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# Politically Connected Venture Capitalists in China

**Abstract**

We examine how venture capitalists and the firms they back utilize network-based strategies in China. Analyzing a manually collected data set of venture capitalists with political ties, we find that firms backed by politically connected venture capitalists are more likely to obtain approval for initial public offerings (IPOs), their time from venture capital investment to IPO approval is shorter. They also exhibit higher IPO offering prices and lower underpricing, and consequently deteriorating long-term post-IPO stock performance. By exploiting a unique regulatory change, we show that venture capitalists' political connections had less IPO applications withdrawn during the 2013 financial inspection period. We also find that firms backed by politically connected venture capitalists have higher levels of earnings management, are more often mentioned in newspaper articles concerning substantial operating performance declines and are more often accused of illegal information disclosures quickly after the IPO. Finally, politically connected venture capitalists can obtain higher investment returns and attract more fund flows after successful IPOs. Our findings are robust to several robustness tests and suggest that political relationships are valuable for this important group of financial intermediaries in transitional China.

*JEL Classification*: G24; D02; P48
*Keywords*: Venture capital; Institutions; Network-based strategy; Political connections; IPO; China

# 1 Introduction

Young businesses with high-growth potential often rely on financing from sources that differ from those used by more established firms. In many developed countries, venture capital has helped such companies grow into important drivers of the economy. For example, venture capital has been a key driver of several of the most dynamic business sectors in the U.S. over the last decades (Jeng and Wells, 2000). More recently, venture capital has expanded in many emerging markets as well. However, venture capitalists operating in emerging markets face very different challenges compared to their counterparts in more developed countries. Venture capitalists typically rely on a well-functioning rule of law and sound institutions in developed countries. Emerging markets are, however, often characterized by weak and transformative institutions as well as an unreliable enforcement of laws.

This study builds on recent research that centers on how personal networks can help alleviate some of these challenges. The venture capital industry is to a large extent shaped by the institutional context in each country (Cetindamar, 2003). Previous research has noted that personal can function as substitutes for sound institutions and a lack of rule of law. Peng and Luo (2000) argue that firms using interpersonal networks, or guanxi in the case of China, at the micro level can be translated into a macro interorganizational strategy where they rely on alliances and networks to grow the firm (see also Peng et al., 2008). Lindsey (2008) shows that venture capitalists act as important network nodes, as companies with the same venture capitalist backing them are more likely to enter alliances. Having a reputable venture capitalist with a strong network as an investor can help the firms they invest in, for example by attracting key early-stage customers and driving the brand (Hsu,

2004). Venture capitalists also build networks of service providers such as law firms, accounting firms, investment bankers, etc., to help the firms they invest in succeed (Sahlman, 1990). In addition, networks constitute an important feature within the venture capital industry itself, as many venture capitalists often syndicate investments instead of investing alone (Lerner, 1994a), which result in better fund performance (Hochberg et al., 2007).

Transitional economies such as those found in Russia, Eastern Europe and China are often characterized by institutional voids and changes (Meyer; 2001; Ahlstrom and Bruton, 2006). A network-based strategy is perhaps especially important in this type of economies, where institutional change can be relatively rapid, a process which in turn increases institutional uncertainty in itself. In addition to purely professional networks between entrepreneurs and financiers, firms often survive and thrive using a strategy based on developing networks, personal trust and informal agreements with officials to deal with institutional uncertainty (Peng and Heath, 1996; Peng, 2003; Allen et al., 2005). A burgeoning literature on political connections has emphasized how firms operating in countries characterized by weak and transitional institutional settings such as China build crucial networks with political leaders and government officials (e.g. Feng et al. 2014, 2015). Building on this literature, we hypothesize that firms develop political connections to deal with weaknesses in the initial public offering (IPO) process and also exploit these weaknesses for their own benefit. The IPO market in China constitutes an unusually suitable setting for a quasi-natural experiment of the importance of political connections for venture capitalists. Johansson et al. (2017) note that even though the Chinese IPO market has been subject to substantial reforms during the last decades,

the process of going public is still highly politicized. A weak enforcement of formal rules for getting access to financing through the stock market means that the potential value for political connections is non-trivial. In fact, previous studies have highlighted how firms' political connections have helped them get accepted for an IPO and obtain higher IPO prices (Francis et al., 2009; Hu and Liu, 2011; Li and Zhou, 2015).

