stock returns between PCFs and unconnected firms. Three benchmarks are applied: cumulative market adjusted abnormal returns (CMAARs); cumulative risk adjusted abnormal returns (CRAARs); and cumulative abnormal returns adjusted from the Fama-French three factors model (CFAARs). No matter which benchmark is used, firms connected to PCFs show higher cumulative abnormal stock returns than matching firms. Also, this study finds that PCFs outperform matching firms in the Conglomerates and Industrials sectors, but not in others. This result could be due to the predominance of firms in the Conglomerates and Industrial sectors in the connected firm samples.

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The completion of my dissertation and subsequent Ph.D has been a long journey. It is true that “Life is what happens” when you are completing your dissertation. Life doesn’t stand still, nor wait until you are finished and have time to manage it. Much as happened and changed in the time I’ve been involved with this project. Many have questioned whether I would finish my dissertation, and have doubted my commitment to it. I, on the other hand, barring losing confidence so many times I’ve lost count, getting writer’s block just as any times, computer crashing, and pure frustration in general, knew I’d complete my Ph.D.

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CHAPTER ONE: INTRODUCTION

This Chapter provides an overview of the three essays contained in this thesis. In particular, it outlines the motivations for, and the need to, study the impact of political connections on the Chinese stock market. The chapter concludes by outlining the framework for the reminder of the thesis.

1.1 Introduction

Political connections have a significant impact on the overall economy and the economic lives of individual firms, particularly in emerging countries (Faccio, 2006). Political connections help firms to secure favourable regulatory conditions (Faccio, Masulis, and Mcconnell, 2006) and access resources such as bank loans (Khwaja and Mian, 2005), which ultimately increase the value of firms (Ramalho, 2007) or improves their performance (Johnson and Mitton, 2003). As a result, there is a growing body of economic literature on the implications of political connections, and in particular the measurement of the value of political connections in the business world.

The cultivation of political connections is also important for entrepreneurs in the transition economy of China. The incentive for businesspeople to establish political connections in China ultimately arises from the state control of key resources. Due to the lingering legacy of the command economy and the slow development of market-supporting institutions, entrepreneurs in China face many obstacles in running their businesses. An example is that bank loans are largely reserved for state-owned enterprises. In addition to such problems as a weak state and ill-functioning financial markets, the legal system in developing economies is often too weak to secure property rights and enforce contracts (McMillan and Woodruff, 2002). In such an environment, close ties to governments help businesses to overcome these market and state failures, and avoid potential obstacles.

Due to historical reasons, at the pinnacle of political power in China is a group of elite political families, of which the father or grandfather are/were revolutionary leaders of the Committee Party of China. These families are also well known as “Red nobility”. Their power derives from who they are, rather than what position they hold. As a result, their descendants (well-known as princelings) have a strong influence on business deals through the use of privileges. In Chinese culture, politicians’ connections to deals are resisted and even successful business ventures by their descendants are considered sensitive, so news on business deals involving members of these powerful families is censored by state-owned media. Nevertheless, their business activities may become known through exposure in media overseas, such as *The Wall Street Journal*.

To a certain degree, the performance of politically connected firms reflects a complex trade-off between economics and the political competition among these elite families. The practice of SOEs privatisation and non-tradable share reform has shown that China has gradually phased out the centrally planned economy resulting in a more market-oriented environment. However, the government still has extensive control over the securities markets; certain fundamental features have yet to be changed. One of these is the role of affiliation with these elite families in helping to improve the performance of Chinese listed firms. Therefore, this thesis, consisting of three interconnected essays, helps to fill this gap by presenting a comprehensive study of political connections in China. This thesis is structured to provide additional insight, specifically into political influences on the Chinese stock markets, from both the investment and financing perspectives.

The rest of this chapter provides an outline for each of the three essays and underlines the important contribution that each provides to the existing body of knowledge. Section 1.2 reports the overarching literature review which is relevant to this PhD study. Section 1.3 outlines how Chinese listed firms connected to princeling families or other high-ranking officers (PCFs) perform differently from unconnected firms in terms of accounting numbers in financial statements. Section 1.4 presents the evidence on the value of expropriation during the profit sharing stage in PCFs in China. Section 1.5 offers evidence on the impact of political connections on stock returns in China. Finally, section 1.6 presents the structure of the overall thesis.

1.2 Overarching literature review

Chapter 2 is the Overarching Literature Review. This chapter provides insights into the relationship between what this PhD study is about to tell readers, and the thesis. This chapter first reviews the existing agency costs of expropriations by controlling shareholders, which is the fundamental theoretical background we apply to support the findings of this PhD project. Then, Chapter 2 gives an overview of the Chinese stock market, including the market capitalisation to GDP, features of dividend payments, political influences on the stock market and characteristics of corporate governance. Over the past few decades, the framework of corporate governance in China has been mimicking mature markets in Western countries. However, the literature reviewed in this

thesis reveals that corporate governance is still plagued by inadequate internal governance, misappropriation by controlling shareholders, strong government intervention, weak transparency in dividend plans and poor information transparency. This chapter concludes that, in the case of China where the law and legal system is weak, agency conflict between insiders (controlling shareholders and managerial teams together) and minority shareholders remains the key issue in corporate governance.

1.3 Essay One: The difference between politically connected and non-connected firms: A new type of political connection and evidence from the Chinese stock market

This essay first describes how a unique sample of listed firms connected to political elites in China is identified. This unique sample consists of 382 "princelings" politically connected firms (PCFs), which have not been examined to date due to the difficulty in identifying them from the public sources available on Mainland China. This study contributes to the existing literature in three ways. First, to the best of the author's knowledge, this is the first study to examine listed firms with connections to princeling families or other high ranking officers in China. This new type of "princeling" political connection is distinguished from existing studies, which link state ownership directly with political connection in Chinese markets. Second, previous research in political connections adopts an international perspective, which makes interpretation of the results difficult as they may be affected by other factors that vary across countries (Faccio, 2010). Compared to prior international studies in this area, this essay examines a longer time period and focuses on a single country, which allows for cleaner interpretation of the results.

Essay One focuses on two main research questions: 1) Whether and how these PCFs differ from non-connected firms in accounting ratios drawn from three financial statements; and 2) how governance and board composition are related to political connections. This essay applies a logistical model to compare the differences between PCFs and non-connected firms. Essay One finds that PCFs systematically perform differently from their counter peers in terms of accounting ratios drawn from three financial statements, governance, and board composition.

1.4 Essay Two: Expropriation during profit distributions in politically connected firms: Evidence from the Chinese stock market

The results of Essay One show that PCFs indeed perform differently from non-connected firms on accounting numbers in financial statements, particularly in profitability. Therefore, Essay Two investigates two questions. First, do PCFs outperform their matching firms in terms of operating performance and growth opportunities? To answer this question, this essay uses OLS regression and finds that PCFs outperform their matching firms in operating performance as measured by net cash flow from operating activities divided by total assets (NOC), and return on assets (ROA), and in growth as proxied by the change ratio on sales.

Then, this essay considers whether PCFs have economic motives to expropriate firms' profits at the operating and profit sharing stages. By using a theoretical approach that combines agency theory and accounting principles, this essay sheds light on how listed firms with political connections expropriate minority shareholders during profit distributions on the Chinese stock market. This integrated approach suggests that, rather than being benevolent resource providers, political connections act as opportunistic rent-seekers to listed firms.

This study contributes to the existing literature in two ways. First, to the best of our knowledge, this is the first study to develop the new theory of "Golden hens vs. Chickens" to explain the distinctiveness of the "princeling" connected firms. This theory predicts that firms with "princeling" connections are associated with greater profitability and growth opportunities, but are less likely to conduct cash tunnelling. However, they are more likely to take extra shares in profit distributions by stockpiling larger retained earnings, while paying lower cash dividends. Second, this essay develops a new theory of "Grey" usages (in equation 4.11). The grey usage is identified as a missing value needed as a balancing condition to explain changes in retained earnings with respect to distributable profits, paid dividend and change of retained earnings and change of surplus reserves.

1.5 Essay Three: Market reaction to the “princelings” connection

This essay investigates how the market reacts to the “princelings” connected firms via stock prices. This paper sheds further light beyond that cast by the previous literature (Ma, Ma, and Tian, 2013) and (Piotroski and Zhang, 2014), which examines the impact of political connections on firms’ financial performance. The investigation in this study is more comprehensive than earlier ones in at least three aspects; (1) defining a new type of political connection, (2) the sampling period, and (3) the industry analysis.

This essay uses three benchmarks to test the difference between connected firms and their matching firms. The first is cumulative market adjusted abnormal returns (CMAARs); the second is cumulative risk adjusted abnormal returns (CRAARs); and the third is cumulative abnormal returns adjusted from the Fama-French three factors model (CFAARs).

1.6 Structure of the Thesis

This thesis is structured as follows. Chapter 2 presents the overarching literature review of this PhD thesis. Chapter 3 reports the first essay of this thesis, which systematically examines the difference between the “princeling” connected firms and their counterparts with respect to accounting numbers on financial statements. Chapter 4 reports whether the “princelings” connected firms have incentives to expropriate at either the business operating stage or the profit distributions stage. Chapter 5 reports how the market responds to the “princelings” political connection. Chapter 6 concludes by summarising the theoretical contributions, findings and implications of each of the three essays, together with presenting suggestions for potential future study.

CHAPTER TWO: OVERARCHING LITERATURE REVIEW

This chapter describes the overarching literature review that includes three main sections. Section 2.2 reviews the agency cost of expropriations by controlling shareholders, which is the theoretical background applied in this PhD thesis. Section 2.2 provides an overview of the current situation of the Chinese stock market, features of dividend policy and political influence on the stock market. Section 2.3 reviews the effectiveness of internal and external corporate governance, and presents a conclusion on the framework of corporate governance.

2.1 Introduction

This chapter provides insights into understanding the relationship between what this study is about to tell readers, and the thesis. It begins with the theory background on the agency cost of expropriation by the largest shareholders, which is applied in this PhD thesis. As this study investigates Chinese sample firms that are listed on the two stock exchange markets (Shanghai Stock Exchange and Shenzhen Stock Exchange), it is necessary to have an overview of Chinese stock markets. In particular, this chapter focuses on political influence, dividend policy, and corporate governance.

First, China is characterised by single-party dominance in political administration; the stock market is well-suited for a study on political connections due to its relationship-based culture and weak market-supporting institutions. This study investigates the nature of a special type of political connection of "princelings" in some publicly traded firms listed on the Chinese stock market. Therefore, Chapter 2 briefly describes the political influence on the Chinese stock market, and presents a literature review on the current theory on political connections.

Second, Chapter 2 systematically reviews dividend policy in Chinese listed firms, due to little attention paid to this topic by previous researchers. The Chinese stock market is plagued by lower dividend payments on average, compared to other mature markets. Chapter 2 presents the current situations on dividend payments, and why cash dividends are paid at a low level. With this in mind, readers should understand the main findings presented in Chapter 4.

In addition, Chapter 2 gives a literature review on corporate governance among Chinese listed firms. The corporate governance in China has been explored and established in the process of state-owned enterprise reform (SOEs reform), private enterprise growth and a special campaign of non-tradable share reform as of 2005. The review on corporate governance will present readers with knowledge about how the weak corporate governance is the main reason for the general expropriation issues on the Chinese stock market.

Overall, Chapter 2 helps the reader to understand the gaps in the literature, which the study in this PhD thesis will address. It serves as a connecting link between the preceding and the following the main three essays of this PhD thesis.

2.2 Expropriation by controlling shareholders

Shleifer and Vishny (1986) develop a theoretical model to explain the role of large shareholders in corporate governance. The model detects that large shareholders have an incentive to monitor managers, thus partially reducing manager's discretion (M. Jensen and Meckling, 1976). However, La Porta, Lopz de Silanes, Shleifer, and Vishny (LLSV) (1998) assert that the central agency problem is how to restrict expropriation by controlling shareholders, whereby controlling shareholders pursue private benefits through the value of control over corporate resources. Such behaviours are described in the literature as "tunnelling"(Johnson, La Porta, Lopez-de-Silane, and and Shleifer, 2000a), entrenchment effect (Claessens and Fan, 2002) , private benefits of control (Dyck and Zingales, 2004; Zingales, 1994) and self-dealing (Djankov, La Porta, Lopez-de-Silanes, and Shleifer, 2008), and principal-principal conflicts (Young, Peng, Ahlstrom, Bruton, and Jiang, 2008).

Many scholars have already conducted valuable research on the extent of expropriations by controlling shareholders around the world and have discovered that expropriations by controlling shareholders can take many forms. LLSV (La Porta, López de Silanes, Shleifer, and Vishny, 2000b) and Jonson, et al (2000a) summarise three main instances of insider expropriation[1]. The first instance is where insiders simply steal the profits, which is illegal everywhere. Such outright theft and fraud can generally be stopped through legal actions in developed countries with strong investor protections.

The second instance of expropriation is through many varied and subtle ways. For example, insiders sell the output, assets or the additional securities from listed firms to another under their control at a discounted price, they obtain a loan guarantee on preferential terms, or they expropriate minority shareholders through share dilution and freeze-outs, which is referred to as financial tunnelling[2]. The third instance of expropriation takes the form of

[1] LLSV (2000b) referred to insiders as both managers and controlling shareholders.
[2]Literature also distinguishes between operational and financial tunnelling. Financial tunnelling refers to expropriation through share dilution by a closed subscription to new share, or through freeze-outs by

occupying corporate wealth opportunistically, appointing unqualified family members or friends as senior managers, and excessive compensation.

The second and third form of expropriation could be legally approvable with a plausible business purpose in a general meeting or court and is, therefore, more difficult to substantiate (Johnson et al., 2000a). Regardless of the specific form, tunnelling activities transfer economic resources out of public firms to private pockets of controlling shareholders, which hinder not only minority shareholders' interests but also stock market development (Dyck and Zingales, 2004; Johnson et al., 2000a; Wurgler, 2000).

As expropriations by controlling shareholders are of a clandestine and varied nature, the value of asset appropriation is often not provable in court. Therefore, it is difficult to pin down the facts on how it is conducted and how to quantify the amount. Most literature indirectly measures expropriations either from changes in firms' market value around specific events, or through the price paid for controlling shareholders. Using a sample of 1301 publicly listed firms across eight East Asian countries, Claessens, Djankov, Fan and Lang (2002) find an entrenchment effect of large ownership wherein firm value drops when the control right of the largest shareholders exceeds their cash flow right. They also show that the entrenchment effect is particularly present in those firms with pyramids, crossholdings, and dual class shares. Bertrand, Mehta, and Mullainathan (2002) trace the propagation of earnings shocks from business group firms where the controlling shareholders have low cash flow rights to ones where they have high cash flow rights to proxy for tunnelling activities within Indian business groups. Bae, Kang, and Kim (2002) investigate whether controlling shareholders benefit themselves during mergers and acquisitions of business groups in South Korean. They find minority shareholders lose value (measured by stock price) when the group affiliated firm makes acquisitions, while controlling shareholders enhance the value of other firms in the group. In addition, Mitton (2002) provides cross-country evidence that individual firms are able to prevent expropriation of minority shareholders even though the legal protection is weak in East Asia.

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delisting with a tender offer to controllers. See Johnson et al. (2000a) and (Bates, Lemmon, and Linck, 2006). Financial tunnelling is less likely to happen in the case of China, due to the overwhelming government interventions in the stock market (Gao and Kling, 2008).

Prior studies also estimate expropriations indirectly through the price paid to controlling parties. For instance, Barkalay and Holderness (1989) qualify the value of private benefits of control by the differential price per share of negotiated transfers paid to controlling shareholders. Johnson, et al., (2000a) provide clinical evidence of three legal tunnelling cases in three developed civil-law countries; Belgium, France, and Italy. These tunnelling cases are legally consistent with statutes and business principles. By following this approach, Dyck and Zingales (2004) use 393 controlling block sales from 39 countries during the period of 1999-2000 to estimate private benefits of control. They find a positive relationship between private benefits of control and concentrated ownership. Atanasov (2005) use the premium paid by controlling blockholders to estimate expropriating activities on the Bulgarian stock market. The author reports 85% of firm value is extracted by controlling shareholders during the mass privatisation auctions.

While these studies have provided evidence on the negative impact of expropriations by controlling shareholders on firm performance though an indirect approach, Cheung, Rau, and Stouraitis (2006) argue that such an indirect method is not reliable and could suffer from endogeneity issues. In their paper, they distinguish the related party transactions from the arm's length transactions between Hong Kong listed companies and controlling shareholders in mainland during the period of 1998-2000. They find a negative market response to the announcement of related party transactions, suggesting controlling shareholders extract firms' wealth at the expense of minority shareholders. They also find firms whose ultimate owners can be traced to mainland China are more likely to undertake related party transactions.

Based on Chinese stock market, Berkman, Cole, and Fu (2009) find controlling shareholders tunnel listed firms' wealth through related-party loan guarantees, which is banned in developed economies. Jiang, Lee and Yue (2010) provide direct evidence on tunnelling activities by controlling shareholders through inter-corporate loans made as part of normal business, but neither is interest charged, nor the principal paid back. These inter-corporate loans are typically reported as the "Other receivables" account on the balance sheet, and often end up being written off as bad debts. In addition, D. Chen, Jian and Xu (2009) link the dividend policy to tunnelling incentives of controlling shareholders in Chinese publicly traded firms. They find that firms with concentrated ownership, recent right issues, and more differential pricing in their IPO, are more likely to pay higher cash

dividends. They interpret that such a cash dividend preference is induced by tunnelling purposes.

Despite so many approaches being used to measure the value of expropriations by controlling shareholders in prior studies, the literature clearly demonstrates the prevalence of embezzling activities resulting in negative consequences, not only in developed economies but also in developing economies. This raises the question of what are the root causes driving expropriations by controlling shareholders and what mechanisms can be applied to prevent such corporate abuse.

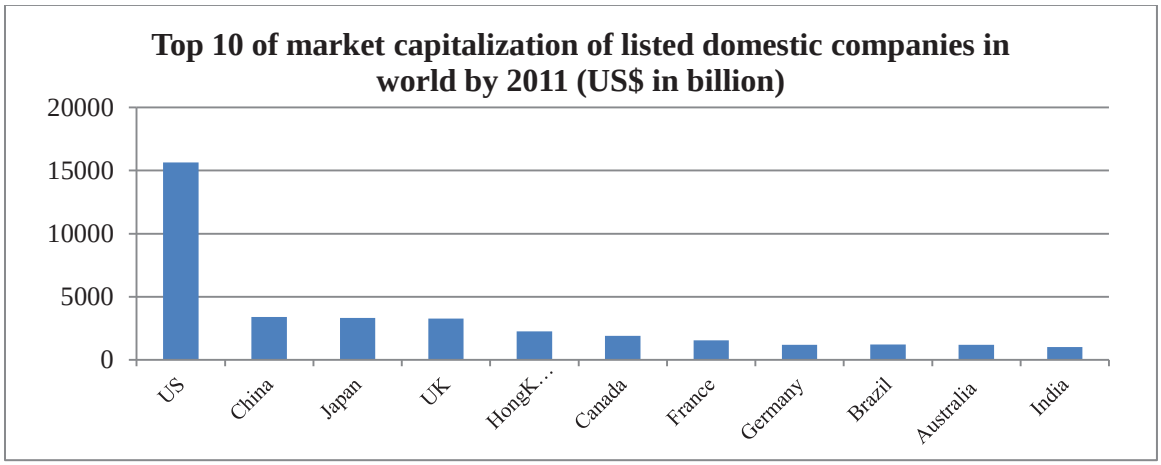
The body of corporate governance literature to date emphasises the importance of law and legal systems in shaping the ability of insider expropriations, thereby increasing investor confidence in markets and consequently stimulating market development (La Porta, López de Silanes, Shleifer, and Vishny, 1997; La Porta et al., 1998; Shleifer and Vishny, 1997). Johnson, et al., (2000a) suggest that unrestrained tunnelling was the main reason for the Asian financial crisis from 1997 to1999. In a follow-up study, Johnson, et al., (2000b) confirm this empirically, using country-level evidence to show that legal institutions play a central role in exacerbating the stock market declines during the Asian financial crisis from 1997 to 1999. They find that the risk of expropriation increases during worse economic conditions, and in countries with weak legal and institutional environments. In the survey study, Claessens and Fan (2002) suggest that weak legal systems and poor law enforcement are the most probable causes of concentrating ownership, which can facilitate the incentive of expropriations in Asian corporations.

2.3 Overview of Chinese stock market

Compared to the capital markets of developed countries, China's securities markets are more fledging in nature. Its two stock exchanges, the Shanghai Stock Exchange (SSE) and Shenzhen Stock Exchange (SZSE), only initiated trading in December 1990 and April 1991, respectively. Thus, they have an operational history much shorter than the major stock exchanges of developed countries. Despite being relatively young, China's two stock markets rank second in the world in market capitalisation behind the New York Stock Exchange (NYSE), and sixth in terms of the number of listed companies by the end of 2011.

Figure 2.1 ranks the top 10 market capitalisations of listed domestic companies around the world at the end of 2011. Although China's stock market is relatively young compared to the US stock market, with the former only a mere 20 years old while the later is more than 200 years old, China's two stock markets have developed quickly and its size is in the top 10 in the world. It is clear from the bar chart that China had the second-highest market capitalisation of domestic listed firms at US$3,412 billion in 2011, following the US with the highest market capitalisation at US$15,640 billion.

Figure 2.1: Top 10 of market capitalization of listed domestic firms in the world by 2011
Figure 2.1 presents the top 10 of market capitalization of listed domestic firms around the world by the end of 2012.Data is available in the World Bank.



The two stock exchanges (the SSE and SZSE) can be further divided into the Main Board, Small and Medium Enterprise Board (SME) and ChiNext Board. The Main Board evolved and grew along with the shareholding system reform in state-owned-enterprises (SOEs) and in response to SOE development. With enhanced financing function and issuers' corporate governance structure reforms, the Main Board has continuously expanded its capacity to serve the economy in promoting modern enterprise systems, optimising resource allocation, readjusting economic restructures and facilitating economic growth. Over the past two decades, the Main Board become a vital financing channel for major enterprises and has raised US$591.06 billion (CNY 3723.69 billion). By the end of 2011, there were 1415 companies listed on the Main Board with a total market capitalisation of US$2,847 billion (CNY 17.9 trillion).

In spite of growing quickly, the Chinese stock market has been seen as a "policy market", where the government intervenes both at the macroeconomic policy level and at the firm level. In the context of China, government policies and administrative decisions on the capital market often reflect a complex trade-off between social, economic, and political objectives. On the one hand, Frye and Shleifer (1996) depict Chinese state-guided economic reform as the role model of a "helping-hand state". According to this view, the government has clear incentives and the ability to control the stock market through the high level of state ownership and the presence of political connections. The most noteworthy of these in recent years is the US$586 billion (CNY 4 trillion) stimulus package announced by the State Council of China in 2008 to minimise the impact to global financial turmoil, including a capital injection for publicly listed state-owned firms. This macroeconomic policy has been blamed for causing a price bubble on the stock market in 2009. Hence, the strong government intervention results in stock price rises and falls, which are highly related to the promulgation of government policies (Gul, Kim, and Qiu, 2010; R. Morck, Yeung, and Yu, 2000).

On the other hand, the public choice literature calls particular attention to the "grabbing hand" through rent seeking, extraction, and protection by politicians' intervention in business activities, particularly in countries with weak institutional constraints (McChesney, 1987; Shleifer and Vishny, 1998; Shleifer and Vishny, 1994; Stigler, 1971).

The key feature of SOEs and non-tradable reforms is the separation of ownership and control, which creates a unique agency cost in government-management-investor conflicts. The games played by the government, management, and outside investors become more complex than the traditional agency conflicts that are merely between firm managers and outside shareholders (Jensen and Meckling, 1976) or conflicts arising between politicians and firms (Shleifer and Vishny, 1994). As a result, Chinese listed firms are associated with weak corporate transparency, particularly as it pertains to the general problems of expropriation and rent seeking activities by the largest shareholders.

Prior researchers have identified many forms of expropriation by Chinese listed firms to date. For instance, Berkman, et al. (Berkman et al., 2009) find that listed firms expropriate at the expense of minority shareholders by issuance of loan guarantees to related parties in 1999. Cheung, Jing, Lu, Rau, and Stouraitis (2009) find controlling shareholders extract

firms' wealth through related-party transactions during the 2001-2002 period. By using a sample period of 1996-2006, Jiang et al. (2010) find block shareholders of Chinese listed firms tunnel tens of billions in RMB through fund occupations, which are typically reported as part of "other receivables". The serious economic consequence of expropriations is obvious and its severity has caused the China Securities Regulatory Commission (CSRC) to take many actions to address the expropriation issues identified in such papers. However, regardless of many efforts by the CSRC to improve the protection of minority shareholders, tunnelling activities are still widespread.

2.3.1 Dividend policy in Chinese stock market

2.3.1.1 Dividend payments process timeline for a Chinese listed firm

Figure 2.2: The dividend payment process time line for a publicly listed company

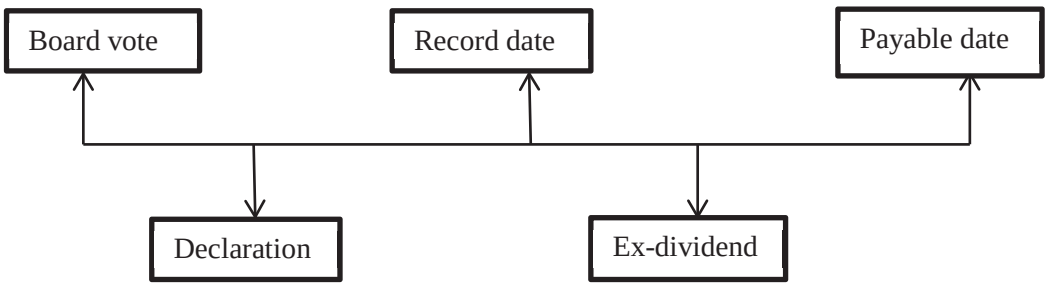


Figure 2.2 exhibits the dividend payments process of Chinese listed firms. The dividend payment process begins with the board vote to pay a dividend. Shortly after, the listed firm publicly announces its intent to pay a dividend after approval by either the Shanghai stock exchange or the Shenzhen stock exchange, along with, at a minimum, the amount of the dividend and the record date. The ex-dividend date normally follows the record date by one day, which is set by the stock exchange. This is in contrast to developed countries where the record date precedes the ex-dividend date by two days. The payable date is the date on which the firm actually pays the dividend. This is five days after the record date.

2.3.1.1.1 Board vote

The process begins with a vote by a Chinese listed firm's board of directors to pay dividends. Then the deliberative plan of dividend payments is approved by an affirmative vote representing two thirds (or one half) of the voting rights vested with shareholders present at the shareholder's meeting. In accordance with the *Company Law*, the *Securities Law*, and the *Administrative Measures for the Information Disclosure by Listed Companies*, the board of directors and the shareholder meeting must approve any distribution of the firm value to shareholders after sufficiently listening to the explicit comments of independent directors and minority shareholders. Listed firms shall perform the decision-making procedures for profit distribution defined in their articles of association and ensure the truthfulness of information disclosure of profits distribution.

In practice, minority shareholders have neither the incentive nor the capability to collect information and monitor the legality and compliance of relevant decision-making procedures on dividend payments. Individual investors seldom participate in the shareholder's meeting. According to an estimate of the CSRC, by the end of 2015, there are total 2315 listed firms. Of them, around 1200 (50% of total listed firms) firms have less than 20 shareholders attending the annual shareholders' meeting, 570 firms have less than 10 shareholders attending the annual shareholders' meeting, and five firms only have one shareholder attending the shareholders' meeting. Furthermore, the board of directors are dominated by either controlling state owners or privately controlling owners (J.P.H. Fan, Wong, and Zhang, 2007; T. W. Lin, 2014; Xi, 2006), thereby they act as a check on the power and interests of the Chinese government and controlling shareholders. Independent directors arguably care less about corporate performance and the interest of minority shareholders and more about their own socio-political objectives (V. Z. Chen, Li, and Shapiro, 2011; M. W. Peng, 2004). Hence, it is not surprising to see that shareholders' meetings are controlled by the board of directors, who are the representatives of controlling owners.

Moreover, on the basis of fully respecting corporate self-governance, the securities regulatory authorities encourage listed firms to be aware the importance of rewarding investors in dividends, but they do not impose specific administrative penalties (including fines and prison terms) to prohibit falsification or major omissions in the statements or explanations of profit distribution policies of listed firms. In addition, the legal system offers few options for minority shareholders to take private enforcement actions against value appropriation through profit distributions. Consequently, the internal decision-making procedure and mechanism regarding profit distributions is not clear or transparent. Dividend policies are at the controlling shareholders' mercy.

2.3.1.1.2 Declaration date

After the board vote, the firm announces to the public that it will pay dividends. The date on which this announcement is made is known as the declaration date (or announcement date) of dividends. The amount date typically includes the amount of value that shareholders will receive for each share of stock that they own, as well as the other dates associated with the dividend payments process. The price of a firm's stock price often changes when a dividend is announced. This happens because the public announcement sends information to investors and the information is incorporated into stock prices at the time of the public announcement (John and Williams, 1985; Miller and Rock, 1985). According to Aharony and Sway (1980) and Asquith and Mullins (1983), when a company announces an increase to dividend payments, this suggests that future cash flows are higher than expected. This, in turn, can result in an increase in the firm's stock price. In contrast, the decision to cut dividend payments indicates a pessimistic signal, which causes the stock price to go down.

The empirical evidence of stock price reaction to dividend announcements based on the Chinese stock market is generally consistent with the signalling theory. By focusing on the information content of concurrent annual earnings and dividend announcements made by 1,232 Chinese listed firms in the period of 1994-1997, Chen, Firth, and Gao (2002) find stock dividends send a positive market signal for firms with surprise earnings associated with positive abnormal returns, while they find little evidence on the relationship between cash dividend announcements and stock returns. Using a sample of 1993 stock dividend

announcements between 1992 and 2007, Anderson, Chi, Ing-aram, and Liang (2011) find a positive relationship between stock price reactions around the announcement date, and the unexpected change in earnings of the concurrent year and the change in stock dividends. In addition, D.H. Chen, Liu, and Huang (2009) conduct an event study using a sample of cash dividend changes from all listed A-share firms in China during the period of 2000-2004. They find the announcement of changes in cash dividends has a positive influence on share prices.

2.3.1.1.3 Record date, Ex-dividend date, and payable date

The record date is the date on which investors must be *stockholders of record* in order to receive dividends, which typically follows the declaration date by three trading days. Usually, the board specifies the record date when it votes to make dividend payments and then informs the two stock exchanges on which its stock is traded of this date. The two stock exchanges set the ex-dividend date.

The ex-dividend date is the first date on which the stock trades without right to dividends. Investors who buy shares before the ex-dividend date will receive dividends on which taxes will have to be paid at both corporate and personal levels. By contrast, investors who buy the stock on or after the ex-dividend date will not. The final date in the dividend payment process is the payable date, when shareholders of record actually receive the dividends. The payable date is typically five trading days after the declaration date

In practise, the double-taxation makes shareholders more heavily taxed on dividend receipts than on capital gains. The Chinese government sets different individual tax rates for cash dividends according to the holding time period of stocks. In 2013, the individual tax rate for cash dividends is 20% for those who hold stocks no more than one month, 10% for those who hold stocks between one month and one year, and 5% for those who hold stocks more than one year. The actual magnitude of the tax burden is debatable[3], because the balance of the shareholder's account eventually reduces as a result of this double tax deduction. Therefore, investors prefer capital gains through buying and selling stocks than dividend incomes. The CSRC has been notified of this tax issue and is diligently

[3] http://www.csrc.gov.cn/pub/newsite/tzzbh/tzzfw/tzzbhtzzwd/201205/t20120502_209450.html

coordinating for the reduction of operating costs related to dividend distribution to improve investor protection[4].

2.3.1.2 Agency theory of dividend policy

Decisions concerning whether to distribute value to shareholders, and what percentage of earnings to distribute as dividends, are very important financing decisions that have implications for a firm's future investment and capital structure policies. To date, the weight of earlier research often investigates stock dividends and cash dividends separately and pays much more attention to the US and other international markets. The literature focuses on shareholder preferences for stock dividends mainly through signalling theory (Grinblatt, Masulis, and Titman, 1984; Rankine and Stice, 1997), the cash dividend substitution hypothesis (Lakonishok and Lev, 1987), and the trading range hypothesis (McNichols and Dravid, 1990). However, the weight of earlier research on both stock dividends and cash dividends pays much more attention to the US and other international markets.

On the other hand, the literature focusing on cash dividends offers a wide range of explanations for the so-called dividend puzzle (Black, 1976), mainly through the clientele theory (Miller and Modigliani, 1961), bird-in-hand theory (Gordon, 1963), agency cost theory (Easterbrook, 1984; M. Jensen, 1986; Rozeff, 1982), self-control (Shefrin and Statman, 1984), and the more recent catering theory (Baker and Wurgler, 2004). Of these, signalling theory and agency cost theory are particularly popular. Signalling theory argues that dividend payments can signal future earnings and profitability to the markets (Bhattacharya, 1979; Boudoukh, Michaely, Richardson, and Roberts, 2007; Miller and Rock, 1985; Nissim and Ziv, 2001). However, the evidence on signalling theory is mixed, as recent papers find the link between earnings and dividends is weak today (Brav, Graham, Harvey, and Michaely, 2005; DeAngelo, DeAngelo, and Skinner, 1996; Grullon and Michaely, 2004).

Agency theory, as it relates to dividend policy, stems from the work of Rozeff (1982) and Easterbrook (1984). Under the agency cost view of dividend policy, it is argued that

[4] http://www.csrc.gov.cn/pub/csrc_en/newsfacts/release/201203/t20120320_207468.html

increased dividend payout ratios lower agency costs of external financing, but raise the transactions costs of external financing. Rozeff (1982) tests this view by employing a cross-sectional model that regresses dividend payout against proxies for the agent cost/transaction cost trade-off. He finds that the percentage of stocks held by insiders is negatively related, and the number of shareholders is positively related, to the dividend payout ratio. Easterbrook (1984) develops two agency-cost explanations of dividends, which could be useful in reducing agency costs of management. He posits that continuing cash dividends compel firms to raise new money in order to carry out investment activities, thereby reducing agency costs as they are subject to the scrutiny of the capital marketplace. Dempsey & Laber (1992) confirm Rozeff's (1982) results by using a longer time period over the years from 1981 to 1987. Moreover, Moh'd, Perry, & Rimbey (1995) find that firms do act to minimise the sum of agency costs and transaction costs toward an optimal level of dividend policy through time-series cross-sectional analysis.

Under the agency cost of the free cash flow hypothesis, Jensen (1986) expands on Easterbrook's (1984) argues that leaving excess resources under management control will lead self-interested utility maximising managers to squander them and use them for perquisite consumption all at shareholders' expense. Unless a firm's earnings are paid out as dividends, corporate insiders are capable of using these profits for personal use or pursue unprofitable investment projects that provide private benefits to themselves (LLSV, 2000a). As a result, dividends play a basic role in the limitation of expropriation because they remove the excessive earnings from under insiders' control.

LLSV (2000a) classify two distinct agency models of dividends. The first one is the "outcome model", under which one considers dividends as an outcome of investor protection. The second is the "substitute model", under which one views dividend policies as a substitute for weak legal protection. LLSV test their agency models of dividends using an international sample of 4103 firms from 33 countries and present empirical evidence supporting the agency "outcome model" of dividends. They show that firms in countries with poor legal protection (often based on civil law) distribute lower dividends to shareholders. While those countries with better investor protection (often based on common law) make higher dividends.

A few prior studies have examined the relation between dividend payment and ownership structure. For instance, Faccio, Lang, and Young (2001) investigate expropriation problems through the perspective of dividend policies in European and East Asian firms. They find that (1) group-affiliated corporations in Europe pay higher dividends than in Asia; (2) loosely-affiliated groups whose control links all exceed 10% but do not exceed 20% do not pay higher dividends; and (3) a wider discrepancy between ownership and control is associated with lower dividend rates. They suggest that ownership structure does affect dividend payments. Focusing on Finnish listed firms, Maury and Pajuste (2002) find that the dividend payout ratio is negatively associated with the controlling ownership, and the presence of another large shareholder also affects the payout ratio negatively. They also conclude that controlling shareholders often have managerial ties (crony capitalism), which makes collusion between managers and controlling shareholders likely and tends to expropriate outside shareholders by paying lower dividends. In addition, Khan (2006) examines the relationship between dividends and ownership structure of 330 large UK companies from 1985 to 1997. He finds that dividends are negatively associated with ownership concentration, suggesting that controlling ownership affects dividend payments.

2.3.1.3 Dividend puzzle in China

2.3.1.3.1 Two types of dividend payments

There are two forms of dividend policies in China[5]; cash dividends, and stock dividends. In general, listed firms pay cash dividends, stock dividends, or both at the same time. Cash dividends are the dividends that firms distribute in cash to each shareholder. Cash dividends are usually unfixed and change with firms' distributable profits every year. Stock dividends are dividends that firms offer as bonus shares to shareholders instead of paying cash. The difference between cash dividends and stock dividends is that the former involve a distribution of the firm's value but the latter do not. Accordingly, cash dividends have a more direct and practical influence on a firm's long-run operations than stock dividends.

[5] There is another form of dividend payment; transference of additional paid-in-capital to contributed capital. It simply transfers a portion of additional paid-in capital to contributed capital, which only affects the relative components of equity (D.-H. Chen et al., 2009).

In theory, stock dividends can be paid out of either retained earnings or capital reserves (or both). However, the CSRC stipulated in 1996 that Chinese listed firms should explicitly disclose the source of dividend payments in their annual reports. As a consequence, no stock dividends are paid from the combination of retained earnings and capital reserves. In practise, stock dividends are paid out of retained earnings, which do not belong to a part of the profit distribution. These stocks transferred from capital reserves are called converted stocks, and are not a part of profit distributions.

2.3.1.3.2 Salient features of dividend policy in China

Distribution of cash dividends is one of the most important methods for listed companies to mitigate the agency cost of expropriations by dominant shareholders (Easterbrook, 1984; La Porta, López-de-Silanes, Shleifer, and Vishny, 2000a), thereby it is the foundation for the development of the stock market. However, the dividend policy in the case of publicly listed firms in China is more complicated compared to other economies for several reasons.

First, the average cash dividend payout ratio is low; even lower than the one-year deposit savings interest rate. Up to the end of 2010, Chinese listed firms have raised approximately US$632.35 billion (CNY 4,300 billion, using an exchange rate of 6.8 by the end of 2010) through initial public offerings (IPOs), seasoned equity offerings (SEOs) and rights offerings. However, the total aggregated cash dividend payments amounted to US$264.7 billion (18,00 billion CNY), of which tradable shareholders were entitled to only US$88.2 billion (tradable shares take up one third), and an aggregated implied dividend yield of 13.9% (0.66%[6] annually) for those holding the tradable shares. Meanwhile, the sum of transaction costs and tax on dividends is around US$147.05 billion (CNY 1,000 billion), which is even higher than the total cash dividend payments to individual investors. According to the statistics from the CSRC, between 2001 and 2011, cash dividends of listed companies only accounted for 25.3% of their net profits, while this figure is usually

[6] 13.9%=88.2/632.35*100%. This average cash dividend payment rate 0.66% is calculated as 13.9% divided by 21 years, which is much lower than the corresponding benchmark one-year deposit rate.

around 40% for international mature markets[7]. These findings indicate that A-share companies in China pay less cash dividends to investors than firms in other markets.

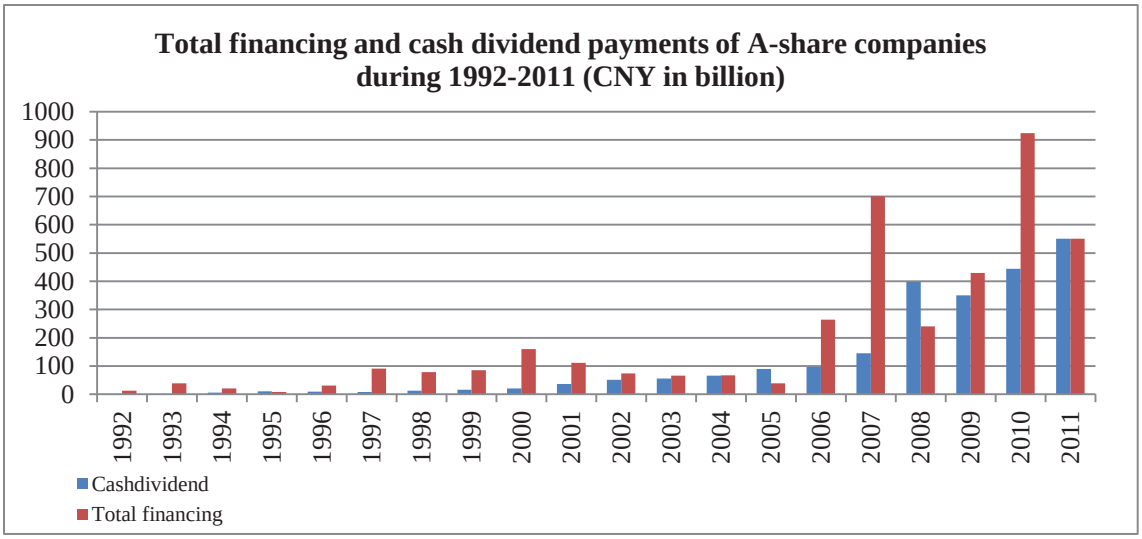
Figure 2.3 illustrates total cash dividend payments by comparison with total financing by listed A-share companies between 1992 and 2011. Contrasted to total financing, Chinese listed A-share companies pay much less in cash dividends over the past 20 years. Moreover, 2010 sees the most dramatic increase in total financing by listed A-share companies, peaking at about CNY 925 billion. By contrast, only 440 billion cash dividends are paid in this year.

Nevertheless, there is a dramatic increase in cash dividends, from 144 to 550. This rise is particularly noticeable between 2008 and 2011, during which time cash dividend payments tripled. Meanwhile, there is clear statistical growth in cash dividends from 2008, when listed A-share firms reward investors in cash dividends that are greater than the money they raise. As discussed later, this contributes to the regulatory reform on cash dividend payments. To sum up, although cash dividend payments increase since 2008, the total cash dividends paid out is considerably less than total financing by listed A-share companies on the two stock exchanges.

[7] Fama and French (2001) report a substantial decline in the proportion of dividend-paying firms in the 1990s in developed countries, from 66.55 in 1978 to 20.8% in 1999. Denis and Osobov (2008) also displays significant reductions in the proportion of dividend-paying firms across five developed countries; the US, Canada, the UK, Germany, and France. Especially in the US, the cash dividend payout is remarkably stable, accounting for 20% of total earnings over the period of 1984-2003. Yet, the percentage of dividend payers begins to increase from 2001 (Julio and Ikenberry, 2004).

Figure 2.3: Total financing and cash dividend of A-share companies during 1992-2011

Figure 2.3 compares total cash dividend payments to total amount of financing through IPO, right offerings, and seasoned issues by Chinese listed A-share companies over the period from 1992 to 2011. Data source is from CSMAR database.



Second, the continuity and stability of cash dividend payments are insufficient. Such poor dividend payments behaviour is associated with the wide variation in dividend payments across Chinese listed firms. According to the CSRC, 854 firms (accounting for 39% of total A-listed firms) do not pay dividends in 2010, 522 firms fail to pay dividends during the successive 3-years from 2008 to 2010, 422 firms do not make dividends during a successive 5-year period from 2006-2010. More than 40 listed firms do not pay out dividends of any form since listing, even if they earn huge profits up to 2011[8]. A considerable number of listed firms do not reveal specific reasons for not distributing cash dividends. In particular, those firms with high-performance do not fully disclose the reason for not distributing dividends, and the purported usage and expected return of the undistributed return, as well as reasons for discrepancy between actual returns and expected returns. This phenomenon induces individual investors to describe Chinese listed firms as "*tiegongji*", which means "*real scrooge*".

Third, not only anecdotal but also empirical evidence suggests firms have a preference for stock dividends over cash dividends (H. D. Anderson et al., 2011; Cheng, Fung, and Leung,

[8] Disclosed by the CSRC, there are 386 Chinese listed companies that do not pay dividends within the successive 10 years over the period from 2001-2014. Of them, 91 never pay dividends of any form. According to Anderson et al. (2011), over half of Chinese listed firms do not pay dividends of any form during the period of 1990-2008.

2009; G. Wei and Xiao, 2009; J. G. Wei, Zhang, and Xiao, 2004)[9]. Why are stock dividends so popular in China when such distributions are, at least in theory, cosmetic changes with no impact on proportional ownership or future cash flows? Issuing stock dividends is often perceived as a cosmetic change whereby firms merely transfer from retained earnings to the capital account. Some of the answers may lie in China's emerging capital markets, where companies have a relatively low level of corporate governance and whose ownership structures differ from companies domiciled in developed financial markets.

It should be noted that it is not mandatory for listed firms to pay dividends in China[10]. China's *Company Law* and *Law of Securities* stipulate that profits distribution of any listed firm is to be decided by the firm itself. It is the board of directors and shareholders' meeting that has the right to decide whether, and how much, to distribute. However, in practice, the dividend policy of Chinese listed firms lacks consistency, rationality, and stability (CSRC, 2012).

Listed companies have low incentives to distribute dividends and reward their shareholders due to many reasons. On the one hand, both public enforcement and private enforcement are inadequate and ineffective to improve the transparency of dividend policies. Particularly, regulatory authorities, such as the CSRC, have no means of enforcing punitive action against expropriations of minority shareholders through profit sharing by listed firms. On the other hand, minority investors do not play an active role in determining a firm's dividend policy. The boards of directors do not take into account the views of minority shareholders and independent directors in dividend policy, because the former rarely participate in shareholder meetings while the latter are not independent with the board of directors. As a result, the process of decision making on dividend payments is not clear and transparent.

[9] Anderson, et al., (2011) summarize that about 20.14% of Chinese listed companies pay stock dividends with an average payout ratio of 0.37 over the period 1992-2008, 35.05% of Chinese listed companies pay cash dividends with an average payout ratio of 0.13 per share.

[10] Mandatory dividend policy refers to a certain fraction of net income being paid out as dividends, which is required by legal systems of some countries, such as Cuba.

Investors count on short-run share capital gains rather than cash dividend gains. Therefore, it seems that, when the proportion of private shareholding is high, managers may cater for a preference for stock dividends in order to raise more capital (J. G. Wei et al., 2004).

2.3.1.3.3 Empirical evidence on dividend policy in China

Most dividend policy literature is based on sample firms from mature economies such as the US, while a relatively smaller number of studies are conducted on the Chinese stock market. The empirical evidence from existing papers investigating dividend policies of Chinese listed firms is not conclusive (G. Chen et al., 2002; Deng, Li, Liao, and Wu, 2013; Lee and Xiao, 2002). It may be problematic to apply signalling theory to explain the cash dividend policy among Chinese listed firms because of their unique ownership structure. Indeed, before the non-tradable share reform, non-tradable shares (largest shareholders) account for around two thirds of outstanding shares and, therefore, the dividend policy reflects the incentives of the largest shareholders.

The first strand of papers examines the association between ownership structure and dividend policy. Specifically, Wei et al. (2004) based on a sample of 2985 observations during the period of 1995-1999, reports a positive correlation between largest ownership and cash dividend payments. This result is in contrast to the agency cost arguments that the more concentrated ownership is, the lower the agency cost, and the lower probability that firms will pay cash dividends. Wei, et al., (2004) further examine the effect of ownership structure on dividend payment policy and find that state ownership is positively related to cash dividend payments, while private ownership is positively related to stock dividends. The authors conclude that the managers of Chinese listed companies are likely to cater for the preferences of different shareholders. Wei and Xiao (2009) investigate how listed Chinese firms pay different types of dividends to satisfy shareholders. They find a preference for stock dividends by tradable shareholders, while non-tradable shareholders prefer cash dividends. The findings are consistent with Yanxin, Dagang, and Xiao (2007), who find that non-tradable shareholders typically derive their return from cash dividends, while tradable shareholders benefit from short-term returns from stock dividends.

Zhang (2008) examines corporate governance and cash dividend policy by comparing Chinese firms listed in Hong Kong and on the Mainland. She finds a negative association between managerial ownership and cash dividends in both markets, however this relation is stronger in Mainland-listed firms. She further shows that ownership concentration in Mainland-listed-firms tends to weaken the association, indicating concentrated ownership in the Mainland firms reduces the agency cost. Furthermore, she shows that the dividend payout ratio is significantly related to a price premium in the Hong Kong market; however this is not the case in Mainland-listed firms, suggesting investors in the Mainland market do not necessarily value cash dividends. Additionally, Bradford, Chen, and Zhu (2013) investigate cash dividend policy in pyramid ownership structures. They find firms with more layers of corporate pyramid structures tend to pay less cash dividends. The results are consistent with the internal capital market hypothesis that longer control chains can result in investable funds more fully utilised within firm pyramid groups, which is a well-known benefit of the internal capital markets for firms in corporate pyramids.

The second strand of literature applies signalling hypothesis to examine dividend policy in China. Chen et al., (2002) study 1232 pairs of earnings and cash dividend announcements, and 1142 pairs of earnings and stock dividend announcements, of Chinese listed companies from 1994 to 1997. They find cash dividends have a weak effect on the earnings signal, while stock dividend announcements have a significant earnings signal. Chen et al. (2009) also find the cash dividend announcement is positively related to share price, supporting the signalling theory. Anderson, et al., (2011) primarily focuses on the market action to stock dividend announcement. They find Chinese listed companies take advantage of positive stock dividend announcement reactions when they are cash poor and less profitable.

In addition, a paucity of academic research examines the link between expropriations and dividend policies. Lee and xiao (2002) show an inertial pattern of paying cash dividends among Chinese listed firms. They find that firms who pay cash dividends regularly are those who also regularly offer a lower payout ratio. They also find the level of cash dividends declines and their paying pattern weakens over time. They suggest that the behaviour of cash dividend payments in China is primarily driven by the market imperfection and the motive of large shareholder expropriation. Attempting to use the agency cost hypothesis to explain the dividend policy of Chinese listed firms, Chen, Jian

and Xu (2009) examine the determinants of exceptionally high cash dividend distributions by Chinese listed firms from 1990 to 2004. They provide evidence that firms with either wider differential pricing for IPOs, more ownership concentration, or ultimate government owners, are more likely to distribute high cash dividends. Their results support the view that cash dividend policy might be used as a form of tunnelling by controlling shareholders in China. Consistent with the tunnelling motive for issuing cash dividends, Su, Fung, Huang, and Shen (2014) show that firms with more related-party transactions pay less in cash dividends. The authors conclude that ownership structure determines dividend policies with respect to related-party transactions and political connections.

According to Anderson et al. (2011), the percentage of dividend payers increases from 38.53% during the period of 1990-1999 to 51.53% during the period of 2000-2008. This ratio is comparable to that observed in developed countries.

However, G. Wei and Xiao (2009) and Anderson, et al., (2011) both report that there is a significant increase in the proportion of listed companies that paid cash dividends and a decrease in the proportion of listed companies that paid stock dividends from 2000[11]. According to Anderson, et al., (2011), the incidence of cash dividend-paying firms is increasing even though the cash dividends payout ratio is lower than in developed countries. In their paper, the percentage of cash dividends paying firms increases from 24.17 during the period of 1990-1999 to 47.15 during the period of 2000-2008, while the cash dividends payout ratio drops from 0.45 to 0.14 (Julio and Ikenberry, 2004).

2.3.1.3.4 The long road to regulatory reform on cash dividend distributions

The significant fluctuations in the levels of cash dividends paid, and generally low levels of cash dividends are perceived by the regulators to be detrimental to the development of the Chinese stock market. At the time of this writing, the CSRC has announced many rules and regulations to foster shareholders' expectations on cash rewards by listed firms, which

[11] Wei and Xiao (2009) state the increase in cash dividend payments might be due to two events. First, in November 2000, Fu-chun Fan, vice chairman of CSRC, declares that the authorities are considering cash dividend payment as a necessary condition for listed companies to offer a rights issue or seasoned equity issue. Second, in March 2001, CSRC formally stipulates cash dividend payments during the past three years as a necessary condition for listed companies to raise new finance through a capital market.

attract much attention by both investors and scholars. The supervision can be divided into three phases. We briefly detail the regulatory efforts by the CSRC to improve the transparency of listed companies' cash dividends.

Opening rounds (2001-2005)

The dividend policy is gradually strengthening as early as 2001, when the CSRC issues *Administration of Offerings of New Shares by Listed Companies*, attaching great importance to encouraging listed firms to reward shareholders. It required the securities underwriter to pay particular attention to, and provide an explanation in, the due diligence report if the board of directors fail to give a reasonable explanation as to why the listed firm does not distribute dividends in neither cash nor stocks during the most recent three years when listed firms issue new shares.

Efforts to urge listed companies to enhance the transparency of dividends policies begin by the end of 2004. To effectively enhance the legitimate rights and interests of minority shareholders, the CSRC promulgates *Provisions on Strengthening the Protection of the Rights and Interests of the General Public Shareholders.* This ruling further sets five specific measures on the dividend policy: 1) Requiring IPOs to disclose information about profit distributions in their prospectuses; 2) clarifying the positions and attitudes of independent directors and external members of boards of supervisors with respect to dividend distributions; 3) guiding listed companies to specify shareholder reward plans; 4) reducing the operating costs to be incurred by listed companies in relation to dividend distributions; and 5) reinforcing supervision on, and inspection of, decision-making process, implementation and information disclosure by listed companies in connection with cash dividends.

Although these specific measures are believed to play a positive role in encouraging the awareness of dividend distribution by listed firms, in fact, they are largely ignored by listed firms. According to the survey by CSRC, by the end of 2004, only 716 listed firms (accounting for 48.6% of total listed firms) pay stock dividends or/and cash dividends. The CSRC has no means of enforcing punitive action against the non-payer, because dividend payments are not taken for granted.

Middle game (2006-2011)

In May 2006, to regulate the issuance of securities by listed firms and protect the lawful rights and interests of investors, *Measures for the Administration of the Issuance of Securities by Listed Companies (CSRC No.30)* is issued. One of the conditions for issuing new shares or subordinated debts is that the aggregated dividend payments in either cash or stocks of a listed firm shall be no less than 20% of the average annual distributable profits over the past three years. On October 9, 2008, *Decision on Amending Several Provisions for Cash Dividends by Listed Companies (CSRC No.57)* is issued, whereby the CSRC increases the refinancing threshold for listed companies to 30% and only cash dividends are counted towards the threshold. Under the decision, listed firms must adhere to more stringent requirement in terms of specifying their distribution policy for cash dividends and periodically disclosing their implementation results, so as to ensure the continuity and stability of dividend policy. This new rule is expected to encourage long-term dividend distributions and boost the slumping stock market amid the financial turmoil led by the US.

However, the extent to which a listed firm must describe its distribution policy and specific plans for cash dividends, and disclose the implementation results of such a plan is still unclear. The marginal decrease in the level of cash dividend payments exceeds the marginal increase in the proportion of paying firms. Based on the statistics from the CSRC, in the years from 2008-2011, the percentage of listed firms which have paid dividends in cash is 52%, 55%, 61%, and 66%, respectively, while the cash dividend payout ratio dropped from 41.69% in 2008 to 31.35% in 2011.

Continuing game (2012-present)

Due to imperfect governance mechanisms, some listed companies do not have a sustainable and stable system for cash dividends. At the end of 2012, the CSRC introduces *Notice on Further Implementing Cash Dividend Distribution by Listed Companies (Notice)*, aiming to further improve the transparency of listed firms' cash dividend payments. This regulation, applicable to all listed firms and IPOs, requires listed companies to disclose information on their dividend plans, including the frequency of dividends, minimum dividend or ratio, and details of the process to be followed to amend the dividend policy in their periodical company reports. As a result, the number of payers of cash dividends increases to 72% of all listed A-share companies.

Coincidentally, on November, 2013, the CSRC announces *Listed Companies Regulatory Guideline No.3: Cash Dividend Distribution of Listed Companies*. It enhances the dividend decision making mechanism, strengthens dividend information disclosure and honours the commitment to dividend distribution. It involves rules and regulations concerning the sustainability and continuity of dividend policy by state-owned enterprises. It also requires all listed firms' boards of directors to take into the account the views of the company's independent directors and minority shareholders in formulating their dividend policy. Furthermore, it clearly requires that listed company specify the priority of cash dividends relative to stock dividends in profit policies. By December 2013, 1879 listed firms (74% of total A-share listed firms) distribute cash dividends of a total amount of 762.7 billion RMB, which is the highest level in Chinese securities market history. Nevertheless, the percentage of dividend payers in the form of stocks only dropped to 1%. Despite the obvious improvement in cash dividends, there is still a long way to go before listed firms increase their dividend payment ratio to the level of their counterparts in mature stock markets.

2.3.2 Political influence on the stock market

Although the Chinese government takes a place of prominence in the framework of the single-party rule by the Communist Party of China (CPC)[12], the leadership is now much more tied to inner-party factions than 30 years ago. Traditionally, political ranking in China is based on the hierarchical line of the politburo standing committee, which is the top decision-making body of China. The politburo standing committee is made up of a group of four to nine people, of which the top leadership changes once a decade. Due to historical reasons, at the pinnacle of political power is a group of elite political families, of which the father or grandfather are/were revolutionary leaders of the Committee Party of China. These families are also well known as "Red nobility". Their power derives from who they are, rather than what position they hold. As a result, their descendants (well-known as princelings) have a strong influence on business deals through the use of privileges. In Chinese culture, politicians' connections with deals are resisted and even

[12] The CPC was found in 1929. Each government level and state owned enterprise is required to have a party committee, which is the final decision maker administration.

successful business ventures by their descendants are considered sensitive, so news on business deals involving members from these powerful families is censored by state-owned media [13]. Nevertheless, their business activities may become known through exposure in media overseas, such as *The Wall Street Journal.*

To a certain degree, the performance of politically connected firms reflects a complex trade-off of between economics and the political competition among these elite families. The practice of SOEs privatisation and non-tradable share reform has shown that China has gradually phased out the centrally planned economy to a more market-oriented environment. However, the government still has extensive control over the securities markets; certain fundamental features have yet to be changed. One of them is the dominant role of state-ownership within listed companies vital to the economy. As a result, the government and party officials exert significant influence over the form and nature of capital market development activities.

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2.3.2.1 Helping hand

Following the process of SOEs' privatisation, most positions of significant power in these state-owned firms are occupied by politicians and bureaucrats who formerly held or currently hold positions in the government hierarchy (J.P.H. Fan et al., 2007). These politicians and bureaucrats are able to influence companies located within their jurisdiction through the de facto control over economic resources, including bureaucracy, regulation, licensing requirements, and informal political and social networks. Therefore, stronger political connections result in greater economic benefits.

[13] https://www.wikipedia.org.

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From a political perspective, politicians have an incentive to consolidate or expand political power by cronyism. This desire will arise to minimise the risk of government expropriation of the firms' assets, and to reduce rent-seeking activities. As a result, the involvement of government officials yields positive effects on firm performance. Cheung, Rau, and Stouraitis (2010) show that Chinese listed firms operated by central government affiliated directors benefit from related party transactions with their government parents. In a highly political setting, government and Party officials exert extensive influence on listed firms. Francis, Hasan, and Sun (2009) study how political connections affect the process of going public, and find that firms with stronger political connections have relatively higher offering prices, lower underpricing, and lower fixed costs during the going public process. Taken together, these findings are consistent with the "helping hand" hypothesis.

2.3.2.2 Grabbing hand

On the other side, the economic literature argues that direct involvement of state officials who impose on the firm multiple political interests (such as job creation and votes) dilute profit-making motives when social objectives collide with the firm's profit goals (Sappington and Stiglitz, 1987). Unfortunately, rent-seeking, extraction, and protection are important objectives of government intervention (Lindbeck, 1976; Rajan and Zingales, 2003; Shleifer and Vishny, 1994). The desire to accumulate personal wealth or to improve career status creates strong incentives for politicians to influence firms' performance without necessarily maximising their value. Under this view, politically connected firms are reluctant to share firms' profits with minority shareholders so as to improve the electability of the incumbent politicians through the use of the entity's resources to reward supporters (e.g. patronage), to create jobs, and to finance the politician's campaign.

More generally, incumbent politicians influence market development through numerous regulatory, administrative, and soft budget constraints (Kornai, 1979). The state' ownership of listed firms and the presence of strong political forces can increase the adverse effects on capital market development. Piotroski and Zhang (2014) show that politicians influence the Chinese stock market through the IPO decision. They find that the pace of exchange eligible firms engaging in an IPO accelerates because of impending political promotion events. This effect is particularly strong among state-owned enterprises and in certain politicised environments where incumbent politicians are more likely to be rewarded for market development activities. Moreover, they also find promotion period IPOs underperform non-promotion period IPOs in terms of both accounting performance and stock returns, which are supportive of the opportunistic explanation.

In addition, political incentives exist in China that prevents the widespread dissemination of unbiased information in a timely basis, which facilitate the risk of expropriation and rent seeking activities. Wang, Wong, and Xia (2008) examine the impact of political forces on the quality of information around privatisation events, and find a negative relationship between corporate transparency and state ownership. Moreover, Piotroski, Wong, and Zhang (2015) examine whether politically connected firms in China temporarily suppress negative information in response to political events. They find a suppression effect on the stock price behaviour in both state-owned and privately listed firms. This finding is consistent with the view that politicians and governments like to avoid negative news about their activities (Watts and Zimmerman, 1990).

2.4 Corporate governance

Corporate governance in China has been explored and established in the process of state-owned enterprise reform (SOEs reform), private enterprise growth and a special campaign of non-tradable share reform as of 2005. Before and since China's entry into the World Trade Organization (WTO) in late 2001, the Chinese government continues to improve its corporate governance policies to prepare Chinese companies to compete with other economies. The development of corporate governance practice in China largely depends on the cooperation between the CSRC and the Organisation for Economic Co-operation and Development (OECD), with the latter having long-term experience in providing a set of international standards in the field of corporate governance which have extensive

influence on corporate governance in member states. As of 2002, the Chinese Securities Regulatory Commission (CSRC) launches *The Code of Corporate Governance for Listed Companies in China* (CSRC, 2002). The protection of the rights and interests of public shareholders is enacted in 2004 and enhances the independent directors system and raises the quality of information disclosure by listed firms in reinforcing the transparency of profit distribution plan and the supervision of management of listed firms.

Although CSRC presents China's laws and regulations by reference to the OECD principles of Corporate Governance, the corporate governance is still relatively weaker than other developed countries (e.g. the US). In a survey by the World Economic Forum, China ranks 44 out of 49 studied countries in terms of corporate governance (Liu, 2006).

2.4.1 Internal governance

2.4.1.1 Ownership structure

2.4.1.1.1 SOEs reform

One of the most significant economic reforms in China is the practice of SOEs' privatisation in the 1990s, by which the government allowed state-owned enterprises (SOEs) to sell minority shareholdings to private investors. The aim of the SOEs reform is to promote markets and gradually phase out the central control of government. In association with this corporation process, two major stock exchanges (Shanghai and Shenzhen) are established in 1990 and 1991, respectively. By the end of 2011, the number of listed companies on the two markets has grown to 2342. The total market capitalisation of these listed firms at the end of 2011 is US$3,390 billion, which is equal to about 45.5% of China's gross domestic product (GDP)[14].

Despite growing quickly, the Chinese stock market is plagued by the general problems of expropriation and rent seeking activities(Berkman et al., 2009). For political and ideological reasons, the state has retained a large portion of ownership. Therefore, SOEs' privatisation created a complex ownership structure. On the one hand, it divided shares

[14] This information was obtained from the World Bank and the Bureau of Economic Analysis (EBA) website at http:// data.worldbank.org.

into tradable and non-tradable types. The tradable shares are further subdivided into tradable A-shares which are publicly traded among domestic investors, and foreign (B, H, and N) shares which are designed for investors outside of the mainland[15]. However, domestic investors are allowed to invest in B-shares since February 2001, and A-shares are available to Qualified Foreign Institutional Investors (QFII) since May 2003. B-shares of companies listed on the SHSE are quoted and traded in US dollars, B-shares of companies listed on the SZSE are quoted and traded in Hong Kong dollars. H-shares and N-shares are traded on the Hong Kong Stock Exchange and on the US stock markets, respectively[16]. Tradable shares owned by individual and institutional investors can be freely exchanged. However, non-tradable shares are owned by all levels of government or state-owned legal entities, but are highly restricted in terms of free trading on the stock markets[17].

However, institutional investors play a small role in the Chinese market. Institutional investors in China mainly include securities investment funds, social security funds (administered by the National Council for the Social Security Fund), qualified foreign institutional investors, securities firms and insurance companies. Jiang, et al.(2010) summarise that institutional investors account for only 3.75% of total outstanding shares (8.26% of tradable shares). We can conclude that Chinese listed firms are under the control of non-tradable shareholders, which is typically the state or a legal person. This is consistent with the view of previous studies that ownership structures of Chinese listed firms are highly concentrated.

Both tradable and non-tradable shareholders enjoy the same voting rights and cash flow rights (e.g. they are entitled to the same dividends), except for public trading. The weaknesses of the segregations between tradable and non-tradable shares in market tradability have been recognised. One of these weaknesses is that the controlling shareholders (non-tradable shareholders) have strong incentives to expropriate minority shareholders (tradable shareholders) because the share price is irrelevant to their own

[15] The sample in this study refers to A-share companies listed on the Chinese stock market.
[16] Anderson et al. (2011) report that, in total, foreign shares, B-shares, H-shares and other shares only account for 5.62% of outstanding shares by the end of 2004.
[17] Xu (2004) summarises that most firms have a single dominant shareholder whose ownership accounts for 44% of the total issued shares; however, the second largest shareholder only own 5% of issued shares. By the end of 2004, insider shares owned by managers and directors represent 0.016% of the tradable shares, employee shares account for less than 1%, and foreign shares also account for less than 1% when averaged over all listed firms.

wealth (J.P.H. Fan and Wong, 2002; Sun and Tong, 2003). The tunneling activities can take many forms, including guarantee loans (Berkman et al., 2009; Berkman, Cole, and Fu, 2011), related-party transactions (Y. L. Cheung et al., 2009), and inter-corporate loans to controlling shareholders (Jiang et al., 2010), as well as cash dividend preference by non-tradable shareholders (D. Chen et al., 2009). According to the CSRC (2006), 676 listed firms were found to have cash tunnelling by controlling shareholders amounting to RMB96.7 billion in 2002, with 623 listed firms diverting a firm's wealth to a total of RMB 57.7 billion in 2003.

In addition, the segregation between tradable and non-tradable shares creates the pyramidal like ownership structure in both state-owned and private-owned companies listed on the Chinese stock markets (J.P.H Fan and Wong, 2005a). Using a sample of 750 government-controlled firms and 62 entrepreneur-controlled firms during the period of 1993-2001, Fan and Wong (2005a) report that 468 (62%) of state-owned and 41(64%) of privately-owned firms are controlled by two-layer pyramids. This indicates that the pyramidal corporate structure is prevalent in China. Pyramid ownership structure is prevalence in countries and regions with weaker legal investor protections (Claessens, Djankov, and Lang, 2000; La Porta, López de Silanes, and Shleifer, 1999; Lemmon and Lins, 2003), which facilitates expropriation and rent seeking activities by controlling shareholders. First, a pyramid creates separation of control from ownership that helps a controlling owner to enjoy private benefits that may include expropriating wealth from minority shareholders (Almeida and Wolfenzon, 2006; Bebchuk, 1999; Riyanto and Toolsema, 2008). Furthermore, a pyramidal structure facilitates the control of multiple corporations and the cross-subsidisation of funds among affiliated firms (Almeida and Wolfenzon, 2006).

2.4.1.1.2 Non-tradable share reform

In January 2004, the Chinese government officially states that non-tradable shares constitute a major hurdle for domestic financial development and that this issue should be addressed. In April 2005, under the guidance of the State Council, the CSRC introduces a "split share structure" reform designed to address the issue of non-tradability of certain shares held by a listed firm's shareholders, whereby non-tradable shares gradually become

tradable. The first experimental phase of the split-share structure reform programme involves inviting four listed companies to convert their non-tradable shares into tradable shares. The core of split share reform is the compensation scheme that involves payments from non-tradable shareholders to tradable shareholders before non-tradable shares can be freely floated. The CSRC requires that at least two thirds of total outstanding shareholders and two thirds of tradable shareholders have to reach an agreement on the compensation scheme of each listed company. This compensation is based on the assumption that a substantial price drop will take place once all of the shares become tradable in the market, and that the drop will be detrimental to the wealth of tradable shareholders (Y. H. Yeh, Shu, Lee, and Su, 2009).

On September 2005, in order to provide guidance for the implementation of the reform, the CSRC promotes the second phase of non-tradable reform and issues the first official document, *Measures on the Administration of Split-share Structure Reform of Listed Companies*. The second phase of reform involves 42 companies, taking 47 days to finalise the process. To mitigate the presumably price volatility and price pressure effect attributable to the massive future supply of shares, trading restrictions on the selling and lock-up period are established (Y. H. Yeh et al., 2009). Non-tradable shares are prohibited from trade on the market within the 12 months lock-up period following the execution of the compensation plan. After that period, non-tradable shareholders with more than 5% (10%) of total shares on issue are forbidden to trade within the next 12 months (24 months). Moreover, the coordinated reforms such as stock repurchase by controlling shareholders is introduced to stabilise the market price (Beltratti and Bortolotti, 2006). According to K .Li, Wang, Cheung, and Jiang (2011), 1254 firms (representing over 97% of the Chinese A-share market capitalisation by the end of 2007) are completely reformed. The non-tradable shares of these firms are gradually becoming tradable.

Although the level of ownership concentration decreases after the 2005 non-tradable share reform of the capital market, when Chinese listed companies are compared with those in the UK and the US, they show fairly concentrated ownership structures, and the proportion of shares owned by managerial and employee is extremely small. Yang, Chin, and Young (2011) find that more than 50% of listed company shares are ultimately owned by the state at the end of 2009. However, Anderson, et al., (2011) report that shares held by the top 2 to 10 shareholders is only 20.08% by the end of 2008, with the sum of management,

foreign and employee shares representing only 6.09% of the listed firms' outstanding shares. Therefore, these investors do not constitute major voting blocks that can prevent agency conflicts between controlling shareholders and minority shareholders.

In addition, Claessens and Fan (2002) suggest that institutional ownership may reduce the risk of expropriation of minority rights as reflected in firm valuations. According to statistics from the WIND database, up to 31 December 2009, the market value of A-shares held by institutional investors accounts for 46.29% of the total market value of tradable A-shares. Although the CSRC in 2002 provides that institutional investors shall play a role in the appointment of company directors, the compensation and supervision of management, and major decision-making processes, the empirical evidence on the impact on listed firms' corporate governance in China is relatively poor. To date, securities investment funds in China are proactive in participating in the governance of listed companies, either directly or indirectly. Qualified foreign institutional investors do not usually participate directly in voting at the general shareholders' meetings (OECD, 2011). When invited to a general shareholders' meeting, they often entrust the board of directors of the listed company to vote on their behalf by delegating via the custodian bank.

2.4.1.1.3 Ownership concentration

Shleifer and Vishny (1986) and Mock et al. (1989) suggest that the different ownership structures have different incentives to control and monitor a firm's management. For instance, managerial ownership has been widely regarded as a useful corporate governance mechanism in Western countries. Moreover, institutional investors, such as mutual funds, can reduce the information asymmetry and help increase the voice of minority shareholders through participating in the operation and management of the company, thereby reducing agency conflicts between controlling and minority shareholders (M. P. Smith, 1996). However, given the concentrated ownership structure in Chinese listed firms, potential conflicts of interest between majority and minority shareholders remain a key corporate governance issue.

As stated in the literature review above, despite the non-tradable share reform, public firms in China remain characterised by highly concentrated ownership structures. Prior studies

point out that concentrated ownership could have two opposing effects on corporate governance; an entrenched effect, and an alignment effect (Claessens and Fan, 2002; J.P.H. Fan and Wong, 2002). Under the perspective of the entrenched effect, controlling shareholders can utilise their control over the firm to engage in self-dealing transactions, which allow them to extract private control benefits (Randall K Morck, 1996; Shleifer and Vishny, 1989). On the other hand, under the alignment effect, concentrated ownership can facilitate the alignment of interests between controlling and minority shareholders (Grossman and Hart, 1980; Mitton, 2002; Shleifer and Vishny, 1986).

Chinese scholars have examined the impact of concentrated ownership on corporate value. Liu and Lu (2007) find a non-linear relationship between the largest shareholder's holding and firms' management activities among Chinese listed firms. They argue that the largest shareholder's opportunistic behaviour increases as their interest in the company increases. However, when the largest shareholder's holding reaches a certain level, the incentive to divert the firm's wealth may decrease, since the net gain of "tunnelling" is no longer significant. C. Lin, Ma, and Su (2009) report a U-shaped relationship between ownership concentration and firm efficiency. Further, Jiang, et al. (2010) report a similar result of a U-shaped relationship between the dominant ownership and tunnelling measured by "Other receivables". They find "other receivables" are highest when the controlling shareholder holds less than 30% of the shares, while the "other receivables" balance is quite low when the controlling shareholders own over 70% of the shares.

2.4.1.2 Board Characteristics

China's *Company Law* governing listed companies is enacted in 1993. It creates a two-tier board structure consisting of a board of directors and a supervisory board, and clearly requires listed firms hold shareholders' meetings. The two-tier board structure in China in appearance resembles OECD-prescribed corporate governance principles, where the management board makes decisions on day-to-day operations and the supervisory board oversees the management board and approves major business decisions[18]. Despite their

[18] Article 148 of the *Company Law* provides that the board of directors and supervisory board are required "to abide by the law, administrative laws and regulations and the articles of association of the company and have a duty of loyalty and diligence to companies. The directors shall not, by taking advantage of their

appearance, however, the Chinese two-tier board structure has weak corporate governance. Given China's concentrated ownership structure, the conventional corporate control mechanisms of such boards of directors and shareholder meetings have difficulty playing an effective role in mitigating agency problems between majority and minority interests (J. P. Fan and Wong, 2005b). Moreover, V.Z. Chen, Li, and Shapiro (2011) argue that adopting OECD-prescribed corporate governance principles cannot solve the major governance problem of controlling shareholder expropriation in China for two reasons. First, OECD-prescribed corporate governance principles are typically designed to resolve traditional agency costs of managerial discretion. Second, the two-tier board structure consisting of a board of directors and a supervisory board is not independent to ultimate controllers.

2.4.1.2.1 Board of directors

The board of directors is the de facto decision-making authority in the corporate governance of the firm (Gevurtz, 2004; Hillman and Dalziel, 2003). This is studied in previous literature, typically focusing on two main responsibilities. The first is to align the interests of shareholders and management so as to mitigate agency costs of managerial expropriation resulting from the separation of ownership and control (Fama and Jensen, 1983; Finkelstein and D'aveni, 1994). Numerous studies have attempted to explain the central role of the board of directors in reducing managerial expropriation, typically employing agency theory and stewardship or organisation theory (Baysinger and Butler, 1985; Donaldson, 1990; Fama and Jensen, 1983). The second is to provide key external resources including legitimacy, advice and counsel, external funding, and links to other entities (Pfeffer and Salancik, 2003; Williamson, 1988).

Given the well-recognised responsibilities of the boards' of directors in reducing agency costs, the quality of the Chinese board structure is highly questionable. In association with the process of SOE reform, boards of directors are dominated by representatives from parent companies or government officials (M. Firth, Fung, and Rui, 2007). D. Chen, Fan, and Wong (2002) examine the board composition using a sample of 621 Chinese listed

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positions and powers, accept bribes or other unlawful incomes, nor may they misappropriate the property of the company."

firms during the period of 1993-2000. They report that 52% of the directors are/were current or former employees of the largest shareholders, 32% have/had current or former government affiliations, and 5% have professional knowledge and working experience in accounting, law and finance. Fan, Wong, and Zhang (2007) investigate the role of government intervention in 790 Chinese newly partially privatised companies between 1993 and 2001 and find that about 27% of CEOs are politically connected. The boards in their sample firms have almost no directors on behalf of minority investors and exhibit fewer professionals on the directorship. They report that firms run by politically connected CEOs underperform their counterparts in terms of accounting performance and post-IPO stock returns.

To some extent, in state-owned firms, board members and managers do not have much power to veto decisions made by their parent companies, because political considerations determine the selection of managers and board compositions (Dongwei, 2005). The directors or managers of SOEs care more about their political agenda than the interests of minority shareholders. Furthermore, due to the weak investor protection, directors or managers may not be fully cognizant of their fiduciary duties, they may be involved in managerial indiscretion, such as diverting SOEs' assets to private accounts, charging meals and travel expenses to company accounts, and purchasing fancy cars and furniture for personal consumptions (Dongwei, 2005). In addition, given super-voting rights, controlling shareholders influence decisions in the board room because they can control the boards of directors through appointing or dismissing board members (Y. Su, Xu, and Phan, 2008; Y.-H. Yeh and Woidtke, 2005). As a result, board members face career promotion and the risk of being replaced. They may collude with controlling shareholders in tunnelling activities, so their monitoring role is limited.

2.4.1.2.2 Independent board of directors and specialized committees

To increase the transparency and effectiveness of internal governance, CSRC (2001) requires that each listed company should have more than one-third independent directors on the board and may establish special committees among directors. By definition, an independent director is a director who holds no other position than that of independent director in the company. They shall perform their duties independently from the main

shareholders or other employers. According to CSRC (2001), at least one of the independent directors should have an accounting background.

Independent directors can better monitor the managerial team on reducing expropriation activities (Byrd and Hickman, 1992; Rosenstein and Wyatt, 1990). However, empirical studies have examined how independent directorship impacts firm performance and the results from international markets are mixed. Dahya, Dimitrov, and McConnell (2008) provide international evidence that the fraction of boards made up with an independent director are negatively related to the occurrences of related-party transactions (proxies from dominant shareholder's expropriations), in their examination of a sample of 799 firms from 22 countries. Also, such an association is stronger in countries where legal protection is weak. These findings imply that independent directors on the board reduce the agency costs of dominant shareholders' potential renting activities. On the otherhand, Ferris, Jagnnathan, and Pritchard (2003) find no evidence of the association between the proportion of independent directors and a firm's market-to-book ratio. They argue that busy boards are as effective as non-busy boards at monitoring. Fich and Shivdasani (2006) find firms perform poorly when there are more than three independent directorships.

However, independent directors may not be truly independent of the controlling shareholders, given the general problem of expropriations by dominant shareholders through cross-shareholdings (Claessens et al., 2000; La Porta et al., 1999). For instance, outside directors may affiliate with the controlling shareholders in holding other senior positions in related firms in the business group (Fich, 2005). In China, firms tend to seek current or former politicians to serve as outside directors in order to build close relationships with government (M. W. Peng, 2004), thus the independence of outside directors is weak. Using a three-year panel between 1999 and 2001, Bai, Liu, Lu, Song, and Zhang (2004) find little evidence on the relationship between independent directors and firm value on the Chinese stock market. Chen et al. (2011) further support that outside directors are not typically not independent to controlling shareholders, by examining a panel of over 1,100 Chinese listed firms during 2001-2003.

2.4.1.2.3 Supervisory board

Among Asian emerging countries, China is the only country that requires listed companies to set up supervisory boards; this is used as a successful corporate governance practice in European countries (Hopt and Leyens, 2004; Maassen and Van Den Bosch, 1999; Renaud, 2007). According to China's *Company Law*[19], the supervisory board is a permanent supervisor body under the leadership of, and responsible to, the shareholders' meeting. The supervisory board should have at least three members. At least one member should be democratically elected by the employees; at least one should represent the minority shareholders; and the directors and senior executives of the company cannot concurrently take positions in a supervisory board to ensure independence (M. Firth et al., 2007). The supervisory board exercises its supervisory power over the board of directors, management and the whole company independently. One of the main duties of the supervisory board is to oversee the board of directors, so as to protect the interests of the company and shareholders (CSRC, 2002)[20].

Notwithstanding, the supervisory board in China has so far not played an effective governance role, as it has weaker power and lower status relative to the board of directors in Chinese listed firms (Tam, 2002; Xi, 2006). The supervisors on the board often have difficulty performing their supervisory duties, because they lack knowledge and experience and often hold trivial positions without any power to select or dismiss board directors and management (Jay Dahya, Karbhari, Xiao, and Yang, 2003; Jason Zezhong Xiao, Jay Dahya, and Zhijun Lin, 2004). This is in contrast to the supervisory board in Germany, in which supervisors are empowered to appoint and dismiss board directors (Kaplan, 1993). The empirical study of Jia, Ding, Li, and Wu (2009) finds that the efficiency of Chinese supervisory boards falls below social expectations and can be described as dysfunctional. They report that an extra supervisory board member is associated with a 27% probability of being sanctioned by the CSRC. In addition, they provide evidence that Chinese supervisory boards take actions only after investigations or sanctions of the fraudulent companies by the CSRC.

[19] The *Company Law* revised in 2006 clearly states that the supervisory board is obligated "to abide by the law, administrative laws and regulations and the articles of association of the company and have the duty of loyalty and diligence for companies".
[20] For the more comprehensive supervisory duties in detail, see the website below:
http://www.csrc.gov.cn/pub/csrc_en/newsfacts/release/200708/t20070810_69223.html

Both the supervisory board and independent directors act as a company's internal supervision mechanism. They each have their respective characteristics and responsibilities and are mutually complementary. The main difference between the two is that the supervisory board mainly plays a role of ex post supervision, while independent directors are in a position to take up in the decision-making over major company affairs and therefore provide ex ante supervision.

2.4.1.2.4 Shareholders' right and Shareholders' meeting

According to the *Company Law*, the shareholder's meeting is the ultimate decision making entity for the company, including the general shareholder meeting and the annual shareholder meeting. The latter is held once a year. In the shareholders' meeting, all shareholders enjoy equal rights (including the right to request dividend distributions, the right to vote, and the right to shareholder's representative action, etc.) and bear the corresponding duties based on how many shares they hold. According to *Article 104 of the Company Law*, the general decision rule of the meeting is one-share, one-vote. For important decisions, such as profit distributions, merger and acquisitions, and election of directors or supervisors, at least two-thirds of the voting rights are required to approve a motion.

However, in China, the shareholders' meeting is dominated by controlling shareholders, who count the votes, thereby having enormous discretion on making decisions. Controlling shareholders always send their representatives, with all expenses covered by the employers. However, most individual shareholders rarely attend the annual shareholders' meeting because they feel their votes have limited influence on the company's decisions and they have to cover their own transportation expenses. According to a survey conducted by the CSRC, the average number of shareholders attending annual shareholder meetings is approximately less than 20, whereas the number of shareholders in listed firms ranges from 3000 to 1.5 million by the end of 2010. As a consequence, important policies (such as dividend payments) proposed by the board of directors who act on behave of controlling shareholders are always successfully approved at the shareholder meeting.

2.4.2 External governance

The literature has discussed three primary external governance mechanisms: information disclosure, bank monitoring, and legal system. Based on a study of securities laws with the focus on listed firms from 49 countries (exclude China), La porta, Lopez-de-Silances, Pop-Eleches and Shleifer (LLPS) (2004) find private enforcement of laws through disclosure and liability rules is superior to strong regulation by the government in promoting stock market development. Given China's poor information disclosure environment and lack of independent judicial systems, the LLPS (2003) result can be used to explain the status of China's stock market. It is unrealistic to rely on external governance mechanisms to discipline non-performing executives, because China lacks a market for corporate control as an external governance mechanism (Fan et al., 2002).

2.4.2.1 Information disclosure and transparency

Disclosing information is a legal obligation for listed companies. In terms of provision of information to the market, improving disclosure and transparency includes the introduction of low-cost disseminating and ensuring that accounting and auditing standards are of high quality and aligned with international standards. This does not only directly influence transparency and pricing efficiency; which is the critical basis upon which investors make investment decisions; —on the securities market, but also serves as the lawful foundation of its principles of "openness, fairness and impartialness" and the core of supervision over the market. Greater transparency and stricter disclosure standards have the capability of strengthening corporate governance through improving monitoring and limiting expropriations by controlling shareholders, resulting in better asset management and investment decisions (Rajan and Zingales, 2003; R. M. Stulz, 1999).

2.4.2.1.1 Rules and regulations

China has taken great strides in the last two decades in an attempt to improve corporate governance, accountability and transparency at both country and firm level[21]. The CSRC

[21]*Accounting Law* (2000) was introduced to standardise accounting behaviour, and ensure the truthfulness and completeness of accounting materials. Regulations mandating convergence toward IFRS (International Financial Reporting Standards), the use of IAAS (International Auditing and Assurance Standards), the

has all along identified the improvement of information disclosure and transparency as a priority, adopting various rules and regulations in the introduction of low-cost dissemination channels and ensuring accounting and auditing are of high quality. In particular, the *Code of Corporate Governance of Listed Companies (2002)* is the first time regulations are set up to promote improvement on information disclosure and transparency in listed companies. Further, to improve financial reporting practice, *Regulations on Listed Companies' Information Disclosure* is enacted in 2007, setting out the requirements and listing particulars for the issuance of Initial Public Offering (IPO) prospectuses, offering circular, periodic reports, ad-hoc reports, information disclosure management, supervision and legal liability. In order to ensure a timely information disclosure environment, *Administrative Measures for Information Disclosure of Listed Companies Disclosure* is also enacted in 2007 by the CSRC, whereby it stipulates that if the occurrence of a significant event is likely to have a market impact on the trading prices of a company's stock prices, the company shall make a timely disclosure to declare the cause and the potential effect of the event. Additionally, the CSRC promulgates *Rules for Determination of Administrative Liabilities Concerning Violations of Laws and Regulations on Information Disclosure* in 2011, to enhance determinations of liabilities arising from violations of disclosure information by "falsehoods, misleading statements or major omissions".

Yet, despite the recent improvement in the information environment, China's financial market continues to be plagued by corruptions and malfunction and considered as one of the least informative systems in terms of quality and transparency. It is possible that these reporting rules and regulations simply amount to "window dressing", adopted to ameliorate the concerns of foreign and domestic investors without making any changes in the transparency and information disclosure (W. T. Allen and Shen, 2011). Ultimately, any assessment of China's information disclosure should be evaluated on the basis of practice and outcomes (Piotroski and Wong, 2012). Given the great government interventions in the operations of median and other information dissemination mechanisms, China continues along its path of having a long-run objective to promote transparency and information disclosure. Piotroski and Wong (2012) argue that political forces have the potential to exert a significant impact on the information environment of Chinese listed

limits on inside trading and significant anticorruption programmes have been enacted in order to improve accounting information accuracy.

companies. In particular, Chinese listed firms have a strong incentive to suppress the flow of negative information about the listed firms, in order to avoid stock price crash behaviour around political events (Piotroski et al., 2015).

2.4.2.1.2 Financial reporting practice

The reporting requirements of publicly listed companies in China mimic those used in most Western markets, and are designed to increase the supply of high-quality financial reports to market participants. The most noteworthy action in this area was the harmonisation of Chinese Accounting Standards (CAS) with International Financial Reporting Standards (IFRS). The Chinese Accounting Standards Board have signed a joint declaration with the International Accounting Standards Committee (IASC), indicating that Chinese accounting standards have been internationally recognised. In February 2006, the new system of *Accounting Standards for Business Enterprises* is enacted by China's Ministry of Finance, coming into force among listed firms in 2007. The new accounting standards formally establish China's enterprise accounting standards system and the CPA auditing system. However, false financial disclosures by listed companies remain a significant problem and investors tend to be critical of fraudulent financial statements (J. P. Fan, Rui, and Zhao, 2008).

Compared to developed economies, the financial reporting practices in China are less accurate, truthful, and reports issued in a less timely manner (Ball, Robin, and Wu, 2000). The evidence on deterioration in earnings performance after an IPO in China highlights the potential deficiencies in financial reporting practice and the information environment. By comparing the pre- and post-IPO earnings patterns for 83 Chinese SOEs, Aharony, Lee and Wong (2000) find a statistically significant earnings decline after the IPO in unprotected industries and B-shares, which indicates financial packaging for the purpose of listing. Chen and Yuan (2004) report that Chinese firms report excessive non-operating income to achieve specific ROE targets for a rights offerings [22]. Similarly, Liu and Lu (2007) study earnings management in the perspective of tunnelling behaviour. They demonstrate that Chinese firms use discretion available in the accrual accounting process

[22] The CSRC requires listed firms to meet return (ROE) criteria before they can apply for refinancing. To be eligible for rights issue, a listed company has to meet several requirements, a reported ROE of 6% for three consecutive years; and the average ROE over these three year must be no less than 10%.

to boost reported earnings to conceal private control benefits from minority shareholders. Such earnings management is similar to "propping up" (W. Q. Peng, Wei, and Yang, 2011), whereby the controlling shareholders instigate favourable related party transactions to meet key performance targets stipulated by market regulators.

Furthermore, prior literature also identifies Chinese that listed firms use asset impairments to engage in earnings management. S. Chen, Wang, and Zhao (2009) find that about half of listed firms reverse asset impairments between 2003 and 2006. Many of the listed firms are motivated to reduce the probability of trading suspension. Duh, Lee, and Lin (2009) find a positive relation between the amount of impairment loss and the probability of earnings management among listed firms, where the more impairment losses are recognised the more likely they will be reversed subsequently in order to smooth earnings. Nevertheless, there is much anecdotal evidence that public firms listed on the Small and Medium Enterprise Board (SME) in the Chinese stock market perform poorly in terms of accounting numbers after IPO. In practice, these firms suffer a dramatic downturn in their performance right after IPO; as a result, there is a saying that "excellent performance in the first year, poor performance in the second and loss in the third". This further implies financial reporting practice is less timely in China. In addition, the seminal survey by PricewaterhouseCoopers (2001) and research by Kurtzman Group (2004) continually rank the quality of China's financial reporting practice as low relative to peer countries.

2.4.2.1.3 External Auditors

There is plenty of evidence on the positive role of external auditors with good auditing quality in limiting biased financial reporting, thereby reducing agency conflicts and information asymmetries between majority and minority shareholders both in the US and other markets (Becker, DeFond, Jiambalvo, and Subramanyam, 1998; Kim, Chung, and Firth, 2003). By examining sample firms from emerging markets, Fan and Wong (2005b) find further support that external auditors serve in a corporate governance role in mitigating agency conflicts between principals and small shareholders. They find firms associated with higher agency costs are more likely to hire big-5 auditors. In general, firms in countries such as China with a weak institutional background prefer to hire lower quality auditors, as auditor choice is irrelevant due to the lower effectiveness of public

enforcement in punishment of violations identified by auditors (J. R. Francis, Khurana, and Pereira, 2003).

In China, prior to the reform and the separation of audit firms from government control in 1998, almost all the audit firms across China are state audit bureaus supervised by their local government. In a move designed to improve both auditing and accounting quality in the Chinese equity markets, the government adopt the international Generally Accepted Auditing Standards (GAAS) in 1995. Defond, Wong, and Li (1999) document that the demand for Top-10 auditors declines after this as an immediate effect of increasingly modified audit reports in the adoption of the GAAS. The auditing firms in China lack independence (Xiang, 1998), which induces collusion between local auditors and local state-owned firms in managing earnings to meet earnings targets for IPOs and seasoned equity offerings, or to avoid delisting (Aharony et al., 2000; K. C. Chen and Yuan, 2004). Further, Allen, Qian and Qian (2005) argue that the weakness in the audit profession is partially to blame for China's corporate governance woes. Chen, Firth, Gao, and Rui (2006) report 169 cases where fraud is found and published by the CSRC between 1999 and 2003. They find prestige auditors based on size and whether they are with the Big-5 companies do not deter fraud any more than other auditors, suggesting that the auditing profession is irrelevant in corporate governance.

The reasons for this lower propensity to appoint name-brand external auditors in Chinese listed firms are contributable to political interventions and the weak institutional environment. Wang, Wong and Xia (2008) examine the impact of political forces on the Chinese listed firms' auditor choice decision by using a sample of firms from 1993 to 2003. They report that, in 2003, only 25% of publicly listed firms hired Top-10 audit firms, while 54% of listed firms hired non-Top-10 audit firms (local audit firms). Firms with greater state ownership and with a location in a less developed area have a stronger tendency to choose non-Top 10 auditors. These findings are supportive of the conjecture that political forces shape the auditor choice decisions, which may be induced by the incentives to pursue political goals or private gains (Shleifer and Vishny, 1994). In addition, when the private enforcement channels are weak and unavailable, external auditors play a less effective role in corporate governance. Indeed, Jiang, et al. (2010) report that 45% of the firms subject to tunnelling by controlling shareholders receive

unclean auditor opinions, however, they exhibit no tendency to reduce their inter-corporate loans to controlling shareholders.

2.4.2.1.4 Stock price synchronicity movement

Morck, Yeung, and Yu (2000) find that stock prices are more synchronous in emerging countries, including China, compared with developed countries. They interpret this phenomenon as being due to poor investor protection and imperfect regulations of markets in emerging markets. The empirical evidence of the Chinese stock market on the high level of stock price synchronicity represents the lower information disclosure system in China. Jin and Myers (2006) find that Chinese firms display the highest level of stock return synchronicity out of the 40 countries included in their study. Kang, Liu, and Ni (2002) and Naughton, Truong, and Veeraraghavan (2008) document a pervasive feature of a momentum effect in firms listed in the Shanghai Stock Exchange. The authors provide evidence that such a momentum effect results from the delayed impounding of firm-specific information. Using data from 1142 Chinese listed firms during the period of 1996-2003, Gul, Kim and Qiu (2010) find that auditor quality is negatively related to stock price synchronicity and that less earnings information is incorporated into stock return in firms exhibiting high synchronicity. Taken together, the highly synchronous stock price movements indicate the lower transparency of information disclosure of China.

2.4.2.2 Legal framework

The literature increasingly emphasises the importance of law and institutions in explaining disparate economic performance (LLSV, 1997; 1998; 2002). In particular, LLSV's discussion on legal system highlights the key role of investor protection in improving corporate governance. In fact, China began to build a legal system virtually from its economic reforms in the late 1970s. Until March 2004, China did not fully recognise the notion of private property in its constitution. Pistor and Xu (2005) state that China has only slowly developed a legal framework for stock markets and has a weak law enforcement record. China's legal framework for corporate governance comprises four levels; basic laws, administrative regulations, regulatory provisions, and self-disciplinary rules. However, the most glaring problem in China's legal system is the lack of effective

investor protection rules. As a result, China performs below average among transition economies in terms of the effectiveness of law enforcement. By mimicking various measures from LLSV's (1998) indicators for shareholder rights protection, Allen, et al. (2005) document that China's legal system is significantly less developed than most of the 49 countries examined by LLSV (1998).

Allen et al. (2005) suggest that the weak legal system further facilitates the incentives of expropriations by controlling shareholders among Chinese publicly traded firms. The formal legal and regulatory framework remains lacking of a truly independent judicial system, due to the multiple roles played by state; shareholders, regulators, and managers. In fact, Jiang, et al. (2010) find an extremely transparent form of block shareholders' tunnelling through inter-corporate loans can persist for many years. They interpret such tunnelling as being due to the inadequate legal framework in the capital market. First, the legal system in China offers few options for minority shareholders to take private enforcement action against block shareholder misconduct. Second, public enforcement, including fines and prison terms for tunnelling, is hampered by the limited authority of security market regulators.

2.4.2.2.1 Public enforcement institutions

Defond and Hung (2004) emphasise the importance of enforcement institutions through which investors protect their rights. The protection of investors' rights is through the enforcement of regulations and laws, with the enforcement being as important as, or more important than, the content of the regulations. The public enforcement framework of China's corporate governance is composed of three parts; the CSRC, corporate-related government agencies (such as the Ministry of Finance), and stock exchanges and companies registration and settlement securities. The main role of corporate-related government agencies is drafting and supervising the implementation of laws and regulations pertaining to financial and accounting management. The two stock exchanges (the Shanghai and Shenzhen Stock Exchange) are independent legal entities directly governed by the CSRC. They provide venues and facilities for centralised securities trading, organise and supervise securities trading, and exercise self-regulatory management.

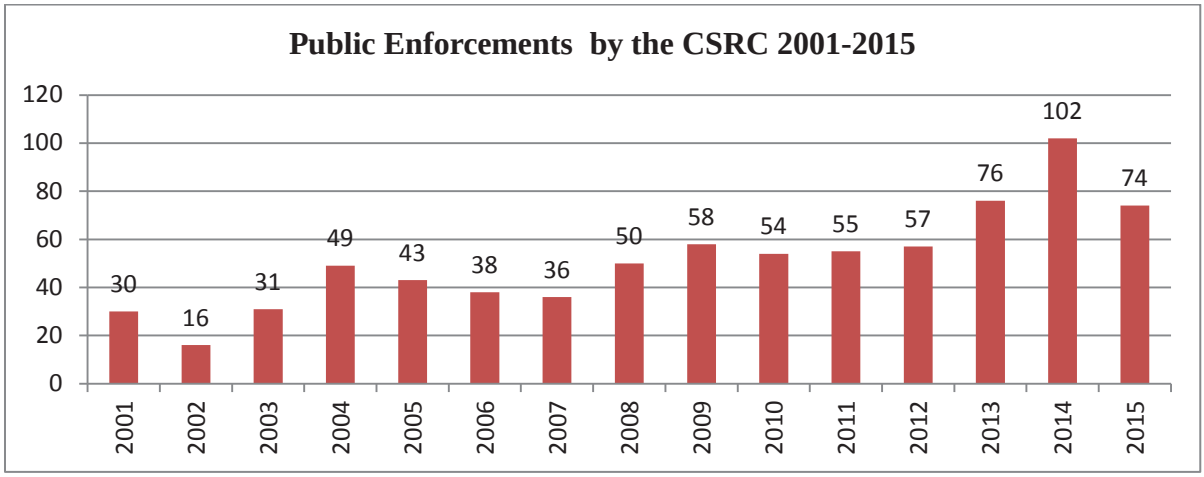
The CSRC was established in 1992, and is a public institution directly under the State Council. The *Security Law* vests the CSRC with the primary power to regulate markets, yet allows it to delegate decisions to the two stock exchanges. The CSRC is the major regulatory agency of China's financial market. Its goal is to build a comprehensive regulatory system for listed companies, thereby strengthening co-ordination among relevant supervisory authorities, promoting the non-tradable share reform, preventing the misappropriation of funds by majority shareholders of listed firms, and promoting the standardisation of listed firms. The CSRC may deliver administrative sanctions, such as warnings, fines, disqualification and banning the entry into the securities market of the companies and individuals responsible for violations.

Anderson (2000) argues that the CSRC is not very effective in identifying and prosecuting fraud. The relative newness of the CSRC allows for skepticism of its motives, independence, and competence in curbing business fraud and malpractice. Chen, Firth, Gao, and Rui (2005) state that the actual CSRC reports provide few details of each disclosed case, with many of the reports described in less than one page. Thus, individual investors are not usually informed enough to understand the real consequence of firms receiving the CSRC's punishments. Moreover, the public law enforcement in the form of the monetary fines and other sanctions imposed by the Chinese government through the CSRC has been fairly weak. Pistor and Xu (2005) report that only 22% of all enforcement actions result in fines, as opposed to warnings or informal reprimands. Thus, it seems that Chinese public law enforcement agencies need more stringent monitoring and stronger enforcement mechanisms. In addition, one of the worst criticisms of the CSRC is its lack of independence from the government, and its susceptibility to political pressures. As the CSRC determines the aggregate amount of new shares (quota) that can be issued each year, firms with political connections are more likely to be approved in the process of going public (B. B. Francis et al., 2009). Furthermore, Piotroski and Zhang (2014) find that the rate of exchange eligible firms engrained in an IPO temporarily increases in advance of impending political promotion events over the period of 2001-2008. These findings suggest that the CSRC lacks independence from the government and therefore has limited jurisdiction.

Despite this, the reforms of 1998 (the passing of the *Securities Law* and consolidating regulatory power in the hands of the CSRC) have led to a significant improvement in the

ability and independence of the CSRC. Table 1 summarises enforcement activities taken by the CSRC from 2001 to 2015. The numbers stand for enforcement events, not companies against which enforcement actions were taken, suggesting that the total number of companies that were subject to enforcement proceedings and subject to enforcement proceedings may be even lower. It is worth noting that the total number of public enforcement activities increases across the time period, reaching a peak of 102 in 2014. This indicates that the CSRC has improved in detecting violations by listed firms over the past two decades.

Figure 2.4: Public enforcement taken by the CSRC from 2001-2015
Figure 2.4 shows the number of public enforcement actions taken by the CSRC during the period of 2001-2015. These public enforcement actions were taken against various violations including inside trading, false financial disclosures, stock price manipulation, and illegal shareholding reductions. Source: Enforcement data made available on the official CSRC website.



2.4.2.2.2 Private enforcement

Jones (2003) presents an excellent overview of China's legal tradition and shows that the law, at least since the Tang Dynasty (618-906 A.D.), is an instrument used by the ruler to enforce its power and authoritative control and to maintain social order, rather than being used by private citizens to protect their rights and interests. As a result, the imperial law processed individual law suits only when they appeared to affect imperial policies. This is in sharp contrast with Western countries where civil liability and procedural law are well developed and occupy a central place (Z. W. Chen, 2003). Before 2001, China's legal system was not fundamentally changed from Jones's (2003) traditional law system overview. On the capital market, private enforcement of investor interests and rights have virtually been absent, not because of a lack of demand for them but because of a lack of

formal development in civil litigation law. In practice, the judiciary agency is criticised as having a lack of legal professionals to deal with civil law suits. Thus, the legal system up to 2001 features "laws on the book" and the courts reject individual law suits (Z. W. Chen, 2003).

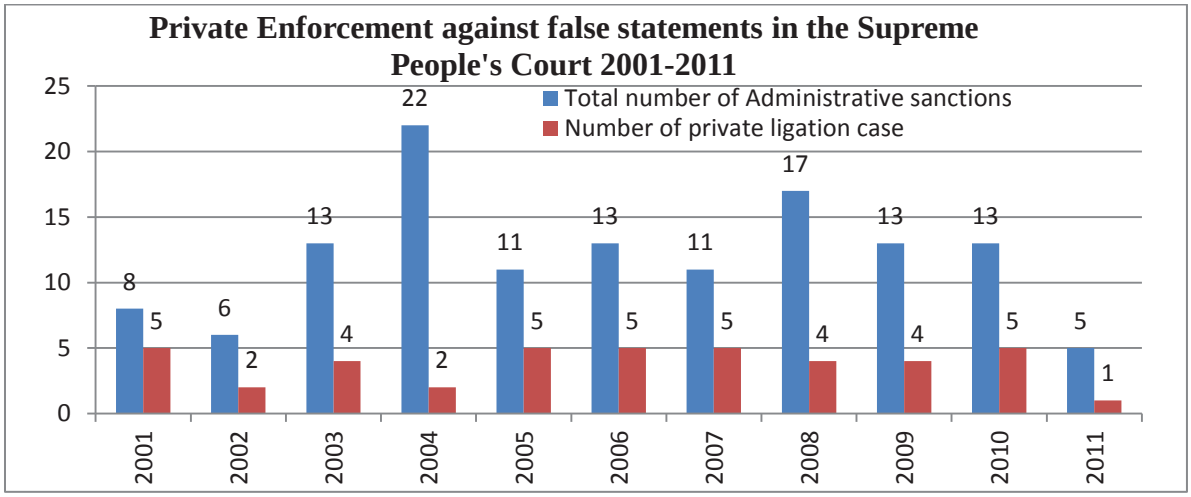
In October 2001, private litigation begins to develop in response to a sequence of scandals involving accounting fraud, insider trading, open market manipulations and other brazen behaviours by well-known listed companies (e.g. Yinguangxia and Yi'an Keji). The first civil lawsuit against a listed firm is accepted by the Supreme People's Court (SPC) in 2002. Meanwhile, the SPC issues the *Notice Regarding Civil Lawsuits Against Listed Companies on the Ground of False Statements*, which allows private securities litigation in the form of either individual or joint actions, but not class action. In January 2003, the SPC promulgates *Several Rules on Adjudicating Civil Lawsuits against Listed Companies on the Ground of False Statements*, which provides more detailed guidance on private securities litigation regarding accounting fraud. According to the CSRC, during the period of 2001-2011, there are a total of 132 violation cases of false information disclosure by Chinese listed firms. Of them, 90 listed companies (accounting for 68%) are not sued by individual investors after the administrative measures. Figure 2.5 compares the number of lawsuits filed after the SPC ruling in 2002, that are widely reported in the Chinese press, with the number of private litigations after court resolution. It shows, even after 2002, that the number of private litigation cases remains stable averaging around four across the time period, with only one case in 2011. This number is much lower compared to the total number of violated firms after administrative penalties. We interpret this evidence as being due to the weakness of the legal system in the private enforcement framework.

Despite this, China is making considerable progress in terms of setting up a framework for private securities litigations to allow investors to sue listed companies for losses caused by their misconduct. So far, private litigation law only provides rules against accounting fraud, without including insider trading and open market manipulations. The legal framework creates some serious obstacles for civil litigation. First, the physical location of where the suit can be filed, and the too narrowly defined causal link between violations by listed companies and losses made by investors. With the increase in administrative sanctions, fines and criminal charges, investors themselves have been left with no means of recovering their losses. Second, local courts simply appear unwilling to allow civil cases to

be heard because of administrative protection of firms by local governments. The few actions that reach conclusion in favour of the investors are settled out of court, as the government fears that allowing individual law cases could cause unlimited liability for listed firms, thereby endangering the viability of the stock market. Third, the cost of private litigation is relatively high, reducing the incentives of investors to pursue actions. The CSRC and other regulatory agencies should broaden the avenues of remedy to minority investors whose rights and interests are damaged, such as class action.

Figure 2.5: Private Enforcement taken in the Supreme People's court during 2001-2011.