We conjecture that venture capitalists in China can use a networked-based strategy to handle an institutional void in the form of a highly politicized process of going public. That is, venture capitalists build networks with political leaders to obtain preferential treatment for the firms in which they invest. We find that firms being backed by politically connected venture capitalists are more likely to be accepted for an IPO. We also show that the period from investment to IPO approval is shorter for such firms. In addition, we find that they receive preferential treatment in the form of a higher IPO offering price, as indicated by a higher price-to-earnings ratios and lower IPO underpricing. We also provide evidence that they exhibit higher levels of earnings management, and are often featured in newspaper articles about significantly deteriorating changes in accounting performance and accusations of illegal information disclosure during the year after the IPO. An event analysis focusing on a unique regulatory change also shows that firms backed by politically connected venture capitalists were less likely to withdraw their IPO application during the well-known financial inspections in 2013. For the politically connected venture capitalists themselves, we find that they can obtain higher book investment returns and are able to attract more fund flows in the year after a successful exit through an IPO. Finally, we provide evidence showing that the long-term stock performance of firms backed by politically connected venture capitalists is significantly worse than

that of firms backed by other venture capitalists. These findings support the hypothesis that politically connected venture capitalists obtain preferential access to capital through IPOs for the firms they back, but also that they can exploit their connections for additional personal benefits. Consequently, the network-based strategy used by these venture capitalists not only functions as a substitute for well-functioning institutions, but can also be used to exploit the very same institutional weaknesses for personal gains.

To the best of our knowledge, this is the first comprehensive study on venture capitalists adopting a network-based strategy approach in the form of political connections in a transition economy. A recent study by Anderson et al. (2017) looks at political connections and venture capitalists' ability to successfully exit firms via the stock market or acquisitions in China. However, while interesting and complementary to ours, the focus of their study is only on the ability by venture capitalists to exit their investments, not the IPO process and various benefits tied to IPOs that politically connected venture capitalists may reap. This study connects to several strands of literature. First, we extend the current literature on political connections in emerging economies by focusing on a key source of alternative financing, venture capital - a main driver of the innovative economy. That is, in contrast to most previous studies (e.g., Fan et al, 2007; Feng et al, 2014) which mainly discuss firms' political connections developed by their CEOs, this paper focuses on the political ties of a key financial intermediary.

Second, this study relates to the literature on venture capital in emerging economies. In particular, we extend the existing literature on network-building strategies by venture capitalists as a means to circumvent and exploit institutional

voids. In other words, political connections of venture capitalists not only help firms backed by them to obtain preferential access to the capital market, but also result in significant private benefits for the venture capitalists themselves. Third, our study adds to a hotly discussed topic on China's stock market. Allen et al. (2017) argue that problematic IPOs exacerbate the disconnect between economic growth and stock market performance. We add to this literature by examining how political ties of venture capitalists may help firms go public. The finding in this study can thus help policymakers improve the efficiency and performance of the Chinese stock market.

The remainder of this paper continues as follows. Section 2 provides an overview of the growing venture capital industry in China. Section 3 develops the working hypotheses and empirical predictions. Section 4 introduces data sources and the sample. Section 5 then presents the empirical results. Finally, Section 6 concludes the paper.

## 2 China's Venture Capital Industry

Following the beginning of the economic reforms in 1978, China's venture capital industry was born in the mid-1980s after the government decided that it was going to push for a development of domestic high-tech industries (Lu et al., 2013). This early attempt to foster a national venture capital industry did not go as hoped, in part because there was simply a lack of know-how among early venture capitalists, and in part because government officials similarly lacked an understanding of how venture capitalists operate (Pukthuanthong and Walker, 2007). The fate of the first private equity company, China New Technology Start-up Investment Company, embodies this early period of the industry. Established in 1986, the company

functioned as an agency controlled by the central government with the goal of boosting domestic private equity. However, the company went bankrupt in 1997.

In the early 1990s, venture capital firms began to operate at the local level. Financed by local governments, these domestic venture capital firms were first established in the coastal provinces of Guangdong, Jiangsu, Zhejiang, Shanghai, and were then followed by similar ventures in other provinces around the country (White et al., 2005). University-backed venture capital firms soon followed. While there were few domestic venture capitalists during this period, foreign counterparts took an early interest in investment opportunities in China (Lu et al., 2013). Finally, it was announced that corporate-backed venture capital firms were to be allowed at the Ninth Conference of the National People's Congress in 1998 (White et al., 2005). As a direct result, the domestic venture capital industry started to flourish in 1999 and 2000, a time during which the Chinese stock market also performed very well. In addition, the Shenzhen Stock Exchange proposed the launch of a venture board similar to that of NASDAQ that could provide support for high-tech companies during this period. The establishment of such a board would have to wait, probably in part as a result of the burst of the dot-com bubble in 2000. However, these plans showed a future in which venture capitalists would be able to exit successful investments via public offerings. Incomplete data show that around 120 venture capital firms and 156 incubators existed in 2000 and that Beijing, Shanghai and Shenzhen were turning into the country's venture capital centers (Pukthuanthong and Walker, 2007).