Figure 2.5 compares the total number of listed companies after administrative penalty on false financial statement with the number of private litigations after court mediation. Source: Enforcement data made available on the official CSRC website.



2.4.2.3 Bank monitoring

It is well-established that bank borrowings provide a positive role in monitoring, thereby enhancing corporate governance. Bank borrowings have significant comparative advantages in access to private information about corporate insiders (Fama, 1985), which enables borrowers to make appropriate corporate decisions (Rajan, 1992; Stiglitz and Weiss, 1983). As a consequence, the bank monitoring role reduces the risk of expropriation by controlling shareholders through offending borrowers, either by liquidation or renegotiation (C. Lin, Ma, Malatesta, and Xuan, 2013; Park, 2000).

In China, so far, bank loans are the dominant form of enterprise debt (F. Allen et al., 2005). The central government has control over the four largest state banks[23], which are the main providers in bank loans to publicly traded firms. Given the state ownership in the Chinese banking system, state-owned banks follow the objectives set by politicians and bureaucrats to serve political and personal objectives (Sapienza, 2004; Shleifer and Vishny, 1994). As a result, publicly listed firms rely on the important role of political networks to obtain bank loans (Michael Firth, Lin, Liu, and Wong, 2009). According to Allen et al. (2005), around 30% of publicly listed firms' funding comes from bank loans. Of this, firms with state ownership have much higher leverage than other firms, due to the large amount of bank loans accumulated in these firms prior to their IPO. This evidence is consistent with the view that state-owned banks lend largely to state-owned enterprise (SOEs) (La Porta, Lopez-de-Silanes, and Shleifer, 2002).

A relatively small number of researches investigate the relationship between bank loans and firm corporate governance in China. Tian and Estrin (2007) examine whether banking debt disciplines managers in publicly listed firms and find banking debt fails to play a governance role. Particularly, they find banking debt facilitates managerial exploitation in state-owned firms. Firth, Lin, and Wong (2008) report a negative association between bank loans and firms' investment and provide evidence that such a negative relation is weaker in firms with low growth opportunities, poor operating performance, and higher state ownership. These results stand in contrast to the evidence in the US, where underperforming firms have difficulty securing bank loans. Bailey, Huang, and Yang (2012) study the bank lending behaviour in China and find that poorly performing listed firms are more likely to obtain bank loans. Using bank loan announcements for all Chinese listed firms during the period of 1999-2004, they further find a significantly negative market response to these bank loan announcements, typically in firms with frequent related-party transactions (RPTs), poor subsequent performance, and high state ownership. In summary, the findings in these papers are in contrast with the notion that bank borrowings play an effective role in monitoring corporations (Ahn and Choi, 2009; Fama, 1985).

[23] The government fully owns the Industrial and Commercial Bank of China, Agricultural Bank of China, China Construction Bank, and Bank of China.

2.4.3 Conclusion on corporate governance

The CSRC, together with other relevant agencies and ministries, has implemented a series of reforms specifically designed to improve the corporate governance quality of publicly listed companies and to continue the modernisation of the country's capital markets. The corporate framework in China is developing and adapting to the country's economic transformation and cooperation with international institutions. In particular, China has achieved substantial convergence with international principles by established board supervision and restraints over management, an independent directors system, shareholders' meetings, transparency and information disclosure, dividend distribution and investor protection within the legal and institutional framework. Meanwhile, a special campaign was launched as of 2005 for publicly-traded companies to conduct non-tradable share reform, to provide clarity on outstanding debts from controlling shareholders and improve corporate governance. The non-tradable share reform has consolidated the market foundation and is of great practical significance to build market confidence and encourage steady investment growth.

In sum, given the concentrated ownership structures, weak legal systems, highly politicised institutional arrangements, rent-seeking and expropriation behaviour, and corruption that characterise the context in China, improving corporate governance remains the key goal in the development of the economy. Regardless of many recent reforms made in corporate governance controls and institutions in China, the assessment of China's corporate governance and legal systems should be made on the basis of practices and outcomes, not standards and regulations alone. China, like all other countries around the world, still faces the continuous challenge of ensuring that its corporate laws and regulations are translated into good corporate practice. Without a commensurate increase in enforcement activities, existing institutional arrangements and cultural factors have the potential to erode the efficacy of rules and regulations in the practice of corporate governance. This process also needs to further draw upon the mature experience of other countries and international organisations, and objectively evaluate achievement and gaps with regard to the legal infrastructure. Without this infrastructure, reforms in the areas of corporate governance, securities legislation, and even capital market development will remain shallow (Pistor, 2002). On the other hand, corporate governance and legal systems in China need to be further modified with Chinese characteristics, so that China can take a

more active role in integrating itself into the world economic system. Without ensuring complementary rules between the domestic and international legal systems, harmonisation may lessen rather than improve the corporate governance and legal framework.

2.5 Conclusions

This chapter presents the overarching literature review for this PhD project. It first starts with the theoretical background of expropriation agency cost applied in this PhD thesis. As this study examines listed firms with "princelings" connections on the Chinese stock market, it is related to the theory on expropriation agency cost according to the previous relevant literature.

As this study investigates listed firms with political connections, it is natural to move forward to an overview of the Chinese stock market. In particular, Chapter 2 describes political influence on the Chinese stock market. The political system is dominated by the rule of one-party control, which motivates the authors to examine listed firms with connections to political elites through comparison to firms without such political ties. Therefore, it is necessary to illustrate political influence on the Chinese stock market.

Chapter 2 also fills the gap on expropriation agency cost in the Chinese stock market. To the best of our knowledge, this PhD study is the first to investigate whether there is expropriation in profit distributions. Previous researches relevant to dividends policy based on the Chinese stock market mainly focus on the phenomenon of low dividend payments by listed firms. However, this study not only exhibits the dividend puzzle, but also gives the reasons for the low level of dividend payments by Chinese listed firms. Looking ahead, this study notes that expropriation through profit sharing in China has stubborn roots. Although the Chinese government has made many efforts to improve dividend payments, the incentives that give rise to the expropriation are largely intact. For example, minority shareholders have no legal recourse and security regulators have limited jurisdiction over the controlling entities, even though an extremely transparent form of expropriation can persist for a long time. The findings of this study provide new insights into why existing legal and extra-legal governance mechanisms are inadequate to contain expropriation at the expense of minority shareholders.

Overall, the overarching literature review in Chapter 2 guides the readers logically into the motivations for this PhD study through the agency cost theory, an overview of the Chinese stock market, and corporate governance among Chinese listed firms.

CHAPTER THREE: ESSAY ONE: THE DIFFERENCE BETWEEN POLITICALLY CONNECTED AND NON-CONNECTED FIRMS: A NEW TYPE AND EVIDENCE FROM THE CHINESE STOCK MARKET

This chapter presents the first essay which systematically examines the differences between politically connected firms and non-connected firms in terms of accounting ratios drawn from three financial statements and corporate governance variables. A new type of political connections is defined and a new theory is developed to describe the observed differences. Section 3.1 introduces the chapter; section 3.2 reviews the relevant literature; and section 3.3 defines the special type of political connection and introduces the data. Section 3.4 develops the hypotheses and explains the theory, as well as discussing the methodology in detail. This empirical analysis is described in Section 3.5 and robustness testing is in Section 3.6. The conclusion is given in Section 3.7.

3.1 Introduction

The primary purpose of this study is to examine whether financial reporting outcomes vary systematically with the special type of political connectivity of "princelings" among the Chinese listed firms on the two primary stock exchanges: the Shanghai Stock Exchange (SHSE) and the Shenzhen Stock Exchange (SZSE).

Most of the available literature on Chinese political connections is based upon firms' ownership structure (such as state ownership), or senior managers' historic official government positions or relations. The uniqueness of this study is the special definition of political connections of "princelings". A firm will be included in the grouping of politically connected firms (PCFs) if there is at least one important person (among top officers, directors or major shareholders) in a firm who has the characteristics of a "princeling", namely, the person is a relative (including spouse, child, sibling, parent, cousin, or nephew/niece) of top state leaders' families or other high-ranking public officials.

There are two groups of theory describing the impact or influence of political connectivity on a related firm. The first is the "helping" hand theory (Y.-L. Cheung et al., 2010; B. B. Francis et al., 2009) and the second is the "grabbing" hand theory (Lindbeck, 1976; Rajan and Zingales, 2003; Sappington and Stiglitz, 1987; Shleifer and Vishny, 1994). This study has examined literature reporting on the second group, including Fan et al. (2007) and Cheung et al. (2010). Unlike previous research, this study fills a gap by using a special sample and finds that the major characteristics of the sample fit within the first group. The explanation for the result is that the "princelings" political connection does not usually have a direct influence on the operating business decision making, but instead has a possible indirect influence on the business activities, such as securing access to new business opportunities, cheaper materials or capital supplies because of their name and the network relations behind them.

Prior academic research shows that political connections are prevalent around the world, irrespective of a country's level of economic development (Faccio, 2006). A substantial

body of empirical evidence documents that political connections may be beneficial to firms in various aspects, ranging from debt financing (Johnson and Mitton, 2003), tax payments, government bailouts (Faccio et al., 2006) and regulatory protection (Kroszner and Stratmann, 1998). However, some papers in the public choice literature argue that political connections lead to rent seeking and expropriation (Frye and Shleifer, 1996; Shleifer and Vishny, 1994; Stigler, 1971). Despite this mixed evidence on the value of political connections, the results of any single-country are specific to that country's conditions.

As the second biggest economy in the world, China is an appealing case study for political connections for several reasons. First, China is a relationship-based capital market due to the impact of its deep-rooted culture. Under such circumstances, the phenomenon of cultivation of political ties in the Chinese stock market is not surprising (La Porta et al., 2000a; Ma et al., 2013). Second, Chinese crony capitalism under a stable single-party provides a particularly durable setting for examining the role of political connections on firm performance. Third, although China has one of the fastest growing economies in the world and its economic importance is likely to grow even more in coming decades, it has weak legal and financial systems (F. Allen et al., 2005). Thus, corporations operating in such an institutional background have incentives to build political connections in order to maintain sustainable growth.

Generally there are two important issues associated with political connections. One is the contrast between improved performance due to benefits of political connections, and impaired performance due to agency costs of political connections. The second is that the degree of political connection in Chinese firms may be changing over time, so previous findings may no longer hold true.

This study has developed the theory of "Golden hens vs. Chickens" to explain the specialties of the "princelings" connected firms. The "princelings" usually come from the "sky" and choose their preferred target firms in a manner as if they were "sky-diving". They usually have no economic or technological power, and have no advantage in knowledge or skills. Combining the reality that they have a superpower by birth, and they have the freedom to choose those firms with which they prefer to work. They will naturally choose "good" firms ("Golden hens") for their "landing" targets. The best use of

“Golden hens” is to have a larger harvest of “eggs” in the future; killing them for their current meat (such as through cash tunnelling) is not optimum.

To test the theory, this study focuses on two main research questions: 1) whether the politically connected firms (PCFs) differ from their non-connected peers in accounting performance; and 2) how these firms are different from their matched peers. Specifically, this study tests the differences from three angles; operating business efficiency, cash tunnelling levels, and reinvested capital as shown in retained earnings. This study hypothesize that the “princelings” firms should be outstanding in their business operations, associated with less cash tunnelling and have accumulated higher business profits in the form of retained earnings. The results of this study have produced some strong evidence to support these hypotheses.

The sample in this study is unique. It manually collects data on the PCFs identified if at least one of its large shareholders (anyone controlling at least 10% of voting rights, directly or indirectly) or top officers (CEO, chairman of the board, president, or secretary) is a current or former government bureaucrat for central or local governments or the military, or is closely related to a politician (Faccio, 2006). This study selected matching firms from the candidate firms identified as non-connected, for each connected firm. For the main tests, the matching firm for each connected firm met the following four criteria; belonged to the same industry, had the nearest total assets in the first year after IPO, had the same trading status, and had the closest age relative to listing. The final sample comprises 8387 firm-year observations between the PCFs and the non-connected firms.

The results show that the “princelings” and “Golden hens” are associated with each other; however this study presents no evidence on their causal relationship. For this question the authors suggest there are two possible reasons. One is that the “princelings” have brought some advantages to their “landed” firms and so have made them into “Golden hens”. The other is that these firms with a “Golden hens” ability have a better chance of being selected by the “princelings” (or these firms are more attractive to the “princelings”). Although this study cannot detect any reason to reject the possibility of the second reasoning, it has observed the tendencies of some accounting ratios, such as retained earnings and net profits, suggesting evidence in favour of the first reasoning.

Overall, the findings in this study contribute to the growing literature on political connections in several ways. First, it is the first to identify a special type of political connection, called “princelings” in this study. The second contribution is the development of the “Golden hens vs. Chickens” to explain the specialties possessed by the “princelings” firms. The third contribution is the empirical evidence produced that supports the new theory.

The rest of the chapter is organised as follows. Section 3.2 reviews the relevant literature and Section 3.3 defines the special type of political connection and introduces the data. In Section 3.4 this study develops the hypotheses and the explanatory theory, and then discusses the methodology in detail. Then empirical analysis is described in Section 3.5 and the robustness tests in Section 3.6. Then conclusion is given in Section 3.7.

3.2 Literature review

Early seminal work by Krueger (1974) has stimulated numerous studies to examine the phenomenon of PCFs; rent seeking individuals (both firms and politicians) and political intervention becomes a common question in theory and practice. Shleifer and Vishny (1994) have established a theoretical model which shows that there is a trade-off effect in the connection between politicians and connected firms. They argue that politicians may be willing to provide subsidies to firms run by independent managers; but they want firms to pay them back by fulfilling political objectives. In the exchange process there are two effects; the subsidy effect, and the obligation effect on the connected firms. When they have the opportunity to receive subsidies from their related politicians, their firm values will be increased. On the other hand, they have the obligation to pay back these helpers. If the first effect is emphasised the theory is of the “helping” hands group, and if the second effect is the focus the theory belongs to the “grabbing” hands group.

3.2.1 Potential benefits of political connections: “Helping” hands theory

Khwaja and Mian (Khwaja and Mian, 2005) report that political connections help firms preferentially access bank loans, government bailouts (Faccio et al., 2006) and government contracts (Goldman, Rocholl, and So, 2009), which improve their recovery following a

financial crisis (Johnson and Mitton, 2003) and ultimately increases firm value (Fisman, 2001; Ramalho, 2007).

In the study of practical issues, several reports (Fisman, 2001; Johnson and Mitton, 2003; Rozeff, 1982), show that PCFs are more valuable than their less fortunate competitors in developing countries while emphasising that political connections constitute a source of firm value. In particular, Francis, et al. (2009) provide evidence that going public is easier for PCFs. They find greater political exposure is associated with a higher offering price and lower fixed costs over the period of going public. Another example is the recent work Faccio (2010), who has made some cross-country comparisons. It is found that connected firms, using larger bank loans, have stronger market share and pay lower taxes than non-connected firms. Adding to this evidence, Chaney, et al. (2011) and Boubakri, et al.(2002) show that firms with political connections have lower costs in capital financing than their non-connected peers. All of these studies suggest that potential investors perceive connected firms as being less risky compared to their non-connected peers.

Also, some documents show that political connections have a pervasive impact on the value of public companies even within the confine of a strong legal system. For instance, Morck, Stangeland, and Yeung (1998) show how Canadian firms with political ties benefit from unlimited resources if the government plays a central role in the economy. In addition, Roberts (1990) and Goldman, Rocholl, and So (2009) find an increase in firm value for firms connected with the US Republican Party after the party won the 2000 elections. Ferguson and Voth (1984) provide similar evidence that affiliated firms outperform the stock market by 5% to 8% and account for a large part of the market's rise.

3.2.2 Potential costs of political connections: "Grabbing" hands theory

However, a series of papers argue that rent seeking and expropriation are important objectives of government intervention (Frye and Shleifer, 1996; Gaver and Gaver, 1993; Shleifer and Vishny, 1994). Further, extensive political entrenchment further affects the cost of equity of the firms. Consistently, Qian, Pan, and Yeung (1995) argue that PCFs can worsen expropriations for at least two reasons: 1) The firm insiders derive gains from their

connections over or above the cost of rent-seeking activities; and 2) connected firms face a lesser concern of capital market punishment due to the easier access to bank loans.

A number of papers have examined the relation between political connections and proxies for firm value and financial performance. Empirically, Bertrand, Kramarz, Schoar, and Thesmar (2006) show that PCFs in France exhibit lower profits than non-connected firms, because entrepreneurs have to bribe presidential campaigners, particularly in election years. Faccio, et al. (2006) provide cross-country evidence that firms with political connections have significantly lower ROAs in the two years following bailouts, indicating a negative effect of political connections on accounting performance. Furthermore, Fisman (2001) concludes that the stock price of firms in Indonesia that are connected to the president dropped more than the price of less connected firms when president Suharto's health was worsening. Additionally, Johnson and Mitton (2003) find that connected firms underperform compared to similar non-connected firms in terms of market value during a financial crisis.

Political connections are not detrimental only in terms of accounting and stock market performance but also in terms of asymmetry of information for connected firms. Using an international sample, Chen, Ding, and Kim (1995) argue that PCFs experience less accurate analyst earnings forecasts, which suggest that political connections exacerbate the severity of information asymmetry between investors and managers. Indeed, prior research (Ghoul, Guedhami, and Pittman, 2010) shows that the connected firms commonly report lower quality accounting information to hide their expropriation activities and impede efficient monitoring. Additional evidence on the relationship between political connections and information asymmetry is presented by Chaney, et al (2011), who find PCFs have significantly poorer quality of earnings than non-connected firms. These evidences imply that investors view connected firms as more risky than non-connected firms; therefore they are not willing to pay higher prices for connected firms than for non-connected firms.

Another illustration of the cost of political connections appears in Leuz and Oberholzer-Gee (1982) who investigate the relationship between political connections and the likelihood of access to foreign capital markets. They find that connected firms shy away from the international capital markets, due to the higher transparency and scrutiny that are consequences of global financing. They also argue that political connections are less likely

to be a source of long-term value in environments with macroeconomic and political instability as political connections can lose their value overnight when the government fails to win an election.

3.2.3 Political connection research in Chinese firms

While the above studies show the international evidence on the cost of political connections, a growing body of papers use sample firms from China. For instance, Fan, et al., (2007) find that post-IPO stock returns of Chinese privatised firms with politically connected CEOs underperform those without a connection by almost 18%. They also find the boards of connected firms have lower participation by professional directors or managers. To a certain extent, the high involvement with bureaucrats with low professional skills in directorships or management drives the intensity to fulfil political objectives. As a result, such poor corporate governance influences firms' operations. Furthermore, Cheung, Rau, and Stouraitis (2003) show that minority shareholders in Chinese publicly listed firms are subject to expropriation when their firms conduct related party transactions[24] with local government shareholders during the period of 2001-2002. The transfer means that substantial-minority shareholders lose up to half of the value of the related party transactions. Berkman, Cole, and Fu (2011) provide additional evidence that regulations aimed at reducing expropriation by controlling shareholders were perceived to be ineffective for firms with strong political connections. The overall evidence from the bove papers is in line with the "grabbing" hands argument (Gaver and Gaver, 1993) that politicians expropriate minority shareholders' wealth from public firms.

In summary, the results of international studies on political connections are mixed. This study interprets these differences as the reflections of many different types of political connections. Each study is unique in its definition of political relationships; each sample is unique in its political and cultural environment context. In the next section, this study defines a special type of political connection examined in this study; the "princelings" type of political connection. With this in mind, this study develops the following discussion on its major influence on the sample firms.

[24] Related party transactions are transfers of resources or liabilities between a listed company and the legal entities or individuals who control it.

3.3 Data

3.3.1 Definition

Faccio and Parsley (2009) argue that solid evidence of a specific political connection is rare; hence, they include in their definition of politically connected companies those companies that have their headquarters in the same town in which the politician lives or was born. This definition is consistent with Roberts (1990), who examines the geographic distribution of federal benefits. However, this geographic approach is problematic for two reasons. First, it broadly includes those businesses that do not have connections with local politicians. Second, it omits those cases which fall into specific connections outside the politicians' regional boundaries. Moreover, Francis et al. (2009) investigate the relationship between political connection and the process of going public, using the state-owned underwriter as a proxy for political connections. Although the political connections of underwriters are beneficial to the process of going public by lowering under-pricing and fixed costs during the going-public process, it is not comparable to many leading studies on the definition of political connection.

In contrast, this study defines political connection mainly according to Johnson and Mitton (2003) and Faccio (2006). Johnson and Mitton (2003) define political connection as firms' directors or major shareholders who have personal ties with politicians. Similarly, Faccio (2006, P.370) defines connected firms as those where "at least one of its large shareholders (anyone controlling at least 10% of voting shares) or one of the top officers (CEO, president, vice-president, chairman, or secretary) is a member of parliament, a minister, or is closely related to a top politician or party".

To avoid an ambiguous definition of political connections on close relationship, following Faccio (2006), this study defines political connection with the condition that a firm's top officers, directors, or major shareholders[25] are: 1) Relatives (including spouse, child, sibling, or parent, cousin, nephew/niece) of "princelings"; or 2) subordinates of senior government officials or high-ranking military officers; or 3) close friends with "princelings". The "princelings" are a group of people whose parents (or grandparents) are

[25] Major shareholders refer to the top 10 shareholders of a company.

important national (or party) leaders in the process of creating the PRC or other high-ranking public officials (at the provincial level).

The “princelings” connected firm sample includes the younger generations of state leaders and other high-ranking officials at the provincial level. So for example, the grandchildren, child-in-law, and grandchildren-in-law are included as the “princeling” sample. Public officials are considered “high-ranking” when they are the governor of a province or a senior officer in military. Firms connected to both may obtain many advantages under their jurisdictions, which is similar to the “princelings” connections. A firms is identified as part of the “princelings” connected samples as long as there is information to show that at some point in time during the 1992 to 2011 sample period, the firm has connection with “princelings”, regardless of the date of establishment or exit of the political connection. This is because, in most circumstances, it is not possible from the anecdotal evidence available to identify the exact dates or years of entry, exit, or changes in firm-level political connection status.

3.3.2 Sample selection

Through prospectuses, the press, financial websites and professional stock analysis software, this study identifies political connections by identifying the insider person who has a special close relation to a top central government or party leader, or other high-ranking public official (minimum at the provincial level). The relation features the involvement of top leaders’ younger generation, and so this study refers to this political connection as the “princelings” connection. The manually collected data is unique, as it enables us to substantiate the occurrence of the connection with princelings’ families in China.

3.3.2.1 Political connection to state leaders

The princelings are the descendants of prominent and influential senior Communist officials in the People’s Republic of China. As children or grandchildren of China’s top government officials, they are often considered by the public as belonging to privileged

classes with strong political and financial clout. Normally, they hold prominent positions in strategic industries, which allow them to be associated with a public firm.

Despite the fact that princelings are well known through their special roles in business, the origins of the firm's connection to them are often very difficult or impossible to trace. There are two reasons for this. First, few public sources of these links are available. Most princelings are very careful to keep a low profile. Being from famous families, if their relationships are exposed they may receive very high scrutiny from the public. Second, there are regulations setting limits on the business activities of the top Chinese leaders[26]. In order to maintain a reputation of integrity, princelings' families may desire more secrecy and prohibit related firms from releasing the information on any connections to the public. Perhaps because of these reasons, this study finds firms connected to such families have complicated pyramidal and cross-holding structures. Such ownership structures mean that connectedness effectively escapes the eyes of the public.

To identify the firms connected to political elites of princelings, in this study the connected samples are had collected using the following steps. First, this study has identified these connected firms largely based on anecdotal evidence from many forms of public sources, mainly via public domains on the internet. The study then proves the presence of political connections by examining information from three sources; prospectuses, the official press, and financial websites[27].

As the most important instrument of legal documentation, an IPO prospectus provides basic information on the top officers, the backgrounds of the founding investors, the top 10 shareholders and the company history. This study includes a company in the sample if top officers (including the chairman, director, CEO, president, vice-president and secretary) or companies' top 10 shareholders or founding investors are related to powerful politicians or military officers.

From the prospectus, this study finds some firms already have some political connections before the IPO in the form of venture capital raised by close relatives of powerful

[26] In the past three decades, the Chinese government has put in place more than 20 regulations to clearly prohibit officials and their relatives from participating in the business world. Please refer to the website: http:// news.sohu.com/20150303/n409303031.shtml

[27] http://www.bbc.co.uk; http://www.epochtimes.com; http://bbs.hexun.com

politicians. Usually venture capital plays a key role in supporting the growth of young firms. According to a study of the venture capital industry in China by Bruton and Ahlstrom (2003), reputation and relationships are the norm in all stages and phases of venture capital development. Hence, this study includes firms funded by venture capital related to politicians in its politically connected samples.

Additionally, this study finds that some firms' final controllers are foreign legal entities without clear description in the prospectus. This study cannot obtain the filings of these legal entities' registry information from the Commercial Bureau, because they are registered overseas[28]. However, from internet searches, this study finds a media outlet named 'Southern Weekend'[29] verifies this connectedness. This media reveals that there are some non-state owned companies with indirect connections to current or former high ranking public officials.

Besides evidence from prospectuses and the press, Chinese local financial websites[30] are other sources of data on political connections. Specifically, this study includes firms as politically connected if the names of the firms' top officers are exactly the same as that found in anecdotes, or the profiles showing their political working experience. However, due to the limitation of these public sources and the authors' limited search ability, this study does believe it still misses some existing politically connected firms in relation to the top leaders.

3.3.2.2 Political connection to other high-ranking public officials

Although there are regulations that forbid public officials from participating in non-state owned businesses, retired officers, especially those who formally had high ranking in government or military, are frequently recruited by non-state owned companies. Their former status still has the potential to influence the firm's performance and increase its market value.

[28] This study finds that the British Virgin Islands, Cayman Islands and Bermuda are home to these offshore companies. Moreover, a small proportion of the offshore companies are registered in Hong Kong.
[29] Southern Weekend is famous for muckraking in China.
[30] http://finance.sina.com.cn is one of the biggest websites for information on finance and the economy in China.

It is easier to obtain data for firms connected to other high-ranking public officials through official channels. This study manually collected the data from two sources, one of which is the professional stock analysis software Tdxw, which provides us with background information about top officers (including the chairman, directors, CEO, president, vice-president and secretary) and top 10 shareholders. This study has classified firms as having connections as long as one of the top officers or large shareholders has political or military working experience[31]. The other source is the Hu Run Report, which is a source of information for private entrepreneurs who have close relationships with local government.

One may confuse state ownership as being comparable to political connections in the Chinese stock market as, to some degree, state-owned companies represent political connections. However, under a "partial privatisation" initiative in the early 1990s, state-owned enterprises are allowed to sell shares to private investors. Thus, a considerable number of state-owned firms became privately controlled businesses during this study period. Moreover, State-owned enterprises are less likely to be successful if they have no strong political connections (B. B. Francis et al., 2009).

It may be worth pointing out that government controlled firms are not included in the definition of the type of political connections, unless a government minister or a member of the parliament sit on their boards or own large stakes in the company.

The princelings samples are those connected firms where the influence may not be limited to routine operating decision making, but where the general advantage is in production and financing sources, including manpower capital. The "helping" hands and "grabbing" hands theories are equally applicable. This is exactly the empirical question investigated in this study.

3.3.3 Sample description

3.3.3.1 Descriptive statistics

[31] This study defines top officers or top 10 shareholders as being politically connected if they were currently or formerly an officer of either the government or the military.

The sample in this study is finalised as consisting of 381 PCFs on the Chinese stock market. This study has matched connected firms with non-connected firms one by one. The sample includes 8387 firm-year observations, covering the period from 1992 to 2011. The data used in this paper include information on accounting values, stock price and corporate governance. This study obtained data on accounting, corporate governance and stock price for both connected and non-connected firms from the Chinese Stock Market and the Accounting Research (CSMAR) database provided by the Shenzhen GTA Information Technology Corporation.

Table 3.1 presents the descriptive statistics for the connected firms in this study; and Panel A provides the IPOs of these firms. The sample period is from 1992 to 2011, which largely reflects the overall IPO pattern in China. Two decades ago there were only 40 newly listed stocks, and then the number rapidly increased to 209 in 1997. Even though PCFs are unevenly distributed across the sample period, the number of connected firms increased from 1992 to 1996, but remained around 20 from after 1996 until 2005, when it fell to 2. Note that in 2005, there were only 15 newly listed stocks. The abnormally low level of IPO activity in 2005 reflects the impact of several regulatory actions that restricted the flow of IPOs to the market[32]. The Chinese stock market had undergone substantial changes in 2005. One of them is the NTS (non-tradable share) reform, which gradually makes all non-tradable shares become tradable. Before 2005, the Chinese government still partially controlled share issue privatisation (SIP) firms, which impacts on the market's proper development and expansion (People's Daily, June 28, 2005). As a result, China has started a split-share structuring reform (referred to as the NTS reform), thereby reducing IPO numbers. Therefore, the sample period is divided into two phases: 1992 to 2004; and 2005 onwards. This is one of the reasons for the robustness tests on political connections by these two sub-periods in Section 3.6.2.

Panel B reports a particular pattern of cross-industry variation among PCFs. The Industrial category has the highest percentage of PCFs (57.74%), followed by Conglomerates (23.62%), Public Utilities (7.61%), Commerce (6.56%), and Properties (4.46%). Moreover, Panel C breaks down the subsamples of Industrial firms. Of the total 57.74% that are

[32] From time to time, market observers have identified some problems with China's IPO system, such as underpricing caused by fixed P-E ratios or issuance quotas. To overcome these problems the CRSC has issued many corresponding reforms. One such freeze was implemented in 2005, lasting from May 2005 to June 2006.

Industrial firms, food, medicine and chemical accounts for nearly 15.49%; this figure is followed by electrical manufacturing and transportation & power, which account for 13.39% and 12.34%, respectively.

Table 3:1: The sample

Panel A: By year			
listing Year	No. of connected firm's IPO	Total No. of A-share's IPO	% of total A-share IPOs
1992	5	40	12.5%
1993	13	129	10.1%
1994	18	107	16.8%
1995	6	28	21.4%
1996	34	206	16.5%
1997	39	209	18.7%
1998	24	104	23.1%
1999	16	96	16.7%
2000	27	131	20.6%
2001	15	75	20.0%
2002	16	71	22.5%
2003	21	67	31.3%
2004	21	100	21.0%
2005	2	15	13.3%
2006	14	66	21.2%
2007	25	126	19.8%
2008	12	77	15.6%
2009	21	99	21.2%
2010	27	349	7.7%
2011	20	282	7.1%
2012	5	155	3.2%
total	381	2532	15.0%
Panel B: By industry classification A		% of total connected firms	
Public utility	29	7.61	
Properties	17	4.46	
Conglomerates	90	23.62	
Industrials	220	57.74	

Commerce	25	6.56
Total	381	100
Panel C:		% of total connected firms
Food, medicine & chemical	59	15.49
Electrical manufacturing	51	13.39
Transportation & power manufacturing	47	12.34
Metallic manufacturing	25	6.56
Culture, office &education goods	21	5.51
Oil, rubber &fibre	17	4.46
Total	220	57.74

3.3.3.2 Matching procedure

In much of the analysis, this study compares the operating performance of PCFs to a set of matching non-connected peers. Faccio (2010) matches connected samples by non-connected companies only on the basis of market equity capitalisation (within ±40%). However, the matching approach in this study is far more stringent. It matches one non-connected firm with each connected firm by the following rules.

a) Industry: According to the CSMAR database, there are two types of industry classifications; industry A, and industry B. The industry A classification has 6 broad categories (Commerce, Conglomerates, Finance, Industrials, Properties and Public Utility), while industry B is subcategorised into 175 categories based on industry A. This study divides the set of political firms into 80 sub-sectors in terms of industry B. A potential match should first come from the same division in industry B. If no company meets this criterion, this study broadly selects a non-connected firm from industry A.
b) Firm size: Based on the first step, a potential match from the same sector is then selected if its book value of total assets is closest to that of the connected firm at the end of the first year after the IPO.
c) Listing year: This study selects a match if its listing year is as close as possible to the listing year of the connected firm.
d) Status: CSMAR categorises firms into 4 statuses. A represents normal trading. S is suspension; D means termination; and lastly, N is delisting. As all of the connected

firms have the status of normal trading, this study selects the matching firms from normal trading as well.

A few caveats are required. First, this study follows the usual practice of excluding financial companies (subcategorised into securities, banks and insurance) because of their unique financial structure, regulatory requirements, and accounting standards. This distinguishes the current study from Faccio (2006), who includes the banking sector in her samples to study the propensity of bailout. Second, matching was done without duplication, which is consistent with Faccio, et al. (Faccio et al., 2006). If more than one firm meets the above requirements at the same time, this study selects the one whose book value of total assets is closest to that of the connected firm.

Regardless of the best efforts to match connected firms with non-connected firms, the matching approach might have limitations in the quality of judgements. One potential problem that should be pointed out is that matching firms can be potentially connected with politicians in ways that escape detection by the search algorithm. On the other hand, it is possible that political connections may decrease or increase within the sample period given that this study cannot track changes in PCFs over time. These may diminish the strength of any findings of differences between the samples. Nevertheless, the results in this study show that the PCFs are systematically different in their accounting balances indicating business performance and wealth distribution in contrast to matching firms.

3.4 Hypotheses and methodology

3.4.1 Hypotheses development

Previous documents (discussed in the literature review section) report evidence that political connections are associated with the difference in these firms' performance. However, Faccio (2010) argues that it is not possible to infer any causality from the reported results; but she mentions two possible interpretations of these results: 1) It could be true that political connections lead to the differences in performance; or 2) it could also be true that these types of firms are more likely to establish a political connection. As a starting point, this study analyses how connected firms differ from non-connected firms in

their accounting ratios in annual financial reports, their market price and their corporate governance performances. This study will discuss the causality question later in section 3.6.3 (time patterns). To organise these comparisons, this study employs the following hypotheses.

Hypothesis 1: There is a systematic difference in accounting ratios between firms with political connections and firms without such connections.

Accounting ratios are a persistent and traditional standard that investors use to assess firm performance. Faccio (2010) investigates the difference between politically connected and non-connected firms by focusing on leverage, taxation, market power and productivity, return on assets, and market-to-book ratio. Motivated by Faccio (2010), this study examines the following items on the firms' balance sheet.

To measure the level of operating current assets this study uses cash & cash equivalents, net other receivables and total current assets (as a percentage of total assets) to measure the impact of a political connection on a firm's liquidity structure. Boubakri, Cosset, and Saffar (2009) suggest that these ratios are particularly important when firms face large amounts of short-term debt. This study also uses the net fixed asset ratio to indicate the operating capital investment level. Charumilind, Kali, and Wiwattanakantang (2006) report that the political connection helps firms gain access to long-term bank credit. They suggest that firms with political ties are treated favourably in the credit market because of less collateral is required for loans (such as fixed assets). Leuz and Oberholzer-Gee (1982) use the ratio of fixed assets to total assets as a proxy for financing needs. Therefore, this study tests whether firms with connections to government or military have lower fixed assets than firms without such connections.

This study also uses the net investments ratio to test possible political relationships. It defines net investment as the short-term net investment plus the long-term net investment. To the best of our knowledge, no other study examines whether the net investment of connected firms is different from that of their counterparts. This study has included this in the study for the purpose of completeness of coverage.

On the liability side this study uses short-term debts, long-term debts, payables for special projects, other liabilities and IPM (interest protection multiples, EBIT/finance expense[33]). Prior research (Cull and Xu, 2005; Faccio, 2006; Johnson and Mitton, 2003; Khwaja and Mian, 2005) shows that connected firms have preferential access to credit. However, Qian, et al (1995) argue that political connections help firms secure bank financing and evade capital market punishment. This study scale their ratios against total assets (except the IPM) to analyse their status.

Boubakri, et al (2009) use the change in the ratio of long-term debt and short-term debt to assess the impact of political connection on debt maturity. Furthermore, Chaney, et al.(2011) use the interest coverage ratio as a control variable when they study the link between earning quality and cost of debt for connected firms. Similarly, this study uses interest protection multiples to measure their relative capacity of meeting debt payment requirements. The higher this ratio is, the easier it is to obtain a loan.

Finally, to test how connected firms differ from non-connected firms in terms of equities, this study includes share capital, capital reserves, surplus reserves, retained earnings and minority interests divided by total assets. Although this study includes most of the accounting ratios from the balance sheet, it excludes Other Current Assets and some of the other non-current assets (such as Long-term Prepayments and Deferred Tax Assets), so there is no perfect linear relation among the included accounting ratios.

As explained in the previous section, the sample is of firms of the "princelings" type, which is a strong indication that these firms are selected by the most powerful group of investors. These investors are powerful not only in political influence, but also in economic capacity. Although these investors are not necessarily well educated, they have all of the professional resources and inside information. Most of the time they are not actively involved in operational decision making, but they are definitely keen on receiving greater returns. The fundamental force of having better returns is of advantage in operating the business, and this advantage should be shown in the selected firms' accounting figures.

[33] In the Chinese accounting report system, interest expense is included in the finance expenses, and reported in the Income Statement.

This study uses the terms “Golden hens” vs. “Chickens” to describe this expectation. Golden hens will be raised for a long time to harvest more eggs, while chickens are kept for a much shorter period. To test the “Golden hens” hypothesis, this study has developed hypotheses 1a, 1b and 1c.

Hypothesis 1a: Politically connected firms of the princelings type are relatively advantaged in operating revenue and/or operating profits.

Hypothesis 1b: Politically connected firms of the princelings type are relatively less motivated to accept cash tunnelling.

Hypothesis 1c: Politically connected firms of the princelings type pay relatively lower dividends and so show a higher retained earnings ratio.

Hypothesis 1a proposes that princelings-connected PCFs are more efficient in operation and more profitable; they are good choice for harvesting future eggs. Due to good future opportunities, this is a better use of the “hens” than producing current meat products. However, cash tunnelling behaviour has a damaging effect on future business incomes. It is proposed that these PCFs have much less motivation to accept cash tunnelling, which is to be tested in hypothesis 1b. Consistent with the lower levels of cash tunnelling, the PCFs of the “Golden hens” type will keep more of their profits as re-investment so that their “hens” can be more productive in the production of future “eggs”. The re-investment effect is indicated in the ratio of retained earnings, which is tested in hypothesis 1c.

To test hypothesis 1a, this study uses operating revenue and net income values in both direct pairwise comparison and controlled regression models. The previous study of Fan et al. (2007) on political connections compares sales growth, earning growth and changes in return on sales to measure firms’ profitability at the time of IPO. They find firms with connected CEOs fail to perform as well as their counterparts post-IPO, which is linked to a lack of managerial skills by those CEOs who are appointed on the basis of their connections. Based on Fan et al. (2007), this study uses operating revenue and net income over the total assets to test the hypothesis that firms are more profitable if they are politically connected.

Additionally, these advantages should be reflected in their market value; this study uses the Market-to-book ratio for this test. Specifically, this study uses the market value of total assets over the book value of total assets as a proxy for the market value ratio. Cheung, Jing, Rau, and Stouraitis (2005) and Faccio (2010) find that there is no significant difference in market value performance between connected firms and unconnected firms.

A key feature of the Chinese stock market is the highly concentrated ownership structures. There are six types of shares; state, legal person, foreign, executive, employee, and individual, according to *Shareholding Experience and Regulatory Opinion on Joint Stock Companies*. The degree of ownership concentration determines which kind of agency problems firms face. For instance, a diffused ownership structure generally has agency problems between managers and a diffused group of shareholders (M. Jensen and Meckling, 1976) while a concentrated ownership structure leads to conflicts between controlling shareholders and minority shareholders (Porta, Lopez‐de‐Silanes, and Shleifer, 2006).

The unique ownership pattern of Chinese firms has triggered substantial academic study on links between earnings quality and ownership structure. High concentration ownership could have a positive effect on alignment (J.P.H. Fan and Wong, 2002) or a negative effect on tunnelling (Jiang et al., 2010). For instance, some controlling shareholders have other wholly-owned business interests and so opportunities exist to transfer resources to these other businesses. In these circumstances the controlling shareholders may force the listed companies to adopt less informative accounting so as to help camouflage the "expropriation" activities.

This study compares the ownership structure of PCFs to that of their non-connected peers by including two shareholder type variables; state, and largest ownership. The different ownership structure has implications for different incentives to control and monitor the firm's management (Shleifer and Vishny, 1986). For instance, firms with state ownership have preferential access to new capital or bailouts in the event they fall into financial distress (Q. Wang, T. J. Wong, and L. Xia, 2008). This study expects that PCFs should have more concentrated ownership.

One of the most important factors influencing a firm's performance is the board of directors, since it is charged with monitoring and disciplining senior management. Beasley (1996) suggests that directors' expertise and occupations might have an impact on managerial decision-making and thereby influence firms' performances. Byrd and Hickman (1992) indicate that the expertise and objectivity of independent directors help firms to reduce the problem of managerial tunnelling. Empirically, Chaney, Faccio, and Parsley (2011) find that, in firms where politics matter more, outside directors with a politician or lawyer status are more important. For example, companies in industries with larger government dealings tend to have a larger number of political directors. During the sample period in this study, the board members of listed firms are usually appointed by the state-owned controlling shareholder. Non-executive directors of connected firms come from social organisations and institutions, universities, industry associated committees, etc. (Xiao Chen et al., 2003).

Fan et al. (2007) argue that political connections have an effect not just in terms of accounting and stock market performance, but also in terms of the qualifications of the managers and directors that are appointed to connected firms. They include several variables to measure the governance and the degree of professionalism of PCFs' directors on boards and find firm-level evidence that weaker corporate governance is associated with PCFs. Thus, following Fan et al. (2007), this study includes the percentage of female directors, age of directors, educational level of directors, background1 (accounting, law or finance background) and background2 (academic background), to test the differences between PCFs and politically unconnected firms. This study expects that PCFs are not significantly different from politically non-connected firms in board structure.

Chinese listed firms have a two-tier internal governance structure including an executive board and a separate supervisory board. Supervisory boards, comprised of at least three members, are intended to provide a monitoring role and help to reduce conflicts of interest between owners and managers. Furthermore, the supervisory board is responsible for accounting informativeness. Previous corporate governance literature on supervisory boards has shown mixed results. Dahya, Karbhari, and Xiao (2002) argue that the appointment of supervisory board members has not been a transparent process and is, therefore, not necessary when a company performs well, and cannot help when the company performs poorly (Schneider-Lenné, 2011). Nevertheless, Xiao, Dahya, and Lin

(2004), through a series of interviews in Chinese listed companies, find that supervisory boards perform as either advisors or watchdogs. Consistently, Firth, Fung, and Rui (2007) find that a larger supervisory board with greater expertise in monitoring management and accounting quality will improve firms' performances. Analysing the weakness of Chinese corporate governance, Braendle, Gasser, and Noll (2005) conclude that business-to-government networks, in particular, can harm the independence of the supervisory board. Therefore, this study constructs two variables to assess the differences in supervisory board structure between connected firms and non-connected firms; the number of members on the supervisory board, and supervisory meeting frequency. This study expects that supervisory board structures of PCFs are significantly different from those of politically non-connected firms.

This study also tests how connected firms differ from their peers on stock returns. In brief, we use abnormal returns (subtract equal-weighted annual market return with cash dividend reinvested, from the annual stock return with cash dividend reinvested) to compare the difference in stock returns between connected and non-connected firms. Therefore, this study use null hypothesis to expect that stock returns of PCFs are not different from those of non-connected firms.

3.4.2 Methodology and models

The methodology in this paper distinguishes from prior studies on political connection in many ways. First, this study calculates three forms of accounting ratios (rate, deviation rate and absolute deviation) to estimate accounting performances among PCFs and their non-connected peers. Each ratio version refers to different meanings. The rate is measured as the accounting value divided by the book value of total assets at the year end (the result is robust if the beginning value of the total assets is used instead). To control for differences in each accounting measure across industries, this study calculates the deviation by subtracting the corresponding industry mean ratios from each firm's accounting rate. This study also calculates the absolute deviation of this deviation to examine the hypothesised relation to the volatility of these ratios.

Second, this study uses T-tests and Wilcoxon tests to compare the mean (median) values of the explanatory variables for both PCFs and their non-connected counterparts. Third, this study conducts a multivariate framework by involving two steps. The first step is to apply VIF (variance inflation factors) regression methodology to detect multicollinearity in the model. If the VIF for one or more of the independent variables is greater than 10, then the variable which has the highest value of VIF will be further treated; for example, the variable will be replaced by the residual from a regression of that variable on an intercept and the other independent variables (fortunately no variable included in the study shows greater-than-10 VIF values, so in the report there is no further treatment on the multicollinearity problem). Moreover, this study uses logit regression to compare the relation between political connection and a set of independent variables for connected firms and non-connected firms. The binary logistic model is used to estimate the probability of a binary response for firm i (equal to one if the firm is politically connected and zero otherwise) based on independent variables from financial statements accounts ($\Sigma Y_{i,j,t}$) and some controlling variables of corporate governance ($\Sigma \text{control}_{i,k,t}$).

Logistic model: $\mathbf{P(Y = 1 \mid X)} = \frac{e^{X\beta}}{1+e^{X\beta}}$

Where $X\beta = \beta_0 + \sum_{j=1}^{n} \beta_j X_{i,j,t} + \sum_{k=1}^{k} \lambda_k control_{i,k,t} + \varepsilon_{m,t}$

To test hypothesis 1, this study uses

Model 1: $X\beta = \beta_0 + \Sigma \beta_j X_{i,j,t} + \sum \lambda_k control_{i,k,t} + \varepsilon_{m,t}$

Where $X\boldsymbol{\beta}$ is a dummy variable taking the value of 1 if the firm is politically connected, and otherwise 0. $\Sigma X_{i,j,t}$ denotes the accounting variable ratios from the balance sheet and income statement. Each ratio is the account balance ratio based on total assets. Beside this simple ratio, this study has also tested the industry-mean-adjusted relative deviation ratio and absolute deviation for each account, although the reported results rely on the simple rate version.

Moreover, this study includes a set of control variables related to corporate governance. $\sum control_{i,kt}$ refers to these control variables. Largest is the percentage of shares owned by the top shareholder, which is used to measure ownership concentration. State is the percentage of shares owned by the state, and dually-listed (Dually) is a dummy variable that takes the value of 1 if a firm is listed on at least two stock markets, and 0 otherwise. Board is the number of directors on the board. Independent is the percentage of independent directors. Female is the percentage of female directors. Age is the average age of directors. Edu [34] is the average educational level of directors. Background1 is the number of directors who have an accounting, law or finance background. Background2 is the number of directors who have an academic background. BMEET is the frequency of board meetings per year. Sbsize is the number of supervisory directors. SBMEET is the frequency of supervisory board meetings. Additionally, this study also measures the market performance of PCFs by using abnormal stock returns (Ar1). Ar1= R_s-R_m. R_s is the raw return of sample firms; R_m is the return of an equally-weighted market index.

In addition to logit regression analysis, this study runs the prediction analysis for model accuracy. This study categorises samples into four classifications:

r1: correct connection prediction (Predicted connected/connected);
r0: correct non-connected prediction (Predicted connected/non- connected);
e1: incorrect connection prediction (Predicted connected/connected);
e0: incorrect non-connection prediction (Predicted connected/non-connected);
The table below shows these 4 classifications:

	Connected	Non-connected
Predicted Connected	r1/(r1+e1)	e0/(r0+e0)
Predicted non-connected	e1/(r1+e1)	r0/(r0+e0)

The percentage of model accuracy is defined as the number of correct predictions relative to the total number of predictions. In the above table, the ratio of [r1/(r1+e1)] is the accuracy for the Connected sample and the ratio of [r0/(r0+e0)] is the accuracy for the Non-connected sample.

[34] Education level is the average score of the education level of the directors on the board. The value of the score is between 0 and 3: 0 means educational level is below junior degree; 1 is junior degree; 2 equals to bachelor degree; 3 refers to master degree; 4 represents PhD.

A ratio result of 50% implies a naïve prediction, suggesting no predictive power for the model. Only when these ratios are over 50% can this study conclude that the resulting model of independent variables from financial statements is helpful in predicting political connections.

3.5 Empirical analysis

3.5.1 Univariate tests

This study first uses T-tests and Wilcoxon testing for all the explanatory variables used in this paper. Table 3.2 reports the mean (median) values of the accounting-based performance measures and corporate governance for the sample of connected firms and their non-connected peers. Panels A to C of Table 3.2 refer to different rate versions (rate, deviation and absolute deviation) used to measure accounting performance, while Panel D presents the mean (median) values of corporate governance for the samples.

The first part of Panel A of Table 3.2 shows the ratios of the balance sheet accounts. Among the asset ratios, the mean (median) values of cash & cash equivalent, total current assets and net construction in progress are significantly higher in PCFs. The result is consistent with the observed higher operating revenues. The result is consistent with the expectation of hypothesis 1a.

This study also observes that the net other receivables and net investments are significantly lower in PCFs. The other receivables are reported by Jiang (2015) and further explained by Wei, Chen and Wirth (2016) as having the function of indicating cash tunnelling behaviour by the top owner-manager. The lower ratio observed for the PCFs is consistent with the expectation of hypothesis 1b.

On the liability side, operating liabilities are lower (although not significantly different), but the short-term debts are significantly higher. The result, combined with higher operating business levels (shown in higher operating revenue and higher total current assets), suggests that PCFs have more operating business credibility.

All of the differences mentioned above are consistently supportive of the observed significantly higher net profits and better interest protection multiples. These results are consistent with the expectation of hypothesis 1a. Finally, there are significantly higher retained earnings, and so less share capital as well as capital reserves are required, which is consistent with the expectation of hypothesis 1c.

All of the above significant differences are consistent with hypothesis 1 that there is a systematic difference in accounting ratios between firms with political connections and firms without such connections. In testing the princelings sample data, the PCFs perform better than their matching firms in terms of their operating level and operating profitability. The princelings type PCFs could be described using the "Golden hens" theory. These hens have the capacity to generate more income and profit; they enjoy better financial credibility. They are not "chicken" firms, and suffer less harm from cash tunnelling. Additionally, they have plenty of internal funds, as shown by the higher ratios of retained earnings. All of the differences shown in Panel A of Table 3.2 are supportive of the hypotheses, although there is no significant difference in the market-to-book ratio.

This study also tests the accounting ratios in some other forms; the deviation ratio against the industry mean (in Panel B), and the absolute value of the deviation (in Panel C). It can be observed in Panel B that a very similar pattern to that in Panel A is produced (with the only exception being that short-term debt becomes significantly lower in Panel B). This result indicates that the result of a better operating business still persists after controlling for the differences in each accounting ratio across industries.

Panel C reports the descriptive statistics for each accounting ratio in absolute deviation; the observation of a different pattern against those of Panel A and Panel B is no surprise because the absolute value of deviation is a different measure (which is volatility). For example, connected firms have lower volatility in mean (median) operating revenue and net income in comparison with non-connected firms. In either case, the difference is statistically significant at the 1% level. It can be concluded that PCFs are systematically better in operating performance, with higher incomes and profits under lower volatility. The lower volatility is true for most of the accounting ratios in Panel C, with the exception of the interest protection multiplier (IPM).

Panel D provides the mean and median values of the variables measuring ownership structure and board structure, as well as stock returns sorted by whether or not the firms are politically connected. The first and the most interesting observation is the ownership concentration measured by the "Largest" shareholder. The mean (median) value of largest ownership for connected firms is 40.56% (39.57%), which is higher than that of unconnected firms, at 38.65% (36.33%). The differences in both mean and median are statistically significant at the 1% level, supporting the conclusion that the connected firms exhibit higher ownership concentration.

Panel D also provides information about the differences in board structure and board directors. Politically connected firms have more state ownership, and both the mean and median values of state owned firms are higher at the 10% significance level, which is consistent with Cheung et al. (2005) and Faccio (2010). It is observed that the connected firms have older boards (48.62 vs. 47.96 years), and have a higher average education level in their directors (2.62 vs. 2.52). The difference in either case is statistically significant at the 1% level. Additionally, connected firms are more likely to have directors with academic backgrounds (Background2). By contrast, there is no significant difference in the proportion of directors with working experience in accounting, law and finance (Background1). All of these facts suggest that the connected firms have better (or not different) board structures, with better (or no indifferently) trained or experienced directors.

The last row in Panel D provides the comparison of market-adjusted abnormal returns (AR); both the mean and median values of the connected firms are statistically significant (at the 1% level) and higher than those without political connections, suggesting that the market is able to distinguish between the two groups of firms over time. The result is consistent with the finding in Panel A that PCFs have higher Market-to-book ratio (although the differences are not significant).

Above all, these initial findings from the univariate tests indicate that PCFs differ sharply from otherwise similar firms. In the next section, this study extends the analysis by more rigorously examining whether the evidence on these predictions will persist in a multivariate analysis.

So far, this study has tried different measures in the univariate analysis, and has found that the results for the original rate and the industry mean adjusted deviation are very close to each other. The result shown for the absolute deviation supports the difference being systematic; the PCFs sample has lower volatility. To save space, this study will report the following analysis with the original rate variables only.

Table 3:2: Univariate tests

Table 3.2 shows descriptive statistics for independent variables of 8387 firm-year observations. Our sample period starts from each firm listing year to 2011. Net investment is equal to net long-term investment+ net short-term investment. Operating liabilities are defined as notes payables +accounts payable + advance receipts+ employee benefits payable + taxes payable + other payables. Payables for special projects are generated from company undertaking special construction projects, such as the fees for the three technical items. Other operating liabilities are measured as other current liabilities + other non-current liabilities. IPM (Interest protection multiples) equal to EBIT divided by finance expenses. Market to Book is the ratio of the market value of equity (total number of shares × market price) plus the book value of debt, over to the sum of book value of total assets. We have 3 rate versions: account rate, deviation rate, and absolute deviation rate. Significance levels 0.01, 0.05 and 0.1 are noted by ***, **, *respectively.

Panel A: Account rate

This table presents descriptive statistics of variables in account ratio. Account ratios are defined as accounts divided by total assets.

Panel A: rate		connected			unconnected		T-test	Wilcoxon-Test
	Mean	Median	Std Dev	Mean	Median	Std Dev	Diff Mean	Diff Median
Cash and cash equivalents	0.183	0.145	0.141	0.175	0.136	0.145	0.008**	0.009***
Net other receivables	0.047	0.020	0.073	0.062	0.025	0.093	-0.015***	-0.005***
Total current assets	0.342	0.333	0.177	0.313	0.298	0.176	0.029***	0.035***
Net investment	0.061	0.029	0.102	0.076	0.035	0.085	-0.015***	-0.007***
Net fixed asset	0.260	0.229	0.169	0.266	0.242	0.169	-0.006	-0.013**
Net construction in Progress	0.050	0.025	0.071	0.047	0.019	0.072	0.003*	0.005***
Net intangible assets	0.040	0.024	0.052	0.042	0.025	0.053	-0.001	-0.002
Net goodwill	0.004	0.001	0.009	0.004	0.000	0.010	0.000	0.000**
Operating liabilities	0.142	0.121	0.145	0.164	0.143	0.147	-0.022	-0.022*
Short-term debts	0.234	0.198	0.123	0.230	0.193	0.139	0.004***	0.005***
Long-term debts	0.057	0.018	0.086	0.056	0.014	0.085	0.002	0.004***
Special projects	0.006	0.000	0.020	0.008	0.000	0.030	-0.003***	0.000***
Other liabilities	0.009	0.002	0.021	0.010	0.001	0.235	0.000	0.000***
Operating revenues	0.694	0.600	0.444	0.651	0.539	0.457	0.043***	0.061***
Net profit	0.055	0.051	0.074	0.039	0.040	0.089	0.016***	0.011***
IPM	7.293	4.558	21.133	5.528	3.472	18.896	1.766***	1.086***
Market to Book	2.610	2.136	1.616	2.578	2.096	1.627	0.033	0.040
Share capital	0.188	0.168	0.109	0.214	0.182	0.139	-0.026***	-0.014***
Capital reserve	0.209	0.189	0.151	0.222	0.193	0.166	-0.013***	-0.004**
Surplus reserves	0.044	0.034	0.037	0.043	0.033	0.036	0.001	0.001
Retained earnings	0.075	0.074	0.334	0.046	0.064	17.805	0.029***	0.010***
Minority interest	0.030	0.014	0.040	0.028	0.013	0.036	0.002***	0.001*

Panel B: Deviation rate

This table presents descriptive statistics of variables in deviation ratio. Deviation rate is accounts ratio (r_t) minus mean value of corresponding accounts ratio (mr_t) by year and industry, $devra_t=r_t - mr_t$.

Panel B: deviation rate	connected			unconnected			T-test	Wilcoxon-Test
	Mean	Median	Std Dev	Mean	Median	Std Dev	Diff Mean	Diff Median
Cash and cash equivalents	0.003	-0.028	0.131	-0.003	-0.034	0.136	0.006**	0.006***
Net other receivables	-0.007	-0.016	0.065	0.007	-0.013	0.082	-0.014***	-0.003***
Total current assets	0.014	0.007	0.160	-0.014	-0.030	0.162	0.028***	0.037***
Net investment	-0.007	-0.036	0.082	0.007	-0.031	0.097	-0.014***	-0.005***
Net fixed assets	-0.001	-0.027	0.152	0.004	-0.018	0.151	-0.005	-0.009*
Net construction in Progress	0.001	-0.019	0.063	-0.002	-0.023	0.064	0.003**	0.005***
Net intangible assets	-0.001	-0.016	0.050	0.001	-0.014	0.051	-0.002	-0.002**
Net goodwill	0.000	-0.002	0.009	0.000	-0.002	0.009	0.000	0.000***
Operating liabilities	0.001	-0.024	0.137	-0.002	-0.028	0.138	0.003	0.004
Short-term debts	-0.003	-0.030	0.102	0.017	-0.011	0.114	-0.020***	-0.020***
Long-term debts	0.001	-0.032	0.082	-0.001	-0.033	0.081	0.002	0.001*
Special projects	-0.001	-0.006	0.019	0.001	-0.006	0.027	-0.002***	0.000
Other liabilities	0.000	-0.006	0.021	0.000	-0.006	0.022	0.000	0.000*
Operating revenues	0.018	-0.055	0.406	-0.020	-0.106	0.424	0.038***	0.051***
Net profit	0.008	0.007	0.070	-0.008	-0.003	0.083	0.015***	0.010***
IPM	0.870	-1.606	20.790	-0.885	-2.541	18.615	1.755***	0.934***
Market to Book	0.013	-0.285	1.375	-0.022	-0.304	1.373	0.035	0.019
Share capital	-0.013	-0.035	-0.013	0.012	-0.021	0.012	-0.024***	-0.014***
Capital reserve	-0.006	-0.027	-0.006	0.006	-0.024	0.006	-0.012***	-0.003**
Surplus reserves	0.000	-0.009	0.035	0.000	-0.010	0.034	0.001	0.001*
Retained earnings	0.014	0.021	0.119	-0.014	0.011	0.139	0.028***	0.009***
Minority interest	0.001	-0.013	0.039	-0.001	-0.014	0.035	0.002***	0.000

Panel C: Absolute deviation rate

This table presents descriptive statistics of variables in change ratio. Absolute Deviation Rate is the absolute value of the deviation rate, abr_t=abs ($devr_t$).

Panel C: absolute deviation	connected			unconnected			T-test	Wilcoxon-Test
	Mean	Median	Std Dev	Mean	Median	Std Dev	Diff Mean	Diff Median
Cash and cash equivalents	0.100	0.079	0.087	0.105	0.085	0.088	-0.005***	-0.006***
Net other receivables	0.042	0.026	0.053	0.051	0.030	0.070	-0.009***	-0.003***
Total current assets	0.131	0.111	0.098	0.132	0.111	0.110	-0.001	0.000
Net investment	0.060	0.050	0.058	0.069	0.053	0.071	-0.009***	-0.003***
Net fixed assets	0.126	0.109	0.093	0.125	0.106	0.095	0.001	0.003
Net construction in Progress	0.044	0.033	0.050	0.046	0.035	0.051	-0.002	-0.002***
Net intangible assets	0.034	0.027	0.037	0.034	0.026	0.039	0.000	0.001
Net goodwill	0.005	0.002	0.007	0.005	0.002	0.008	0.000	0.000
Operating liabilities	0.107	0.088	0.088	0.106	0.086	0.093	0.001	0.002
Short-term debts	0.095	0.082	0.075	0.105	0.092	0.083	-0.011***	-0.011***
Long-term debts	0.060	0.048	0.058	0.060	0.048	0.056	0.000	0.000*
Special projects	0.009	0.007	0.018	0.012	0.007	0.027	-0.003***	0.000*
Other liabilities	0.012	0.007	0.017	0.012	0.007	0.019	-0.001	0.000
Operating revenues	0.298	0.225	0.282	0.318	0.248	0.284	-0.021***	-0.023***
Net profit	0.046	0.030	0.054	0.053	0.030	0.066	-0.007***	-0.001**
IPM	14.018	6.290	15.481	12.319	5.948	14.065	1.699***	0.341***
Market to Book	0.964	0.679	0.996	0.950	0.678	1.010	0.014	0.001
Share capital	0.081	0.067	0.071	0.093	0.069	0.098	-0.013***	-0.002**
Capital reserve	0.114	0.100	0.088	0.124	0.102	0.101	-0.010***	-0.003***
Surplus reserves	0.025	0.019	0.921	0.025	0.020	1.018	-0.001	-0.001***
Retained earnings	0.083	0.051	0.026	0.095	0.054	0.025	-0.012***	-0.002***
Minority interest	0.029	0.023	0.027	0.027	0.023	0.023	0.002***	0.000

Panel D: corporate governance and market performance.

This table presents descriptive statistics for corporate ownership structure, board characteristics and other firm specific information.

Ownership structure: Largest is the proportion of shares owned by largest shareholder; state is the proportion of shares owned by government; dually is a dummy variable with value of 1 if firms have B- or H- shares.

Board structure:

Board is the number of directors on the board in calendar year; Independent is the proportion of independent directors on the board; Female is the percentage of female directors on the board; Background 1 is the percentages of directors on the board who have background of accounting, law, or finance. Background 2 is the percentage of directors on the board who have working experience in university or research institutions; Edu (director education level) is the average score of the education level of the directors on the board. The value of the score is between 0 and 3: 0 means educational level is below junior degree; 1 is junior degree; 2 equals to bachelor degree; 3 refers to master degree; 4 represents PhD; Age is the average age of directors on the board.; BMEET (Board meeting) is the number of board meetings per year.

Supervisory structure:

Sbsize (Supervisory size) is the number of members on the supervisory board; SBMEET (Supervisory meeting) is the number of meetings of the supervisory board annually.

Market performance:

AR1 is annual market-adjusted abnormal return, R_s-R_m. R_s is the annual return of sample firms (with reinvestment of cash dividends); R_m is the annual market return of either the Shanghai A-share or Shenzhen A-share (equally weighted).

Panel D: corporate governance		connected			unconnected		T-test	Wilcoxon-Test
ownership structure	Mean	Median	Std Dev	Mean	Median	Std Dev	Diff Mean	Diff Median
Largest	40.564	39.570	16.038	38.651	36.330	16.856	1.913***	3.240***
State	0.272	0.258	0.256	0.260	0.215	0.260	0.012*	0.042**
Dully	0.079	0.000	0.270	0.073	0.000	0.260	0.006	0.000
Board	9.446	9.000	2.180	9.241	9.000	2.156	0.206***	0.000***
Independent	0.289	0.333	0.139	0.289	0.333	0.139	0.000	0.000
Female	0.098	0.100	0.104	0.099	0.091	0.108	-0.001	0.009
Age	48.615	48.455	4.221	47.957	48.000	4.084	0.658***	0.455***
Edu	2.615	2.600	0.643	2.518	2.571	0.624	0.097***	0.029***
Background1	0.671	0.667	0.308	0.680	0.667	0.311	-0.009	0.000
Background2	0.585	0.571	0.357	0.559	0.500	0.357	0.025**	0.071***
BMEET	8.251	8.000	3.635	8.296	8.000	3.746	-0.046	0.000
Sbsize	4.058	3.000	1.338	3.981	3.000	1.223	0.078**	0.000
SBMEET	4.112	4.000	1.737	4.047	4.000	1.715	0.065	0.000
AR1	0.058	-0.029	0.491	0.009	-0.063	0.534	0.049***	0.035***

3.5.2 Pair-wise correlation test

Before conducting the regression analysis, this study needs to consider the influence of any multicollinearity problem. This study starts by calculating the correlation coefficients for all accounting ratio variables; the results are shown in Table 3.3. The correlation coefficients that are significant at the 1% level are highlighted in boldface in the table. Most of the coefficient values of any two variables are lower than 0.45, but there are a couple of exceptions; the net fixed assets and the total current assets are significantly correlated, with the coefficient value of -0.49, and the net profits are highly correlated to the retained earnings, with a coefficient value of 0.63.

This study finds that it might be important to control for multicollinearity. After the VIF regressions, multicollinearity does not seem to be a problem in the model since the maximum variance inflation factor is no greater than 5.6 and the coefficients for most highly correlated variables (Net fixed assets, Total current assets and Net profit) show strong significance in the regression, which indicates that the identification problem is not serious. Although the coefficient for the Retained earnings is not significant, this study will retain the caution that it might be influenced by a multicollinearity problem. Considering the possible side effects of removing the identification problem, this study retains the original variables as unchanged, which is the method applied in all of the following analyses.

Table 3:3: Correlation matrix

This table reports the Pearson correlation coefficients between accounts ratios of variables from the balance sheet. The variables' definitions can be found in Table 2. There are a total of 8387 firm-year observations. Boldface indicates statistical significance at the 1% level.

	Cash	Net other receivables	Total current assets	Net investment	Net fixed assets	Net construction in Progress	Net intangible assets	Net goodwill	Operating liabilities	Short-term debts	Long-term debts	Special projects	Other liabilities	Operating revenues	Net profit	IPM	Market to Book	Share capital	Capital reserve	Surplus reserves	Retained earnings	Minority interest
Cash and cash equivalents	1.00																					
Net other receivables	**-0.25**	1.00																				
Total current assets	**-0.15**	**-0.19**	1.00																			
Net investment	**-0.14**	**0.10**	**-0.23**	1.00																		
Net fixed assets	**-0.37**	**-0.11**	**-0.49**	**-0.22**	1.00																	
Net construction in Progress	**-0.17**	**-0.04**	**-0.24**	**-0.09**	**0.04**	1.00																
Net intangible assets	**-0.15**	0.02	**-0.23**	**-0.05**	**0.08**	-0.02	1.00															
Net goodwill	**-0.05**	**0.07**	**-0.14**	**0.04**	**0.04**	**0.06**	0.01	1.00														
Operating liabilities	**-0.08**	**0.09**	**0.38**	-0.09	**-0.24**	**-0.18**	0.01	-0.02	1.00													
Short-term debts	**-0.34**	**0.30**	**0.03**	**0.02**	**0.09**	0.00	**0.08**	**0.03**	-0.02	1.00												
Long-term debts	**-0.25**	**-0.06**	**-0.12**	**-0.04**	**0.25**	**0.28**	0.02	0.01	**-0.15**	**-0.05**	1.00											
Special projects	**-0.08**	**0.25**	**-0.13**	**0.13**	-0.01	-0.03	**0.08**	0.00	**0.18**	**0.17**	0.00	1.00										
Other liabilities	**-0.06**	**0.13**	**-0.05**	**0.03**	0.00	0.00	**0.06**	0.00	**0.04**	**0.06**	**0.04**	**0.13**	1.00									
Operating revenues	**0.07**	**-0.20**	**0.26**	**-0.17**	**-0.06**	**-0.11**	**-0.04**	**0.04**	**0.32**	**-0.05**	**-0.20**	**-0.10**	**-0.04**	1.00								
Net profit	**0.30**	**-0.33**	**0.08**	**-0.06**	**-0.12**	0.00	**-0.09**	0.00	**-0.12**	**-0.42**	**-0.11**	**-0.23**	**-0.11**	**0.22**	1.00							
IPM	**-0.09**	**-0.05**	**0.08**	**0.00**	0.01	0.03	0.01	-0.01	0.01	**-0.05**	0.00	**-0.03**	-0.01	**0.09**	**0.20**	1.00						
Market to Book	**0.21**	**0.07**	**-0.11**	**0.03**	**-0.12**	**-0.08**	**0.07**	0.01	-0.01	**-0.12**	**-0.20**	**0.10**	0.02	**-0.06**	**0.18**	-0.02	1.00					
Share capital	**-0.07**	**0.27**	**-0.20**	**0.10**	**0.05**	**-0.07**	**0.12**	0.01	0.00	0.02	**-0.20**	**0.25**	0.02	**-0.14**	**-0.12**	-0.02	**0.45**	1.00				
Capital reserve	**0.29**	**0.08**	**-0.31**	**0.05**	-0.01	**0.04**	0.01	0.00	**-0.23**	**-0.22**	**-0.18**	**0.09**	-0.01	**-0.24**	**-0.16**	**-0.08**	**0.17**	**0.15**	1.00			
Surplus reserves	**-0.03**	**0.06**	**-0.15**	**0.13**	**0.09**	**-0.05**	0.02	0.04	**-0.05**	**-0.14**	**-0.17**	**0.08**	0.00	0.00	**0.08**	0.03	**0.14**	**0.25**	**0.07**	1.00		
Retained earnings	**0.29**	**-0.39**	**0.10**	**-0.09**	**-0.07**	0.02	**-0.15**	**-0.04**	**-0.27**	**-0.41**	**-0.06**	**-0.32**	**-0.11**	**0.18**	**0.63**	**0.11**	**-0.01**	**-0.41**	**-0.28**	0.02	1.00	
Minority interest	**-0.06**	-0.03	-0.02	**0.09**	**0.01**	**-0.03**	**0.11**	**0.04**	-0.01	**0.05**	0.01	0.00	-0.01	0.02	0.00	0.01	**-0.11**	**-0.13**	**-0.19**	**-0.04**	**-0.04**	1.00

3.5.3 Regressions

3.5.3.1 Logistic regression results

As discussed in section 3.4.2, this study applies logit regression to examine the probabilities describing the possible relationship between the dependent variable of political connection and the series of independent variables of accounting performance. The dependent variable takes the value of one when a firm has political connections and zero otherwise. On the right side of the regression, this study includes the following variables of operating a business; cash and cash equivalents, net other receivables, total current assets, net fixed assets, other variables of net investment, net construction in progress, net intangible assets, net goodwill, operating liabilities, short-term debts, long-term debts, payables for special projects, other liabilities, operating revenues, net profit, IPM(interest protection multiple), market to book, share capital, capital reserves, surplus reserves, retained earnings, and minority interest. Before running the regressions, all of the independent variables are winsorised at the 1^{st} and 99^{th} percentiles.

Table 3:4: Political connections and accounting based numbers

This table presents the logistic regression results of the relationship between political connections and corporate governance. The dependent variable in this table is political connection, and equals 1 if the firm is politically connected (zero otherwise). Robust t-statistics are in parentheses. Significance levels 0.01, 0.05 and 0.1 are noted by ***, **, * respectively (The accounting ratios are based on total assets).

	1	2	3	4	5	6
Intercept	0.557***	0.457**	0.279	0.491**	0.614***	-0.300
	(3.38)	(2.47)	(0.49)	(2.43)	(3.67)	(-0.49)
Cash and cash equivalents	-0.592***	-0.669***	-0.244	-0.595***	-0.596***	-0.126
	(-3.77)	(-3.72)	(-0.88)	(-3.10)	(-3.46)	(-0.41)
Net other receivables	-0.961***	-0.907***	-0.544	-0.698**	-0.890***	-0.424
	(-4.02)	(-3.32)	(-1.06)	(-2.29)	(-3.62)	(-0.81)
Total current assets	1.526***	1.458***	1.661**	1.418***	1.315***	1.062
	(3.43)	(2.90)	(2.04)	(2.76)	(2.80)	(1.18)
Net investment	-1.459***	-1.522***	-1.330***	-1.472***	-1.527***	-1.281***
	(-7.75)	(-7.11)	(-3.64)	(-6.41)	(-7.82)	(-3.41)
Net fixed assets	-0.429***	-0.464***	-0.056	-0.473***	-0.465***	-0.058
	(-3.64)	(-3.46)	(-0.25)	(-3.34)	(-3.82)	(-0.25)
Net construction in Progress	-0.287	-0.594**	-0.025	-0.558*	-0.251	-0.289
	(-1.21)	(-2.04)	(-0.05)	(-1.74)	(-1.00)	(-0.55)
Net intangible assets	-0.294	-0.132	-0.789	-0.060	-0.259	-0.656
	(-0.95)	(-0.38)	(-1.46)	(-0.16)	(-0.82)	(-1.15)
Net goodwill	0.894	2.220	4.485	3.886*	0.809	4.050
	(0.58)	(1.18)	(1.47)	(1.85)	(0.51)	(1.28)
Operating liabilities	-0.055	-0.032	-0.047	-0.122	-0.154	-0.150
	(-0.29)	(-0.16)	(-0.12)	(-0.57)	(-0.80)	(-0.36)
Short-term debts	-0.696***	-0.696***	-1.063***	-0.737***	-0.766***	-1.028**
	(-3.51)	(-3.27)	(-2.54)	(-3.28)	(-3.79)	(-2.37)
Long-term debts	-0.250	-0.357	-0.659	-0.425	-0.362	-0.841
	(-0.96)	(-1.25)	(-1.24)	(-1.42)	(-1.37)	(-1.55)
Payable for special projects	0.824	0.659	-0.193	0.633	0.659	0.182
	(1.13)	(0.86)	(-0.13)	(0.79)	(0.90)	(0.12)
Other liabilities	0.451	1.332	-0.751	2.308**	0.450	-1.221
	(0.62)	(1.53)	(-0.52)	(2.45)	(0.60)	(-0.81)
Operating revenues	-0.004	-0.003	-0.159**	-0.002	0.013	-0.164**
	(-0.10)	(-0.07)	(-2.13)	(-0.05)	(0.30)	(-2.10)
Net profit	1.107***	0.846**	0.581	0.976***	1.052***	0.559
	(3.54)	(2.42)	(0.93)	(2.66)	(3.29)	(0.86)
IPM	0.002**	0.002*	0.003*	0.002**	0.002**	0.002
	(2.48)	(1.72)	(1.88)	(2.33)	(1.98)	(1.45)
Share capital	-1.076***	-0.976***	-1.354***	-0.938***	-1.169***	-1.457***
	(-4.97)	(-4.10)	(-3.03)	(-3.73)	(-5.18)	(-3.06)
Capital reserve	-0.224	-0.174	-0.818**	-0.138	-0.203	-0.940**
	(-1.24)	(-0.89)	(-2.15)	(-0.67)	(-1.10)	(-2.34)
Surplus reserves	1.196**	1.169**	-1.093	0.584	1.175**	-0.948
	(2.52)	(2.13)	(-1.18)	(1.01)	(2.38)	(-0.96)
Retained earnings	-0.014	0.094	-0.238	0.118	-0.061	-0.390
	(-0.05)	(0.34)	(-0.46)	(0.41)	(-0.23)	(-0.72)
Minority interest	1.001**	1.632***	2.631***	1.491***	1.084**	2.790***
	(2.32)	(3.34)	(3.20)	(2.93)	(2.46)	(3.26)
Market to Book	0.040***	0.036***	0.073***	0.035**	0.043***	0.082***
	(3.34)	(2.76)	(3.48)	(2.43)	(3.18)	(3.35)
Largest		0.002*				0.009***

		(1.68)				(4.18)
state		0.086				-0.050
		(1.05)				(-0.33)
dully		-0.079				-0.069
		(-1.15)				(-0.68)
board			0.004			0.000
			(0.28)			(0.01)
independent			-1.082**			-0.745
			(-2.21)			(-1.44)
female			-0.418			-0.054
			(-1.56)			(-0.19)
age			0.013*			0.008
			(1.79)			(1.05)
edu			0.105**			0.090
			(2.03)			(1.63)
background1			-0.175			-0.101
			(-1.63)			(-0.85)
background2			0.223**			0.300***
			(2.15)			(2.69)
BMEET			-0.012			-0.009
			(-1.51)			(-1.01)
Sbsise				0.023		0.073***
				(1.56)		(2.85)
SBMEET				-0.005		0.010
				(-0.44)		(0.55)
AR1					0.017	-0.023
					(0.65)	(-0.57)
Politically connected	57.7%	60%	62.29%	59.59%	60.35%	62.82%
Politically non-connected	55.27%	55.27%	55.51%	55.84%	55.98%	60.20%

Table 3.4 presents the results of the logistic regressions of political connection on accounting performance and corporate governance for the total samples. This study reports the results of the regressions on accounting ratios based on the total assets in Model 1 and adds corporate governance and other control variables in Models 2-6. For the first group of variables of asset accounts, it can be observed that connected firms have significantly lower cash and cash equivalents, net other receivables, net investments and net fixed assets. However, total current assets are positively related to political connections. The coefficients of these variables are all negative and most are highly statistically significant at the 1% level.

On the liability side, it can be seen that all of the operating liabilities are negative, but none are statistically significant. It can also be seen that connected firms have both less long-term and less short-term debt, but this is only significant for the short-term debts (mostly at the 1% level). As for business revenue and incomes, it can be seen that the operating revenues are mostly negative (2 out of 6 are significant at the 5% level). Again there are significantly (4 out of 6 regressions) positive net profits and significantly positive interest protection multiplies (IPM).

These findings are generally consistent with the results in the preliminary test presented in Table 3.2. Although there are some differences, such as the operating revenues and operating liabilities being negative, stronger positive coefficients in net profits and total current assets consistently indicate that the PCFs have better operating business performance. They also display better production efficiency with less fixed assets. The connected firms are, on average, generating more revenue (Table 3.2) and higher net profits (Table 3.2 and Table 3.4). The negative operating revenue shown in Table 3.4 could possibly be due to a multicollinearity problem; it is highly correlated with many operating business variables (such as Total current assets and Net profits), and some other non-operating variables.

To check the accuracy of the logistic regression model, we check the model accuracy prediction, as reported in Table 3.4. It shows that regardless of which rate version is used, our model has more than 50% ability in predictions for both PCFs and politically unconnected firms.

In Table 3.4 the significantly negative coefficients of net other receivables confirm that PCFs are less likely to conduct cash tunnelling. It is interesting to note that the variable of net other receivables is highly correlated with retained earnings, with a coefficient of -0.39 (shown in Table 3.3). However, the coefficients of net other receivables in the regressions are strongly significant in most of the regressions shown in Table 3.4.

Another important difference between Table 3.2 and Table 3.4 is the variable of retained earnings. On average, the connected firms maintain higher ratios (1% significance in Table 3.2), but after controlling for other accounting ratios, the coefficients turn to having no significance (at any conventional level). The authors think this is caused by a multicollinearity problem. It can be seen that the variable of retained earnings is highly correlated with a few of the other ratios (net other receivables at -0.39, short-term debts at -0.41, net profits at 0.63, and share capital at -0.41). Retained earnings are actually the accumulation of many operating and non-operating results. Therefore, it seems true that the relation between retained earnings and the dependent variable is dominated by the relatedness of through multicollinearity to many other variables included in the regressions.

The last result is in regards to the share capital, with systematic lower ratios (at the 1% significance level) for the connected firms, indicating less original investment from stockholders. The result is consistent with the hypothesis of higher (historical) operating profits; for a similar size of total assets, less share capital is required because these firms have more internal funding.

In addition, all the coefficients of market-to-book ratio in Table 3.4 are shown to be significantly positively correlated to political connection. Although the market-to-book ratio has a significant correlation with share capital (at 0.45 in Table 3.3), the coefficients of share capital are negatively significant at the 1% level, indicating there is no serious identification problem between them.

As for the control variables related to ownership structure, the results in Table 3.4 show that the coefficients of ownership concentration measured by “largest” (in Models 3 and 6) are significantly positively related (10% and 1%) to political connections. This is consistent with Fan et al. (2007). Furthermore, for the control variables of board

characteristics, Table 3.4 shows that the connected board directors are older (Age) and have more academic education background (Background2). All of these are consistent with the findings shown in the univariate test reported in Table 3.2. The remaining variables are not particularly significant in explaining political connections.

To check the power of the logit regression model, instead of examining some indicative econometric statistics, this study uses prediction accuracy. There are two measures; one is the ratio of correct prediction among politically connected firms, and the other is the ratio of correct prediction among politically non-connected firms. The result is reported in the last two rows of Table 3.4. It can be seen from the table that all of the right prediction ratios are above 55%, which is well above the no explanation ratio of 50%.

The logit regression results are generally supportive of the hypothesis that PCFs have a systematically different pattern of accounting ratios (Hypothesis 1). In particular, these firms have managed operating businesses with higher business turnover and lower fixed assets investment. As a result, they show higher net profits (Hypothesis 1a). Additionally, these firms suffer less cash tunnelling (Hypothesis 1b) and so they have more net profits and thereby have more internal funds available for growth (Hypothesis 1c). In terms of the "Golden hens" vs. "Chicken" theory these results show strong evidence that connected firms are "Golden hens".

3.5.3.2 OLS regression results

This section tests the relation between the political connection and proxies for firm operating performance, tunnelling activities, and dividend payments, by applying the ordinary-least-squares (OLS) regressions.

Table 3.5 shows the results of the OLS regressions on the relationship between the dependent variables of interest and political connection for the total sample. Hypothesis 1a is supported by the observed significantly higher net profits in PCFs than unconnected firms. The coefficient is 0.008, which is statistically significant at the 1% level. Furthermore, in the regression with net other receivables as dependent variable, it can be seen that connected firms are associated with lower net other receivables. The coefficient

is -0.006, significant at the 5% level. This result is consistent with hypothesis 1b that PCFs have lower risk of tunneling through operating activities. Additionally, Table 3.5 shows that dividends are negatively related to political connection, while retained earnings are positively related to political connections. The coefficients are -0.001 and 0.13, respectively, both are significant at conventional levels. These results support hypothesis 1c that PCFs will pay lower dividends and thereby maintain a higher proportion of retained earnings on the balance sheet. Overall, the results reported in Table 3.5 support hypotheses 1a to 1c.

Table 3:5: OLS regressions explaining Hypothesis 1a to 1c

This table presents the OLS regression results of the relationship between political connections and some dependent variables: revenues, net profits, net other receivables, dividends, retained earnings. All the dependent variables are the ratios to total assets. The dummy PC equals1if the firm is politically connected (zero otherwise). Robust t-statistics are in parentheses. Significance levels 0.01, 0.05 and 0.1 are noted by ***,**,* respectively.

	Hypothesis 1a		Hypothesis 1b	Hypothesis 1c	
	Revenues	Net profits	Net other receivables	Dividends	Retained
Intercept	-0.786***	-0.362***	0.422***	-0.088***	-0.797***
	(-4.19)	(-14.15)	(14.67)	(-10.32)	(-17.67)
PC	0.008	0.008***	-0.006**	-0.001**	0.013**
	(0.45)	(3.25)	(-2.36)	(-1.98)	(3.17)
Leverage	0.109***	-0.148***	0.120***	-0.033***	-0.339***
	(2.92)	(-29.31)	(21.17)	(-19.22)	(-38.14)
Size	0.019**	0.019***	-0.015***	0.004***	0.041***
	(2.16)	(15.18)	(-10.54)	(8.61)	(18.84)
Largest	0.000	0.000	0.000**	0.000***	0.000
	(0.48)	(0.61)	(-2.43)	(4.04)	(-0.18)
MB	-0.008	0.012***	-0.001	0.003***	0.009***
	(-1.52)	(16.62)	(-1.35)	(13.33)	(7.08)
Board	-0.009	0.013**	-0.007	0.007***	0.015
	(-0.21)	(2.22)	(-1.05)	(3.49)	(1.52)
Age	0.016***	0.000	-0.004*	-0.001	0.009**
	(6.99)	(-0.19)	(-1.92)	(-0.84)	(2.55)
Education	0.067***	0.002	-0.107***	-0.007	0.027
	(4.47)	(1.11)	(-5.90)	(-1.29)	(0.94)
Independent	0.108	0.003	-0.001***	0.000***	0.001**
	(0.92)	(0.17)	(-2.87)	(3.55)	(2.13)
Background	0.000	0.012***	0.007	0.003**	-0.007
	(0.00)	(2.57)	(1.27)	(1.99)	(-0.89)
N	2463	2466	2466	2344	2468
R-squared	0.05	0.38	0.35	0.36	0.45

3.6 Robustness tests

In this section, this study performs several tests to assess the robustness of the primary findings reported above. It extends the analysis to examine how the relation with accounting information changes; (1) in different industries, and (2) over different sub-periods of time.

3.6.1 Tests on different industries

This study considers whether the influences of political connections vary among different industries by dividing the firms into five subsamples according to their industry sector. Table 3.6 reports the regression results.

At the first glance, Table 3.6 shows that separating the sample by industry weakens the significance of accounting variables in regressions. However, it can still be seen that there is a strong relation in two major industries: Industrials and Conglomerates. These two sectors make up more than 80% of the sample firms (shown in Table 3.1). From these sectors, it can be seen that there is a strong positive coefficient in Net profits and strong negative coefficient in Net other receivables. Although no higher Retained earnings ratios are seen in these industries, the average ratios are higher (not reported here). This study interprets this as being caused by the multicollinearity problem. The strong positive Net profits and strong negative Net fixed assets results are consistently supportive of the outstanding operating performance in production efficiency and profitability. Moreover, the owner tendency for tunnelling shown in the Net other receivables further explains the higher reported net profits. Although there is no predicted relation shown in the industries of Utilities and Property, a problem is caused by the small sample size. The performance of the Commerce industry also shows a strong positive result in Net profits. It can be concluded that the proposed hypotheses are robust at the industry level.

Table 3:6: Political connections among different industries

The dependent variable in this table is political connections, which equals 1 if the firm is politically connected (zero otherwise). Robust t-statistics are in parentheses. Significance levels 0.01, 0.05 and 0.1 are noted by ***, **, * respectively.

rate	Utilities	Properties	Conglomerates	Industrial	Commerce
Intercept	0.991	0.912	0.623	0.849***	1.056
	(1.58)	(1.16)	(1.62)	(3.17)	(0.90)
Cash and cash equivalents	0.521	-2.785***	-1.363**	-0.773***	0.808
	(0.81)	(-3.46)	(-3.70)	(-3.47)	(1.32)
Net other receivables	0.509	-0.932	-2.473***	-0.978***	1.194
	(0.54)	(-1.08)	(-4.75)	(-2.73)	(1.04)
Total current assets	2.241*	-0.736	3.894***	1.421*	2.195
	(1.89)	(-0.44)	(4.07)	(1.79)	(1.19)
Net investment	-0.544	-0.966	-1.697***	-1.934***	-0.380
	(-0.76)	(-1.25)	(-4.02)	(-7.00)	(-0.50)
Net fixed assets	-0.277	-0.342	-0.758**	-0.525***	0.507
	(-0.58)	(-0.53)	(-2.22)	(-2.90)	(1.16)
Net construction in Progress	-0.271	1.689	-1.313**	-0.385	2.058***
	(-0.30)	(1.23)	(-2.27)	(-1.11)	(2.66)
Net intangible assets	3.756***	2.493	-0.979	-0.530	-1.299
	(3.60)	(1.46)	(-1.45)	(-1.13)	(-1.09)
Net goodwill	32.386***	-10.914*	4.642	-5.373*	-3.795
	(4.11)	(-1.65)	(1.16)	(-1.69)	(-1.23)
Operating liabilities	-1.098	-0.318	-0.210	-0.193	0.076
	(-1.48)	(-0.34)	(-0.52)	(-0.66)	(0.07)
Short-term debts	-1.471*	-0.208	-1.666***	-0.714**	-1.201
	(-1.87)	(-0.22)	(-3.66)	(-2.32)	(-0.91)
Long-term debts	-2.746***	-0.734	1.726***	-0.327	-1.941
	(-2.96)	(-0.71)	(2.67)	(-0.83)	(-1.23)
Special payables	7.068**	-5.615	1.732	-1.170	14.314**
	(1.98)	(-1.43)	(0.95)	(-1.15)	(2.45)
Other liabilities	1.246	-2.996	3.185*	1.778*	-15.000***
	(0.52)	(-1.05)	(1.75)	(1.65)	(-4.63)
Operating revenues	0.019	0.167	0.074	-0.065	-0.028
	(0.06)	(0.71)	(0.73)	(-1.19)	(-0.22)
Net profit	-0.210	-0.060	2.566***	0.838**	3.232**
	(-0.17)	(-0.04)	(3.54)	(2.00)	(2.08)
IPM	0.012***	-0.002	0.002	0.002**	-0.002
	(3.94)	(-0.83)	(1.30)	(2.07)	(-0.60)
Market to Book	-0.020	0.042	0.060**	0.041***	-0.092
	(-0.41)	(0.61)	(2.32)	(2.59)	(-1.60)
Share capital	-0.761	-1.256	-1.984***	-0.919***	-1.049
	(-0.92)	(-1.21)	(-3.90)	(-2.83)	(-0.80)
Capital reserve	-1.607**	-1.235	0.930**	-0.671**	-0.423
	(-2.53)	(-1.22)	(2.28)	(-2.40)	(-0.35)
Surplus reserves	0.689	5.000**	4.698***	-0.026	-6.993***
	(0.35)	(2.20)	(4.07)	(-0.04)	(-3.11)
Retained earnings	-1.188	-1.603	-0.844	0.173	-2.360
	(-1.37)	(-1.12)	(-1.42)	(0.46)	(-1.50)
Minority interest	-3.481**	2.009	3.722***	1.542***	-5.713***
	(-2.12)	(0.95)	(3.43)	(2.60)	(-2.93)
Politically connected	59.08%	71.46%	65.71%	61.40%	69.57%
Politically non-connected	72.65%	54.09%	55.91%	54.05%	65.04%

A casual glance at Table 3.6 suggests that separating the sample by industries weakens the significance of the accounting variables, there are further noticeable findings among industries. At first, regardless of what industry a firm belongs, net other receivables, net investment, short-term debts and share capital are negatively associated with political connections, which is consistent with the results for the full samples in Table 3.4. Second, we find that connected firms from Utilities and Commerce have significantly higher payables for special projects. However, firms from Commerce use greater long-term debt than others. These findings suggest only a portion of connected firms more easily attract subsidies from government or bank loans. Third, we can observe that firms from Conglomerates and Industries show similar a pattern of findings relative to the full sample in Table 3.4. Also, the results for these two industries are more robust compared to other industries.

The evidence that PCFs perform differently across industries is due to a number of possible interpretations. One possibility is that politicians prefer these firms which have such characteristics of accounting numbers. A second is that political connections cause these differences. A third is that our sample is unevenly distributed over time, which leads to these differences.

3.6.2 Tests on sub-period

The Chinese stock exchange has expanded rapidly since the 1990s. For instance, the Shenzhen stock exchange was approved by the China Securities Regulatory Commission to launch small and medium enterprises (SME) to improve the institutional environment. The rapid development of the stock market contributes to the reform of the investment system, accounting system and privatisation initiatives. Furthermore, to standardise the disclosure practice, the required content and format of annual reports has been revised many times since 2004. In addition, as this study shows in the distribution of political firms in Table 3.1, 2005 is a turning point. Hence it is possible that the differences in accounting information between PCFs and their controlled peers may change across the sample period. Accordingly, this study attempts to shed some light on this by examining two sub-periods, 1992 to 2004, and 2005 onwards, using the logistic model. The results are reported in Table 3.7.

The results of the regressions on the sub-periods in Table 3.7 are supportive of the main finding that connected firms have higher total current assets and less fixed assets, while generating higher net profits. Moreover, as shown in Table 3.7, connected firms have lower Net other receivables, Net investments and Short-term debts in both sub-periods. However, some changes are also obvious. For example, the coefficients of Net fixed assets and Net profits are stronger in the later period, from 2005 to 2011, than the former sub-period from, 1992 to 2004. Additionally, when this study calculates the prediction accuracy for both sub-periods, the result is that three are above 55% and one is 51%. This again verifies that the model has reasonably good predictive ability.

The above univariate tests and regression models are all statistical methods with a sample of data across time periods; the conclusions are made through logical statistical deduction.

Table 3:7: Political connections in the sub-period during 1992-2004 and 2005-2011

This table shows logistic regression results of the relationship between political connections and accounting information in two subsample period 1992-2004 and 2005-2011. The dependent variable in this table is political connection, which equals 1 if the firm is politically connected (zero otherwise). Robust t-statistics are in parentheses. Significance levels 0.01, 0.05 and 0.1 are noted by ***, **, *respectively.

Variable	1992-2004	2005-2011
Intercept	0.459	0.330*
	(1.23)	(1.70)
Cash and cash equivalents	-0.818***	-0.501**
	(-3.15)	(-2.46)
Net other receivables	-1.251***	-0.721*
	(-3.71)	(-1.83)
Total current assets	3.437***	0.819
	(3.48)	(1.58)
Net investment	-2.024***	-1.059***
	(-6.82)	(-4.23)
Net fixed assets	-0.281	-0.575***
	(-1.43)	(-3.76)
Net construction in Progress	-0.483	0.087
	(-1.41)	(0.24)
Net intangible assets	-0.703	-0.103
	(-1.25)	(-0.27)
Net goodwill	-1.055	3.536
	(-0.51)	(1.47)
Operating liabilities	0.356	-0.004
	(0.86)	(-0.02)
Short-term debts	-0.722*	-0.367
	(-1.74)	(-1.52)
Long-term debts	-0.265	0.008
	(-0.52)	(0.02)
Special projects	1.007	0.452
	(0.58)	(0.53)
Other liabilities	-2.591*	1.777**
	(-1.90)	(1.97)
Operating revenues	-0.061	0.037
	(-0.90)	(0.73)
Net profit	1.246**	1.312***
	(2.12)	(3.40)
IPM	0.001	0.003***
	(0.76)	(2.75)
Market to Book	0.012	0.050***
	(0.55)	(3.36)
Share capital	-0.373	-1.193***
	(-0.82)	(-4.53)
Capital reserve	0.197	-0.193
	(0.50)	(-0.91)
Surplus reserves	2.519***	0.654
	(3.28)	(0.98)
Retained earnings	-1.118**	0.347
	(-2.03)	(1.16)
Minority interest	0.381	1.765***
	(0.48)	(3.27)
Politically connected	62.325	66.81%
Politically non-connected	51.27%	56.57%

The results of Table 3.7 show that more variables are associated with significant relations in the second sub-sample period from 2005 to 2011. Although we undertake no statistical testing of differences between the two sub-sample periods, the results imply that the performance of political connections may be different across the sample periods, which is consistent with the argument by Rozeff (1982) who suggest that the value of political ties is different over time.

Nevertheless, the results in Table 3.7 provide some support for our main results that connected firms have significantly lower cash and cash equivalents, net other receivables, net investment and short-term debts but have significantly higher net profits and market valuation. Furthermore, when we calculate the probability of accuracy for each model, all the results in each table demonstrate that our models have been predicted well over 50% probability. This again verifies that our model has good predictive ability.

In the next section, this study will organise the annual data along the time span in charts. The advantage is it can allow for direct observation of the hypothesised difference at each point in time, and of the evolution over the sample period. The disadvantage is that it is not easy to add any restrictive conditions. It is, at least, very helpful to observe the difference between PCFs and their matched firms, and how the differences evolve over the test period.

3.6.3 Time patterns

For Hypothesis 1a, in Chart 3.1 this study observes the pattern of the variables of operating revenues (chart 3.1), total current assets (chart b), net fixed assets (chart c) and net profits (chart d). It can be clearly seen that the PCFs have generally produced larger operating revenues and higher total current assets, thereby resulting in higher net profits. The differences between PCFs and unconnected firms are not obvious in the early years, but they become more obvious around 2000 or 2001. The differences in the same direction between the two groups also widen in all of the later years after the turning point. Additionally, lower Short term debt (chart e) is sustained throughout the time period, together with no observable difference in Operating liability (chart f) indicating the situation of better financial credibility.

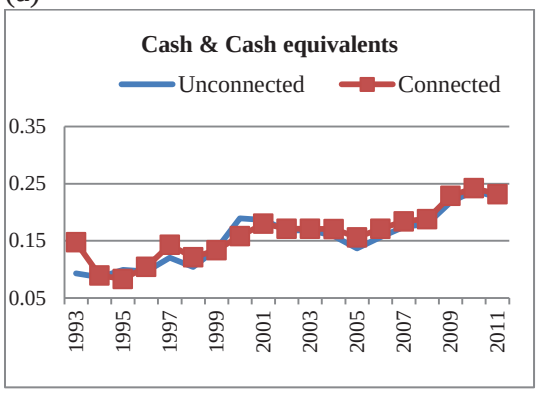
The second observation is for the cash tunnelling level, which is indicated by the Net other receivables (chart g). The tendency for PCFs to display less cash tunnelling is from 1994 to the end of the testing period of 2011. The observation is again supportive of Hypothesis 1b. The last interesting observation concerns the equity ratios. It can be seen from chart h that the situation of less share capital started from 2005, and a higher equity surplus (chart i) is maintained in the earlier years until the end point, which is about 2006. The most interesting ratio is net profit (in chart o). It depicts an obviously positive difference between PCFs and unconnected firms starting in 2002, with the difference growing continuously after that.

The shape of the Retained earnings curve provides a good summary of the different performance between the PCFs and their matching firms. There is a systematic difference between the two groups, the “princelings” type of political connection outperforms their peers, as expressed in their accounting ratios (consistent with Hypothesis 1). In summary, the difference on the accounting ratios between the two groups is not observable in the early sample period; however, the separation starts in the middle of the sample period and the difference grows continuously through to the last year (2011).

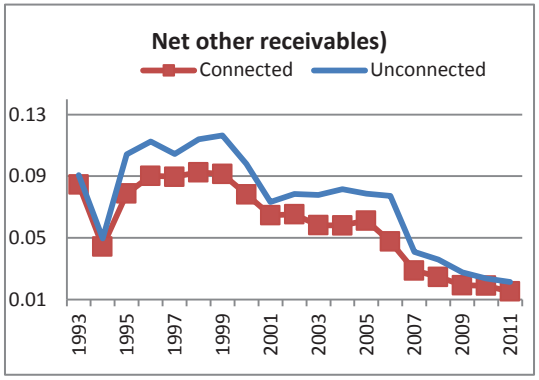
Chart 3.1: PCFs compared to unconnected firms on accounting based information

These charts plot the accounting variable used in this chapter from1993 to 2011 for PCFs and unconnected firms. The X-axis is the calendar year; the y-axis is the ratio values. The solid lines with dots represent PCFs, while the smooth lines indicate unconnected firms.