Following the fast expansion in 1999-2000, the industry cooled down during 2000-2005 (Humphery-Jenner and Suchard, 2013a). The delay of the new board meant that venture capital firms had limited options to exit their investments. In 2003,

it was announced that domestic private companies would be allowed to list overseas. This soon became a way to exit favored by foreign venture capital firms (Humphery-Jenner and Suchard, 2013b). In 2004, the Small and Medium Enterprise Board was established, thereby creating a new venue for investments exits. In 2006, it was announced that a company was only allowed to list abroad if the Chinese Securities and Regulatory Commission (CSRC) approved the listing first (Humphery-Jenner and Suchard, 2013a). In 2007, the Chinese government also allowed for investment banks and securities firms to make venture capital investments, and in 2008, the post-IPO lock-up period was shortened from three years to one year.

In May 2017, the CSRC reintroduced tighter IPO lock-up rules. However, exemptions are to be offered to venture capital and private equity firms. The CSRC highlighted the importance of venture capital funds as an alternative channel for financing of small- and medium-sized enterprises and how they help push innovation and entrepreneurship (Li, 2017). In practice, venture capital firms not owning a control share of a company can adhere to a 12-month instead of a 36-month lock-up period.

As it is difficult to obtain a comprehensive data set on venture capital investments in the country, the size of China's venture capital industry varies in different reports. KPMG (2017) reports that venture capital investments increased by 19 percent to USD31 billion in 2016. Yeung (2016) has collected data from different start-up databases which suggest that the total amount invested by venture capital firms is much higher than that. Regardless of the exact amount invested, it is commonly said that China's venture capital industry today is the second-largest in the world (e.g., Yiu, 2016). From 2006 to 2016, the Chinese venture capital industry

raised a total of USD532 billion, compared, for example, to USD66 billion in Japan (PwC, 2017). The continued strong growth in the domestic venture capital industry suggests that it is becoming an increasingly important source of financing for small and innovative companies in China.

## 3 Hypotheses

We first examine the impact of venture capitalists' political connections on the success of going public for firms they back. We expect that firms backed by venture capitalists with political connections exhibit a higher likelihood of getting access to capital via the stock market. The primary reason for this is that even though the IPO process has undergone several major reforms since the opening of the country's stock markets, the IPO process in China is still heavily influenced by the government (Pistor and Xu, 2005). While the IPO system formally is merit based, political leaders at different levels still play an important role in the selection of firms that are finally accepted for public offerings (Johansson et al., 2017). Non-commercial factors play a significant role and the authorities are exposed to lobbying during in IPO application process. As a result, we conjecture that a network-based strategy based on close relationships with political leaders and government officials can help venture capital firms to exit firms they have invested in via an IPO.

> **Hypothesis 1.** Firms with backing from politically connected venture capitalists are more likely to be selected for an IPO

Venture capitalists generate a large portion of their profits from investments in firms that go public. It has been shown that venture capitalists in the U.S. tend to be

proficient at timing the IPO with high market valuations (Lerner, 1994b). However, the fact that the competition for relatively few IPO slots in China is fierce and the fact that the process itself is marred with informal factors means that a fast exit via an IPO is most likely preferred by most venture capitalists. The CSRC often controls the frequency of IPOs based on current market conditions and industry policies (Huang, 2011). In extreme cases, the government imposes formal suspensions of new offerings. For example, IPOs were suspended from 25 May 2005 to 2 June 2006. Similarly, following the onset of the global financial crisis, new IPOs were suspended from 16 September 2008 until 17 June 2009. This unique institutional setting makes access to exit opportunities especially important for venture capitalists. In addition to increasing the probability of exiting an investment via an IPO, it is possible that venture capitalists can use their ties with leading politicians to speed up the pace at which they are able to exit their investments via an IPO.

> **Hypothesis 2.** Politically connected venture capitalists exit their investments via an IPO faster than regular venture capitalists

Easier and faster access to exits via the stock market are important. However, it is also possible that venture capitalists are able to leverage their political networks for economic benefit. Previous studies have found that business owners can exploit their political networks in ways that increase their firm value (e.g. Faccio, 2006; Feng et al., 2014, 2015). In the case of venture capitalists and IPO exits, benefits from personal networks would likely include a higher offering price for their ownership stakes as that would imply more financing or less issuing of new shares. If politically connected venture capitalists can obtain such economic benefits from their personal networks it

would result in higher price-to-earnings ratios or lower IPO underpricing because China's IPO offering price is not fully determined by a market mechanism, and is instead often regulated by the government.