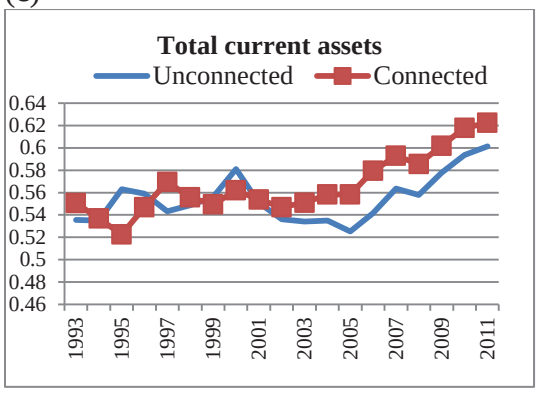
(a)



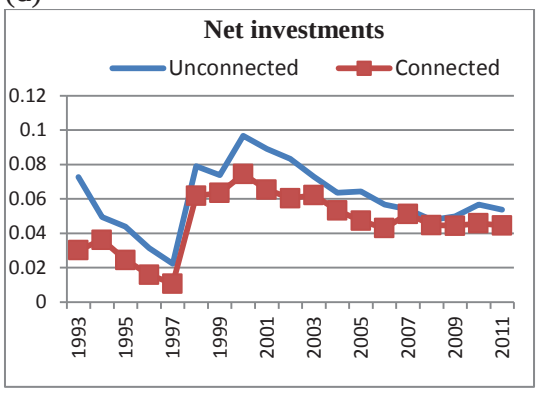
(b)



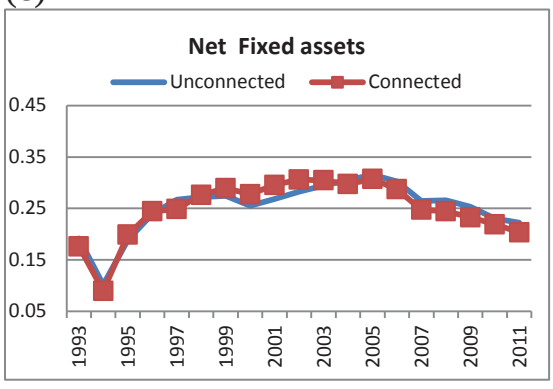
(c)



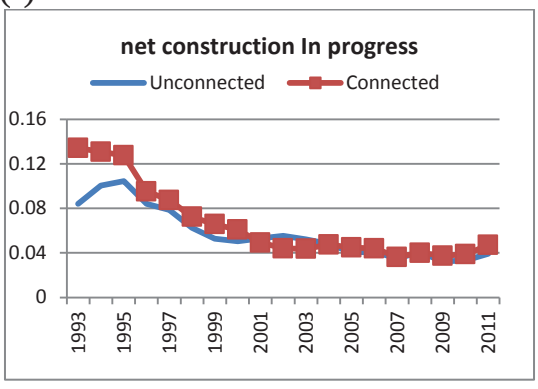
(d)



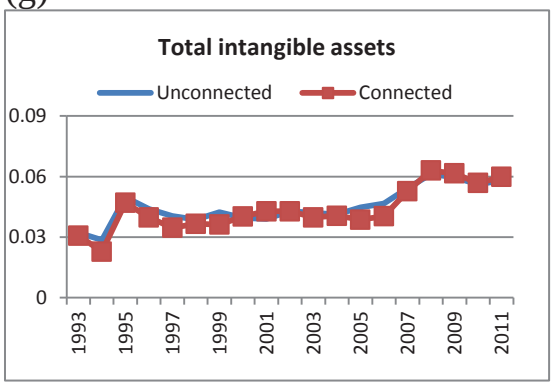
(e)



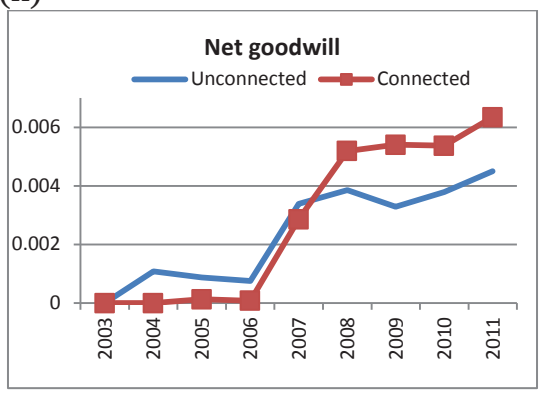
(f)



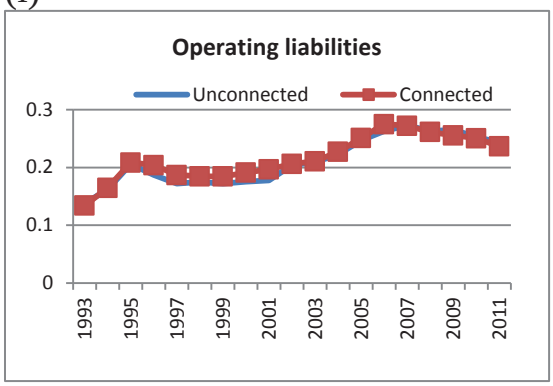
(g)


Total intangible assets
Unconnected
Connected
0.09
0.06
0.03
0
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011

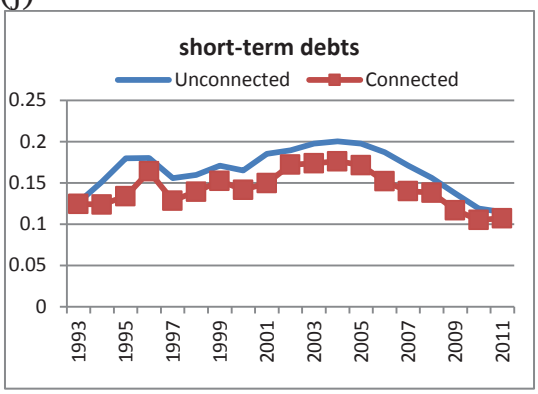
(h)


Net goodwill
Unconnected
Connected
0.006
0.004
0.002
0
2003
2004
2005
2006
2007
2008
2009
2010
2011

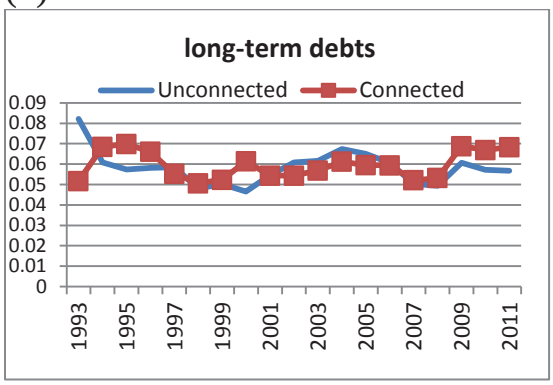
(i)


Operating liabilities
Unconnected
Connected
0.3
0.2
0.1
0
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011

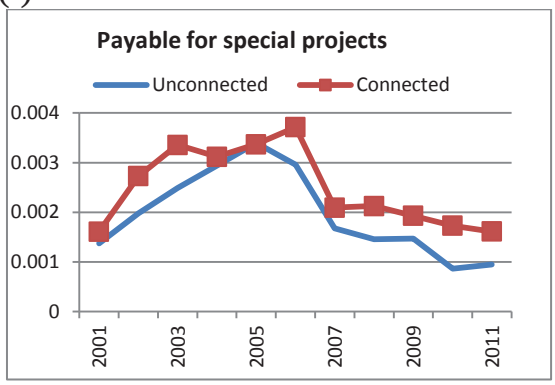
(j)


short-term debts
Unconnected
Connected
0.25
0.2
0.15
0.1
0.05
0
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011

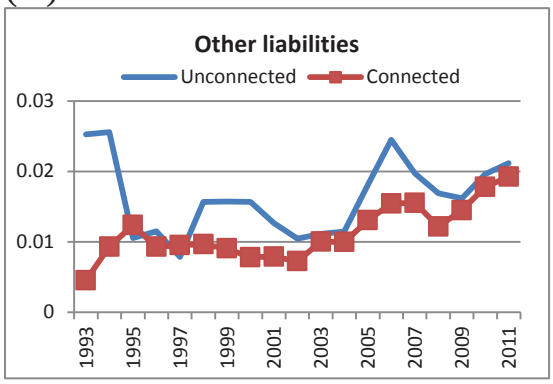
(k)


long-term debts
Unconnected
Connected
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011

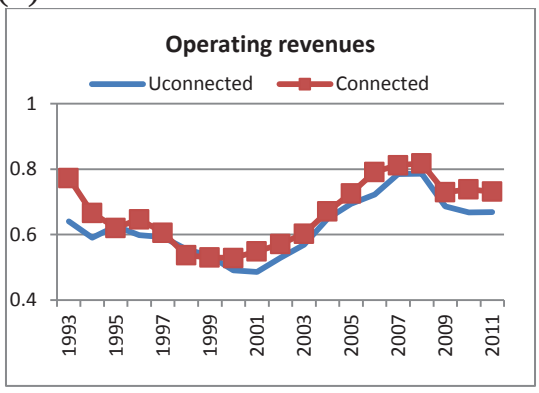
(l)


Payable for special projects
Unconnected
Connected
0.004
0.003
0.002
0.001
0
2001
2003
2005
2007
2009
2011

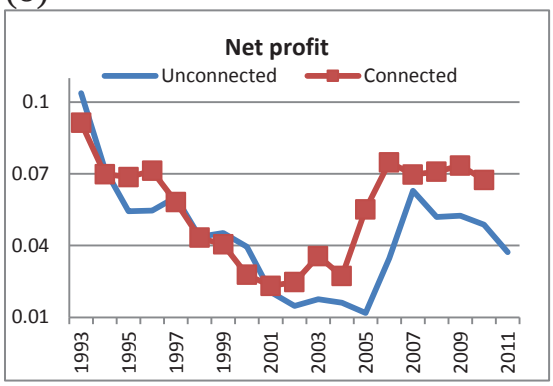
(m)


Other liabilities
Unconnected
Connected
0.03
0.02
0.01
0
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011

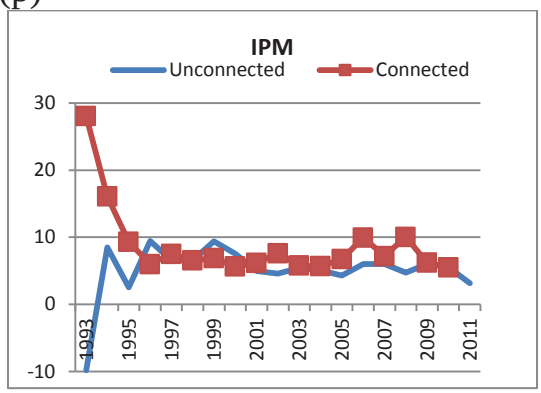
(n)


Operating revenues
Uconnected
Connected
1
0.8
0.6
0.4
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011

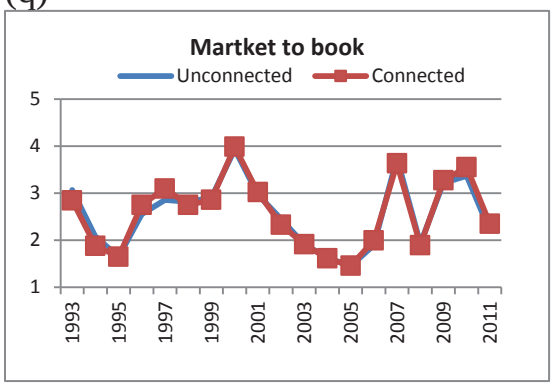
(o)


Net profit
Unconnected
Connected
0.1
0.07
0.04
0.01
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011

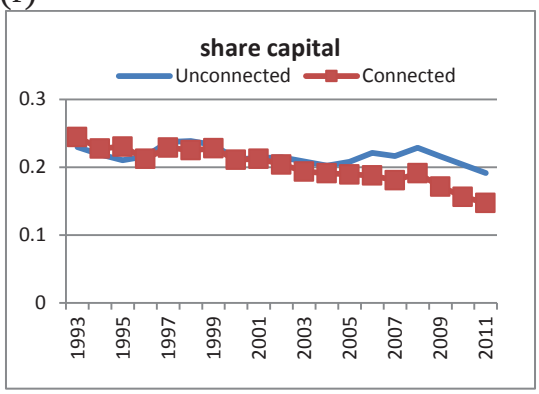
(p)


IPM
Unconnected
Connected
30
20
10
0
-10
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011

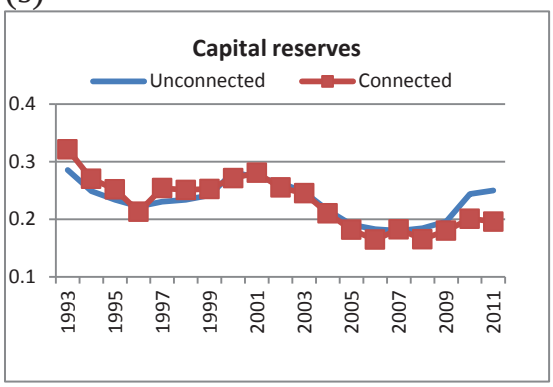
(q)


Martket to book
Unconnected
Connected
5
4
3
2
1
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011

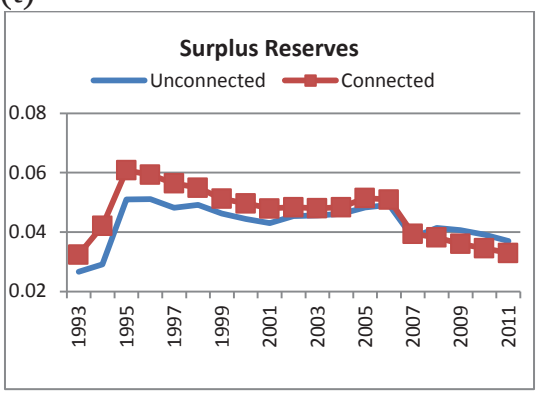
(r)


share capital
Unconnected
Connected
0.3
0.2
0.1
0
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011

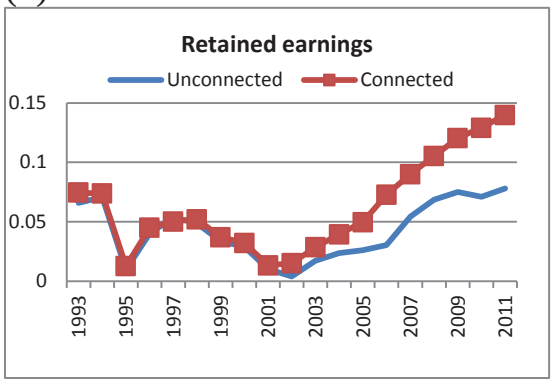
(s)


Capital reserves
Unconnected
Connected
0.4
0.3
0.2
0.1
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011

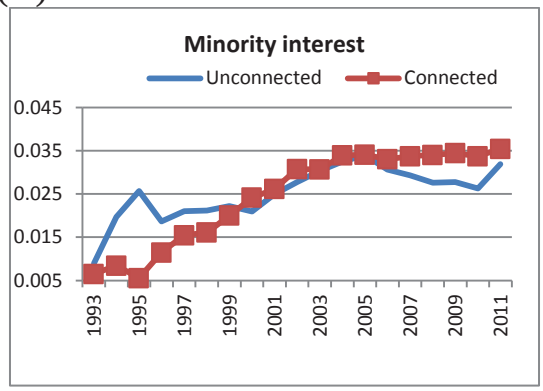
(t)


Surplus Reserves
Unconnected
Connected
0.08
0.06
0.04
0.02
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011

(u)


Retained earnings
Unconnected
Connected
0.15
0.1
0.05
0
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011

(w)


Minority interest
Unconnected
Connected
0.045
0.035
0.025
0.015
0.005
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011

3.6.4 Discussion on the "princelings" connection and causality

This study has produced some evidence to show that PCFs perform differently to their matching firms. One possibility is that politicians choose to associate with firms which have these characteristics in their accounting figures. The other is that political connections cause these differences.

From section 3.6.3, this study finds that the shape of the Retained earnings provides a good description of the possible influence of "princelings" type political connections on their chosen firms. Most other types, such as state ownership in state-assets-privatisation, are the natural results of many "policy reforms". The connected politicians are somewhat related to the firms before they are pushed to join the firms. However, the "princelings" are basically very different in terms of the joining mechanism, with the process being like "sky-diving". The "princelings" come from very high in the sky, they find their targets, and choose to "land" on the firms.

The chart of Retained earnings suggests that the "princelings" start to join their firms in about 2000 or 2001, when the Chinese economy started to gain momentum. Chinese GDP starts to grow continuously, from 7.61% in 1999 to 14.19% in 2007, with the double digits rate maintained until 2011, which is the last year of the sample period. The "princelings" have chosen a perfect time to join. After being joined by the "princelings", these firms start to perform very differently to their matching firms. The chart suggests that the "princelings" have brought some extra power with them to these firms, such that the resulting prosperous "eggs" production is a natural consuquence.

3.7 Conclusions

This study investigates the nature of a special type of political connection, referred to as "princelings", in some publicly traded firms listed on the Chinese stock market. This study has tested the possible impact from this political connectedness on the firms' operating business performance. The results show that there exists some systematic differences in their accounting reports relative to non-connected matching firms. The differences are presented from three specific observational angles. The first is of some accounting ratios

indicating the operating business level and profits. The second is of cash tunnelling behaviour, which is often mentioned in relation to political connections. The third difference is shown in the structure of equity ratios.

This study has developed the theory of “Golden hens vs. Chickens” to explain these discovered differences. It finds that these “princelings” firms have the capacity for fast growth in business revenue and profits in a period of fast growth in the Chinese economy. Combined with the observed lower level of cash tunnelling behaviour, this study portrays these firms as “Golden hens”. Instead of making these firms produce more current meat, the management (and the joined “princelings”) prefer to keep the “hens” a prolonged period of time in order to raise the production of “eggs”. The “hens” productivity is shown to be reserved through in the higher ratio of Retained earnings.

This study is the first to investigate the “princelings” type of political connection. Also, the hand collected data presented in this study is unique. Most of the current studies on political connections involve data of some government officials who take political elements into consideration in their data. In this study, the “princelings” type of political connection looks like a purely economically motivated action; the theory and empirical results have the function of filling a gap in the theoretical framework. The topic has potential to be studied further in the future. The major purpose of the next chapter is to further investigate the behaviour and motivation of the “princelings” phenomenon.

China is characterised by single-party dominance in political administration; the stock market is well-suited for a study of political connections due to its relationship-based culture and weak market-supporting institutions. Thus far, the analyses in this study have shown some interesting findings. Due to data limitations, this study cautions the reader that the findings are still preliminary in nature and do not imply any clear causality.

CHAPTER FOUR: ESSAY TWO: EXPROPRIATION DURING PROFIT DISTRIBUTIONS IN POLITICALLY CONNECTED FIRMS: EVIDENCE FROM CHINA

This chapter examines whether and how the "Princelings" type of politically connected firms have incentives to engage in expropriation activities. Section 4.1 presents the introduction, and a review of the literature is undertaken in section 4.2. Section 4.3 shows the model designs and hypotheses development. Section 4.4 describes the data and methodology. Section 4.5 presents the empirical results, with the robustness tests shown in section 4.6. The final section (4.7) concludes. The chapter's references are presented in the references section later in the thesis.

4.1 Introduction

Prior research has provided many reports contributing to the understanding of why and how politicians and entrepreneurs are sometimes motivated to cooperate with each other in the operation of private firms in different markets and economic environments around the world. One common conclusion is the identification of the importance of political connections to a firm. In China, the economy is transformed from a previously central planning format, in which the political system is dominated by one-party control. For any individual publicly listed firm political connection is extremely important to survive and to be prosperous in the future.

Available reports on Chinese political connections generally focus on several types; state ownership, former government officials holding important positions in a firm, and so on. This study defines a new type of political connection, which is called “princelings”. The key to this connection is the existence of a person who takes an important position in a company, where he or she is a younger generation of former national (or party) leaders. Actually, this study finds that this type of connection is popular among Chinese listed firms. The hand-collected sample used to examine this connection in this study includes about 15% of all firms listed in the market.

As explained in chapter 3, this type of political connection has many unique featureness. Since these firms are selected by the “princelings” generations, this study expects they are generally outstanding in business performance. The politically related youngsters are not active in business activities; yet they have some superpower by birth in having access society’s economic and financial resources. A princeling’s decision to join a company will allow the use of their power to make it more profitable. In return they will naturally ask for a “fair” return. This study applies and develops models to explain the behaviour of these connected firms; and additionally provides some empirical evidence to describe their distinctions specialties in operating business activities and profit distribution actions.

This study empirically investigates whether firms connected to political elites outperform their counterparts in terms of operating performance and growth opportunities. It should certainly expect firms to pursue a variety of motives (such as government contracts, state bank loans and provide access to other rare resources) when establishing political ties, in

order to improve firm value. This study then seeks to answer whether connected firms have economic motives by taking an extra share of the distributable profits to compensate for the special contribution they make to the companies. The answer in the affirmative leads to our second and main research question of whether and how these PCFs divert firms' profits to reward their supporters.

This study first analyses whether PCFs have greater operating performance and growth opportunities than matching firms. The study uses net cash flow from operating activities divided by total assets (NOC) and return on assets (ROA) to measure operating performance, and uses the change ratio on sales to proxy for growth. Using OLS regressions, this study finds that all three measurable variables are significantly positively related to political connections. This finding confirms that PCFs outperform their counterparts in business activities, which is consistent with the view that political connections improve Chinese family firm's operating performance (C. J. Chen, Li, Su, and Sun, 2011; N. Xu, Xu, and Yuan, 2013).

Given this evidence, this study next proceeds to the main hypothesis and analyses whether PCFs are more likely to expropriate at the expense of minority shareholders. If firms are more profitable because of political connections, then this study asks whether PCFs have strategic considerations in the whole process, and specifically whether PCFs reward politicians when they exchange political favours with the firms. The position this study takes is that politicians have the desire to accumulate personal wealth when they bring benefits to connected firms. To identify the effect, this study proceeds in two steps. It starts by analysing the relation between political connections and tunnelling at the operational stage. Following Jiang, Lee, & Yue (2010), this study uses the account "Net other receivables" from the balance sheet to proxy for a firm's tunnelling. It finds that when connected firms are more profitable, they are less likely to tunnel firms' assets. This finding is consistent with previous findings (Berkman et al., 2009; Jiang et al., 2010), and confirms the prediction in model 1, which explains the conditions under which firms have more incentives to juggle tunnelling activities.

Motivated by anecdotal evidence that Chinese listed firms often use the account "Selling expenses" to cover discretionary consumption, this study alternatively measures operational tunnelling by using the ratio of "Selling expenses" to total revenues. It finds a

significant positive relation between political connections and “Selling expenses”. The evidence on higher selling expenses might not be enough to directly support tunnelling activities by PCFs; however, it is consistently with the conjecture that PCFs use “Selling expenses” to cover some miscellaneous expenditure, or nonrecurring consumption.

The second test focuses on whether PCFs expropriate value at the profit sharing stage. This study finds that PCFs stockpile disproportionately larger retained earnings but pay lower cash dividends, compared to unconnected firms. It further finds that such behaviour in PCFs is not due to either investment or precautionary motives. These results immediately give rise to the question of what happens to retained earnings. Therefore, this study then asks whether PCFs have a greater tendency to misuse retained earnings. This study has developed a proxy, named “Grey usage” in this paper, to measure potentially misused retained earnings. By examining the components of retained earnings, it finds that PCFs have higher average Grey usages on retained earnings than matching firms, with 2.45million RMB and -2.22 million RMB, respectively. Although the difference appears large and consistent with our expectations, it is not statistically significantly different between the two groups of firms. Additional analysis indicates that the movement of this inexplicable Grey usage within the sample period is very volatile, which explains why the difference is not significant. The authors still think the information is supportive of the conjecture that the alternative expropriation of retained earnings is a common phenomenon among Chinese listed firms[35].

Interestingly, this study further finds the mean percentage of the change of retained earnings to net profits attributable to parent owners in PCFs is higher than that of unconnected firms, by 3.8%. At the same time, PCFs have 1.05% Grey usages compared to -1.07% in unconnected firms. By contrast, the difference in the mean percentage of cash dividends between PCFs and matching firms is -4.27%. These results are consistent with our expectation that PCFs with greater profitability have higher Grey usages, or pay lower cash dividends, so as to engage in wealth extraction.

[35] In section 2 this study describes in detail the regulatory efforts on mandatory dividend policies to curb this abuse by the CSRC. The CSRC decision to force listed firms to pay dividends is in itself some evidence in favour of the importance of agency considerations.

To identify the predictive power of Grey usages on asset prices, this study runs a cross-sectional regression of stock returns on Grey usages and other control variables. Grey usages are negatively correlated with stock returns, suggesting a partial awareness of the problem by the markets. Finally, this study attempts to explore the possible mechanism in place to divert Grey usages out the firm. By running regressions on the cash paid account from cash flow statements, it finds Grey usages by PCFs are positively associated with the account "Cash paid to and on behalf of employees" and "Other cash paid in relation to operating activities". In contrast, Grey usages by unconnected firms are only relevant to "Other cash paid in relation to operating activities". This finding suggests the possibility that the channels used to divert profits into outside pockets are different among PCFs and matching firms.

The regression results are further substantiated by directly observing the movement of proxy variables in time charts. From these charts it is observed that the difference in performance between connected and unconnected firms starts from about 2001 when China became a member of the World Trade Organization and the Chinese economy began to develop at a rapid rate. Therefore, the collective results of the tests and time trends support the conclusion that political connections lead firms to perform differently from their counterparts.

The results in this paper are important in three ways. First, it examines the financial statements of listed firms belonging to families and associates of revolutionary leaders in China to see whether they vary systematically from other public firms. To the best of our knowledge, no previous research has examined firms with connections to political elites of China. Second, by using a theoretical approach that combines agency theory and accounting principles, this study sheds light on how listed firms with a "princelings" type of political connection expropriate minority shareholders during operating activities and profit distributions on the Chinese stock market. This integrated approach suggests that, rather than being benevolent resource providers, political connections act as opportunistic rent-seekers to listed firms. Third, compared to prior international studies in the area, this study examines a longer period of time and focuses on a single country, which allows for cleaner interpretation of the results. Importantly, these contributions are beneficial to firms in the sense that they are related to firm performance, but are also highly valuable to Chinese stock market investors.

This paper proceeds as follows. Section 4.2 reviews the literature. Section 4.3 develops the models and hypotheses. Section 4.4 describes the data, the construction of the variables and the methodology used in our empirical analysis. Sections 4.5 and 4.6 present evidence that political connections play a role as a double-edge sword in Chinese listed firms. Section 4.7 concludes.

4.2 Literature review

In the Chinese setting, the effect of political connections is profound. China maintains a government-oriented economy, in which politicians and bureaucrats have a strong influence over resource allocation. A strong relationSHIP with politicians makes PCFs more likely to gain key inputs as these are controlled by the government, and are pivotal to firms' survival and sustainable growth. These key resources include business operation licenses, bank loans, land, and eligibility for favourable but discretionary government policies such as tax benefits and the waiver of "extra-legal" fees ((Brandt and Li, 2003; Cull and Xu, 2005; H. Li, Meng, Wang, and Zhou, 2008). Additionally, the economic environment in China is characterised by weak investor protection, poor enforcement of property rights, and a high level of corruption (F. Allen et al., 2005). In response to these pressures, private firms operating in these highly politicised environments seek to establish strong political connections (C. J. Chen et al., 2011; H. Li, Meng, and Zhang, 2006) .

This is known to be advantageous. Several studies show a phenomenon called "propping up" in state-owned firms, in which the government injects favourable assets without interfering with the rest of the operation (Xiao Chen et al., 2003; Jian and Wong, 2006; Liu and Lu, 2007; W. Q. Peng et al., 2011). "Propping" provides firms with a guarantee in the case of financial distress, which can be leveraged by political connectivity since these connections help firms access preferential treatment. Based on the above arguments, political connections in China may have a positive effect on firms' performance. For example, by using survey data on privately owned enterprises in 2002, Li, Meng, and Qian (2008) find that good political connections and status make private entrepreneurs more likely to obtain preferential treatment, hence improving firms' profitability. Cheung, Jing, Lu, Rau, & Stouraitis (2009) find that central government connections improve

shareholder value via related party transactions with public firms during the period of 2001-2002 in the Chinese stock market.

On the other hand, in line with the grabbing hand hypothesis, political extraction and rent seeking are the main objectives of government interference (Frye and Shleifer, 1996; Shleifer and Vishny, 1998; Stigler, 1971). Earlier work by Shlerifer & Vishny (1994) develops a general equilibrium model of the relationship between firms and politicians and notes that there is a price between them. Their model has implications for the behaviour of both politicians and related firms. From a firm's perspective, PCFs are close to politicians and, hence may obey political objectives that generally go against firms' profit maximisation objectives. These political objectives include infrastructure development and resolution of the regions' fiscal situation and overemployment, which may adversely impact corporate governance quality and firm performance. Yet politicians have the desire to accumulate personal wealth or personal gains, which frequently results in operating inefficiencies and poor governance. Fan, Wong, & Zhang (2007) find that firms in China operated by politically connected CEOs underperform their counter-peers in both the short-term and the long-term. The cost of political connections extends to post-IPO earnings growth, sales growth, and change in return on sales.

A more recent study on the Chinese market by Qian, Pan, & Yeung (2011) shows that expropriation of minority shareholders by insiders is far more severe in politically connected firms when the aim of political ties is to ensure access to bank financing. Based on cross-country studies by Chaney, Faccio, & Parsely (2011) and Chen, Ding, & Kim (2010), they argue that political connections are a reflection of a firm's agency problems and governance quality. From a corporate governance perspective, political connections may intensify dominant shareholders' incentives to expropriate minority shareholders' wealth, as political connections shield related firms from market punishment for insider misconduct. In addition, political connections can increase information asymmetry arising from the separation of ownership and control (Chen et al., 2011). In a nutshell, one can conclude that the existence of preferential access to bank loans, together with the existence of less sensitivity to market penalties and close relations with politicians provide controlling owners with incentives and opportunities to extract private control benefits.

In contrast, the presence of political connections may help align the interests of dominant owners and minority shareholders. In the case of Chinese listed firms, corporate ownership is highly concentrated in the hands of government and founding-family members. Once dominant owners obtain effective control of the firm, any increase in voting rights does not further entrench the controlling owners, but their higher cash flow rights in the firms mean that any diversion from firms' resources is costly to them (J.P.H. Fan and Wong, 2002). Under this perspective, the dominant owners of Chinese firms who establish strong political connections are not motivated by expropriation motives as agency theory predicts, but instead are motivated by the incentive to increase firm performance through connectivity (C. J. Chen et al., 2011). By examining Chinese public firms from 2004 to 2010, Ma et al. (2013) find that firms with politically connected founder-managers (block owners of the firm) have a stronger resistance to tunnelling than other firms. Therefore, the alignment effect suggests dominant shareholders place politically connected directors on the board of directors to help the firm navigate government requirements and operate in a way that is beneficial to all investors, thereby further enhancing the firm's reputation.

Moreover, the career concerns of politicians in connected firms create incentives to reduce appropriations, as in the context of China; political elites have strong incentives to consolidate political power through the achievement of capital market stability. Under this perspective, these influential politicians and their associates behave as good stewards of corporate resources and view the connected firms' health as an extension of their own well-being. This political prospect may induce politicians colluding with firms to improve operations.

To summarise, extant studies on the Chinese market define political connections differently. Usually, they use state ownership or local politicians on the board to measure political ties. However, this study suggests that one should not link these two measurements directly in Chinese markets given that, to some degree, they are politically connected. Instead, the political connection that this study defines is the connection with families or associates of revolutionary leaders of the Communist Party of China (CPC). This has not been examined previously. The political connections that this study defines in this paper distinguish the firms' ability to extract value from such relationships, and

may reveal that those firms without strong political connections are not actually endowed with significantly higher benefits than other publicly listed firms.

The earlier reported politically connected people are current officers; they are subject to greater public scrutiny. This means it will cost more if these firms commit asset appropriations, thereby reducing the incentives for dominant shareholders to engage in opportunistic behaviours. The sample firms in this study are connected with political leaders through a very different mechanism; the related persons are younger generations of their older retired leaders. They have less responsibility to current political concerns and social economic development. In addition, the literature on tunnelling in the Chinese market has mostly focused on related party transactions during operating stages. This paper examines the process of profit sharing arrangements in firms with connections to national leaders, which has not yet been formally studied.

4.3 Model and hypothesis development

This section describes two models to explain how the dominant owners may exploit other investors in the operating income stage and the profit distribution (or post operating income) stage, respectively. It also discusses predictions linked to the specific mechanisms of the models, and relates them to the empirical hypotheses.

The initial idea of “tunnelling” is generally considered as the action of transferring resources out of a company to its controlling shareholder (who is typically also a top manager) (Johnson et al., 2000a). Atanasov (2005) extends it to a broader definition that includes transfers to managers who are not controllers and so he divides tunnelling into three basic types; cash flow tunnelling, asset tunnelling, and equity tunnelling. This study divides the tunnelling into two classes (or stages) based upon coporate finance theory; the operating stage and distribution stage. The operating stage is all the decisions made to determine the arrangement of net operating assets, which includes cash tunnelling and asset tunnelling. The distribution stage is the allocation or distribution of the resulting profits from stage 1, which includes equity tunnelling.

4.3.1 Model 1: Operating stage tunnelling

Motivated by Friedman, Johnson, and Mitton (2003), Wei, Chen and Wirth (2016) consider a situation in which controlling shareholders siphon off firms' resources before they are used for legitimate operations. Such tunnelling is potentially costly to the controlling shareholders. The most obvious costs are monetary fines from regulatory institutions and reputation penalties from market participants. The other cost of expropriation is losing the return opportunities associated with the tunnelled (and so reduced) operating assets.

This study uses the following variables in the remainder of this paper:
T=operational tunnelling level;
W=total wealth of controlling shareholders
α=controlling shareholders' ownership;
A_0=the current value of firm assets without tunnelling and without growth;
g=growth rate; and
C=the cost of tunneling.

When controlling shareholders conduct operational tunnelling T, the post-tunnelling firm value is $(A_0 - T)$. The variable g measures the added value of the firm caused by its growth opportunities; and the firm's net value will be the current value plus the growth value, which is $A_0 + A_0$*g. Following Friedman et al. (2003), and Wei, et al. (2016), and with the rationale that the marginal risk of penalties increases as the amount of tunnelling increases, this study assumes the cost of tunnelling to be a quadratic function to the amount of T, $Cost = CT^2$, as used by Friedman et al.(2003).

Since controlling shareholders own α faction of the firm, the net wealth for the owner from the firm is:

$$W = \alpha(A_0 - T)(1 + g) + T - CT^2 \quad (4.1)$$

In this form three effects are considered: 1) The value of tunnelled assets is a direct addition to the owner's wealth; 2) the owner's ownership value is reduced by the amount of (αT)(1+g); and 3) the owner will suffer a penalty with increasing marginal cost. The

dominant owners will choose the level of tunnelling, T, to maximise his/her wealth and, therefore the optimisation condition is:

$$\frac{\partial W}{\partial T} = -\alpha(1+g) + 1 - 2CT = 0 \quad (4.2)$$

Solving for the first –order condition, this study obtains the optimal tunnelling level:

$$T^* = \frac{1-\alpha(1+g)}{2C} \quad (4.3)$$

The model (equation 4.3), developed by Wei, et al. (2016), predicts that: (i) Firms with higher growth opportunities (expressed as g in equation 4.3) practice less operating tunnelling; (ii) firms with higher ownership concentration (α in equation 4.3) practice less operational tunnelling; and (iii) firms that face higher penalty costs (C in equation 4.3) practice less operational tunnelling.

This study has described the "princelings" sample firms in the previous chapter, in that they have the characteristi of "Golden hens" instead of "Chickens". These firms are selected by the "princelings" investors and they are more prosperous in operating business with higher operating profits. The model of equation 4.3 indicates that controlling shareholders who are aiming to maximise their personal wealth are less likely to kill the golden hens that lay golden eggs. With this in mind, it is better to keep the golden hens alive so that they will have more eggs. Based upon the model prediction, the "princelings" type of politically connected firms will engage in less tunnelling in stage 1 of the process. To verify the higher operating performance, this study sets Hypothesis 1, and to test the cash tunnelling behaviour it sets Hypothesis 2

Hypothesis 1: Firms connected to "princelings" outperform unconnected firms in terms of operating performance and growth opportunities.

Hypothesis 1 predicts that firms belonging to families or associates of these influential political elites should outperform other public firms on the Chinese stock market. To test this prediction, this study focuses on both profitability and growth opportunities. Similar tests are reported in Chapter 3 using accounting ratios of Net Profits and Retained Earnings; here we use different and more conventional variables to verify the prediction.

Variables: *Profitability:* Net cash flow from operating activities deflated by total assets (NOC); and Net income deflated by total assets (ROA).
Growth opportunities: Annual sales growth rate (GROWTH).

Hypothesis 2: Politically connected firms are less likely to conduct tunnelling through operating activities.

Following from the above model (equation 4.3), it is predicted that the "princelings" PCFs are less likely to commit operational tunnelling. This study uses two proxies to indicate the level of operating tunnelling; the ratio of "Other receivables", and the ratio of "Selling" expenses.

Variables: *Operating tunnelling*: Other receivables deflated by total assets (OREC); and Selling expenses deflated by total revenues (SEXP).

The practice of making inter-corporate loans is widely used by Chinese listed firms. They are typically reported as an "Other receivables" asset account on the balance sheet (Jiang et al., 2010). "Other receivables" are only disclosed at the year-end and there is no itemising of transactions between controlling shareholders and the corporations during the accounting period. As a result, the vague definition of "Other receivables", and the minimal disclosure requirements for it make manipulation possible. Until 2006, the CSRC mandated the disclosure of "Other receivables" by listed companies.

Alternatively, an indirect way to examine operational tunnelling is to trace selling expenses as a percentage of total assets (Ma, 2012). This indirect approach is motivated by the Chinese cultural practice that business deals are normally conducted through social/entertainment activities. According to Ma (2012), the most common type of entertainment is to enjoy an expensive meal with associates at a nice restaurant. Additionally, in order to build and maintain political ties, connected firms have a desire to reward their supporters by "gift-giving". The benefits of "gift-giving" can be either pecuniary or non-pecuniary, such as luxury houses, cars and famous paintings. Such miscellaneous expenditure should ultimately be reflected in the cost of sales. In practice, Chinese firms often use the "Selling expenses" account to cover these expenditures. Therefore, the extra selling costs could be the result of asset transfers by controlling shareholders.

This study has described some special features of our “princelings” PCFs. These firms are described as “Golden hens” and the most beneficial use is to harvest “golden eggs” at some point in the future. In the next step we develop a theory to describe the rational behaviour of controlling owners in distributing the eggs. This study starts from the assumption that the controlling owners will not agree to distribute the eggs in fair proportions. They usually have the power to get higher shares in the post operating income distribution stage, which is described in model 2 in the next section.

4.3.2 Model 2: Distribution stage wealth expropriation

In an agency context, La Porta, Lopez – de – Silanes, Shlerfer, & Vishny (LLSV) (2000a) state that investors have a preference for cash dividends (bird in the hand argument) over retained earnings (bird in the bush), because the latter might never materialize as future dividends (i.e. they can fly away). In their “outcome model”, firms in countries with better investor protection pay higher dividends than in countries with poor protection, given the same investment opportunities and growth prospects (Figure 1 in LLSV, 2000).

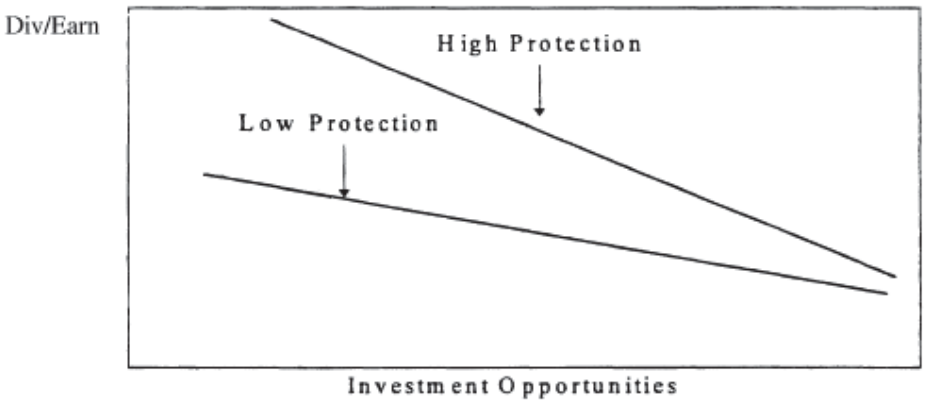


Figure 1. Outcome model of dividends.

(Source from LLSV, 2000; p. 7)

On the other hand, managers (and controlling owners) have a preference for less cash dividends. Dividends are paid in ownership ratios, but the remaining values after dividends are not. Apart from dividend payments, there are generally many other usages. For example, there could be the payment of employee benefits by regulation in China, and some other non-discretionary expenses allowed for in the firm’s policies. The more

that these other items are used in a firm, the greater the chances are available for the owner managers to engage in wealth expropriation from minority shareholders. There are some economic incentives for the owner managers to pay a lower rate than the optimal level preferred by minority shareholders.

Now this study turns to consider the case that controlling shareholders take advantage of other expenses during the process of profit distribution. In an environment with poor investor protection, controlling owners can effectively determine how profits are allocated among shareholders and hence are capable of using these earnings to maximise their private benefits.

To show these issues in value distribution between controlling shareholders and minority shareholders, this study illustrates the point in the following table:

	Cash dividend	Retained profits	Sum
When there is no wealth expropriation in retained profits:			
Controlling ownership	α d	(α) (Π − d)	(α) Π
Minority ownership	(1-α) d	(1-α) (Π − d)	(1-α) Π
Sum	d	Π − d	Π
When there is wealth expropriation in retained profits, expressed as Δ:			
Controlling ownership	α d	(α+Δ) (Π − d)	(α+ Δ) Π - Δd
Minority ownership	(1-α) d	(1-α-Δ) (Π − d)	(1-α- Δ) Π + Δ d
Sum	d	Π − d	Π

Where α=controlling ownership;

1-α=minority ownership;

d=cash dividend payments;

Π=distributable profits of a firm; and

(Π − d)=retained profits.

To identify the difference in retained profits between controlling owners and minority shares, this study uses the sign Δ to express the ratio of wealth expropriation. The real ratio for the owners is increased from α to α+Δ and the real ratio for minority shares is decreased from (1-α) to (1-α-Δ).

Π measures the total amount of distributable profits of a firm, and retained earnings is the difference between distributable profits and cash dividend payments expressed as $(\Pi - d)$.

The basic assumption used here is that the dominant shareholders have the opportunity to expropriate value from minorities, which is equivalent to the expression that they have some excess share (expressed as Δ above) of retained earnings. If no dividends are paid, the controlling shareholders' value will be (α+Δ)Π; and if a dividend of d is paid, the value will reduce to (α+Δ) Π – Δd [i.e. from the last column of the above table: The controlling ownership value is (α+ Δ) Π – Δd when d>0]. For every dollar of reduction in paid dividend there will be a wealth transfer of Δ dollars from minority shareholders to controlling owners, which explains the existence of an incentive for controlling shareholders to pay as low a dividend as possible.

On the other hand, there are other theories explaining the advantage of paying dividends. For the trade-off between dominant and minority shareholders, dividend theory is still not certain of the optimal level of dividends (Lintner, 1956; Modigliani & Miller, 1958, 1961). From empirical investigations we know that most firms have a long term dividend policy (Gaver and Gaver, 1993; Moh'd et al., 1995; Rozeff, 1982; C. W. Smith and Watts, 1992). Market investors will also use the policy to make their investment decisions.

If we use d* to denote the long term dividend policy level before the above discussed incentive for paying lower dividends is considered, the long term optimal dividend condition for the controlling shareholder is where the optimal condition is the result of the trade-off between the benefits and costs covered in the previous literature. It can be expressed as:

Σ^{*} = (α) (Π- d^{*}) + α (d^{*}) + Others (d*) [which is also (α) (Π) + Others (d*)] (4.4)

In equation 4.7, "Σ*" is the total wealth of controlling shareholders in the firm. The first two items '(α)(Π-d*)+α(d*)' on the right side of equation 4.7 represent wealth changes associated with different dividend payment levels.'Others (d*)' is the part of wealth which does not change with dividend payment levels, such as salary paid to controlling shareholders.

From this position, this study models the net effect of further reducing the dividend level, from the optimal of d* to the reduced level of d*-D. It can now use the above discussed formula 4.4 for taking into account the wealth expropriation due to a dividend reduction of D; the incentive effect could be fully specified by the first part of the above expression so that it becomes (α+Δ) (Π- d^*+D) + α (d^*-D). The remaining part is the same (in the form of Others (d*)).

Apart from the incentive effect, this study further uses a quadratic function (without losing the general property of increasing marginal cost) to indicate the cost associated with the dividend reduction (of D), which takes the form of (kD^2) assuming a constant coefficient of k. As a result, the net value of the dominant owner's wealth will be:

$$\begin{aligned}\Sigma &= (\alpha+\Delta)(\Pi - d^* + D) + \alpha(d^* - D) - (kD^2) + \text{Others}(d^*) \\ &= (\alpha+\Delta)(\Pi - d^*) + \alpha(d^*) + \text{Others}(d^*) + (\Delta D) - (k D^2) \\ &= \Sigma^* + (\Delta D) - (k D^2)\end{aligned} \quad (4.5)$$

This means there will be an additional amount of wealth (ΔD) transferred from the minority to the dominant owners. For this transfer, the dominant owners will suffer a loss [such as their personal reputation expressed as (k D^2)]. Taking the partial derivative of Σ with respect to the dividend reduction of D, the equation is:

$$\frac{\partial \Sigma}{\partial D} = (\Delta) - 2kD = 0 \quad (4.6)$$

Solving the first-order condition of equation (4.6), we obtain the optimal level of dividend reduction:

$$D^* = \Delta/(2k) \quad (4.7)$$

The dominant owners will choose to pay a dividend of (d*-D*), where d* is the optimal for all shareholders, and a further reduction of D* is the owner's personal optimal choice. Equation (4.7) predicts that: (i) Firms with a chance of higher wealth expropriation (higher Δ value, associated with stronger dominant power) should pay lower cash dividends; and (ii) firms with lower reputation loss (or lower k value) associated with the personally preferred dividend reduction will also pay lower dividends. The basic

implication of this model is that in an environment where corporate governance is poor and market protection for minority owners is weak, the dividend payments will generally be lower than the firm's optimal level.

This model prediction is consistent with the theory developed by LLSV (2000a). Furthermore, this study provides a new explanation; it is the existence of wealth expropriation (in the future distribution of retained earnings) that causes the dividend reduction.

The current study focuses on firms with a "princelings" type of political connection. The empirical evidence indicates that these firms are generally more profitable and associated with greater growth opportunities. Model 1 (equation 4.3) predicts that these politically connected firms have better operating business performance and less incentive to undertake tunnelling in the operating stage. They generally have higher after-tax distributable earnings. The reduction level (of D* in equation 4.7) is directly related to corporate governance quality, market monitoring and punishment for the top owner's value appropriation. Generally, in many well developed security markets (such as the US and the UK), this is the case.

Turning attention to listed firms on the Chinese stock market, this study proposes that the deviation from the optimal will be serious, and the dividend payout will, in general, be lower than the optimal level. This study has a sample with political relations; these firms are featured with strong and dominant top owners (as shown in Table 3.4, in higher ownership for the largest shareholding and a smaller number of independent directors), and they have few worries of market punishment. A dividend reduction should be evident, as predicted in model 2.

The last story (or theory) of the value expropriation behaviour to be tested in this study regards the use of retained earnings (after the cash dividend reduction already discussed). In China, the account of retained earnings on the balance sheet includes surplus reserves and undistributed profits. Surplus reserves are a composite of statutory surplus reserves, common welfare funds, and discretionary surplus reserves. According to the *Company Law*, the statutory surplus is a compulsory deposit, which is used to cover potential deficits or used as capital reserves. It accounts for 10% of net profits. Common welfare

funds draw off up to 5% ~10% of net profits, which are used for employee benefit payments. However, discretionary surplus reserves are determined at the general meeting of shareholders, and are a discretionary portion of net income. Usually, they are beneficial to the dominant owners. As the shareholder meetings are dominated by the large shareholders, the usages of discretionary surplus reserves depend on the large shareholders and their appointed management teams. Moreover, details of the usages of discretionary surplus reserves are not available on the accounting reports, and therefore they are potentially beneficial to dominant shareholders.

Apart from these designed usages of distributable profits, this study identifies some additional "spending" not included in these accounts. In the model developed below (equation 4.11) an assumption is built of the existence of value expropriation (indicated by Grey usages). In the current accounting reporting form, these values are not disclosed. This study has developed a method to estimate the grey value and our results indicate that the grey value is not trivial. These findings are consistent with the above assumption.

Equation 4.7 indicates that the existence of value appropriation (of Δ) at the distribution stage is a necessary condition of paying lower dividends, which is why retained earnings are preferred by the dominant owners, as their effective share increases from ownership α to the effective $\alpha + \Delta$. This prediction is described in Hypothesis 3 below.

Hypothesis 3: The PCFs of the "princelings" type are more likely to expropriate the interests of minority shareholders through profit-sharing arrangements.

Under the agency cost theory, unless a firm's profits are paid out as dividends, corporate insiders may divert cash flow for personal use, or to pursue unprofitable investment projects. Dividend payouts can be seen as a means to reduce the free cash flow that insiders can use at their own discretion ((M. Jensen and Meckling, 1976; M. C. Jensen, 1986; Lang and Litzenberger, 1989). Motivated by this agency theory, this study posits that if PCFs do not commit tunnelling in the operations process, then they will expropriate during the process of profit allocation. First, extant Chinese-based research implies that tunnelling or self-dealing by controlling shareholders is a general problem among publicly traded firms and these expropriation-related activities can take many forms (Berkman et al., 2009; Y. L. Cheung et al., 2009; Jiang et al., 2010). Second, in an

environment with poor investor protection, controlling owners can effectively determine how profits are allocated among shareholders and hence are capable of using these earnings for private benefit. According to Bradford, Chen, and Zhu (2013) and Lee and Xiao (2002), as a result of the institutional background and especially due to highly concentrated ownership in Chinese listed firms, minority shareholders have less power to force management or controlling shareholders to implement dividend policies. Recent empirical papers suggest that dividend policies might be used by the controlling shareholders to engage in tunnelling, due to the differential pricing for tradable and non-tradable shares during the IPO stage (D. Chen et al., 2009; Zhang, 2008).

Third, as was discussed in the model 2 formulation, the cost of expropriation through profit sharing arrangements is relatively lower than operational tunnelling, holding the investment policy constant. As a result, controlling shareholders have a preference to stockpile the excess earnings rather than pay dividends to individual investors.

Hypothesis 3a: PCFs pay lower cash dividends than unconnected firms.

The degree of the expropriation could possibly be influenced by the poor quality of corporate governance and the market punishment mechanism on the dominant owners. LLSV (2000) devise two distinct agency models on dividends. One considers dividend payouts as an outcome of legal protection of shareholders. The outcome model predicts that dividend payout ratios are higher in countries with good shareholder protection, others things remaining equal. The empirical studies by LLSV (2000) and Faccio, Lang, and Young (2001) suggest that dividend payouts are an outcome of agency problems, not only between managers and shareholders, but also between controlling shareholders and minority shareholders. As investor protection is quite poor in China, the dividend paid should be lower than others. Accordingly, if PCFs are more likely to expropriate through after-tax profit distributions, then they will pay cash dividends as low as possible and hence retain as much excessive earnings as possible. First, from the perspective of controlling shareholders, minority shareholders receive the same dividend per share; paying cash dividends will dilute the interests of dominant owners by reducing the capability to extract private benefits. Since controlling owners can effectively determine profit allocations due to the pyramid ownership structure (Joseph, Wong, and Tianyu, 2006), then they are reluctant to reward outside individual investors through cash

dividends. Second, by paying dividends, firms may in the future need to come to the capital markets to raise funds for investment opportunities. According to the pecking order theory (Myers, 1984), retained earnings within firms are a low-cost means of financing. Thus, firms prefer to keep earnings rather than returning them to investors, in order to avoid increasing their cost of capital. Third, under the agency view of PCFs and given their lack of investor protection, managers tend to hold more free cash, leaving them more opportunity to squander firms' resources and expropriate minority shareholders.

Lastly, the tax issue cannot be neglected when the firm pays dividends (Poterba and Summers, 1984). In China, dividend income is subject to taxation at both the corporate and personal levels, while the tax rate on capital gains is zero. Hence, to avoid double-taxation, the majority of firms choose to pay lower cash dividends. Given that dividend receipts are more heavily taxed than capital gains, minority shareholders may value cash dividends less than capital gains. This in turn decreases enthusiasm for dividends paid and further facilitates the opportunity for controlling shareholders to conduct expropriation activities. This is particularly the case for firms in an environment with poor protection for minority shareholders. Indeed, investors in China are poorly protected, and they have neither outside nor private channels to request mandatory cash dividend payments.

Variables: *Distribution expropriation*: Total cash dividends deflated by total assets (DIV); and Retained earnings deflated by total assets (RETAIN).

Hypothesis 3b: PCFs keep a larger proportion of profits for grey usage motivations. The degree of expropriation through grey usages on retained earnings is higher with weaker corporate governance and market disciplines.

Lower dividend payouts lead to higher retained earnings, leaving a greater probability of expropriations by controlling shareholders. LLSV (2000) find outside shareholders have a preference for dividends (a bird in the hand) over retained earnings (a bird in the bush), because the latter might never materialise as future dividends in hand. Myers and Rajan (1995) argue that anonymous liquid assets are more vulnerable for extraction because they are more difficult to trace, and are easier and less costly to convert for private consumption. Myers (1984) points out that if earnings are higher than anticipated, then

much of the increase is free for insiders to deploy, if it has not been promised to shareholders.

Thus, this study argues that, on balance, higher retained earnings can provide PCFs with more opportunities to expropriate at the expense of individual investors. First, it gives entrenched controlling owners more discretion over these earnings for gaining private benefits (Dyck and Zingales, 2004; Leuz, Nanda, and Wysocki, 2003). PCFs are close to politicians and hence may obey political objectives. For example, controlling shareholders may use firms' funds to enhance political support (e.g. bribery, corruption). Second, typical corporate governance mechanisms, such as company boards within PCFs, cannot effectively play their role of monitoring decision makers. These incentives stimulate entrenched dominant owners to expropriate, including retaining large free cash flows and squandering them by consuming perquisites with impunity. Third, the cost of expropriation through retained earnings is lower than other mechanisms. This is because controlling shareholders have incentives and know-how to take advantage of individual investors during profit allocations. The expropriation of minority shareholders can take many forms, including salary bonuses, luxury office complexes, and extravagant entertainment or travel expenses for provincial government staff (Y.-L. Cheung et al., 2010). More importantly, these kinds of appropriations appear common, but there is no legal mechanism to prohibit them. On the other hand, minority investors are not sophisticated enough to hamper such discretionary activities. In addition, by retaining more profits, PCFs can easily develop their reputation to the public for maintaining sufficient internal funds for growth opportunities. This will, accordingly, enable PCFs to be more attractive to outside investors, which in turn facilitates the motivation of expropriations by PCFs.

To investigate whether PCFs are in fact retaining larger earnings for grey usages motives, this study is the first to measure the amount of grey usages on net incomes using the following equations:

$$Distributable\ profits = Net\ income + retained\ earnings_{T0} - \Delta Surplus\ reserves \quad (4.8)$$

$$Retained\ earnings_{T1} = Distributable\ profits - Cash\ dividends \quad (4.9)$$

Substituting equation (4.8) in equation (4.9), we get equation (4.10):

$$\Delta Retained\ earnings = Net\ income - \Delta Surplus\ Reserves - Cash\ dividends \quad (4.10)$$

If there is any grey (unexplained) usage, then we should find equation (4.10) fails to balance. Thus, we express it as:

$$Grey\ usage = Net\ income - \Delta Surplus\ reserves - Cash\ dividends - \Delta Retained\ earnings \quad (4.11)$$

4.4 Data and methodology

4.4.1 Data source

This paper considers a firm to be politically connected if at least one of its shareholders or one of its top officers (CEO, president, vice-president, chairman, secretary, or independent directors) is a member, or associate of revolutionary leaders, of the Communist Party of China (CPC). We manually collect details of politically connected firms (PCFs) from IPO prospectuses, journals, and financial websites.

The sample finally consists of 381 politically connected firms listed on the Shanghai and Shenzhen stock exchanges. We then match connected firms with non-connected firms, as follows. First, a potential match is any firm from the same industry but not identified as politically connected. Second, the unconnected matching firm has the nearest listing year and has the same normal trading status as the connected firm. This matching procedure is done without duplications, which could reduce the bias on judgements.

This study follows the usual practice of excluding financial companies due to their unique financial structure, regulatory requirements, and accounting standards. Therefore, the final sample includes 8387 firm-year observations, covering the period from 1993 to 2011. This study uses the CSMAR database to obtain data on the three financial statements; balance sheet, income statement, and cash flow statement (direct); for the sample firms. Cash flow statement data is only available since 1998 when the Chinese accounting system first required listed firms to disclose both the direct and indirect cash flows, thus covering a relatively shorter time period than the other two statements.

4.4.2 Methodology

This section presents the empirical models used for testing Hypotheses 1 and 2. Specifically, it estimates the following model:

$$\text{INDICATOR} = \alpha + \beta_1 \text{PC} + \beta_2 \text{CONTROL} + \varepsilon$$

Where $INDICATOR$ refers to accounting performance (ROA), growth opportunities (Growth), operational tunnelling (OREC) and selling expenses (SEXP), profit distributions (DIV), retained earnings (RETAIN) and grey usage (GREY). PC is our variable of interest. It is a dummy variable equal to one if the firm belongs to the associates and families of revolutionary leaders of the CPC. $CONTROL$ refers to a set of firm-level control variables that may affect our main results. This study includes the following control variables in our regressions; leverage (Leverage), Size, market to book ratio of assets (MB), and the percentage ownership of the largest owner (Largest). It also includes a set of variables to control for board characteristics; the number of directors on the board (Board), the number of independent directors (Independent), the average director age (Age), the average score of director education level (Education), and the background of directors (Background). ε is an error term. As is common with panel data, we embed firm specific effects in the constant term (fixed-effects model).

The focus in this study is on the coefficient β_1, which measures the sensitivity of performance and expropriation to firms' political connectedness. Before carrying out any regressions, one should be aware of potential multicollinearity. Correlation coefficients between the explanatory variables in this paper are rather small; hence, multicollinearity does not affect our results.

4.5 Empirical results

Before running the regressions, T-tests and Wilcoxon tests are used to examine the differences between the firm characteristics of listed firms with and without political connections to national leaders.

4.5.1 Univariate results

Table 4:1: Descriptive statistics

This table presents variables used for testing Hypotheses1-3. Our sample includes 7537 firm-year observations from 1993 to 2011. OCTA is the ratio of cash received from sales of goods divided by total assets. OCPTA is cash paid for goods and services scaled by total assets. NOC is net cash flow from operating activities scaled by total assets. TURNOVER is total revenues scaled by total assets. COGS is total expenses scaled by total assets. ROA is net income scaled by total assets. GROWTH is the change ratio of total revenues. OREC is net other receivables scaled by total assets. SEXP is selling expenses scaled by total assets. DIV is cash dividends scaled by total assets. RETAIN is retained earnings scaled by total assets. CAPEX is fixed assets scaled by total assets. CASH is cash & cash equivalents scaled by total assets. GREY is calculated from equation 11. CP_employee is cash paid to or on behalf of employees divided by total revenues. OCP is other cash paid relating to operating activities divided by total revenues.

		Mean			Median	
	Connected	Unconnected	Diff	Connected	Unconnected	Diff
Panel A: Whole sample period 1993-2011						
Variables used for testing Hypothesis1						
OCTA	0.732	0.655	0.076***	0.631	0.541	0.091***
OCPTA	0.524	0.496	0.028***	0.402	0.369	0.034***
NOC	0.061	0.046	0.015***	0.057	0.042	0.015***
TURNOVER	0.692	0.649	0.043***	0.599	0.538	0.061***
COGS	0.638	0.622	0.016*	0.536	0.503	0.034***
ROA	0.055	0.039	0.016***	0.051	0.04	0.011***
GROWTH	1.231	1.18	0.050***	1.187	1.145	0.042***
Variables used for testing Hypothesis2						
OREC	0.047	0.062	-0.015***	0.02	0.025	-0.005***
SEXP	0.047	0.039	0.008***	0.026	0.024	0.002***
Variables used for testing Hypotheses3						
DIV	0.025	0.024	0.001	0.018	0.017	0.001*
RETAIN	0.075	0.046	0.029***	0.074	0.064	0.010***
CAPEX	0.261	0.267	-0.006*	0.23	0.243	-0.013**
CASH	0.183	0.175	0.008***	0.145	0.135	0.010***
GREY[36]	2.456	-2.223	4.679	0.000	0.000	0.000
CP_employee	0.090	0.098	-0.008***	0.075	0.081	-0.005
OCP	0.160	0.190	-0.031	0.095	0.096	-0.001
Panel B: sub-period 1993-2001						
Variables for testing Hypothesis1						
OCTA	0.577	0.543	0.034	0.482	0.424	0.060***
OCPTA	0.433	0.417	0.016	0.336	0.294	0.042**
NOC	0.037	0.035	0.002	0.035	0.033	0.002
TURNOVER	0.567	0.539	0.028	0.471	0.426	0.045***
COGS	0.519	0.504	0.015	0.425	0.379	0.046*
ROA	0.0502	0.043	0.0071**	0.056	0.051	0.005***
GROWTH	1.179	1.163	0.016	1.125	1.1	0.025

[36] The value for "GREY" here is average raw grey usages in million RMB.

Variables used for testing Hypothesis2						
OREC	0.081	0.098	-0.017***	0.055	0.066	-0.011***
SEXP	0.031	0.030	0.001	0.019	0.018	0.001
Variables used for testing Hypotheses3						
DIV	0.032	0.029	0.003**	0.025	0.022	0.003**
RETAIN	0.037	0.034	0.003	0.044	0.044	0.000
CAPEX	0.264	0.254	0.01	0.237	0.231	0.006
CASH	0.142	0.142	0.000	0.109	0.111	-0.002
GREY	7.086	15.873	-8.787	5.256	2.500	2.756**
CP_employee	0.081	0.085	-0.004	0.068	0.074	-0.005
OCP	0.190	0.201	-0.011	0.105	0.105	0.000
Panel C: sub-period 2002-2011						
Variables used for testing Hypothesis1						
OCTA	0.762	0.681	0.081***	0.663	0.570	0.093***
OCPTA	0.542	0.514	0.028**	0.419	0.390	0.029***
NOC	0.066	0.048	0.018***	0.062	0.045	0.017***
TURNOVER	0.729	0.684	0.045***	0.643	0.585	0.058***
COGS	0.672	0.658	0.014	0.576	0.545	0.031**
ROA	0.056	0.037	0.019***	0.049	0.036	0.013***
GROWTH	1.245	1.185	0.060***	1.201	1.156	0.045***
Variables used for testing Hypothesis2						
OREC	0.037	0.051	-0.014***	0.015	0.017	-0.002***
SEXP	0.052	0.042	0.010***	0.029	0.025	0.004***
Variables used for testing Hypotheses3						
DIV	0.023	0.022	0.001	0.016	0.015	0.001
RETAIN	0.087	0.049	0.038***	0.088	0.072	0.016***
CAPEX	0.259	0.271	-0.012***	0.228	0.249	-0.021***
CASH	0.195	0.185	0.010***	0.155	0.142	0.013***
GREY	0.986	-8.433	9.419	0.000	0.000	0.000
CP_employee	0.092	0.100	-0.009***	0.076	0.082	-0.006
OCP	0.154	0.188	-0.034***	0.093	0.094	-0.001

Table 4.1 provides the results for all of the tested variables. The summary statistics include the mean and median of each variable; the results for all years in Panel A (1993-2011), the sub-period (1993-2001) in panel B, and the post-WTO period (2002-2011) in Panel C. In total, we have 7537 firm-year observations.

The variables are grouped relative to the three tested hypotheses. In the first hypothesis, this study has the interested variables measuring accounting performance and growth opportunities. Panel A, has cash flows received and cash flows paid for operating business, with the next two variables being operating business accounting levels (operating revenue and cost of goods sold). It can be seen that, in both cash flows and

accounting reporting terms, the connected firms have, on average, higher balances than the unconnected firms. The differences in the mean (median) values between connected and unconnected firms are mostly statistically significant at the 1% level. For example, connected firms have significantly greater cash received from sales and goods (OCTA) than unconnected firms in terms of mean (7.6%) and median (9%). Moreover, connected firms have a higher mean (median) of returns (ROA) than unconnected firms, by 1.6% (1.1%); and a higher mean (median) of sales growth than unconnected firms, by 5.04% (4.22%). In all cases the differences are statistically significant at the 1% level.

Panel A of the table also shows the descriptive statistics for variables that proxy for tunnelling in Hypothesis 2. Of particular interest is that "Net other receivables" of connected firms are significantly less than that of unconnected firms. The mean (median) values are 4.6% (1.9%) and 6.2% (2.4%) for connected firms and unconnected firms, respectively. The differences between both mean and median are negative and statistically significant at the 1% level, which supports Hypothesis 2 that connected firms tend to avoid tunnelling at operational stages. The mean (median) of "Selling expenses" for connected firms is higher than for unconnected firms, with a difference of 0.77% (0.25%). Both the differences between the two groups are positive, at a significance level of 1%. The immediate comparison of "Selling expenses" does not seem to support Hypothesis 2; however, some supportive information is still found. By comparing the difference in "Selling expenses" against the differences in operating turnover, the former (which is 4.3%/6.1% in mean/median) is much greater than the latter (which is only 0.8%/0.2%). The ratio of "Selling expenses" based on the sales revenue of the connected firms is much smaller than that for the non-connected matching firms.

The last group of Panel A reports the statistics for the variables used in testing Hypothesis 3. At first glance, it can be seen that cash dividends relative to total assets are similar between the two groups. When comparing retained earnings, the difference between the connected and non-connected firms is found to be disproportionately high (7.5% versus 4.6% in mean value). These initial findings are consistent with the suggestion that connected firms might deliberately keep larger retained earnings for potential extraction.

To interpret the observed difference in retained earnings, this study investigates the possibility of two other explanations; investment motivation, and precautionary

motivation. We expect to see more investment in fixed assets if the first explanation is true, or higher cash/cash equivalents if the second explanation is true. To test these two explanations this study uses the ratio of net fixed assets to total assets (CAPEX) as the proxy for investment motives, and the ratio of cash & cash equivalents to total assets (CASH)[37] as the proxy for precautionary motives. Interestingly, the difference between the groups for the mean (median) of net fixed assets (CAPEX) is negative (at the 10% or 5% significance level in mean or median). By contrast, PCFs hold more cash & cash equivalents (CASH) compared to unconnected firms, by 0.8%. This finding suggests that connected firms may keep huge earnings for extraction incentives or precautionary reasons, rather than investment. Although it is hard to disentangle these two competing incentives between extraction and precautionary reasons, this study presents a more comprehensive analysis below to add insight into the agency cost explanation for firms retaining more earnings.

The last part of Panel A is the grey usage (GREY), a variable this study has developed to proxy for potentially expropriated values. This study derives the variable of Grey usage from equations (4.8) to (4.11) to investigate the extent to which the sample firms have spent a portion of distributable profits on something not well explained in standard accounting reports. As shown in Table 4.1, the average grey usages (GREY) across the whole sample period is on average higher in connected firms than in unconnected firms (2.45 versus -2.22). Yet the difference in the median of grey usages across connectedness is fairly small. However, both differences in mean and median of grey usages across connectedness are statistically insignificant at conventional levels, possibly because of the high noise in the measure of Grey usages (it actually involves an accumulative effect).

When comparing the two sub-periods illustrated in Panels B and C, there are two aspects that deserve comment. First, it can be seen that both the mean (median) of each variable for testing Hypothesis 1 increases over the period from 2002 to 2011. This finding is consistent with the overall growth in China's economy after the entry to the WTO at the end of 2001.

[37] The literature puts forward several reasons to explain the incentives of firms to keep cash. For example, Jesen (1986) and Stulz (1990) argue excessive cash holding leads to agency conflicts. While Boubakri, El Ghoul, and Saffar (2013) show PCFs hold more cash than non-connected firms to meet political agendas. This is supportive of our expropriation incentives through retained excessive earnings by PCFs.

Second, compared to the full sample period reported in Panel A, Panel B shows that the differences of means for each variable during the period of 1993-2001 are fairly small and insignificant. In contrast, Panel C shows a quite similar pattern to those reported in Panel A. This evidence suggests that connected firms perform differently since 2001, the year China first became a member of the WTO. The observation is that the major difference in operating business between our "princelings" and the matching firms started in the later period after 2001; the result suggests that the connection happened after 2001, which is consistent with the conclusion drawn from the observed difference in retained earnings (Chart 3.1-u in Chapter 3). Consistent results are obtained for Hypothesis 2 that the "princelings" connected firms show less cash tunnelling behaviour in both sub-periods. Taken together, the evidence suggests that the lower level of tunnelling in princelings connected firms is not the result of political connections; rather, it is a result of better operating business performance or other factors that are linked to operating business conditions.

The movement of retained earnings involves accumulative effects of operating business profits. It is continuously high business profits in the post-2001 sub-period that cause the increase of retained earnings (observed in Chart 3.1-u). The precautionary (shown in higher cash reserves) or expropriation motivations are again supported in this period; and the investment motivation is not supported.

This study also investigates the differences of raw grey usages (GREY) during the two sub-periods from 1993 to 2001 (in Panel B of Table 4.1) and from 2001 to 2011 (in Panel C of Table 4.1). First, it finds that the "Grey" spending of the "princelings" politically connected firms are positive in both sub-periods; but with a much higher value (of 7.086 million RMB per year,) in the years before 2002 (these positive values in the period from 1998 to 2002 can be seen in Chart 4.3-E). Surprisingly, it is found that an even higher value (of 15.87 million RMB per year) of "Grey" usage is shown for the matching firms in the same period. Interestingly, in the later sub-period a figure of -US$8.43 million dollars is shown in matching firms, indicating that much of the "Grey" spending is returned to the company accounting book. On average, over the whole sample period (in Panel A), the "princelings" firms spend US$2.46 million dollars each year, while the matching firms have negative spending in the same period. This result is consistent with the prediction in Hypothesis 3.

Overall, the between-group comparison in the T-tests seems supportive of the systematic superiority of “princelings” PCFs relative to their matching firms in operating business revenue and profits. These firms are also less motivated to engage in cash tunnelling in the operating stage. In order to further investigate how these higher distributable funds are allocated in the second distribution stage, this study compares the average values of three components; dividend payments, retained earnings, and some others (including “Grey” usages). The univariate comparisons tell us that the major difference occurs in the retained earnings and there is no observable difference in in the level of dividends paid. Additionally, this study observes higher “Grey” values for the PCFs, and wild fluctuations in Grey values for both PCFs and matching firms. Negative Grey values are evident in many years (particularly for the matching firms in the second sub-period from 2002-2011). These findings warrant further investigation in the next section to provide an explanation.

4.5.2 Regression results

Although these univariate tests provide preliminary support for our hypotheses, they only document binary relations without controlling for other potential determinants. In this section, we extend the analysis through more rigorously examining whether the evidence on these predictions will persist in a multivariate framework. Before carrying out any regressions, one should be aware of potential multicollinearity. This study finds the correlation coefficients between the explanatory variables are small, so multicollinearity is unlikely to affect our results. As this study deals with panel data, both firm and year fixed-effects are included in the regressions to control for the possibility that unobserved firm- and year-specific attributes may affect the results.

4.5.2.1 Hypothesis1: political connections, operating performance and growth opportunities.

The dependent variables are operating performance and growth opportunities. This study uses the ratio of net cash flow from operating activities divided by total assets (NOC) and return on assets (ROA) to measure the firm’s operating performance and profitability. The change ratio in sales (Growth) is used to proxy for growth opportunities. The independent

variable of interest indicates whether or not a company belongs to the families or associates of national leaders in China. This study uses a dummy variable for PC which takes a value of one if a company is politically connected, and a value of zero otherwise.

This study also uses several control variables; firm size (Size), total liabilities divided by total assets (Leverage), the market to book value of total asset ratio (MB), and the percentage ownership of the largest shareholder (Largest). The ownership variable controls for the possibility that a politician's rent-seeking incentives depend on the controlling shareholders' ownership stake in the firm. In addition, this study controls for board characteristics using the following variables; logarithm of number of board directors (Board), the percentage of independent directors on the board (Independent), the average age of directors on the board (Age), the average education level of directors on the board (Education), and the number of directors who used to work, or are currently working, for universities or research institutions (Background). This study winsorises the top and bottom 5% of variables for both the dependent and independent variables in the model

Table 4:2: Political connections, operating performance and growth opportunities

This table presents OLS regression results of the relationship between political connections and firms' operating performance and growth opportunities. NOC is the ratio of net cash flow from operating activities divided by total assets. ROA is net income divided by total assets. GROWTH is the change ratio of sales. A firm is defined as PC when it is politically connected. All other control variables are defined in Appendix A. The P-values are reported in parentheses. Superscripts *, **, *** indicates significance at the 90%, 95% or 99% confidence levels, respectively.

	NOC		ROA		GROWTH	
Variables	1	2	3	4	5	6
PC	0.008***	0.008**	0.007***	0.007***	0.041***	0.049***
	(.0002)	(.0152)	(<.0001)	(.0023)	<.0001	0.0002
Leverage	-0.057***	-0.062****	-0.153***	-0.149***	-0.054***	-0.036
	<.0001	<.0001	<.0001	<.0001	0.0025	0.2033
Size	0.012***	0.007***	0.022***	0.019***	0.056***	0.063**
	<.0001	<.0001	<.0001	<.0001	<.0001	0.0338
Largest	0.000	0.000**	0.000	0.000	0.000	0.001***
	0.3706	0.0104	0.6716	0.4873	0.2346	<.0001
MB	0.006	0.008***	0.011***	0.012***	0.022***	0.034
	<.0001	<.0001	<.0001	<.0001	<.0001	0.9069
Board		0.025***		0.012**		0.004*
		0.0015		0.0351		0.541
Independent		-0.001		-0.000		0.054***
		0.9648		0.9634		<.0001
Age		0.002***		-0.000		-0.008
		<.0001		0.8378		0.7756
Education		0.005*		0.001		-0.003
		0.0974		0.6112		0.3220
Background		0.002		0.005		0.025
		0.7795		0.2832		0.3216
Intercept	-0.189***	-0.264***	-0.392***	-0.362***	-0.061***	0.110
	<.0001	<.0001	<.0001	<.0001	0.5044	0.4335
N	6029	2477	6072	2487	5808	2401
R-squared	0.06	0.11	0.32	0.38	0.04	0.06

Table 4.2 shows the results of the OLS regression on the relation between political connections, and operating performance (models1-4) and growth opportunities (models 5-6). The multivariate regression results show there is a positive relationship between political connections, and firm operating performance and growth opportunities. The coefficient on the dummy variable PC is positive and statistically significant across all specifications, at the 1% level (except model 2). The effect is also economically significant given the mean differences of 1.6% of for NOC, 1.6% for ROA and 5% for GROWTH (shown in Table 4.1), between the two groups of firms. Regarding the control variables, Leverage has a negative effect on firms' operating performance and growth opportunities, whereas both Size and Board have positive explanatory effects.

Overall, the multivariable regression results confirm the univariate results reported in Table 4.1 that connected firms outperform the unconnected matched firms in terms of operating performance and growth opportunities, which is consistent with the expectation in Hypothesis 1. The result is in contrast with a negative and perhaps dominating view in the literature that PCFs underperform their unconnected peers (Sun & Tong, 2003; Fan et al., 2007). The results in this study support the initial description of the "princeling" firms as "Golden hens". In other words, connected firms in this study should be nourished for more future eggs. In contrast, some other reported PCFs are "Chickens"; their owners are eager to extract current benefits via cash tunnelling. This study tests the cash tunnelling expectation in the next section.

4.5.2.2 Hypothesis 2: political connections and tunnelling at the operating stage.

The positive link between a firm's political connection and its greater profitability and growth opportunities is consistent with the model prediction of less tunnelling at the operating stage. In this section, the second hypothesis is tested by exploring whether connected firms engage in fewer tunnelling activities to divert corporate resources for private benefits. Table 4.3 reports the results.

Table 4:3: Political connections and operating tunnelling

This table presents the OLS regression results of the effects of political connections on operating tunnelling. Tunnelling is alternatively measured by the "Net other receivables" divided by total assets (OREC) or selling expenses divided by total assets (Models 3 and 4) or total revenues (SEXP). A firm is defined as PC when it is politically connected. All other control variables are defined in Appendix A. The P-values are reported in the parentheses. A superscript *, **, *** indicates significance at the 90%, 95% or 99% confidence levels, respectively.

	OREC/T.Assets		SEXP/T.Assets		SEXPX/T.Sales	
Variables	1	2	3	4	5	6
PC	-0.006***	-0.004	0.003***	0.001	0.003*	0.001
	0.0031	0.1129	0.006	0.9759	0.084	0.6597
ROA	-0.294***	-0.220				
	<.0001	<.0001				
Tax			0.784***	0.905***	0.703***	0.823***
			<.0001	<.0001	<.0001	<.0001
Leverage	0.088***	0.089***	0.006**	0.014***	-0.002	0.004
	<.0001	<.0001	0.0239	0.0007	0.5496	0.5716
Size	-0.016***	-0.010***	-0.003***	-0.006***	-0.011***	-0.012***
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
Largest	0.000	0.000	0.000***	0.000***	-0.001***	-0.001***
	0.3196	0.0198	<.0001	<.0001	<.0001	<.0001
MB	0.003***	0.002**	0.000	-0.001*	0.001	0.001
	<.0001	0.0583	0.2107	0.0526	0.1231	0.1143
Board		-0.003		0.001		0.002
		0.6701		0.8738		0.7565
Age		-0.001***		0.000		-0.001***
		0.0027		0.5635		0.0004
Education		-0.005**		0.011		0.004
		0.0167		<.0001		0.1434
Independent		-0.113***		0.035***		0.027
		<.0001		0.0064		0.1808
Background		0.005		-0.014***		-0.016***
		0.2863		0.0001		0.0055
Intercept	0.349	0.339***	0.080***	0.104***	0.304***	0.361***
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
N	6072	2487	5961	2442	5956	2441
R-squared	0.25	0.26	0.28	0.34	0.13	0.18

The first dependent variable to proxy for tunnelling is the ratio of "Net other receivables" divided by total assets (OREC). The explanatory variables are similar to those defined in Table 4.2, with the addition of the ROA variable. As can be seen from columns 1 and 2 of Table 4.3, PC is negatively related to OREC with coefficients of -0.6 % and -0.4%, respectively. The first coefficient is significant at the 1% level; when more corporate governance variables are included the second coefficient is no longer significant, which suggests that lower cash tunnelling could be related to better corporate governance. Table 3.2-D shows that our PCFs have significantly higher Age and Education, and that these two variables are significantly negatively related with the OREC. These observations serve as important evidence that the "princeling" firms generally have higher profitability and better corporate governance; both of the properties contribute to the lower level of cash tunnelling observed in these companies. Furthermore, the table also shows that firms with lower leverage and larger size are less prone to tunnelling at the operational level. These findings are consistent with those reported in the previous literature (Berkman et al., 2009; Jiang et al., 2010).

This study also uses the ratio of selling expenses over total revenues as a proxy for tunnelling. It is possible that the higher selling expenses in politically connected firms could alternatively be explained by their higher total revenues rather than representing the extraordinary expenditures on politicians. To rule out this concern, the ratio of selling expenses over total revenues is used, and the results are given in models 5 and 6. When a firm is politically connected, additional expenditures[38] are necessary to maintain good relationships with government officials. As a consequence, such suspicious misuses of public money should be higher in firms with political connections. In practise, Chinese listed firms often use the "Selling expenses" account to cover these. Alternatively, one may argue that the observation of higher expenses in connected firms can relate to tax avoidance. Therefore, models 3 and 4 include the control variable of tax payments (Tax), and it is expected that the observed political connection effect is not the result of tax evasion.

The coefficients on the main interest variable PC in models 3 and 4 are 0.3% and 0.1%, respectively. The former is significant at the 10% level, but the latter is insignificant.

[38] Including official receptions, vehicles, and overseas trips

Collectively, the results of the two tests presented in models 3 and 4 in Table 4.3 are consistent with the view that the positive relationship between PC and SEXP suggests the use of selling expenses as a mechanism to establish or maintain political ties; however, when it controls for corporate governance issues the relationship disappears.

Overall, the results in Table 4.3 show that cash tunnelling by PCFs is less likely to be conducted when measured by "Net other receivables". However, this is not the case when cash tunnelling is proxied by "Selling expenses" relative to total revenues. Overall, these findings are consistent with the prediction of model 2.

4.5.2.3 Hypothesis 3: political connections and profits allocations

So far, the results in Tables 4.2 and 4.3 suggest that political connections increase a firm's profitability but reduce tunnelling at the operating stage. A natural question is whether or not political connections influence the distribution of a firm's earnings. Given that expropriation is a general problem on the Chinese stock market, the third hypothesis predicts that connected firms are more likely to expropriate minority shareholders during profit allocations.

4.5.2.3.1 Hypothesis 3a: Political connections and dividend-retained earnings

This section examines whether connected firms pay less cash dividends and maintain more retained earnings, as expected by expropriation incentives. By paying dividends, insiders return corporate earnings to investors and hence earnings are no longer available to benefit the insiders (LLSV, 2000). However, in countries with weak investor protection, such as in China, the dividend behaviour of listed firms is not well regulated. Public enforcement of dividend payments, including fines and prison terms, are hampered by the limited authority of security market regulators. Chapter 2 of this study shows that the rules and regulations on dividend policy are promulgated as late as 2012. As the market regulators had no jurisdiction over profit distributions before 2012, it is not unreasonable to suggest that a firm's ability to earn greater profits due to political connections may encourage the expropriation of minority shareholders through profit sharing arrangements.

As a consequence, connected firms may have strong incentives to avoid cash dividend payments and instead have a preference for expropriating retained earnings.

Table 4:4: Political connections and profits sharing distribution

This table presents the OLS regression results of the effects of political connections on profits allocations. DIV is total cash dividend payments divided by total assets. RETAIN is retained earnings divided by total assets. CAPEX is net fixed assets divided by total assets. CAPEX*PC is an interaction term between CAPEX and PC. CASH is cash & cash equivalents divided by total assets. CASH*PC is an interaction term between CASH and PC. A firm is defined as PC when it is politically connected. All other control variables are defined in Appendix A. The P-values are reported in the parentheses. A superscript *, **, *** indicates significance at the 90%, 95% or 99% confidence levels, respectively.

	DIV/T.A	RETAIN/T.A				
Variables	1	2	3	4	5	6
PC	-0.001*	0.013***	0.013***	0.022***	0.013***	0.006
	0.0844	0.0018	0.0027	0.005	0.0026	0.3988
CAPEX			-0.050***	-0.033*		
			<.0001	0.0593		
CAPEX*PC				-0.033		
				0.1582		
CASH					0.074***	0.057**
					<.0001	0.0058
CASH*PC						0.035
						0.1838
Leverage	-0.033***	-0.340	-0.339	-0.339	-0.320	-0.320
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
Size	0.004***	0.041	0.041	0.041	0.041	0.041
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
Largest	0.001***	0.000	-0.001	-0.001	0.000	-0.001
	<.0001	0.7131	0.9833	0.9537	0.834	0.8853
MB	0.003***	0.009	0.008	0.008	0.007	0.007
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
Board	0.006***	0.016	0.019	0.018	0.016	0.016
	0.0017	0.124	0.0671	0.0687	0.1249	0.1245
Age	0.001	0.001	0.002	0.002	0.001	0.001
	0.0005	0.0118	0.0052	0.0054	0.0096	0.0104
Education	-0.001*	0.012	0.011	0.011	0.011	0.011
	0.0905	0.0012	0.0018	0.0021	0.0014	0.0015
Independent	-0.008	0.030	0.026	0.027	0.024	0.024
	0.1367	0.2883	0.3518	0.3499	0.3967	0.3999
Background	0.002	-0.017	-0.017	-0.017	-0.016	-0.017
	0.1734	0.0391	0.0374	0.0401	0.0431	0.0401
Intercept	-0.088***	-0.805	-0.809	-0.814	-0.828	-0.826
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
N	2353	2482	2485	2485	2485	2485
R-squared	0.25	0.45	0.46	0.46	0.46	0.46

Table 4.4 reports the results of this investigation. Consistent with Hypothesis 3a, model 1 in Table 4.4 shows that the coefficient on PC is significantly negative for cash dividend payments (DIV) at the 10% level. Model 2 shows that the coefficient on PC is significantly positive for retained earnings (RETAIN) at the 1% level. These findings are consistent with the explanation that connected firms prefer to retain earnings rather than pay out cash dividends. However, it should be noted that, apart from the expropriation objective in Hypothesis 3a, PCFs have higher retention of earnings could also be explained by two other sound economic motivations; investment motivation, and precautionary motivation.

The investment motivation is based on the pecking order theory. Internal funding is cheaper than issuing dividends and floating new securities (Easterbrook, 1984), because of informational asymmetries between insiders and external investors (Myers and Majluf, 1984). Hence, firms tent to prefer using internal funds (such as retained earnings) to finance profitable investment opportunities. Accordingly, PCFs may accumulate excessive earnings in order to reduce transaction costs associated with external financing in imperfect capital markets. The second possibility concerns precautionary reasons. That is, firms' retention of any excess operating cash flow can be a deliberate choice for precautionary motivations. According to this view, firms' accumulation of earnings is more or less automatic, because having sufficient retained earnings can provide a cushion for unanticipated events, such as a global crisis. In short, it is imperative to account for precautionary and transaction reasons before concluding that PCFs stockpile larger profits for expropriation motives.

As discussed above, there are two concerns that connected firms keep larger retained earnings for investment opportunities or precautionary reasons, other than for expropriating misuses. Therefore, to mitigate the first consideration, models 3 to 4 (in Table 4.4) re-run the regression reported in model 2 by including the ratio of net fixed assets over total assets (CAPEX) as a proxy for investment opportunities and an interaction term CAPEX*PC. In both models 3 and 4 the coefficients of fixed asset investment (CAPEX) are significantly negative. The result of a negative relation between fixed assets and retained earnings is not supportive of the investment motivation. The expropriation hypothesis is still valid after observing that the coefficients on PC in

models 3 and 4 are positive and significant at the 1% level, which is similar to the coefficient on PC reported in model 2.

To mitigate the second concern, this study controls for precautionary motives by including the ratio of cash & cash equivalents over total assets (CASH) in model 5 and by further including the interaction term, CASH*PC, in model 6. It has been observed in the results in Table 4.4 that the coefficients (in models 5 and 6) on CASH are significantly positive to RETAIN; the result is consistent with the precautionary motive (although the interaction term CASH*PC is not significant). Still with precautionary motives controlled, it sees a positive relation between PC and retained earnings (1% level of significance in model 5). Again, the expropriation hypothesis is supported.

Overall, the results reported in Table 4.4 indicate a preference for retained earnings over cash dividends by firms with "princelings" connections. According to agency theory, unless profits are paid out to shareholders, they may be diverted by the insiders for personal use or committed to unprofitable projects for private benefits and, hence, they might never materialise as future dividends (LLSV, 2000). Hence, this study conjectures that connected firms that retain large earnings and distribute lower dividends might have expropriation influenced by expropriation incentives. The findings in Table 4.4 are consistent with the proposition in model 2 that firms operating in an environment with weak investor protection will pay lower dividends for the purpose of taking a higher proportion of the retained earnings.

The next section takes a further step in the investigation by directly testing any extra spending of retained earnings by the politically connected firms. For that purpose this study has developed a new variable called "Grey usage" to test for the incidence of extra grey usages in these firms.

4.5.2.3.2 Hypothesis 3b: Political connections and the "Grey" usage of earnings

This section analyses net income according to equation 4.11 in order to investigate profit distribution in more detail. This study looks into profit distribution by testing five variables; net income attributable to parent owners (NI), cash dividends (DIV), the net

change in surplus reserves from year t+1 to year t (ΔSR), the net change in retained earnings from year t+1 to year t (ΔRE), and grey usages (GREY) for both connected and unconnected firms across the sample periods. Table 4.5 calculates the average annual mean values for both the connected and unconnected sample groups separately (the same number of firms is included in each group).

Table 4:5: Summary statistics on grey usages

This table presents the summary statistics on grey usages across connectedness. NI is net income attributable to parent owners. DIV is cash dividends. ΔSR is the net change in surplus reserves from year t+1 to year t. ΔRE is the net change in retained earnings from year t+1 to year t. GREY is grey usage from equation 11 in this paper. Panel A gives the value-weighted mean value of these variables. Panel B shows the equal-weighted mean percentage to net income attributable to parent owners.

Panel A Mean Value (In Million)			Panel B Mean/NI			
	Connected	Unconnected	Connected	Unconnected	Diff.	Diff/Connected
Whole period:1994-2011						
NI	234.92	130.87	100.00%	100.00%	0.00%	0.00%
Div	77.23	48.61	32.88%	37.15%	-4.27%	-12.97%
ΔSR	29.77	18.59	12.67%	14.20%	-1.53%	-12.10%
ΔRE	132.45	68.81	56.38%	52.58%	3.80%	6.74%
Grey	2.46	-2.22	1.05%	-1.70%	2.75%	261.78%
Sub-period:1994-1999						
NI	79.96	51.19	100.00%	100.00%	0.00%	0.00%
Div	23.87	14.67	29.85%	28.66%	1.19%	4.00%
ΔSR	27.12	15.56	33.91%	30.40%	3.52%	10.38%
ΔRE	12.62	8.18	15.78%	15.99%	-0.21%	-1.31%
Grey	16.74	13.24	20.94%	25.86%	-4.92%	-23.50%
Sub-period:2000-2005						
NI	88.46	48.87	100.00%	100.00%	0.00%	0.00%
Div	47.88	29.89	54.12%	61.27%	-7.15%	-13.21%
ΔSR	23.46	16.69	26.52%	34.22%	-7.70%	-29.02%
ΔRE	29.57	6.96	33.42%	14.26%	19.16%	57.33%
Grey	-10.20	-3.22	-11.53%	-6.61%	-4.92%	42.68%
Sub-period:2006-2011						
NI	382.76	218.11	100.00%	100.00%	0.00%	0.00%
Div	113.03	73.35	29.53%	33.63%	-4.10%	-13.88%
ΔSR	35.02	20.97	9.15%	9.61%	-0.46%	-5.07%
ΔRE	239.35	134.72	62.53%	61.77%	0.76%	1.22%
Grey	7.59	-6.19	1.98%	-2.84%	4.82%	243.45%

As shown in the table, over the whole time period of 1994-2011, a connected firm on average earns 1.80 times more NI than an unconnected firm, being RMB 234.92 million and RMB 130.87 million, respectively. Nevertheless, the relative gap in retained earnings (ΔRE) is even bigger. There is RMB 132.45 million in mean ΔRE in connected firms, which is 1.92 times more than that of unconnected firms. Additionally, connected firms have RMB 2.46 million of grey usages, while matching firms have negative grey usages of RMB -2.22 million over the whole sample period. From the definition of the "Grey usage" (in equation 4.11), a positive value represents a usage (or spending) of net income.

Table 4.5 also analyses the distribution ratios relative to NI. Relative to a 100% level of NI, an average connected firm pays 32.88% as dividends, while a typical unconnected firm pays dividends at a rate of 37.15%; the net difference of 4.27% is 12.97% [(32.88-37.15)/32.88] less for a the connected firm compared to its matched firm. As for retained earnings, an average connected firm keeps 56.38% of NI while the matched firm retains 52.58%; the 3.80% net difference is a 6.74% relative difference.

The above results provide a more detailed picture of expropriation in the distribution stage. An average politically connected firm produces more net income, and pays a lower proportion of this out as dividends, leaving a higher proportion in the retained earnings. One important explanation of the higher retained earnings is that the firm can spend more on extra spending, which is unexplained in financial reports and measured as "Grey" usage in this study.

To further investigate distribution issues, this study divides the sample into three sub-periods; the first is from 1994 to 1999, the second is from 2000 to 2005, and the third is from 2006 to 2011. The first sub-period division is about the time when China joined the WTO, and the end of the second sub-period is the time when many new policies or reforms (on the security market and accounting regulations) were implemented in China.

The sub-periods' values are also provided in Table 4.5, below the full whole period results. In the first sub-period (1994-1999), the relative dividend ratio between the connected firms (23.87) and unconnected firms (14.67) is 1.63 (=23.87/14.67), and similar ratios are observed in net incomes (1. 56) and retained earnings (1.54). It seems that in the first sub-period the major difference between connected and unconnected firms

is in operating profits (measured in NI); there is no material difference in their distribution policies.

In the second sub-period (2000-2005), an obvious difference can be seen in performance in terms of operating incomes; the average connected firm enjoyed an increase (from RMB 79.96 million to RMB 88.46 million) while the matching firms suffered a decrease (from RMB 51.19 million to RMB 48.87 million), resulting in a relative ratio of 1.81 in the second-period. An even bigger difference is observed in retained earnings changes; the average annual increase for the connected firms is much more than double (from RMB 12.62 million to RMB 29.57 million)[39]. By contrast, matching firms' annual change is reduced from RMB 8.18 million to RMB 6.96 million, resulting in a relative ratio of 4.25 in the second sub-period.

The analysis of the distribution policy in terms of ratios based on net income leads to the conclusion that an average connected firm has increased its dividend payout ratio by 24.27% (from 29.85% to 54.12%), while its matching firm has made an even bigger increase of 32.61% (from 28.66% to 61.27%). Also, the ratio of the retained earnings to net income has increased in the connected firms by 17.64% (from 15.78% to 33.42%), and decreased in matching firms by -1.73% (from 15.99% to 14.26%). In terms of the relative difference ratio, connected firms pay 7.15% less in dividends, 7.70% in surplus reserves (SR), and19.16% higher in retained earnings than its matching firm.

When we investigate the third sub-period (2006-2011), it can be seen that both connected and unconnected firms have enjoyed more than a quadruple increase in net incomes compared with the averages in the second sub-period. In terms of direct ratios, the two groups have a similar pattern (ranging from 1.54 to 1.78); but a very different relative distribution ratio. The connected firm pays 4.10% less in dividends and add 0.76% more to retained earnings.

From the above sub-period analysis we can further describe the difference between the "princelings" sample and their matching firms; this study observes major differences in operating incomes starting in the second sub-period. Although both groups have increased

[39] This difference is consistent to the observed results shown in the retained earnings chart (Chart 4.3-B), that the major influence of the "princelings" started about the turn of the new century.

their payout ratios in the second period, connected firms pay over 7% less in dividends and allocate 14% more to retained earnings. These differences in policy continue in the fast growth market conditions of the third sub-period, when the Chinese economy tended enjoyed double digit annual growth in GDP.

Recall from equation (4.11), that an element has been identified in this study as missing to explain changes in retained earnings in Chinese financial statement, named “Grey” usage. From this “Grey” variable, a possible means of expropriation by dominant shareholders is explored. It can take a negative value in some periods because the accounting process of cash spending includes both “spending” and “reversed” transactions; but the “reversed” transactions are usually the opposite process of earlier “spending” transactions. This process is clearly shown in the sub-period results.

The Table 4.5 results of the first sub-period show that both average connected firms and their matching firms are “spending” great amounts of distributable income on the “Grey” usage category. An average connected firm spends RMB 16.74 million each year; whereas its matching firm spends RMB13.24 million each year. These values are, in terms of the distribution ratio based on net income, 20.94% for the connected firm and 25.86% for the matching firm; both of the ratios are greater than the ratios of change in retained earnings in the same time period. It is interesting to see that in the second sub-period the Grey usage in both the connected and the matched firms becomes negative, reflecting a “reversal” direction in Grey usage, with values of RMB 10.20 million and RMB 3.22 million, respectively. For an average connected firm, the Grey value changes back to positive (i.e. spending) in the third sub-period with RMB 7.59 million while for the average matching firm the reversal continues with negative RMB 6.19 million.

In summary, Grey usage is observed among Chinese firms in the earlier years (such as the first sub-period before 2000). The overspent discrepancy is generally reversed in the second sub-period, and some reversing continues into the third sub-period. For the whole sample period, it is observed that there is positive spending of RMB 2.46 million on Grey usage for an average connected firm, and negative RMB 2.22 million for the average matched firm. These results are supportive of the expropriation hypothesis. Furthermore, the negative Grey usage for an average matching firm and the drop in GREY across time could potentially be explained by a lack of regulation by the China Securities Regulatory

Commission (CSRC) to enforce the reduction in these grey usages until the later periods. Before and after China's entry into the World Trade Organization (WTO) in late 2001, the Chinese government has continued to improve the relevance of China's accounting information to prepare Chinese companies to compete with other economies (Wang, Zheng, & Chen, 2001).

Overall, Table 4.5 shows that PCFs retain disproportionately higher profits and have more grey usages on earnings but pay lower cash dividends to investors than unconnected firms. The results in Table 4.5 are consistent with Hypothesis 3b that PCFs are more likely to expropriate outside shareholders. The results in Table 4.5 could explain why Chinese listed firms are criticised for their poor dividend policy. Indeed, compared to the initial public offerings on the Chinese stock market, the dividend payout ratios of Chinese listed firms are relatively low.

4.5.2.3.2.1 Grey usage and stock returns

If grey usages serve as a means to engage in value expropriations, they should be associated with negative stock returns. As the grey usage is distributed unevenly across the sample period, this study now investigates the impact of gross grey usages on a cross section of stock returns. The dependent variable is annual stock returns without cash dividends reinvested. The independent variables are the political connection dummy (PC) and Grey usage. The control variables are the same as used in Table 4.1.

Table 4:6: The relation between the grey usage and stock return

This table reports the results of cross-sectional regressions of annual excess stock returns on grey usages. GREY is the natural logarithm of grey usages. A firm is defined as PC when it is politically connected. All other control variables are defined in Appendix A. The P-values are reported in the parentheses. A superscript *, **, *** indicates significance at the 90%, 95% or 99% confidence levels, respectively.

Variable	1	2	3
PC	-3.9E-05	1.5E-03	3.1E-01***
	0.00	0.10	2.45
GREY	-0.007**	-0.010**	0.000
	-2.23	-2.15	0.00
PC*Grey			-0.018**
			-2.45
ROA	0.110	-0.055	-0.039
	1.09	-0.35	-0.25
Leverage	0.047**	0.020	0.038
	2.01	0.55	1.04
Size	0.020***	0.030***	0.031***
	3.48	3.31	3.45
MB	0.007**	0.007	0.008*
	2.12	1.60	1.80
Largest	0.000	3.18E-05	8.471E-05
	0.40	0.07	0.18
Log_board		-0.033	-0.036
		-0.90	-0.98
Age		-0.001	-0.001
		-0.35	-0.29
Edu		-0.017	-0.018
		-1.24	-1.35
Independent		0.007	-0.008
		0.05	-0.06
Background1		0.002	0.002
		0.06	0.07
Intercept	-0.393***	-0.388**	-0.581***
	-3.45	-2.22	-3.07
N	370	209	209
R-Squared	0.04	0.07	0.1

Table 4.6 reports the results of cross sectional regressions between excess stock returns and grey usage. As indicated by the negative coefficients on grey usage in model 1 and model 2, and on the interation term of PC and Grey in model 3, grey usage is interpreted as bad news by the market. Overall, the results in Table 4.6 show a negative relationship between grey usage and stock return, suggesting investors are partially aware of value expropriations of earnings through grey usages.

4.5.2.3.2.2 Potential mechanisms in place to divert the grey usage

Having revealed a negative association between grey and stock return, this study now considers how the grey usage is diverted by the listed firms. Specifically, there may be certain cash flow accounts that serve as channels to transfer the grey usage out from the listed firms. If so, then a positive relation is expected between the grey usage and the related cash outflow accounts. To test this possibility this study examines many cash flows accounts, finding that only two of them are consistently positively related. These two ratios are; cash paid to and on behalf of employees divided by total revenues (CP_employee), and other cash paid relating to operating activities divided by total revenues (OCP).

Note, according to the CSMAR China stock market financial statement database, company's cash payments to and on behalf of employees, including wages, bonuses, allowances and subsidies actually paid to employees in current period, as well as pensions, unemployment insurance, supplementary pensions, housing fund, and housing hardship allowances paid to employees, and expenses paid for retired staff, excluding wages paid to staff involving in construction in progress. Any payments to controlling owners could also be included in this account.

Table 4:7: Potential mechanism to divert the grey usage

This table examines the relation between cash payments and grey usage across political connectedness by running OLS regressions. The grey usage is the ratio of annual raw grey usage over total revenues. CP_employee is the ratio of cash paid to and on behalf of employees divided by total revenues. OCP is the ratio of other cash paid relative to operating activities divided by total revenues. All other variables are defined in Appendix A. The P-values are reported in the parentheses. A superscript *, **, *** indicates significance at the 90%, 95% or 99% confidence levels, respectively.

Variables	Connected sample			Unconnected sample		
	1	2	3	4	5	6
CP_employee	0.089***	0.073***	0.112***	0.003	-0.030	-0.131***
	<.0001	0.0031	0.0004	0.8992	0.2474	<.0001
OCP	0.029***	0.021***	0.012	0.023***	0.017***	0.015**
	<.0001	0.0017	0.1869	<.0001	0.0052	0.0458
Leverage		0.042***	0.043***		0.013**	0.021**
		<.0001	<.0001		0.0478	0.0146
Size		-0.005***	0.001		-0.003*	-0.002
		0.0003	0.5086		0.0761	0.4397
Largest		0.000	0.000		0.000	0.000
		0.5617	0.8105		0.1069	0.1202
MB		0.003***	0.002*		0.004***	0.003**
		0.0002	0.0829		0.0003	0.0466
Board			-0.002**			0.000
			0.0443			0.9149
Age			-0.001			0.001**
			0.3059			0.0452
Education			0.001			0.000
			0.7005			0.9525
Independent			-0.072***			0.016
			0.0076			0.5805
Background			-0.002			0.005
			0.8254			0.5518
Intercept	0.002	0.082***	0.005	0.009***	0.058	-0.025
	0.3204	0.0079	0.8885	0.0003	0.1491	0.6119
N	3661	2929	1188	3462	2874	1216
R-Squared	0.01	0.03	0.03	0.005	0.01	0.02

Table 4.7 reports the results of the OLS regressions for connected and unconnected samples, respectively. In model 2, other well-known firm characteristics are added as control variables. In model 3, controls for board characteristics are further added.

The results show that both (CP_employee) and (OCP) have a positive relationship with grey usage. Specifically, the coefficient of CP_employee is 0.089 in model 1, 0.073 in model 2, and 0.112 in model 3. All the coefficents of CP_employee are significant at the 1% level. Moreover, the coefficient of OCP is 0.029 in model 1, 0.021 in model 2, and 0.012 in model 3. The coefficients of OCP are significant at the 1% level in models 1 and 2. The positive and significant signs indicate that connected firms might use the accounts of Cash paid to and on behalf of employees (CP_employee) and Other cash paid relating to operating activities (OCP) in order to extract firm profits.

When the regressions for the sub-sample of unconnected firms are rerun, some very interesting results emerge. Models 4-6 in Table 4.7 report the results. First, they show a negative relation between Cash paid to and on behalf of employee (CP_employee) and grey usage, which is remarkably different to the situation for the connected sample. Second, the variable of Other cash paid relating to operating activities (OCP) is positively associated with grey usage across models 4-6, which is remarkably similar to the situation in the connected sample. These findings suggest that unconnected firms might use Other cash paid relating to operating activities (OCP) as the main vehicle to divert grey usages.

Table 4:8 Potential mechanisms in place to divert grey usage in the sub-period 1998-2005

This table examines the relation between cash payments and grey usage across political connectedness by running OLS regressions. Grey usage is the ratio of annual raw grey usage over total revenues. CP_employee is the ratio of cash paid to and on behalf of employees divided by total revenues. OCP is the ratio of other cash paid relative to operating activities divided by total revenues. All other variables are defined in Appendix A. The P-values are reported in the parentheses. A superscript *, **, *** indicates significance at the 90%, 95% or 99% confidence levels, respectively.

Variables	Connected sample			Unconnected sample		
	1	2	3	4	5	6
CP_employee	0.093**	0.096**	0.034	0.070*	0.060	-0.129
	0.0288	0.0309	0.5737	0.088	0.1821	0.0187
OCP	0.029***	0.018*	-0.005	0.025***	0.021**	0.018*
	0.0025	0.0708	0.7368	0.0027	0.0193	0.0805
Leverage		0.033	0.009		-0.005	0.036
		0.0078	0.6161		0.6655	0.0139
Size		-0.001	0.003		0.004	-0.007
		0.7955	0.504		0.244	0.1304
Largest		0.000	0.000		0.000	0.000
		0.3688	0.7635		0.9247	0.7614
MB		0.014	0.014		0.014	-0.010
		<.0001	0.0008		<.0001	0.022
Board			-0.002			0.000
			0.1366			0.8597
Age			-0.001			0.001
			0.2168			0.2597
Education			0.006			-0.003
			0.3113			0.5832
Independent			-0.085			-0.096
			0.0304			0.0102
Background			0.010			0.027
			0.4265			0.0214
Intercept	0.008	-0.015	-0.007	0.01031	-0.10891	0.11519
	0.0685	0.8227	0.9377	0.0158	0.1751	0.2253
N	1529	1383	439	1538	1417	485
R-Squared	0.01	0.05	0.04	0.01	0.04	0.03

Table 4:9 Potential mechanisms in place to divert grey usage in the sub-period 2006-2011

This table examines the relation between the cash payments and grey usage across political connectedness by running OLS regressions. Grey usage is the ratio of annual raw grey usage over total revenues. CP_employee is the ratio of cash paid to and on behalf of employees divided by total revenues. OCP is the ratio of other cash paid relative to operating activities divided by total revenues. All other variables are defined in Appendix A. The P-values are reported in the parentheses. A superscript *, **, *** indicates significance at the 90%, 95% or 99% confidence levels, respectively.

Variables	Connected sample			Unconnected sample		
	1	2	3	4	5	6
CP_employee	0.100***	0.097***	0.147***	-0.010	-0.047	-0.137
	<.0001	0.0002	<.0001	0.684	0.11	0.001
OCP	0.021**	0.019**	0.033**	0.013*	0.002	0.1102**
	0.0124	0.0246	0.0041	0.0614	0.8003	0.018
Leverage		0.042	0.058		0.025	0.019
		<.0001	<.0001		0.0008	0.0872
Size		0.000	0.001		-0.001	-0.004
		0.7942	0.6653		0.5299	0.2044
Largest		0.000	0.000		0.000	0.000
		0.0947	0.5643		0.6427	0.3514
MB		0.001	0.000		0.002	0.002
		0.3487	0.9576		0.1622	0.2215
Board			-0.001			0.002
			0.3852			0.3127
Age			-0.001			0.001
			0.3415			0.2566
Education			-0.003			0.002
			0.5045			0.7732
Independent			0.001			0.123
			0.9866			0.0256
Background			-0.012			-0.012
			0.1901			0.2902
Intercept	-0.002	-0.015	-0.009	0.006	0.023	-0.013
	0.5415	0.6383	0.8452	0.0418	0.6136	0.8421
N	1932	1545	749	1924	1457	731
R-Squared	0.01	0.03	0.07	0.01	0.01	0.02

For robustness, this study also investigates the results on two sub-sample periods; 1998 to 2005, and 2005 to 2011. The results are reported in Tables 4.8 and 4.9, respectively. The patterns revealed are remarkably similar to those based on the full sample period in Table 4.7. For the connected firms, grey usage is positively related to both CP_employee and OCP and all coefficients are statistically significant, with the exception of model 3 from 1998 to 2005 in Table 4.8. For the unconnected firms, there is a positive relationship only between the grey usage and OCP. Overall, these empirical findings suggest that the accounts of CP_employee and OCP might be a plausible economic channel through which the grey usages of Chinese listed firms can be transferred out.

4.6 Robustness tests

4.6.1 Time trends

To better understand the systematic differences between PCFs and firms without political ties, this study compares the average values of all variables year-by-year. Prior research particularly emphasises endogeneity issues in OLS regressions because it is not possible to infer any causality from the results reported (see Faccio et al., 2010). In other words, the potential concern for the regression is that political connections may not be exogenous. Some unobserved determinants may explain the differences between connected firms and their counterparts. Hence, the causality problem can make the results of OLS regression biased and inconsistent.

This study attempts to resolve endogeneity concerns by looking into the time trends in the changes of accounting performance. Specifically, it covers a long enough time horizon, from 1993 to 2011, to provide us with a greater variety of information reflecting the dramatic changes that have taken place in firms with political connections. For example, firms may be more likely to seek political connections when they lack management or production efficiencies, but gain their competing edge through political connections or outright bribery. In this scenario, political connections would lead to differences in firm performances before and after the establishment of political ties. If so, we could then find time trend changes in accounting performance for connected firms. Alternatively, it could be that these types of firms tend to seek strong political ties because they are more successful in business operations (more competitive). In this case, rent seekers are also

efficient firms who are likely to invest in political relations because they are affordable. If so, the political connection is an expected risk with no economic outcome and, as such, it may be that no changes are observed in accounting performance by connected firms across time, relative to the matching firms. Therefore, to examine the consequences of political cronyism, this time approach is cleaner than running regressions.

4.6.1.1 Hypothesis 1

Chart 4.1: The differences between politically connected firms (PCFs) and unconnected firms in variables used to test hypothesis 1.

These charts plot the differences between PCFs and unconnected firms in accounting variables used in this chapter from 1993 to 2011. All the accounting balances for each variable are deflated by total assets. The X-axis is the calendar year; the Y-axis is the ratios. The solid lines with dots represent PCFs, while the smooth lines indicate unconnected firms.

Chart 4.1-A

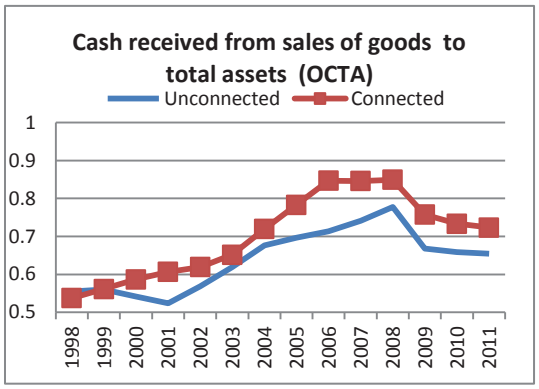


Chart 4.1-B

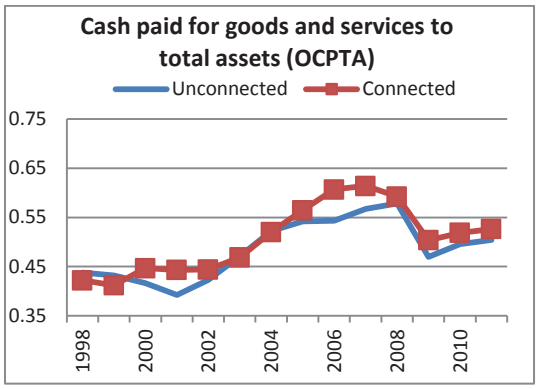


Chart 4.1-C

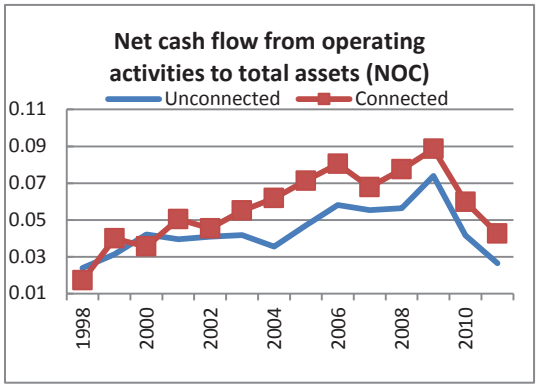


Chart 4.1-D

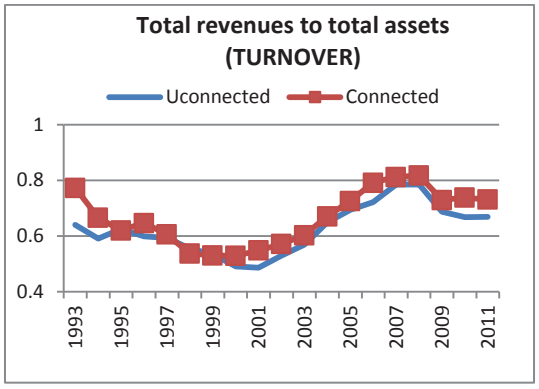


Chart 4.1-E

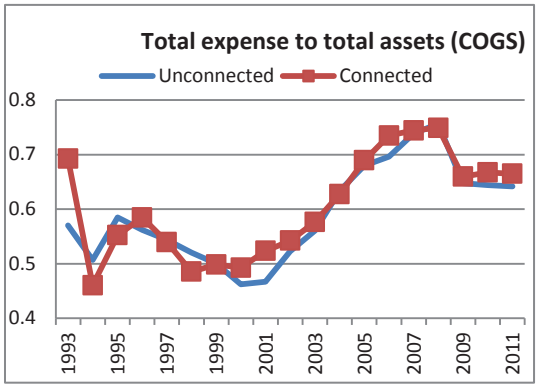
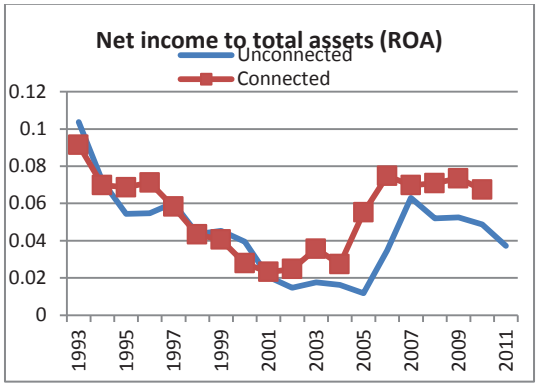


Chart 4.1-F



The figure in Chart 4.1-A compares the average ratio of Cash received from sales of goods to total assets (OCTA) for PCFs and their matching firms from 1998 to 2011. It shows that both groups have a similar average ratio of 0.6 in 1998, which then rises gradually over the next decade. This could be due to high economic growth in the Chinese economy during this 10-year period. Looking at the time trend, from 2000 the OCTA for PCFs is increasingly higher than for non-connected firms, reaching its highest point at 0.81 in 2006. Similarly, chart 4.1-B plots the corresponding average ratio of Cash paid for goods and services to total assets (OCPTA) among PCFs and their matching firms. It shows that PCFs have slightly higher OCPTA than non-connected firms from 1998 to 2011. Taken together, the evidence in these charts suggests that PCFs operate more efficiently. Therefore, it is not surprising to observe (in Chart 4.1-C) that the Net cash flow from operating activities to total assets (NOC) is substantially and increasingly larger for PCFs compared to non-connected firms. These findings confirm the previous discussion of Hypothesis 1; the supportive evidence is consistently produced in each year after the beginning of the new century. The accounting ratios of total revenue (Chart 4.1-D), expenses (Chart 4.2-E), and net income (Chart 4.2-F) consistently produce the same conclusion.

Previous literature on political connections emphasises a problem of causality, so this study extends our analysis by checking total revenue, costs, and net income over a longer period of 1993 to 2011. Specifically, potential endogeneity issues can affect cross-sectional regressions of firm performance against political connections (Narjess Boubakri, Cosset, and Saffar, 2012). Charts 4.1-D to 4.1-F show how operating performances vary within PCFs and their counterparts before and after 2001. Any systematic changes in time trends would suggest interference by political connections.

As Chart 4.1-D shows, both PCFs and unconnected firms experience a fall in the ratio of total revenue to total assets (TURNOVER) between 1993 and 1999. After 2000, TURNOVER in PCFs increases monotonically to around 0.8, which is impressively faster than that of the matching firms. However, as Chart 4.1-E shows, the ratio of total operating expenses divided by total assets (COGS) is remarkably similar in both groups across the time period. Given Charts 4.1-D to -E, it is not surprise to observe higher net incomes in PCFs in Chart 4.1-F. During the period of 1993 to 2001, the average ratio of net income divided by total assets (ROA) for both groups decreases monotonically from

10% to 2%. This study interprets this drop as a significant worsening in earnings following the IPOs of Chinese state-owned enterprises (Aharony et al., 2000). After 2001, PCFs have a substantial increase in ROA reaching the highest figure of almost 8% in 2006. By contrast, the ROA of non-connected firms increases from 2005, peaking at 6% in 2006 and deceasing from then on. These findings suggest that for Chinese listed companies, PCFs systematically outperform similar unconnected firms in business on the performance.

4.6.1.2 Hypothesis 2

Chart 4.2: The differences between PCFs and unconnected firms in variables used to test hypothesis 2

These charts plot the differences between PCFs and unconnected firms in tunnelling measured by "net receivables" and "selling expenses". Both variables are calculated as a ratio relative to total assets. The X-axis is the calendar year; the y-axis is the ratios. The solid lines with dots represent PCFs, while the smooth lines indicate unconnected firms.

Chart 4.2-A

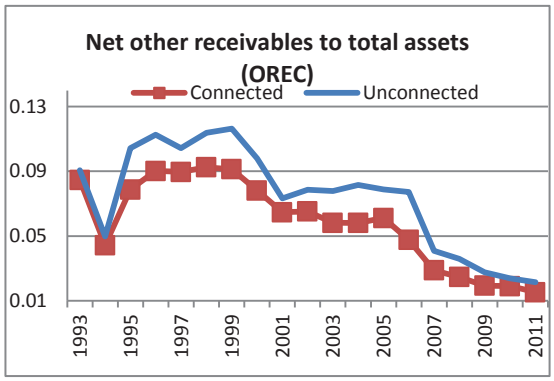
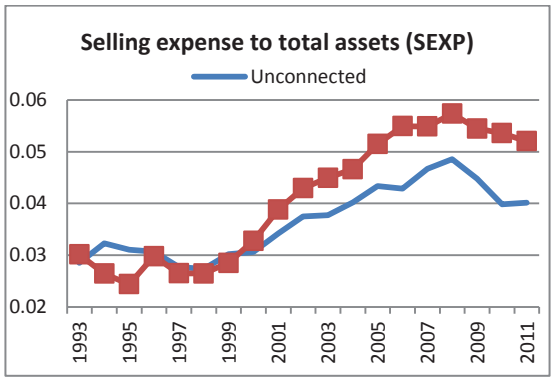


Chart 4.2-B



The second hypothesis predicts that PCFs are less likely to tunnel at the operating stage when they are more profitable and have better growth opportunities. To test this hypothesis, this study first examines whether PCFs have higher mean ratios of "Net other receivables" divided by total assets (OREC) than their counterparts. Chart 4.2-A illustrates the comparisons for our sample firms. Chart 4.2-A shows that for PCFs, the mean ratio of "Net other receivables" to total assets (OREC) is persistently lower than that of matching firms. This finding is consistent with the prediction that PCFs are less likely to conduct cash tunnelling when they have better operating performance and growth opportunities.

Specifically, both groups of firms experience a sudden increase in OREC from 4% in 1994 to around 10% (PCFs) and 12% (unconnected firms) in 1999. The figure drops dramatically from 1999, when the Chinese government initiated efforts to curb the abuse of “Net other receivables” by controlling shareholders. By the end of 2011, both groups of firms reduce OREC by close to 2% on average. The decline in “Net other receivables” of listed firms in China is consistent with data reported by Jiang et al. (2010).

To measure operational tunnelling, this study further considers whether PCFs experience higher ratios of selling expenses to total assets (SEXP). Chart 4.2-B reports the result. It shows that the SEXP for PCFs is similar to that of non-connected firms between 1993 and 1999. After 2000, both groups experience a significant increase in selling expenditures. However, the selling costs in PCFs double, from 3% in 2000 to 6% in 2008, while for non-connected firms they grow moderately to just under 5%. The rise in selling expenses of PCFs is steeper than that of their counterparts, which suggests connected firms may bear extra political costs when they benefit from such connections.

Overall, the evidence in Chart 2-A is consistent with our second hypothesis that tunnelling is less likely when PCFs have better operating performance. The findings in Chart 4.2-B suggest politicians may receive kick-backs in return for political favours for connected firms.

4.6.1.3 Hypothesis 3

4.6.1.3.1 Hypothesis 3a

Chart 4.3: The differences between PCFs and unconnected firms in variables used to test hypothesis 3

These charts plot the differences between PCFs and unconnected firms in accounting variables used in this chapter from 1993 to 2011. All the accounting balances for variables are deflated by total assets. The X-axis is the calendar year; the y-axis is the ratios. The solid lines with dots represent PCFs, while the smooth lines indicate unconnected firms

Chart 4.3-A

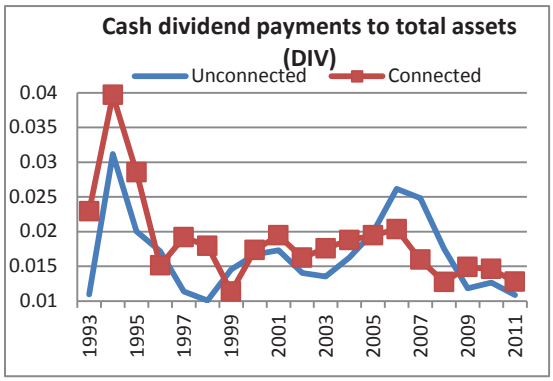


Chart 4.3-B

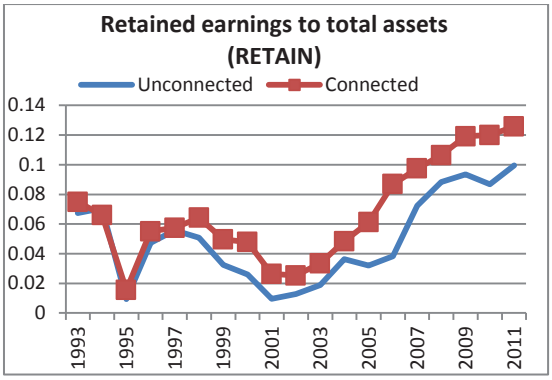


Chart 4.3-C

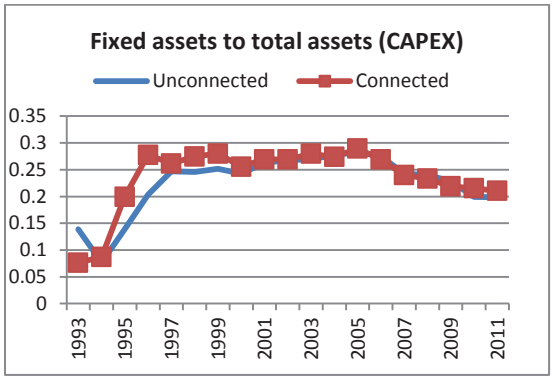
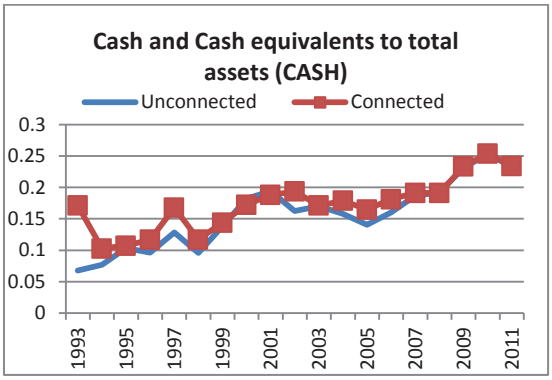


Chart 4.3-D



This study considers Hypothesis 3a by comparing the ratios of cash dividends to total assets (DIV) and retained earnings to total assets (RETAIN) for PCFs and their counterparts. To better understand the profit distribution process for our sample firms, we trace the evolution of cash dividends and retained earnings through time, scaled by total assets. Chart 4.3-A presents a comparisons of cash dividends to total assets (DIV) between PCFs and their matching firms from 1993 to 2011. It sees no systematic difference in cash dividend payments between the two groups. Further, chart 4.3-B illustrates the ratio of retained earnings to total assets (RETAIN) over the same period. The proportion of retained earnings for both groups goes up over time, with particularly strong growth in the PCF sample. For example, the retained earnings of PCFs increase around seven times (from 2% to 14%) over the period from 2001 to 2011, while for non-connected firms the increase is only four times. As Chart 4-B shows, after 2001, PCFs experience a disproportionately steep rise in retained earnings. This makes them a serious challenger to non-connected firms, which start to rise a bit later in 2002 and grow steadily afterwards. In contrast, in the earlier period from 1993 to 2001, both PCFs and non-connected firms depict similar proportions of retained earnings to total assets. The findings of Chart 4-B are supportive of the prediction that firms with political connections have stronger incentives to retain more earnings than firms without political ties.

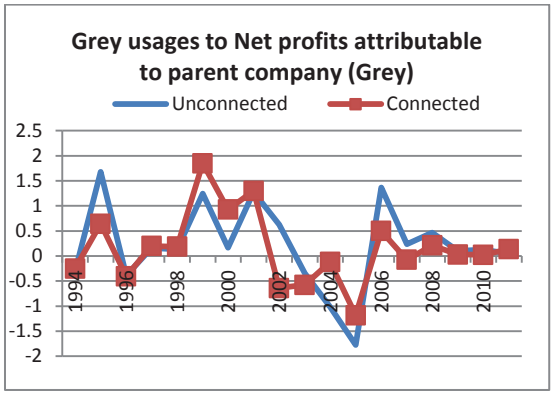
As discussed in the hypothesis development, one could potentially argue that PCFs have a preference for dividends over retained earnings for investment opportunities or precautionary reasons other than expropriation motivations. To mitigate these concerns, this study conducts two tests; the first focuses on the ratio of net fixed assets to total assets (CAPEX), and the second focuses on the ratio of cash & cash equivalents to total assets (CASH). Charts 4.3-C and 4.3-D provide the results pertaining to Hypothesis 3b. Chart 4.3-C plots the average ratio of net fixed assets to total assets (CAPEX) for PCFs and their matching firms. Both groups experience significant increases, from 10% in 1994 to over 30% in 2006, which is consistent with high growth in the Chinese economy. However, post-2006 there is a consistent decrease in CAPEX for both groups, with a larger drop in PCFs than in matching firms. Similarly, Chart 4.3-D traces the average ratio of cash & cash equivalents to total assets (CASH). Both PCFs and unconnected firms experience similar CASH ratios and a monotonic rise over the same period. In short, as Charts 4.3-C and 4.3-D show, there is little to suggest that PCFs maintain larger retained earnings for investment or precautionary motivations, at least during this initial

phase. Instead, this evidence is more consistent with the view that PCFs keep larger retained earnings for value expropriations.

Collectively, Charts 4.3-A to -D depict a persistent pattern that PCFs have a preference to accumulate profits within the firm rather than paying out earnings to reward shareholders. This finding provides the first evidence suggesting that political connections of companies can effectively increase firms' operating incomes. Instead of rewarding their investors they tend to stockpile higher profits in the company as retained earnings. The increased wealth is not used in capital investment for business growth, neither is it used as precautionary cash reserves. These findings are consistent with our hypothesis that the extra funds could be used as wealth appropriations through a special distribution channel, such as the grey usage as defined in this study.

4.6.1.3.2 Hypothesis 3b

Chart 4.3-E



The figure in Chart 4.3-E compares the ratio of Grey usages to net profits attributable to parent companies for PCFs and their counterparts across the sample period. The grey usages in both groups of firms changes greatly throughout the sample period.

Overall, it can be seen that both connected firms and unconnected firms follow a similar time pattern in the ratio of grey usage to net incomes attributable to parent owners. Specifically, the ratio of grey usage for both groups demonstrates an upward trend before 1999, but descends steeply from 2001 to 2005 and reboundes to be positive in 2006. Both groups remain at a low level of about 0.25 in the following sample period. This study interprets the significant drop in grey usage since 2000 among Chinese listed firms as

being due to the accounting reform requiring increased transparency introduced by the Chinese government and regulatory efforts by the CSRC to curb insider abuse so as to be in line with world trade and capital markets.

In summary, this study finds that PCFs are associated with greater sales and profits after 2000, which is consistent with the first hypothesis regarding better growth opportunities and operating performance. Consistent with the second hypothesis, at the operating stage, PCFs are less likely to conduct cash tunnelling as measured by "Net other receivables". Instead of paying higher dividends, PCFs keep a disproportionately higher level of retained earnings and the usage of retained earnings is not well monitored by outside investors[40]. This study proposes that grey usage is an important source of motivation for managers to potentially misuse funds, especially when firms are associated with political connections. The previous findings in this study using average value for Grey usage support this motivation; nevertheless, a clear difference in the year-by-year chart of the Grey usage is not obvious.

Importantly, this study is the first to identify a potential new form of wealth expropriation through profit distributions. This study argues that this method (via Grey usage) of expropriation is highly likely by observing the violently volatile shifts in the historical accounts of the firms; owner managers have a large amount of leeway to adjust this ratio to realise the extra distributions to them for their personal benefits.

Additionally, this study produces a by-product through an interesting observation regarding the highly synchronised movements between connected and unconnected firms (Chart 4.3-E); it appears true that there exists some market-wide mechanism that drives the year-by-year changes of Grey usage for both connected and unconnected firms. The mechanism could be some accounting regulations, security policies, or even political issues. This study has no clear answer to this question and leaves it to future studies to provide a sound answer.

[40] This interpretation is verified by the newly identified grey usages, which are part of retained earnings distributed without detailed explanation in footnotes to the financial statements.

4.6.2 Other tests

This section examines the international evidence that expropriation is more severe when the largest shareholder's controlling rights (C) are much larger than the ownership rights (O)(Claessens et al., 2002; Lemmon and Lins, 2003). By using a sample of Chinese firms, Jiang et al. (2010) find that tunnelling behaviour is more severe when the percentage of the largest shareholder's ownership is lower. This study follows Jiang et al. (2010) to examine the relationship between the largest shareholder's ownership (Block) and grey usages for connected firms and their matching firms. This study ranks firms based on the percentage of shares held by the largest shareholder (Block) into 10 deciles and then calculates the average value of grey usage in each decile.

Chart 4.1-A shows the relationship between Block and grey usages for connected firms. The grey usage is highest when the largest shareholder holds around 41% of the shares (in decile 6), while it is lowest within decile 10 when the highest ownership percentage is below 10%. It is noteworthy that connected firms have negative values of grey usages in deciles 8 and 10, which this study interprets as the effect of "inflow" (reversed spending) to the firm. Chart 4.1-B illustrates the relationship between Block and grey usages for unconnected firms. In general, unconnected firms tend to have lower grey usages when the controlling shareholder's ownership rights are higher. The grey usages are highest when the largest shareholder holds about 20% (decile 2) of the total shares of the firm. In particular, from deciles 6 to 10, unconnected firms have negative grey usages, with a total value of –RMB 40.57 million. This amount of "inflow" is higher in unconnected firms than in connected firms with RMB –33.1 million. This finding is unsurprising, as the unconnected firms have lower profitability compared to connected firms.

Additionally, the large volume of negative Grey usage produces a large challenge issue in this study. One of the possible reasons for this large figure is missing information before listing. Although the sample starts from 1992, many sample firms start listing in the middle of the sample period. These firms may have accumulated some not-used "Grey" spending in their accounting book, and these entries have to be reversed under the pressure of new accounting regulations, or by some other influence. The study results only "view" the reversed transactions (which produce negative Grey value) and miss the earlier spending transactions (which produce positive Grey value) in the figures. This

interpretation is also consistent with the chart shown in 4.3-E, where the curves for connected and unconnected firms are highly synchronised. Such a high correlation between these two independent samples unlikely to be spurious, and some common force appears to exist between them.

Figure 4.1: The relationship between Block and grey usages for PCFs and unconnected firms, respectively

Figure1-A plots the relationship between grey usages and the percentage of shares held by the largest shareholders (Block) among politically connected firms. This study sorts connected firms into ten deciles based on Block (Bar graph) and then computes the mean value of grey usages in each decile (Line graph). The X-axis is decile rankings based on Block. Numerical values for Block are reported on the left side of the graphs (in %); numerical values for grey usages are reported on the right (in million).

Figure 4.1-A: Connected firms

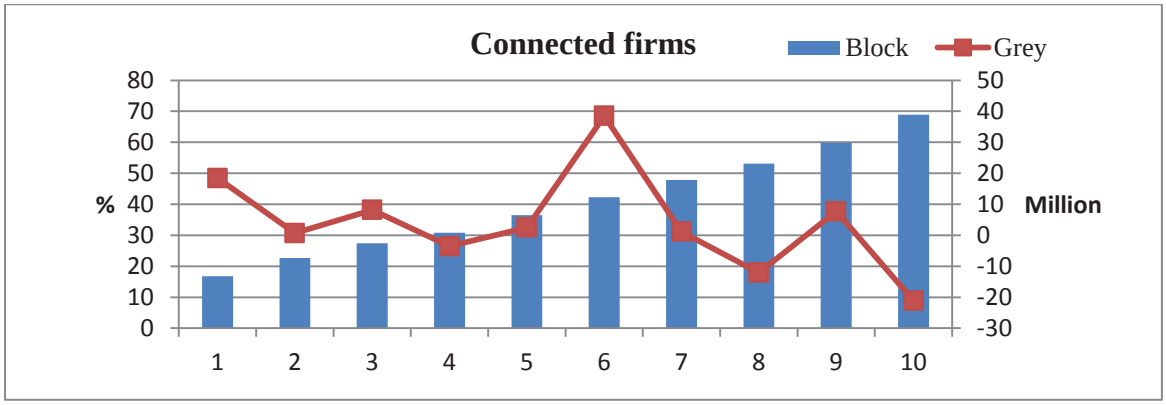
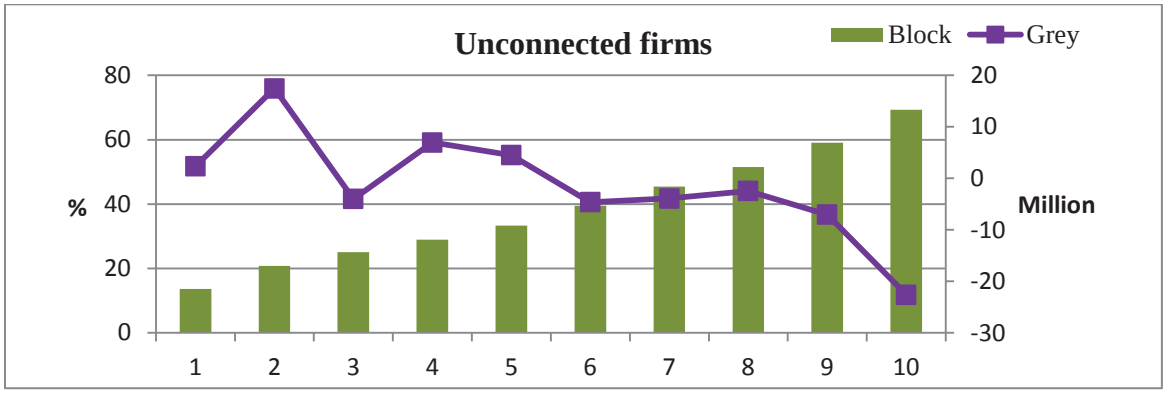


Figure 4.1-B: Unconnected firms



4.7 Conclusion

This paper investigates Chinese listed firms with a special type of political connection. This connection, named “Princelings”, is built through the descendants of prominent and influential senior Communist officials in the People’s Republic of China. This study has developed the theory of “Golden hens vs. Chickens” to describe the major features of these connected firms; the “Golden hens” selected by the “princelings” are generally more “beautiful” (higher profitability) and not to be “used as Chickens” for current meat (less cash tunnelling). Instead they should be nourished (less dividend payments) for the future harvest of eggs (future equity tunnelling or expropriation).

This study has investigated a theory of value appropriation by dominant shareholders via two business stages; the operating stage, and the distribution stage. In the operating stage, dominant owners can take extra benefits by cash or asset tunnelling; in the second stage they have another chance to take extra shares of distributable incomes or profits. Based upon the theory developed by Wei, Chen and Wirth (2016), it is predicted that these “princelings” have the feature of being more “productive”, and thus have less incentive to commit cash tunnelling in operating stage activities.

To describe the second stage tunnelling motivation, this study has developed a new theory of “Grey” usage. Under the current security and accounting regulation system there are still many chances for dominant owners to take extra shares by “spending” some distributable profits for personal benefit. It is the existence of these chances that make the dominant owners choose a smaller dividend level. A missing value can be identified in the balance condition between new profits and allocated values (in paid dividends, change in retained earnings, and change in surplus reserves); this missing value (Grey usages) is used as the proxy for tunnelled (or expropriated) value by the dominant owners.

This study empirically investigates these predicted qualities of the “princeling” type of politically connected firms. By direct comparison with the industry-matched sample firms, this study produces strong evidence to show that there exists a strong positive relation between political connections and measures of operating performance as well as growth

opportunities. This finding suggests that PCFs are more prosperous compared to their counterparts. Second, we find that political connections are significantly negatively related to "Net other receivables", which are used to measure operational tunnelling by Jiang et al. (2010). This suggests that PCFs with greater profitability have lower risks of tunnelling activities at the operating stage, and confirms our model prediction that the higher the profitability, the lower the probability of tunnelling in business operations.

Consistent with LLSV (2000), this study finds that PCFs pay lower cash dividends and thereby keep disproportionately larger retained earnings that are not used either for investing opportunities or precautionary reasons. To better understand the motivations, this study analyses the components of retained earnings during profit allocations and finds that PCFs have higher mean (cumulative) grey usages on retained earnings than unconnected firms[41]. This pattern in the percentage of grey usages (dividends) is consistent with the view that the agency problem may be worse in PCFs. It is posited that the superior profitability of PCFs allows insiders to expropriate funds through higher percentages of grey usages on earnings, or pay higher dividends.

Furthermore, the cross-sectional regression results show that grey usages have negative explanatory power on stock returns. This supports the argument that expropriation is a general problem in the Chinese stock market (Berkman et al., 2009). This study also provides evidence that the accounts "Cash paid on behalf of employees" and "Other cash paid relating to operating activities" are positively related to grey usages of retained earnings. This suggests that some of the accounts recording cash flow payments may be used to divert the profits of Chinese listed firms.

This study also investigates the time trend of the main variables used to test the hypotheses in this paper. As OLS regressions are employed throughout the analysis, it is not possible to infer any causality from the results reported. However, the systematic patterns shown in the time trends are supportive of the notion that political connections impact firms' operating activities and profit allocations. The timing of changes in performance among connected firms is also shown to be important. PCFs systematically

[41] The differences of mean (cumulative) grey usages are not statistical significance. However, these findings are still informative as they are supportive of the argument that Chinese PCFs tend to pay lower dividends on average.

perform differently from unconnected firms effective from 2001, when China experienced rapid economic growth as a member of the World Trade Organization.

Overall, the findings in this paper provide evidence that political connections explicitly and implicitly influence Chinese listed firms' performance, and provide a picture of the severity of alternative means of expropriation through profit distributions in China. The evidence implies that the existing legal and extra-legal governance mechanisms are inadequate to reduce the general practice of value expropriation. This study reports on the constraints under which market regulators in China operate. It shows that a string of security regulations issued before 2012 was largely ignored, mainly because market regulators had no jurisdiction over the controlling shareholders.

One question that this study is unable to resolve concerns the mechanism behind the documented grey usages from retained earnings in Chinese listed firms. Given the sheer scale of this study, it is suspected that the answer to this question is rather extensive and complex. What can be stated is that "princelings" type political connections appear valuable, not only when they are established by the firm itself but also to investors who are economically dependent on that firm. The hope of this study is that future research will further analyse the source of our documented effects.

CHAPTER FIVE: ESSAY THREE: MARKET REACTION TO THE "PRINCELINGS" CONNECTION

This chapter empirically tests the market reactions associated with the addition of the "Princelings" type of political connection in Chinese listed firms. Several bench marks are used to test the difference between the Politically Connected Firms (PCFs) and their matching firms. Section 5.1 introduces the chapter. Section 5.2 reviews the literature and section 5.3 describes the data, hypothesis development, and methodology. Section 5.4 shows the empirical results, with the time patterns examined in section 5.5. Section 5.6 concludes the chapter.

5.1 Introduction

There is international evidence that political connections have a significant impact on firms' market performance, regardless of whether the legal system is weak or strong. Particularly, political connections are more valuable in countries with weak legal systems, high government intervention and corruption (Faccio, 2006; Faccio and Parsley, 2009). All of these are the characteristics of the emerging markets in general, including China. Prior literature has provided evidence that political patronage is important for firms in China. By being politically connected, firms receive private economic rents and preferential treatment, which help them to gain higher market share and profitability (C. J. Chen et al., 2011; H. Li et al., 2008; Piotroski and Zhang, 2014). Accordingly, these connected firms are found to have higher firm values than their non-connected counterparts. Despite this fact regarding firms with political connections, it remains questionable as to whether the stock market participants would incorporate such a factor into their investment decisions and whether this would be a factor in stock pricing.

The recent literature on Chinese securities markets focuses more on the impact of political connections on the IPO process. For example, Francis et al. (2009) investigate the relation between political connections and the pricing of Chinese firms going public during the 1990s. Although they find robust evidence that issuing firms with political connections exhibit relatively higher offering price but lower underpricing, they do not directly test how political connections impact stock price in the long-run. Tian (2011) studies the level of IPO underpricing with a lag between the issuing and trading of the stock, and insider ownership. Although they attribute the extreme level of underpricing to government regulation and contend that PCFs benefited most from the high initial returns, they do not directly test how political connections impact the stock price. Therefore, the major objective for this paper is to examine the relationship among political connectedness and stock price performance of PCFs in China.

This paper sheds further light beyond that cast by the previous literature, Ma et al. (2013) and Piotroski and Zhang (2014) that examines the impact of political connections on firms' financial performance. However, the level of investigation in this study is more comprehensive than earlier ones in at least three aspects, namely: (1) a new type of political connection, (2) the sampling period, and (3) industry analysis.

In this study, a new type of political connection, called “Princelings”, is defined. As discussed in Chapters 3 and 4, some new theories are developed and their predictions on accounting and financial reports are empirically tested. This chapter provides a final part of the testing on market reactions, and the results can be discussed alongside the findings in the previous chapters.

The sample period of this paper covers a longer time period, from 1993 to 2011. To date, the existing literature only covers the period before 2001, when China became a member of the WTO, since which time it has experienced rapid economic development. Therefore, the later period is particularly interesting for analysis. This is especially true in light of corporate governance which is relatively weak in Chinese listed firms. Secondly, this paper uses three kinds of models to measure abnormal stock returns. The first model is cumulative abnormal stock returns calculated on the basis of monthly stock returns starting from the first month after the IPO date (CMAARs). This approach is used by Fan, et al. (2007), who investigate the relationship between political connections and post-IPO stock returns. Moreover, this paper also uses the market pricing model to measure the residuals as abnormal returns (CRAARs). In addition, this study applies the three-factor model (Fama and French, 1993) to examine the cumulative abnormal stock returns of firms (CFAARs).

Prior studies find that entry and the ability to obtain projects in certain sectors are based on the strength of political connections in developing countries (Intarakumnerd, 2000; McMillan and Woodruff, 2002). This is particularly the case for restrictive industries such as resources, public utilities, finance and real estate. Fan, et al. (2007) find that there is a cross-industry variation in the appointment of politically connected CEOs for China’s newly partially-privatised firms. They find that the highest percentage of politically connected CEOs occurs in the natural resources sector (40%), followed by the public utilities sector (32%). Motivated by such findings, this paper aims to highlight whether the impact of political connections on stock returns varies across the different industries. Since firms in a restricted and highly competitive industry require more protection and preferential treatment from politicians than firms in other industries, it is conjectured that the impact of political connections on stock returns would vary from one industry to another.

This study is organised as follows. Section 5.2 discusses the international evidence of the impact of political connections on stock prices and outlines the hypothesis development. Section 5.3 describes the data, methodology, and hypothesis development. The empirical results are given in Section 5.4. To test for robustness, Section 5.5 exhibits the time patterns. Section 5.6 presents the conclusion.

5.2 Literature review

Prior research provides evidence that, on average, political connections add firm value. Fisman (2001) estimates the value of political connections in Indonesia on firms' market valuation by using event studies surrounding rumours of President Suharto's worsening health during his final years in office, and compares the stock abnormal returns across firms with different levels of political exposure. Consistent with the helping hand theory, his study finds that, at the time of the dissemination of this bad news, firms with tight political connections suffered significantly lower abnormal returns than less politically connected firms. Johnson and Mitton (2003) estimate the value of political connections in Malaysia by looking at how stock prices moved during the Asian financial crisis from 1997 to 1998. They find that firms with political connections had worse stock returns in the early phase of the Asian financial crisis, but once capital controls were imposed these firms did better than their counterparts on average. Their findings are broadly supportive of the view that capital controls create a screen for cronyism.Ferguson and Voth (2008) study the value of connections between German industry and the Nazi movement in early 1933. They find that the stock price of tightly connected firms experienced unusually high returns, outperforming unconnected ones by 5% to 8% between January and March 1933, when Hitler was appointed Chancellor.

Using Thailand as a research setting, Bunkanwanicha and Wiwattanakantang (2009) report that the market valuation of PCFs increases dramatically once the firms' owner wins the election when running for top office. The authors interpret this finding as due to the owner using policy-decision power to shape policies or regulations in favour of the connected firms in order to increase their market share. In a more international study using data from 35 countries, Faccio (2006) investigates whether political connections add value to the corporate by applying an event study around announcements of officers or large shareholders entering politics and politicians joining boards. She shows significant increases in corporate value, but only when

businesspeople enter politics. She also finds that the stock price impact of a new connection is larger whenever a businessperson is elected as Prime Minister, rather than as a member of the Parliament, and when the new connection entering politics is a large shareholder (rather than a director). She further finds that political connections in countries with high levels of corruption generate a statistically significant cumulative abnormal return (CAR) of 4.32%, versus an insignificant CAR of -0.02% in countries with low levels of corruption. Moreover, Faccio and Parsley (2009) define firms as politically connected when they are headquartered in the politician's home town, and they find the average stock price of geographically connected firms dropped by 1.7% around 122 sudden deaths of politicians drawn from global data of 8191 companies since 1973.

However, two additional studies have argued that government relationships are potentially detrimental to shareholder value. Shleifer and Vishny (1998) propose that governments may have a "grabbing hand", leading them to expropriate shareholder wealth. There is evidence in the literature that political connections destroy firm value. Johnson, Kaufmann, McMillan, and Woodruff (2000) present evidence that in countries where bureaucratic corruption is high, firms are more likely to hide output in order to reduce appropriation. Aggarwal, Meschke, and Wang (2011) examine corporate donations to political candidates for federal offices in the United States from 1991 to 2004. They find donating firms engage in more acquisitions and their acquisitions have significantly lower cumulative abnormal announcement returns than non-donating firms. A US$10,000 increase in donations is associated with a reduction in annual excess returns of 7.4 basis points.

Whilst the above literature presents well documented international evidence on the value of political connections, the relationship between political connectedness and stock performance in Chinese stock performance has received little attention from finance researchers. Focusing on a sample of 790 newly privatised firms in China, Fan, Wong, and Zhang (2007) examine firm post-IPO stock performance. They find firms run by politically connected CEOS underperform their counterparts by almost 18% based on three-year post-IPO stock returns. They also find a negative association between CEO's political connections and the short term stock price performance. They suggest that the negative effect of government intervention is reflected shortly after IPOs. Berkman, et al. (2011) examine the market reactions to three regulatory changes designed to improve minority-shareholder protection in the Chinese stock markets. They find that the announcements of regulations designed to protect minority

shareholders from expropriation by controlling shareholders led to higher cumulative abnormal returns of privately owned firms than for firms with government blockholders; market-oriented state-owned enterprises blockholders fall in between. This result suggests that minority shareholders did not expect regulators to enforce the new rules on firms where blockholders have strong political connections.

By contrast, Cheung et al. (2010) analyse related party transactions between Chinese publicly listed firms and their state-owned shareholders to examine whether companies benefit or lose from the presence of government shareholders and politically connected directors. They sort political connections into two types; the first one is connection to local government, while the second is connection to central government. They find that minority shareholders in Chinese publicly listed firms benefit when they conduct transactions with central government shareholders, but are subject to expropriation when their firms conduct related party transactions with their local government shareholders. Their findings for local government are consistent with the "grabbing hand" argument (Frye and Shleifer, 1996; Shleifer and Vishny, 1998), while the findings for central government are supportive of the "helping hand" theory. In a more recent study, (Piotroski et al., 2015) examine the impact that political forces have on the flow of negative financial information into stock prices surrounding three Chinese typical political events, and find that firms controlled by the state are significantly less likely to experience negative stock price crashes in the years of the National Congress of the CCP and in advance of political promotion decisions relative to non-event years. Their findings suggest that state controlled firms benefited from the political incentive to suppress negative financial information.

5.3 Data and Methodology

5.3.1 Data

This paper includes 381 PCFs and 381 matching firms listed on the Shanghai and Shenzhen stock exchanges, respectively. The criteria of matching firms must meet the following conditions; they must be from the same industry, have the nearest listing year, be of similar size in the IPO year, and have normal trading status as PCFs. Data on PCFs and their matching firms, information on stock price, returns, as well as financial statement information, is obtained from the CSMAR database. Our sample covers financial statement data from 1993 to

2011 and stock return data from 1991 to 2011. In addition, this paper excludes financial firms because the high leverage that is normal for these firms probably does not have the same meaning as for nonfinancial firms, where high leverage more likely indicates distress.

One obvious drawback of this approach is the difficulty inherent in identifying key dates associated with the establishment of political connections. This difficulty is further complicated by the uncertainty as to when relevant information is incorporated into prices (Binder, 1985).

5.3.2 Hypothesis development

Chapters 3 and 4 have shown that the "princelings" type of politically connected firms (PCFs) have superior operating profits than firms without such connections. To be consistent with this evidence, this paper expects that the outstanding performance should be reflected in the market prices. Therefore, this paper uses three hypotheses to investigate the impact of political connections on stock returns.

Hypothesis 1: The "princelings" type connected firms outperform their matching firms in market performance, measured by abnormal stock returns.

This paper also investigates whether PCFs perform differently on stock abnormal returns in three sub-periods (1996-1999, 2000-2005, and 2006-2011) due to the following reasons. First, the pace of economic growth in China has been extremely fast since 2001 when China became a member of World Trade Organization (WTO). The CSRC has also implemented a series of regulations specifically designed to improve the quality of corporate governance since 2005. Besides these factors, the Chinese government established a special campaign of non-tradable share reform as of 2005. Therefore, 2000 and 2005 are the critical turning points that have witnessed many changes on the Chinese stock markets. The literature has identified pronounced stock returns on the Chinese stock market around 2000 and 2005 (Yan, Powell, Shi, and Xu, 2007). Consequently, it is reasonable to divide the sample firms into the three sub-periods. To compare the differences of stock returns between PCFs and unconnected firms across different time sub-periods, this paper tests the following hypothesis.

Hypothesis 2: PCFs outperform their matching firms in stock returns across different sub-periods.

Prior studies such as Boubakri, et al. (2009), and Faccio (2010), document that political connections are more prevalent and essential for some industries than others. For example, Fan, et,al. (2007) find that Chinese firms in highly regulated industries tend to rely more on political connections than firms in other industries. It is therefore interesting to examine whether political connections have the same power in explaining stock returns of firms across five different industries in China. The industries are: (1) Utilities; (2) Properties; (3) Conglomerates; (4) Industrial; and (5) Commerce. Such an analysis further distinguishes this study from prior ones, since no empirical study to date investigates the effect of political connections on stock returns in China using analysis carried out at industry level. Hypothesis 3 is as follows:

Hypothesis 3: There are differences in terms of explanatory power of political connections on stock returns of firms belonging to the five different industries in China.

5.3.3 Methodology

This study employs several stock-based measures to evaluate the market performance of PCFs through comparison with unconnected firms. Due to a lack of data regarding the exact date of the establishment of political connections, this paper evaluates the long term stock performance post-IPO. Moreover, this paper uses an aggregated markets index for adjustments throughout the paper. According to the CSMAR, market return represents the value-weighted average return of all stocks. Weightings are calculated using three methods: The equal-weighted average; the current-value-weighted average (weighted by negotiable shares); and the total-value-weighted average (weighed by total shares). Therefore, there are three kinds of market returns weighted methods. This paper reports the equally weighted market adjusted abnormal return. The results remain qualitatively similar with total-value-weighted market adjusted abnormal return averages and current-value-weighted market adjusted abnormal return averages.

5.3.3.1 Cumulative market adjusted abnormal returns (CMAARs)

The first approach is to use cumulative abnormal market-adjusted stock returns (CMAARs), calculated on the basis of monthly stock returns starting from the first month after the IPO date. Abnormal returns are the key measure to assess the impact of an event, particularly in the short-term estimations. Following Fama, Fisher, Jensen, and Roll (1969), the abnormal return is:

$$AR_{i,t} = R_{i,t} - R_{m,t} \qquad \text{Equation 5.1}$$

Where $R_{i,t}$ is the monthly return of firm i, and $R_{m,t}$ is the value-weighted market return (the Shanghai and Shenzhen markets are calculated separately).

Therefore, cumulative market adjusted abnormal returns are:

$$\text{CMAARs} = \sum_{t=1}^{T} AR_{I,t} \qquad \text{Equation 5.2}$$

5.3.3.2 Cumulative risk adjusted abnormal returns (CRAARs)

The second approach is to apply cumulative abnormal risk-adjusted returns (CRAARs) calculated on the basis of monthly stock returns starting from the first month after the IPO data. Following Jensen (1968), this paper calculates the risk adjusted abnormal returns (CRAARs) in the below equations.

$$AR_{i,t} = R_{i,t} - (\alpha_i + \beta_{i,m} R_{m,t}) \qquad \text{Equation 5.3}$$

Where $AR_{i,t}$ is used to determine the abnormal return of firm i over the theoretical expected return from the risk-adjusted model. α_i is the intercept and $\beta_{i,m}$ is the coefficient of the market index return. This paper use three historical years' data on monthly stock returns of firm i and market index returns to estimate α_i and $\beta_{i,m}$. Therefore, this paper obtains the cumulative risk adjusted abnormal returns (CRAARs) as shown in equation 5.4

$$\text{CRAARs} = \sum_{t=1}^{T} \{R_{i,t} - (\alpha_i + \beta_{i,m} R_{m,t})\} \qquad \text{Equation 5.4}$$

5.3.3.3 Fama-French three factors model

Fama and French (1992) suggest that stock risks are multidimensional. One dimension of risk is proxied by size and another dimension is proxied by book-to-market ratio. To control for the risk-return relationship, we use the Fama and French (1993) three-factor model to obtain alphas for all decile portions. The Fama-French three-factor regression model is specified by the following equation:

$$R_{i,t} = \alpha_p + \beta_p\left(R_{m,t} - R_{f,t}\right) + s_p SMB_t + h_p HML_t + \varepsilon_{p,t} \qquad \text{Equation 5.5}$$

Where $R_{i,t}$ is the monthly return of firm i; $R_{m,t} - R_{f,t}$ is the market return in excess of the risk-free rate; and SMB_t and HML_t are the monthly size and book-to-market factors, respectively. To be specific, SMB_t is the difference in returns between a portfolio of "small" and "big" stocks. HML_t is the difference in returns between a portfolio of "high" book-to-market and "low" book-to-market stocks. The intercept α_p measures the average monthly abnormal return on the portfolio of event firms after controlling for the market, size and book-to market factors. An α_p with zero value suggests no abnormal performance under the null hypothesis. Regressions are performed using average monthly returns of each decile-sorted predictor variable during the entire sample period.

Unlike the US stock market, the components for the Fama-French three-factor model are not publicly available in China. So this paper mimics the procedure provided in Fama and French to compute SMB and HML factors using Chinese stock return data. First, this paper eliminates financial companies to avoid potential bias due their unique characteristics. Second, as discussed earlier, Chinese listed companies issued both tradable and non-tradable shares. Tradable shares are further classified into tradable A- and B- shares on the mainland, where the former are ordinary shares available exclusively to Chinese citizens and institutions, and B-shares were designated for overseas investors prior to opening the market to domestic investors in 2001 (Wang, 2004). This study focuses on A-shares due to two reasons. One is the sample firms and their matching firms used in this study are A-share listed firms. The second is due to

the different regulatory environment between A-shares and B-shares. Therefore, the total market valuation (size) equals tradable A-shares' closing price times the outstanding shares.

This paper constructs the size and book-to-market ratio in June of each year t. In particular, the book-to-market ratio (B/M) is defined as the book value of equity per share divided by the closing price at the end of the year. Following Chen, Kim, Yan, and Yu (2010), this paper sorts all stocks into small and big size groups on the median market capitalisation of all stocks in June of year t. To form the HML factor, this paper independently sorts all stocks into low, median and high book-to-market groups based on the 30% and 70% cutoffs points of the book-to-market ratio of all stocks at the end of December of year t-1.

Further, in terms of the market return $R_{m,t}$, this paper calculates the monthly market returns in China as both the equally weighted (EW) and total-value-weighted (TVW) average monthly returns for all A-shares traded in the Shanghai and Shenzhen stock exchanges. In addition, this paper follows Kang, Liu, and Ni (2002) and Wang (2004) in using the 3-month household deposit interest rate as the risk-free rate in China. After these three steps, this study runs the adjusted three-factor regression model taking the below equation, so as to gain a perspective on whether the intercepts are different between the PCFs and their matching firms.

$$\text{CFAAR}= \sum_t^T \{R_{i,t} - [\alpha_p + \beta_p(R_{m,t} - R_{f,t}) + s_p SMB_t + h_p HML_t + \varepsilon_{p,t}]\} \qquad \text{Equation 5.6}$$

5.4 Empirical Results

5.4.1 Univariate tests

Table 5.1 reports the mean and median values of cumulative abnormal stock returns for subsamples sorted by whether or not they have political connections across the whole time period and the sub-periods. This paper uses three approaches to measure the cumulative abnormal stock returns. The first method is cumulative abnormal stock returns adjusted on the basis of monthly market index returns (CMAARs). The second approach is cumulative abnormal stock returns from the market model (CRAARs). The third measure is cumulative abnormal stock returns adjusted with the Fama French three factor expectation (CFAARs).

In the whole sample period from 1993 to 2011, we find that mean (median) cumulative abnormal stock returns are on average higher in PCFs than unconnected firms, regardless of which approach is used. The differences in the mean (median) between the two groups range from 0.362 to 0.440 across the three approaches. All are statistically significant at conventional levels of 1%. To increase the statistical power, this paper also investigates these differences during the sub-period samples. In the first sub-period of 1993-1999, the mean (median) cumulative abnormal stock returns of firms with political connections are statistically significantly higher than those without political connections. The differences between the two groups across CMAARs, CRAARs, and CFAARs range from 0.227 to 0.433 and are statistically significant at the 1% level.

In the sub-period 2000-2005, Table 5.1 reports that PCFs have higher mean (median) CMAARs and CRAARs than firms without political connections, which is similar to the patterns from the full sample period. In contrast, the mean (median) CFAARs of PCFs is lower than firms without political connections, indicating that PCFs underperform politically unconnected firms after controlling for risks from the market. Moreover, for the sub-period from 2006 to 2011, the mean (median) cumulative abnormal returns in PCFs are positive, while they are negative in unconnected firms. The differences between the two groups range from 0.028 to 0.117. Again, all the differences are statistically significant at the 1% level.

Overall, Table 5.1 shows that PCFs outperform their matching firms in market performance, no matter whether looking at CMAARs, CRAARs, or CFAARs. Moreover, the differences between PCFs and unconnected firms are larger in the sub-period 1996-1999 when the Chinese stock market was in a bullish market cycle, but these gaps are narrower in the sub-period 2000-2005 when the Chinese stock market was in an anti-bubble phase (WeiXing Zhou and Sornette, 2004) with the Shanghai stock exchange composite index falling from its then historical high of 2245 on June 2001 to the historical low on June 2005.

Table 5:1: Cumulative abnormal returns (CARs) statistic for full samples

This table presents the mean (median) cumulative abnormal returns (CMAARs, CRAARs and CFAARs) for firms sorted on whether or not they are politically connected. The cumulative abnormal returns are estimated by cumulating monthly abnormal stock returns since the sample firm listed. CMAARs are the cumulative abnormal returns calculated from equation (5.2); CRAARs are calculated from equation (5.4); CFAARs are calculated from equation (5.6). This study uses t-statistics for testing the significance of the mean and the Wilcoxon signed-rank test for testing the significance of the medians. Significance at 1%, 5%, 10% level (two-tail test) is denoted by ***, **, and * respectively.

	Mean			Median		
	Connected	Unconnected	Diff	Connected	Unconnected	Diff
1993-2011						
CMAAR	-0.046	-0.409	0.362***	-0.022	-0.397	0.374***
CRAAR	0.575	0.159	0.416***	0.558	0.134	0.424***
CFAAR	0.884	0.444	0.440***	0.866	0.441	0.425***
1996-1999						
CMAAR	-0.156	-0.385	0.229***	-0.078	-0.347	0.270***
CRAAR	0.630	0.291	0.340***	0.536	0.244	0.292***
CFAAR	0.926	0.511	0.415***	0.906	0.473	0.433***
2000-2005						
CMAAR	0.024	-0.021	0.045***	0.002	-0.018	0.020***
CRAAR	0.099	0.037	0.063***	0.105	0.034	0.072***
CFAAR	0.027	0.050	-0.023***	0.021	0.046	-0.024***
2006-2011						
CMAAR	0.037	-0.080	0.117***	0.015	-0.090	0.105***
CRAAR	0.008	-0.020	0.028***	0.013	-0.021	0.034***
CFAAR	0.035	-0.020	0.055***	0.037	-0.019	0.056***

5.4.2 Regressions

5.4.2.1 Test on full sample

This section performs regression analyses to examine the effects of political connections on long-term stock price performance. In order to gather further evidence regarding the hypotheses and to consider other possible firm specific characteristics and governance variables that may influence the results, cross-sectional regressions are conducted. The model is:

$$CAR_i = \alpha_{0,i} + \beta_{1,i}PC + \beta_{2,i}Control + \varepsilon_i \qquad \text{Equation 5.7}$$

where CAR_i refers to the dependent variable measuring cumulative abnormal stock returns (CMAARs, CRAARs, and CFAARs). On the right side of the regression, this study includes a dummy variable equal to one if a firm is politically connected and zero otherwise. This study also includes control variables of firm characteristics: Leverage (total liabilities divided by total assets); Size (natural logarithm of total assets); MB (market to book ratio of assets); and Largest (the percentage ownership of the largest shareholder). Furthermore, this study controls for a set of corporate governance variables: Board (the logarithm value of the total number of directors on the board); Independent (ratio of independent directors on the board); Age (=the average age of directors on the board); Education (the average score of the education level of the directors, which ranges from 0-4); and Background (directors who used to work, or are currently working, for universities or research institutions). The ownership variable controls for the possibility that a politician's rent-seeking incentives depend on the controlling shareholder's ownership stake in the firm (J.P.H. Fan et al., 2007).

Table 5.2 reports the regression results. Column 1 presents the regression results of the relationship between political connections and the market reaction as measured by CMAARs. It shows a positive association between political connection and CMAARs. The coefficients on the PC dummy are positive and significant at the 1% level in the model of CMAARs, suggesting the market responds positively to PCFs. Further, this paper alternatively uses CRAARs and CFAARs as dependent variables of stock price performance. The corresponding coefficient is 0.143 and 1.65, respectively. Both are statistically significant at the conventional level. These findings suggest that PCFs outperform unconnected firms in CARs adjusted for risk using the market model or the Fama French three-factor model.

It is essential to control for other firms' specifics risks and corporate governance effects on stock returns. Table 5.2 shows that CARs are significantly positively related to the control variables of ROA, Size, Leverage, and Market-to-book in the model of CMAARs. By contrast, coefficients of ROA and Leverage are insignificantly negative in models of CRAARs and CFAARs. Cumulative abnormal returns are negatively related to the corporate governance variables measuring average age of directors (Age) and the background of board directors (Background). However, they do not show any statistical significance.

Overall, the results in Table 5.2 are consistent with the univariate results reported in Table 1. The magnitudes of the differences in market performance measured by CMAARs, CRAARs, and CFAARs between PCFs and matching firms are similar to the univariate results even after controlling for firm specific and corporate governance factors that could affect long-term stock return performance. Political connections are significantly positively related to CARs measured from CMAARs, CRAARs and CFAARs, indicating that PCFs in fact outperform their matching firms in stock price returns.

Table 5:2: Determinants of cumulative abnormal stock returns (CARs) for full sample

This table reports the cross-sectional regressions results on the determinants of CARs. The dependent variable is CARs calculated from equations (5.2), (5.4), and (5.6). CMAARs are the cumulative abnormal returns calculated from the adjustment on the market index return (equation (5.2)); CRAARs are the cumulative abnormal returns from the market model (equation (5.4)); and CFAARs are cumulative abnormal returns from the Fama French three-factor model (equation (5.6)). The independent variables are; PC (a dummy variable equal to one if a firm is politically connected and zero otherwise), ROA (net profits divided by total assets), Leverage (total liabilities divided by total assets), Size (natural logarithm of total assets), MB (market to book ratio of assets), and Largest (the percentage ownership of the largest shareholder). Furthermore, this study controls a set of corporate governance variables; Board (the logarithm value of total number of directors on the board), Independent (ratio of independent directors on the board), Age (the average age of directors on the board), Education (the average score of the education level of the directors, ranging from 0-4), and Background (directors who used to work, or are currently working, for universities or research institutions). The numbers in the parentheses below the coefficients are the t-statistics to test the significance of the variables. Significance at 1%, 5%, and 10% level (two-tail test) is denoted by ***, **, and * respectively.

2000-2011	CMAARs	CRAARs	CFAARs
PC	0.238***	0.143***	0.165***
	(3.71)	(2.68)	(2.76)
ROA	4.579***	-0.602	-0.299
	(5.04)	(-0.64)	(-0.28)
Leverage	0.485**	-0.693***	-0.524**
	(1.97)	(-3.44)	(-2.32)
Size	0.090**	0.000	-0.079*
	(2.06)	(-0.01)	(-1.77)
Largest	0.002	0.001	0.003
	(0.86)	(0.57)	(1.21)
MB	0.169***	-0.131***	-0.108***
	(4.69)	(-3.66)	(-2.67)
Board	0.000	-0.036**	-0.029
	(-0.02)	(-2.24)	(-1.60)
Age	-0.001	-0.010	-0.016*
	(-0.08)	(-1.25)	(-1.73)
Education	0.044	-0.007	0.013
	(0.70)	(-0.14)	(0.24)
Independent	-1.007*	-0.043	0.191
	(-1.81)	(-0.09)	(0.35)
Background	-0.082	-0.103	-0.175
	(-0.59)	(-0.86)	(-1.29)
Intercept	-2.688***	1.489*	3.066***
	(-3.02)	(1.74)	(3.19)
N	600	478	478
R-squared	0.16	0.08	0.06

5.4.2.2 Test on sub-periods

To test Hypothesis 2, each sub-period is examined independently to determine whether political connections are important in explaining stock returns across different time periods. As data on corporate governance is not available before 2000, this paper cannot examine the relation between political connection and CARs between 1996 and 1999. Therefore, this paper examines the two sub samples of 2000-2005 and 2006-2011. This section re-runs the regressions of Table 5.2 for these two sub-periods and the results are reported in Table 5.3.

Panel A reports the regression results for the sub-period 2000-2005, while Panel B reports the regression results for the sub-period 2006-2011. Panel A shows that political connections are positively associated with the two measures of cumulative abnormal stock returns (CRAARs and CFAARs) during the sub-period 2000-2005. The coefficient of CRAARs and CFAARs is 0.123 and 0.114, respectively. Both are significant at the 5% level. However, the coefficient of the dummy PC is statistically insignificant in the model of CMAARs. Moreover, for those control variables, ROA is significantly positively related to all the three measurements of cumulative stock abnormal returns at the 1% level. By contrast, the coefficient of size is significantly negative in the models of CRAARs and CRAARs, but positive in the model CMAARs. The same is true for the market-to-book variable.

Panel B shows that the coefficient of PC is significantly positively related to both the CRAARs or CFAARs in the second sub-period 2006-2011, with the coefficients 0.109 and 0.138, respectively. This finding is consistent with the results shown in Panel A. In addition, the dummy PC is positive to CMAARs, and this result is statistically significant at the 1% level.

Overall, Table 5.3 shows that political connections are significantly positively related to cumulative stock abnormal returns across both sub time periods, indicating PCFs outperform unconnected firms in market performance. These findings suggest that there are differences in terms of the explanatory power of political connections on stock abnormal returns of firms across different time periods in China.

Table 5:3: Determinants of CARs across different sub-periods

This table reports the cross-sectional regression results on the determinants of CARs. The dependent variable is CARs, calculated from equations (5.2), (5.4), and (5.6). CMAARs are the cumulative abnormal returns calculated from the adjustment on the market index return (equation (5.2)); CRAARs are the cumulative abnormal returns from the market model (equation (5.4)); and CFAARs are cumulative abnormal returns from the Fama French three-factor model (equation (5.6)). The independent variables are; PC (a dummy variable equal to one if a firm is politically connected and zero otherwise), ROA (net profits divided by total assets), Leverage (total liabilities divided by total assets), Size (natural logarithm of total assets), MB (market to book ratio of assets), and Largest (the percentage ownership of largest shareholder). Furthermore, this study controls a set of corporate governance variables; Board (the logarithm value of the total number of directors on the board), Independent (ratio of independent directors on the board), Age (the average age of directors on the board), Education (the average score of the education level of the directors, ranging from 0-4), and Background (directors who used to work, or are currently working, for universities or research institutions). The numbers in the parentheses below the coefficients are the t-statistics to test the significance of the variables. Significance at 1%, 5%, and 10% level (two-tail test) is denoted by ***, **, and * respectively.

Panel A: sub-period from 2000-2005.

2000-2005	CMAARs	CRAARs	CFAARs
PC	0.044	0.123***	0.114**
	(1.01)	(2.86)	(2.30)
ROA	7.388***	2.373***	2.469***
	(12.47)	(4.02)	(3.65)
Leverage	0.604***	-0.066	0.185
	(3.93)	(-0.44)	(1.08)
Size	0.074**	-0.115***	-0.314***
	(2.01)	(-2.85)	(-6.80)
Largest	0.001	0.001	0.002
	(0.76)	(0.48)	(1.31)
MB	0.175***	-0.137***	-0.157***
	(5.39)	(-4.10)	(-4.09)
Board	0.003	0.005	0.011
	(0.26)	(0.44)	(0.81)
Age	0.002	-0.003	-0.002
	(0.39)	(-0.44)	(-0.22)
Education	0.002	0.043	0.057
	(0.05)	(1.00)	(1.17)
Independent	0.652*	-0.075	0.292
	(1.77)	(-0.16)	(0.53)
Background	0.132	0.076	0.048
	(1.32)	(0.77)	(0.43)
Intercept	1.929	2.642***	6.457***
	(1.26)	(3.15)	(6.72)
N	409	327	327
R-squared	0.43	0.12	0.13

Panel B: sub-period from 2006-2011.

2006-2011	CMAARs	CRAARs	CFAARs
PC	0.231***	0.109*	0.138**
	(3.54)	(1.88)	(2.20)
ROA	1.239*	-0.858	-0.867
	(1.64)	(-1.15)	(-1.08)
Leverage	0.037	-0.364**	-0.396**
	(0.19)	(-2.34)	(-2.36)
Size	0.008	-0.030	-0.030
	(0.23)	(-0.89)	(-0.81)
Largest	0.000	0.001	0.003
	(0.09)	(0.56)	(1.30)
MB	0.127***	-0.091***	-0.072**
	(4.55)	(-3.48)	(-2.56)
Board	0.008	-0.031*	-0.024
	(0.41)	(-1.79)	(-1.26)
Age	-0.009	-0.004	0.000
	(-0.98)	(-0.44)	(0.02)
Education	0.066	0.022	0.052
	(1.15)	(0.45)	(1.00)
Independent	0.010	-0.474	-0.456
	(0.01)	(-0.70)	(-0.63)
Background	0.074	0.191	0.147
	(0.54)	(1.49)	(1.06)
Intercept	-0.535	1.513**	1.088
	(-0.73)	(2.09)	(1.39)
N	447	326	326
R-squared	0.14	0.04	0.06

5.4.2.3 Test on five different industries

To test Hypothesis 3, each industry is examined independently to determine whether political connections are important in explaining stock returns within each particular industry. To test this, CARs of firms belonging to five different types of industries are examined. This section re-runs the regressions of Table 5.2 for each industry and the results are reported in Table 5.4.

Panels A to C in Table 5.4 report the regression results with the three dependent variables of CMAARs, CRAARs, and CFAARs, respectively. Panel A shows that political connections are positively associated with cumulative abnormal stock returns measured by CMAARs across the industries of Utilities, Conglomerates, and Industrial, with the coefficients ranging from 0.260 to 0.272. Moreover, both the coefficients of PC in Conglomerates and Industrial are significant at the conventional level. This finding indicates that PCFs' outperformance in terms of CMAARs seems to be largely attributable to Conglomerates and Industrial.

Moreover, Panel B shows a positive relationship between PC and cumulative abnormal stock returns measured by CRAARs across all the industries, with the exception of Properties. However, the coefficients of PC are not statistically significant. Similarly, Panel C shows PC are positive to CFAARs across all industries, with the exception of Properties. Moreover, the coefficient of the dummy PC is significant at the conventional level for both Conglomerate and Industrial.

Overall, these findings in Table 5.4 suggest that there are differences in terms of the explanatory power of political connections on stock returns of firms across the different types of industry in China. Particularly, both Conglomerates and Industrial are significantly positively associated with political connections across CMAARs and CFAARs, representing 80% of the PCFs in this study.

Table 5:4: Determinants of CARs of firms across five industries

This table reports the cross-sectional regression results on the determinants of CARs. The dependent variable is CARs calculated from equations (5.2), (5.4), and (5.6). CMAARs are the cumulative abnormal returns calculated from the adjustment on the market index return (equation (5.2)); CRAARs are the cumulative abnormal returns from the market model (equation (5.4)); CFAARs are cumulative abnormal returns from the Fama French three-factor model (equation (5.6)). The independent variables are; PC (a dummy variable equal to one if a firm is politically connected and zero otherwise), ROA (net profits divided by total assets), Leverage (total liabilities divided by total assets), Size (natural logarithm of total assets), MB (market to book ratio of assets), and Largest (the percentage ownership of the largest shareholder). Furthermore, this study controls a set of corporate governance variables; Board (the logarithm value of the total number of directors on the board), Independent (ratio of independent directors on the board), Age (the average age of directors on the board), Education (the average score of the education level of the directors, which ranges from 0-4), and Background (directors who used to work, or are currently working, for universities or research institutions). The numbers in the parentheses below the coefficients are the t-statistics to test the significance of the variables. Significance at 1%, 5%, and 10% level (two-tail test) is denoted by ***, **, and * respectively.

Panel A: dependent variable of CMAARs

	Utilities	Properties	Conglomerates	Industrial	Commerce
PC	0.269	-0.265	0.260**	0.272***	-0.133
	(0.77)	(-0.84)	(2.11)	(3.27)	(-0.53)
ROA	7.857	17.159**	3.743**	4.560***	9.480**
	(1.50)	(2.26)	(2.28)	(3.77)	(2.25)
Leverage	1.643	-0.476	0.313	0.592*	1.430
	(1.37)	(-0.47)	(0.64)	(1.76)	(1.48)
Size	-0.069	0.452	0.158*	0.085	0.247
	(-0.40)	(1.71)	(1.81)	(1.42)	(0.82)
Largest	-0.001	0.002	-0.008*	0.007**	0.001
	(-0.09)	(0.14)	(-1.87)	(2.22)	(0.07)
MB	0.165	0.096	0.080	0.229***	0.014
	(0.78)	(0.34)	(1.38)	(4.66)	(0.07)
Board	-0.001	-0.176	-0.012	0.007	-0.068
	(-0.01)	(-1.4)	(-0.33)	(0.27)	(-0.70)
Age	0.018	-0.138*	-0.002	-0.001	-0.022
	(0.28)	(-1.87)	(-0.14)	(-0.05)	(-0.37)
Education	0.288	0.202	-0.051	0.085	0.035
	(0.73)	(0.56)	(-0.40)	(1.12)	(0.11)
Independent	-7.295**	-9.680*	-1.254	-0.777	-0.206
	(-2.01)	(-1.91)	(-1.27)	(-1.06)	(-0.07)
Background	-0.050	-1.146	-0.143	-0.010	0.486
	(-0.07)	(-1.61)	(-0.47)	(-0.06)	(0.84)
Intercept	0.175	0.216	-2.889	-3.173***	-4.822
	(0.05)	(0.04)	(-1.53)	(-2.62)	(-0.74)
N	43	30	142	351	34
R-squared	0.29	0.62	0.18	0.22	0.34

Panel B: dependent variable of CRAARs

	Utilities	Properties	Conglomerates	Industrial	Commerce
PC	0.297	-0.046	0.169	0.091	0.284
	(1.52)	(-0.19)	(1.44)	(1.27)	(1.14)
ROA	0.914	-7.381	3.869	-1.184	6.060
	(0.25)	(-1.26)	(1.62)	(-1.00)	(0.82)
Leverage	-0.262	-1.512*	-0.171	-0.938***	1.797*
	(-0.39)	(-1.91)	(-0.32)	(-3.36)	(1.64)
Size	-0.028	0.075	-0.154	-0.042	-0.146
	(-0.24)	(0.37)	(-1.36)	(-0.75)	(-0.36)
Largest	-0.005	0.019	0.001	0.004	0.004
	(-0.65)	(1.43)	(0.16)	(1.53)	(0.36)
MB	-0.105	-0.068	-0.223***	-0.154***	-0.073
	(-0.65)	(-0.31)	(-2.84)	(-3.27)	(-0.21)
Board	0.024	0.056	-0.060*	-0.033	0.037
	(0.35)	(0.58)	(-1.87)	(-1.50)	(0.34)
Age	0.008	-0.076	0.005	-0.013	-0.041
	(0.24)	(-1.33)	(0.29)	(-1.27)	(-0.53)
Education	-0.034	0.028	-0.038	0.036	-0.529
	(-0.16)	(0.10)	(-0.35)	(0.56)	(-1.35)
Independent	-1.026	6.126	0.567	-0.487	-0.174
	(-0.45)	(1.56)	(0.62)	(-0.74)	(-0.05)
Background	0.051	-0.198	-0.683**	0.069	-0.584
	(0.12)	(-0.36)	(-2.39)	(0.42)	(-0.83)
Intercept	0.943	0.276	4.085	2.548**	5.137
	(0.38)	(0.07)	(1.61)	(2.15)	(0.63)
N	36	30	99	287	26
R-squared	0.24	0.42	0.19	0.1	0.43

Panel C: dependent variable of CFAARs

	Utilities	Properties	Conglomerates	Industrial	Commerce
PC	0.138	-0.252	0.220*	0.134*	0.266
	(0.77)	(-0.75)	(1.64)	(1.70)	(0.85)
ROA	3.114	-4.776	6.619**	-1.736	11.798
	(0.93)	(-0.59)	(2.41)	(-1.33)	(1.28)
Leverage	0.022	-1.256	0.344	-0.815***	2.399*
	(0.04)	(-1.16)	(0.56)	(-2.65)	(1.75)
Size	-0.117	-0.037	-0.288**	-0.099	-0.850*
	(-1.09)	(-0.13)	(-2.22)	(-1.60)	(-1.70)
Largest	-0.012*	0.023	0.000	0.006**	0.002
	(-1.81)	(1.26)	(0.08)	(2.27)	(0.16)
MB	-0.209	-0.005	-0.257***	-0.102**	-0.505
	(-1.40)	(-0.02)	(-2.85)	(-1.97)	(-1.14)
Board	0.001	0.112	-0.026	-0.025	-0.013
	(0.01)	(0.84)	(-0.71)	(-1.02)	(-0.09)
Age	0.018	-0.054	-0.015	-0.017	-0.013
	(0.55)	(-0.70)	(-0.71)	(-1.49)	(-0.13)
Education	0.087	-0.095	-0.013	0.037	-0.369
	(0.44)	(-0.25)	(-0.10)	(0.53)	(-0.75)
Independent	-0.884	5.518	1.214	-0.072	-4.419
	(-0.42)	(1.03)	(1.15)	(-0.10)	(-1.03)
Background	0.006	-0.305	-0.870***	-0.017	-0.098
	(0.02)	(-0.41)	(-2.64)	(-0.09)	(-0.11)
Intercept	2.754	1.374	7.104**	3.483***	20.232**
	(1.22)	(0.24)	(2.44)	(2.66)	(1.99)
N	36	30	99	287	26
R-squared	0.29	0.27	0.2	0.09	0.45

5.5 Time Patterns

5.5.1 Different sub time periods

This section compares the mean monthly cumulative abnormal stock returns (CMAARs, CRAARs, and CFAARs) of firms across different time periods, sorted on whether or not they have political connections. Charts 5.1 to 5.3 exhibit the time patterns of the mean difference between PCFs and matching firms across the CMAARs, CRAARs, and CFAARs, respectively.

Chart 5.1 plots the mean monthly CMAARs for both PCFs and their matching firms. The CMAARs is calculated as the accumulative mean abnormal stock returns adjusted from the market index returns. Chart 5.1-(a) shows the mean CMAARs for the full time period from 1993 to 2011. It exhibits clear time patterns of firms based on political ties over time periods. From 1993 to 1995, in particular, both groups experience a drop in CMAARs, bottoming at -0.6 and -0.8, respectively. There is no significant difference between the two.

However, from 1996, both groups experience an increase in CMAARs, and PCFs outperform the matching firms from then on. To gain a clearer picture, this paper divides this into three sub-periods and compares the mean CMAARs between PCFs and matching firms for each sub-period. Charts 5.1-(b) to 5.1-(d) show the mean CMAARs in the three sub-periods, respectively. The differences of the mean CMAARs between PCFs and unconnected firms in charts 5.1-(b) to 5.1-(d) are consistent with the patterns of the full samples shown in Chart1-(a). In particular, Chart 5.1-(c) shows that there is no difference between PCFs and unconnected firms, and for both groups CMAAR (EW) levels off at zero during the sub-period 2000-2003. In contrast, the difference in the mean CMAAR between the two groups of firms widens over time since 2004. Further, the mean CMAAR of PCFs is positive after 2004, while this figure is negative in matching firms.

Overall, Chart 5.1 shows that the mean CMAARs of PCFs surpasses matching firms during 1996 to 2000, and then from 2005. This finding is interesting, as PCFs outperformed their counterparts in the previous bull markets (Jan 1996-Dec 2000 and Jan 2006-Oct 2007) (G. M. Chen, Rui, and Wang, 2005; WC Zhou et al., 2009). However, during the 2000 to 2003 bull market, there is no difference in the mean CMAARs between two groups. According to Jiang et al. (2010), 2000 is the first year that the Chinese stock market shows clear signs of being in serious decline (a bear market that lasts until 2005).

Chart 5.1: Cumulative stock abnormal returns adjusted from market index returns (CMAARs)

These charts plot the differences between PCFs and unconnected firms in cumulative stock abnormal stock returns adjusted from market index returns (CMAARs) from 1993 to 2011. The X-axis is the calendar year; the y-axis is the ratios. The red lines represent PCFs, while the blue lines indicate unconnected firms.

Chart 5.1- (a)

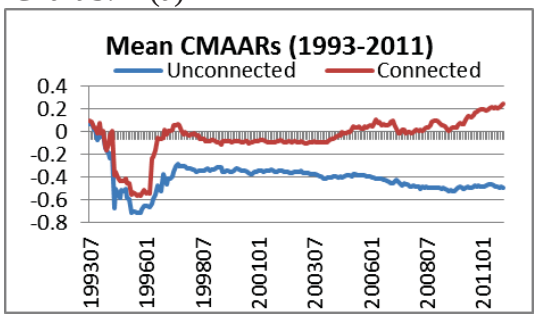


Chart5.1-(b)

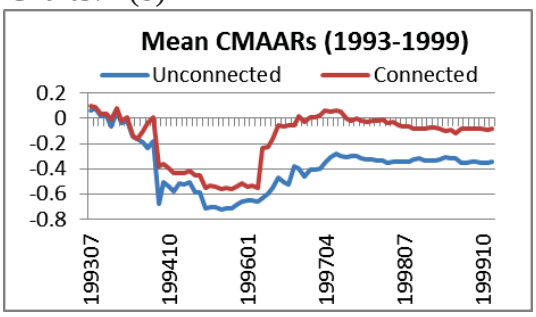


Chart 5.1-(c)

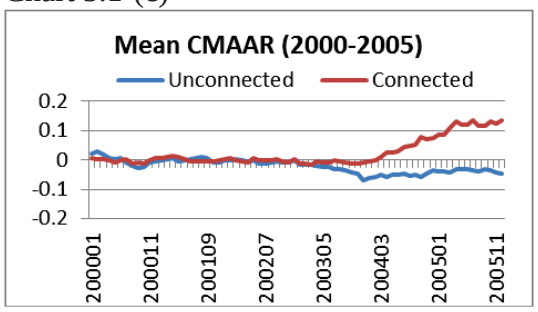
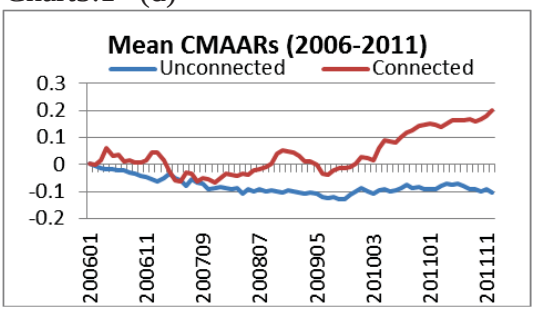


Chart5.1 –(d)



This section reports the mean monthly cumulative abnormal returns adjusted from the market model (CRAARs). Chart 5.2-(a) plots the mean monthly CRAARs of sample firms sorted by whether they have political ties over the whole sample period from 1996 to 2011. Chart 5.2(a) shows PCFs outperform the matching firms across the whole time period. In particular, the CRAARs of PCFs peak near to 1.0 the middle of 1997, which is 0.5 higher than unconnected firms. Moreover, the difference in the mean CRAARs between the two groups of firms widens over time. For robustness testing, Chart 5.2-(b) to 5.2-(d) compares the mean

CRAARs between the two groups for each sub-period. Charts 5.2-(b) to 5.2-(c) illustrate that the mean CRAARs in PCFs are higher than in unconnected firms in each sub-period, except in 2000 when PCFs underperform their matching firms. Moreover, Chart 5.2-(d) shows the gap between two groups of firms is bigger during the later period (2006-2011) in terms of mean CRAARs, which is consistent with the finding in Chart 5.1. Overall, Charts 5.2-(b) to 5.2-(d) provide a clearer picture on the comparisons between PCFs and unconnected firms in each sub-period; that is, PCFs outperform unconnected firms in accumulative stock abnormal returns adjusted from the market model (CFAARs).

Chart 5.2: Cumulative abnormal stock returns from market model (CRAARs)

These charts plot the differences between PCFs and unconnected firms in cumulative stock abnormal stock returns adjusted from market model (CRAARs) from 1993 to 2011. The X-axis is the calendar year; the y-axis in is the ratios. The red lines with dots represent PCFs, while the blue lines indicate unconnected firms.

Chart 5.2- (a)

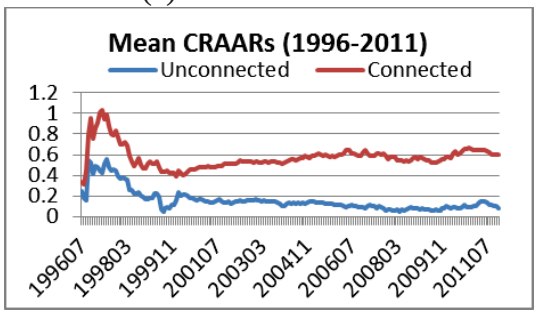


Chart5.2-(b)

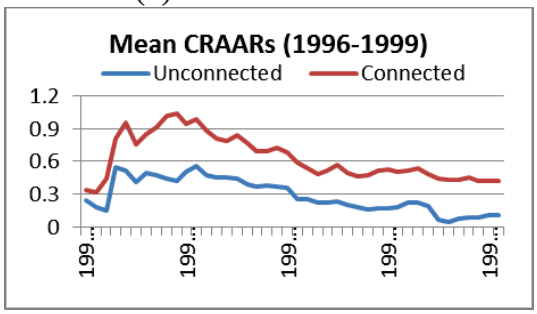


Chart 5.2-(c)

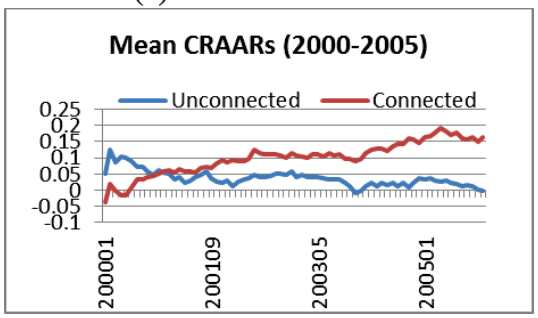
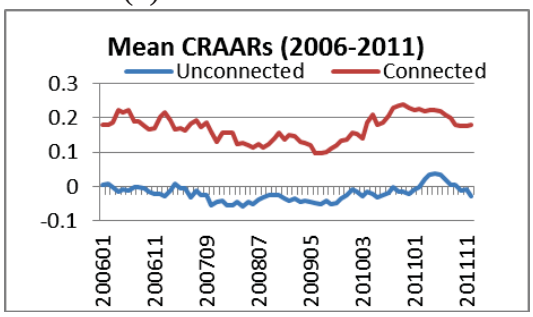


Chart5.2-(d)



This section shows the mean monthly cumulative abnormal returns adjusted from the Fama French three-factors model (CFAARs). Chart 5.3-(a) compares the mean monthly CFAARs of listed firms in China sorted by whether or not they are politically connected over the whole sample period of 1996-2011. The spreads in the mean CFAARs between the two groups in Chart 5.3-(a) are remarkably similar to those based on CRAARs in Chart 5.2-(a). This is also the case for Charts 5.3-(b) and 5.3-(d). The patterns in both sub-periods are similar to those in

Charts 5.2-(b) and 5.2-(d), that PCFs have higher accumulated abnormal stock returns in the two sub-periods: 1996-1999; and 2006-2011. However, Chart 5.3-(c) illustrates that the CFAARs in PCFs are, on average, lower than those of unconnected firms during the bearish sub-period of 2000-2005 (WeiXing Zhou and Sornette, 2004). Therefore, one can conclude that PCFs outperform in cumulative abnormal stock returns adjusted from the Fama-French three factors (CFAARs) mainly in the two previous bull markets in the periods of 1996-1999 and 2006-2011.

Chart 5.3: Cumulative abnormal stock returns from Fama-French three Factors (CFAARs)

These charts plot the differences between PCFs and unconnected firms in cumulative stock abnormal stock returns adjusted from Fama French three factors (CFAARs) from 1993 to 2011. The X-axis is the calendar year; the y-axis is the ratios. The red lines represent PCFs, while the blue lines indicate unconnected firms.

Chart 5.3-(a)

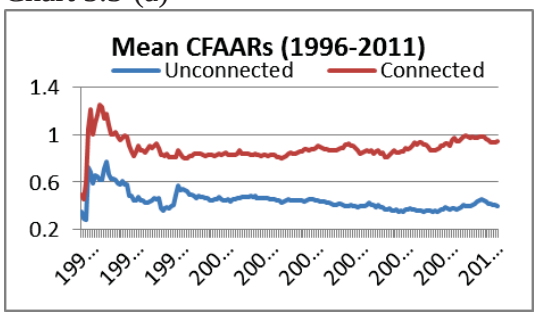


Chart5.3-(b)

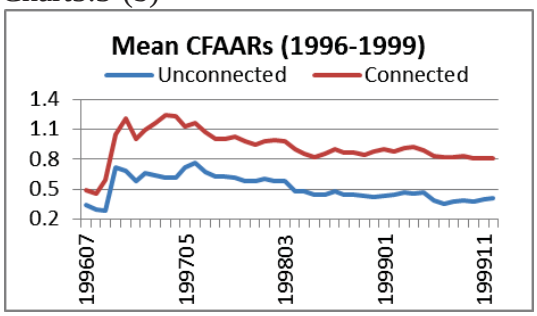


Chart 5.3-(c)

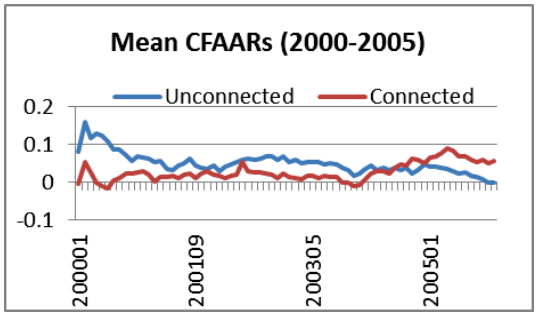
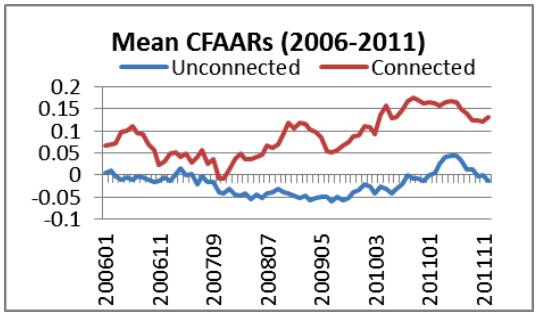


Chart5.3-(d)



5.5.2 Test on five different industries

This section shows how the mean cumulative abnormal stock returns of PCFs vary across industries, by comparison with their matching firms. Charts 5.4-(a) to 5.4-(e) compare the mean CMAARs between PCFs and unconnected firms across the five industries. The overall patterns in Chart 5.4 are similar to the patterns of the full sample shown in Chart 5.1, that PCFs on average have higher mean CMAARs. However, this is not true in the case of Chart 5.4-(e), which shows that PCFs underperform unconnected firms in the Commerce industry. Moreover, Charts 5.5-(a) to 5.5-(e) illustrate the comparisons of mean CRAARs between the two groups, while Charts 5.6-(a) to 5.6-(e) compare the mean CFAARs between the two groups. They show PCF outperform unconnected firms in cumulative abnormal returns (either CRAARs or CFAARs) only within the two industries Utilities and Conglomerates. These findings are interesting as they suggest there are differences in the abnormal stock returns between PCFs and unconnected firms across the industries.

Chart 5.4: CMAARs across five different industries

These charts plot the differences between PCFs and unconnected firms in cumulative stock abnormal stock returns adjusted from market index return (CMAARs) across five different industries. The X-axis is the calendar year; the y-axis is the ratios. The red lines represent PCFs, while the smooth lines indicate unconnected firms.

Chart 5.4-(a)

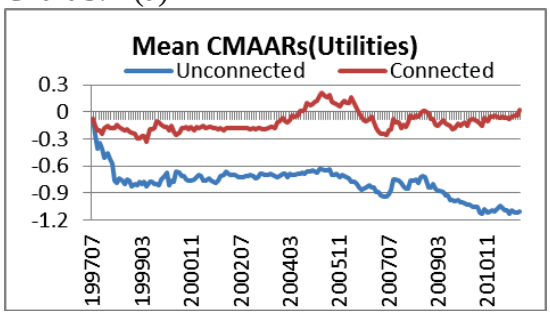


Chart 5.4-(b)

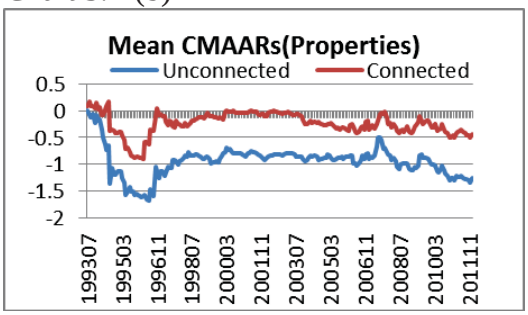


Chart 5.4-(c)

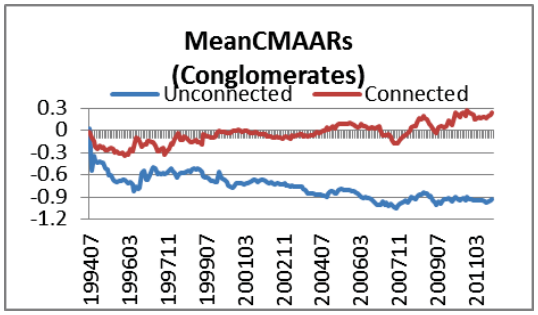


Chart5.4-(d)

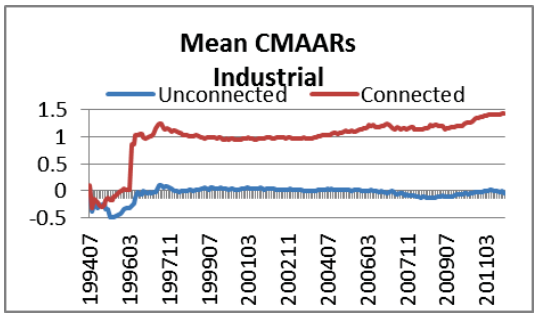


Chart5.4-(e)

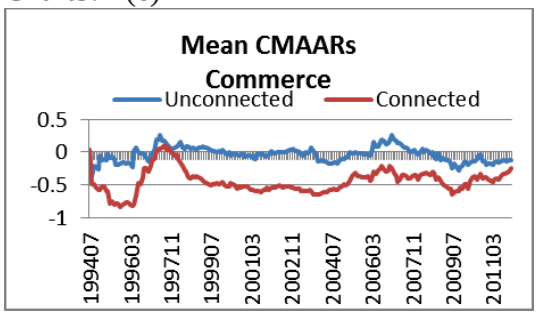


Chart 5.5: CRAARs across five different industries

These charts plot the differences between PCFs and unconnected firms in cumulative stock abnormal stock returns adjusted from market model (CRAARs) across five different industries. The X-axis is the calendar year; the y-axis is the ratios. The red lines represent PCFs, while the blue lines indicate unconnected firms.

Chart 5.5-(a)

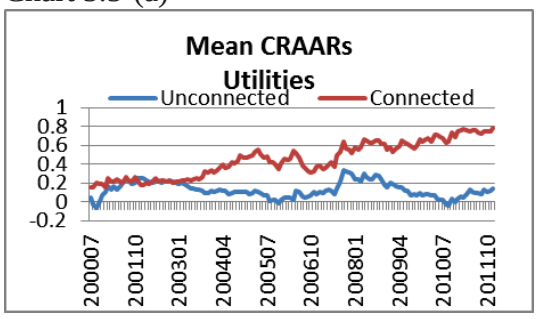


Chart 5.5-(b)

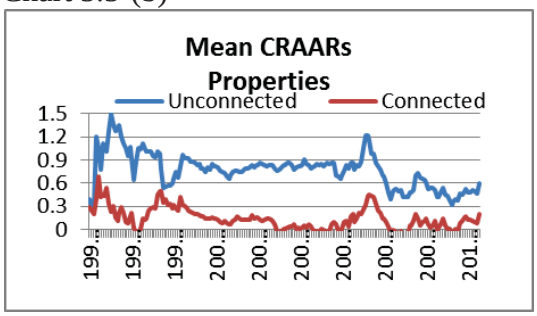


Chart 5.5-(c)

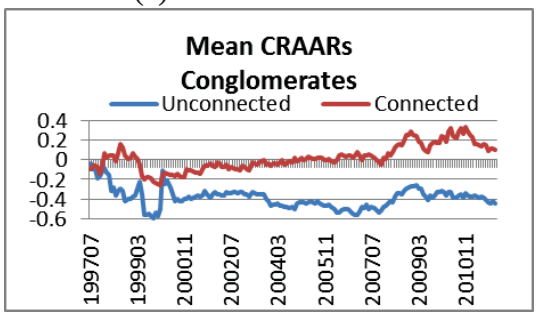


Chart 5.5-(d)

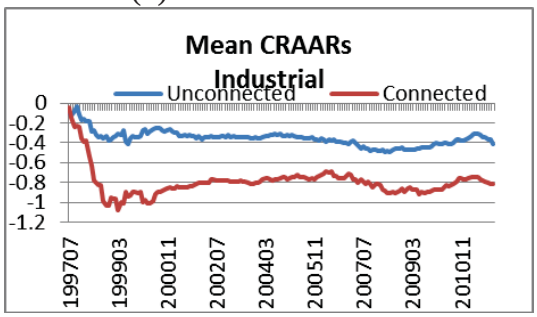


Chart 5.5-(e)

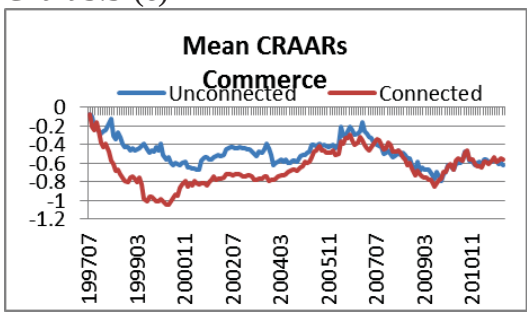


Chart 5.6: CFAARs across five different industries

These charts plot the differences between PCFs and unconnected firms in cumulative stock abnormal stock returns adjusted from Fama-French three factors (CFAARs) across five different industries. The X-axis is the calendar year; the y-axis is the ratios. The red lines represent PCFs, while the blue lines indicate unconnected firms.

Chart 5.6-(a)

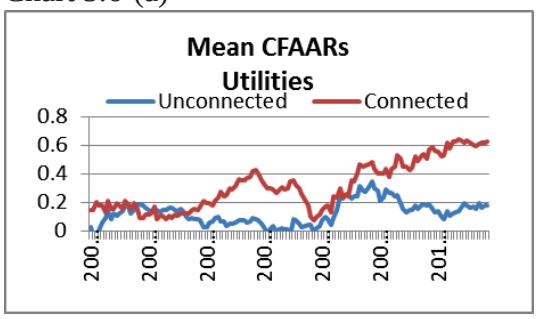


Chart 5.6-(b)

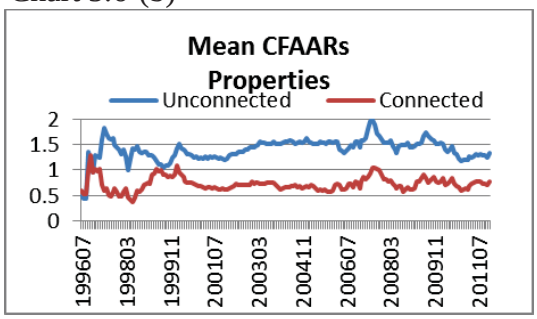


Chart 5.6-(c)

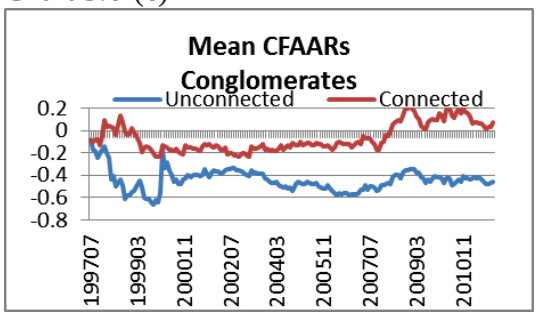


Chart 5.6-(d)

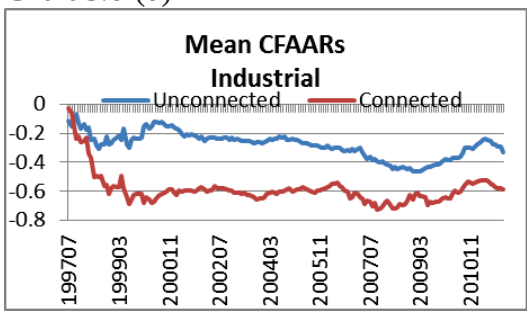
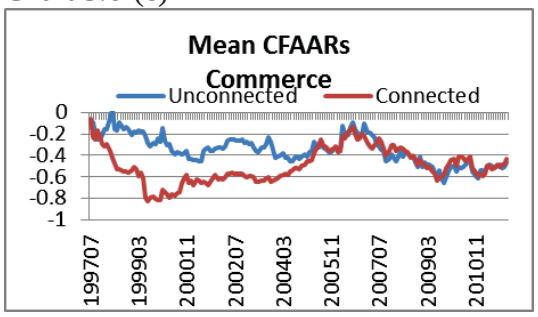


Chart 5.6-(e)



5.6 Conclusions

This study investigates the relationship between political connections and long-term stock returns of firms in China. This study uses three models to capture cumulative abnormal stock returns to examine stock price performances for firms sorted by whether or not they are politically connected. There are three null hypotheses in this essay and all are rejected. The first part of this study provides evidence on the nexus between political connections and stock returns on the Chinese stock market. This finding firmly suggests that political connections have impacts on the stock returns in China. To be specific, this paper finds that the cumulative abnormal stock returns (CMAARs, CRAARs, and CFAARs) are, on average, higher in PCFs than in unconnected firms across different time periods. This finding indicates that PCFs outperform their matching firms in market performance.

The second part of this study draws attention to the differences in stock abnormal returns of firms in five different industries. Specifically, this paper finds that political connection is one of the important determinants to the stock price of firms belonging to the two industries of Conglomerates and Industrials. This can be due to the competitive advantages that high level politicians have in terms of a stronger ability to provide access to state resources and enact or changes laws so as to generate economic rents or protect these firms from competition and industrial regulations (De Soto, 1990; Kroszner and Stratmann, 1998; Stigler, 1971). Moreover, as discussed in Chapter 3, together, Conglomerates and Industrial account for 80% of PCFs in this study. Therefore, they represent the majority of the connected sample firms.

In addition, this paper examines the time trends of cumulative stock returns of PCFs compared to unconnected firms as robustness checks. The time trends clearly show large differences between the two groups across different sample time periods, with the types of political connections, and across the five industries.

CHAPTER SIX: CONCLUSIONS

This chapter concludes the thesis by reviewing the theories developed (section 6.1); reviewing the hypotheses, and providing a summary of the major findings and implications (section 6.2). Section 6.3 presents the limitations of the thesis and suggests potential areas for future research.

6.1 Review of theoretical contributions

6.1.1 New type of political connection: “Princelings”

This study defines (in Chapters 3 and 4) a new type of political connection, called “princelings”. The key to this connection is the existence of a person who is a younger generation of former national (or party) leaders, and who takes an important position in a company.

6.1.2 New theory of “Golden hens vs. Chickens”

Based upon this definition of “princeling” political connections, this study has developed the theory of “Golden hens vs. Chickens” (in Chapters 3 and 4) to explain the characteristics of the “princelings” connected firms. The “princelings” usually come from the “sky” and choose their preferred target firms in a manner as if they were “sky-diving”. They usually have no economic or technological power, and have no advantage in knowledge or skills. Nevertheless, they have a superpower by birth, by virtue of which they have the freedom to choose “good” firms (“Golden hens”) for their “landing” targets. The best use of “Golden hens” is to secure a larger harvest of “eggs” in the future; killing them for their current meat (such as through cash tunnelling) is not optimal.

The theory predicts that “princelings” firms with the “Golden hens” features should be outstanding in their business operations, associated with less cash tunnelling, and should have accumulated higher business profits in the form of retained earnings relative to non-connected firms.

6.1.3 New theory of “Grey” usage

This study has developed (in Chapter 4) a new theory of “Grey” usage (equation 4.11). Under the current securities and accounting regulation systems, there are still many channels via which the dominant owners can take extra shares by “spending” some distributable profits for personal benefits. It is the existence of these opportunities that induce the dominant owners to choose a smaller dividend level (equations 4.5-4.7). A

missing value can be identified by a discrepancy in the balancing condition for changes in retained earnings: specifically, between new profits and other allocated values (paid dividends, and change of surplus reserves); this missing value (Grey usages) is suggested as a proxy for tunnelled (or expropriated) values by the dominant owners. Chapter 3 (Essay one) conducts empirical tests on the "Golden hens vs. Chickens" theory by examining the information in accounting reports using a probit prediction model. The results indicate that "princeling" firms are systematically different from non-connected firms in the way that accounting ratios express their operating sales, net profits and cash tunneling.

Chapter 4 focuses on the topic of wealth expropriation by dominant owners through two separate financial business stages. The first stage is the operating business activity stage, and the second is the profit distribution stage. The regression models show the "princeling" type of politically connected firm has a strong tendency to display higher operating revenue, production efficiency and operating profits. Moreover, the regression models results show that these firms are associated with lower cash tunnelling behaviour and maintain a higher ratio of distributable profits. These profits are available to the dominant owners for the purpose of wealth expropriation. These results are consistent with the "Golden hens" theory. Additionally, Chapter 4 develops a measure of the possible "usage", which involves an expenditure of distributable profits that is not directly shown in the financial reports. The results show that "princeling" firms have higher "Grey usage" than their matching firms in the whole sample period, and the sub-period test results reveal some new questions for future studies.

6.2 Review of hypotheses, major findings and implications

The hypotheses and conclusions in connection with the three key research aims are summarised in Table 6.1, and discussed further below.

Table 6:1: Hypotheses and conclusions for three key research aims

Research aim 1: To investigate the systematic differences in financial account ratios between the new type of "princelings" politically connected firms and their matching firms		
Hypothesis 1	*There is a systematic difference in accounting ratios between firms with political connections and firms without such connections.*	Supported
Hypothesis 1a	*The politically connected firms (of the princelings type) are relatively advantaged in operating revenue and/or operating profits.*	Supported
Hypothesis 1b	*The politically connected firms (of princeling type) are relatively less motivated to accept cash tunnelling.*	Supported
Hypothesis 1c	*The politically connected firms (of princeling type) pay relatively lower dividends and so they will show a higher retained earnings ratio.*	Supported
Research aim 2: To examine the potential for expropriation during the operating business stage and profit distribution stage for the new type of "princeling" political connection		
Hypothesis 1	*Firms connected to "princeling" outperform unconnected firms in terms of operating performance and growth opportunities.*	Supported
Hypothesis 2	*Politically connected firms are less likely to conduct tunneling through operating stage.*	Supported
Hypothesis 3	*The PCFs of the "princelings" type are more likely to expropriate the interests of minority shareholders through profit-sharing arrangements.*	Supported
Hypothesis 3a	*PCFs pay lower cash dividends lower than the optimal level.*	Supported
Hypothesis 3b	*PCFs keep a larger proportion of profits for grey usage motivations. The degree of expropriation through grey usages on retained earnings is higher in weaker corporate governance and market disciplines.*	Supported
Research aim 3: To examine how the stock market prices react to the "princelings" connection		
Hypothesis 1	*The "princeling" type of connected firms outperform their matching firms in market performance measured by abnormal stock returns.*	Supported
Hypothesis 2	*PCFs outperform their matching firms in stock returns across different sub-periods.*	Supported
Hypothesis 3	*There are differences in terms of explanatory power of political connections on stock returns of firms belonging to the five different industries in China.*	Supported

6.2.1 Essay One: The difference between politically connected and non-connected firms: A new type of political connection and evidence from the Chinese stock market

This essay examines the systematic differences in accounting ratios between "princeling" connected firms and their matching firms. Based upon the newly developed theory of "Golden hens vs. Chickens", this essay categorises the "princeling" firms as "Golden hens", which generally have more profitable operating businesses with higher operating revenue and less required capital investment. This expectation is supported by the results.

The second prediction out of the "Golden hens" theory is that there will be less cash tunnelling behaviour in the "princelings" connected firms. Cash tunnelling will have the effect of damaging these firms' ability to produce more "eggs" in the future. This prediction is also consistent with the prediction that the optimal cash tunnelling volume is negatively proportional to the level of a firm's profitability and growth value in the cash tunnelling model developed by Wei, Chen, and Wirth (2016). This essay observes that the "princeling" firms are associated with higher operating profits but lower cash tunnellng behaviour, which is well explained by the model.

Both the higher observed profits and lower cash tunnelling contribute to high net incomes and greater retained earnings in accounting reports. These expected systematic accounting ratio differences that indicate better operating business, less cash tunnelling and higher net profits are empirically tested and supported by logit regression models. The strong and consistently outstanding performance in higher operating profits and exceptionally low indications of cash tunnelling could possibly be used to identify for the "princelings" type of political connection.

6.2.2 Essay Two: Expropriation during profit distributions in politically connected firms: Evidence from the Chinese stock market

This essay examines the wealth appropriation effect of the "princelings" connected firms in two separate stages: 1) Operating business stage; and 2) profit distribution stage. Each is supported by a theoretical model to make some predictions. The operating stage model uses the model developed by Wei et al. (2016), with the prediction that cash tunnelling is

negatively related to three factors; operating profitability, the dominant owner's percentage ownership, and the reputational cost of committing tunnelling. For the distribution stage, this essay has developed a new model to show that "princelings" firms' should pay their dividends at a level lower than the optimal level without the motivation of wealth appropriation by the dominant owners.

At the operating business stage, this essay empirically investigates whether firms connected to "princelings" outperform their counterparts in terms of operating performance and growth opportunities, while being less likely to conduct cash tunnelling. This essay uses net cash flow from operating activities divided by total assets (NOC) and return on assets (ROA) to measure operating performance, the change ratio on sales (GROWTH) to proxy for growth, and "net other receivables" divided by total assets (OREC) to measure cash tunnelling. This study finds that all the variables NOC, ROA and GROWTH are significantly positively related to the "princelings" connection, but OREC is significantly negatively associated with political connection. These results are consistent with the prediction in the cash tunnelling model by Wei et al. (2016).

In the profit distribution stage, this essay tests whether connected firms take extra shares in profit distributions. The regression results show that firms with political connections are significantly positively related to retained earnings, but are significantly negatively related to cash dividends. By further examining the components of retained earnings, this essay finds that "princeling" connected firms keep 3.8% larger retained earnings (divided by attributable net income) than matching firms. However, they pay -4.27% lower cash dividends (divided by attributable net income) than matching firms. Moreover, it is found that connected firms have high average grey usage on retained earnings at 2.45 million RMB and -2.22 million RMB for matching firms). These combined results are consistent with the prediction that connected firms with higher profits will take an extra share in profit distributions.

6.2.3 Essay Three: Market reaction to the "princelings" connection

This essay next turns to the next question of stock market reactions. This study has observed evidence of higher operating profits, lower dividend payouts and higher retained earnings in the "princelings" politically connected firms. Essay Three considers how these

differences are reflected in the market prices of these firms. It is expected that connected firms should outperform their matching firms as measured by abnormal stock returns. Therefore, three benchmarks are used to test the difference between connected firms and their matching firms. The first is cumulative market adjusted abnormal returns (CMAARs); the second is cumulative risk adjusted abnormal returns (CRAARs); and the third is cumulative abnormal returns adjusted from the Fama-French three factors model (CFAARs). Consistent with the predictions, the results in Essay Three show that the "princelings" connected firms outperform matching firms in all three benchmarks, which suggests that the market reacts positively to "princelings" connected firms.

This essay further tests whether the "princelings" type of political connections has explanatory power in abnormal stock returns across the two time sub-periods and five different industries. Essay three show that connected firms outperform matching firms across the two time sub-periods in cumulative stock abnormal returns. Also, this essay finds that connected firms outperform matching firms in the two industries of Conglomerates and Industrials, but not in others. This result could be due to the dominance of the Conglomerates and Industrial industries in the connected firms sample.

6.2.4 Limitations of the thesis and future areas of research

The major limitation of this study is the restriction of available sample data. We have hand collected the data from the public domain, and especially from many overseas internet webpages. Although we have done our best to verify the truthfulness of the contents, there may exist two problems; one is the wrong identification of a "princelings" relation, and the second is the possibility of missing many true "princelings" firms from our dataset. This means there is noise in our "princelings" and matching firm samples (the matching firms are assumed to be non-connected in the "princelings" type). Although we observe systematic differences between the princelings and matching samples, the incidence of noise will reduce our testing power. To improve this, we aim to continue to add to the sample in future studies.

The second major limitation is that there are multiple factors relating to political connections, and many different types of political connections, especially in the Chinese

market environment. We do not have enough data or methods to distinguish between the different types in empirical study.

The third limitation is with respect to the ability to control for chronic political influence on corporate firms. This is particularly true for the newly developed proxy of overspending of distributable profits; the “grey usage”. We are unable to explain why the two independent sub-samples of “princelings” and their matching firms have such synchronised movements in their grey usage. The most likely causes are accounting and security market regulations, or policy changes, along with political events. We expect that future studies could investigate this question, as “grey usage” could be a previously undetected and important method of wealth appropriation by dominant owners. This has the potential to provide a sound explanation for the tendency for Chinese listed firms to pay exceptionally low dividends.

APPENDIX A

ESSAY TWO: EXPROPRIATION DURING PROFIT DISTRIBUTIONS IN POLITICALLY CONNECTED FIRMS: EVIDENCE FROM CHINA

Appendix A. 1: Variable Definition

This appendix table provides definitions of the variables employed in this paper.

Variable	Definition
PC	Dummy variable equal to 1 if the firm is politically connected and 0 otherwise.
Hypothesis1	
OCTA	Cash received from sales of goods divided by total assets
OCPTA	Cash paid for goods and services divided by total assets
NOC	Net cash flow from operating activities divided by total assets
TURNOVER	Total sales divided by total assets
COGS	Total operating expenses divided by total assets
ROA	Net income divided by total assets
GROWTH	Total revenue growth rate, (Total revenue$_{t1}$-Total revenue$_{t0}$)/Total revenue$_{t0}$
Hypothesis2	
OREC	Total amount of "Net other receivables" divided by total assets (Jiang et al.,2010)
SEXP	Selling expenses divided by total assets
Hypothesis3	
DIV	Total cash divided by total assets
RETAIN	Retained earnings divided by total assets
CAPEX	Total net fixed assets divided by total assets
CASH	Total cash and cash equivalents divided by total assets
CP_employee	Cash paid to and on behalf of employees divided by total revenues
OCP	Other cash paid.relating to operating activities divided by total revenues
GREY	=Net income - Cash dividen - Δ Surplus reserves - Δ Retained earnings
Control variables	
Size	Natural logarithm of total assets
Leverage	Total liabilities divided by total assets
MB	Market to book ratio of assets
Largest	The percentage ownership of largest shareholder
Board	The logarithm of total number of directors on the board
Independent	Ratio of independent directors to total number of directors
Age	The average age of directors on the board
Education	The average of the education level of the directors (ranges from 0-4)
Background	Directors who used to work or are currently working for universities or research institutions.

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