> **Hypothesis 3.** Firms with backing from politically connected venture capitalists are offered at a higher price-to-earnings ratio

> **Hypothesis 4.** Firms with backing from politically connected venture capitalists are priced higher in the IPO primary market, resulting in lower IPO underpricing

In addition to direct financial benefits, firms backed by connected venture capitalists may take advantage of their political networks to implicitly or explicitly engage in different types of strategies in order to pass the highly regulated IPO process. For example, they could engage more in earnings management, i.e. use accounting methods to present an overly positive view of their business by managing earnings. Aharony et al. (2000) have shown that earnings management is often used in the process of "financial packaging" (*caiwu baozhuang*) in China to get IPO approval. Previous studies have found evidence of a positive relationship between earnings management and political connections in general (e.g. Li et al., 2016), making it likely that firms with backing from politically connected venture capitalists would do the same. In addition, more use of earnings management is likely to be followed by a weaker accounting performance after the IPO. Once firms have gone public, the incentive to manage earnings is reduced and post-issue earnings decline as a result. Stories about the "changing face of firm performance" (*yeji bianlian*), i.e. a significant deterioration of a firm's sales or earnings quickly after its IPO, are often featured in

Chinese media. If firms backed by politically connected venture capitalists engage in unethical behavior such as earnings management more than regular firms, it is likely that they will be mentioned in news articles that bring up that topic. Similarly, it is likely that such firms engage in more illegal information disclosure to obtain IPO approval as they are better protected by politically connected venture capitalists.

> **Hypothesis 5.** Firms with backing from politically connected venture capitalists engage more in earnings management
>
> **Hypothesis 6.** Firms with backing from politically connected venture capitalists are more likely to be featured in articles about rapid deterioration in firm's accounting performance after the IPO
>
> **Hypothesis 7.** Firms with backing from politically connected venture capitalists are more likely to be reported of having engaged in illegal information disclosure immediately after the IPO

Besides obtaining preferential access to capital via the stock market and having more opportunities to engage in illicit behavior, it is likely that firms backed by politically connected venture capitalists are protected against negative policy decisions by the government. One policy example is a comprehensive financial inspection of the IPO process which began in late 2012 and lasted for most of 2013. The accumulated number of IPO candidates was too large at the time, so the CSRC suddenly decided to reduce the applicants and therefore initiated a comprehensive inspection (China Daily, 2013). During this unprecedented event, 622 companies had to submit detailed reports to the CSRC. Onsite inspections were carried out, during which firms applying for an IPO were required to provide original financial documents and to ensure proper due diligence (China Daily, 2013). The inspection resulted in more than 30 percent of companies cancelling their IPO applications. If a

firm planning to go public was backed by a venture capitalist with strong political ties, it is less likely that it had to withdraw its application during the inspection.

> **Hypothesis 8.** Firms with backing from politically connected venture capitalists were less likely to face a withdrawal of their IPO application during the large inspection in 2013

In terms of direct economic implications for venture capitalists with established political networks, it is likely that they can leverage these networks to obtain higher investment returns when they sell their stakes in the newly listed companies. While only an indirect indicator, higher book returns suggest that venture capitalists can leverage their political networks for more personal gains.

> **Hypothesis 9.** Politically connected venture capitalists obtain higher book returns when they exit an investment through an IPO

Besides the direct effect on book value of their investments, venture capitalists may benefit in other ways. One potential channel is that their successful exit via IPOs can results in the venture capitalists being able to attract more funds to manage in the following rounds. For example, Lee and Wahal (2004) find that younger or less experienced venture capitalists build reputation and obtain higher compensation by quickly bringing smaller firms to the stock market. Based on this and the reasoning above concerning preferential treatment and economic effects of political networks, it is likely that connected firms can use their ability to push through IPOs to attract more capital under their management.

**Hypothesis 10.** Politically connected venture capitalists attract more fund flows after firms they back go public

Finally, while firms backed by politically connected venture capitalists can get preferential access to the capital market and possibly engage more in illicit behavior, the longer-term effect on such firms and their shareholders is likely negative. With a higher likelihood of earnings management, illegal information disclosure, and an announcement of poor accounting performance in the media after the IPO, we expect long-term performance of these firms to be significantly worse than their peers.

**Hypothesis 11.** Firms with backing from politically connected venture capitalists exhibit inferior post-IPO stock performance

# 4 Data and Sample

## *4.1 Data Sources*

To test the hypotheses in the previous section, we collect data from several different sources. CSRC provides preliminary IPO prospectuses as well as the formal decision on IPO applications on their website. Data on pre-IPO venture capital and private equity investors are collected manually from the preliminary IPO prospectuses provided by CSRC. We also cross-check pre-IPO ownership with information that we collect from three leading Chinese database providers on venture capital and private equity: Zero2IPO Group, CVSource, and China Venture Investment Consulting Group. Zero2IPO provides annual private equity and venture capital reports on limited partners of funds, reports on investments by venture capital and private equity,

and so on. To complement this information, we also use databases on venture capital and private equity provided by the China Venture International Consulting Group, a firm that specializes in information related to private equity and venture capital funds, including investments, limited partners, and so on.

To analyze political connections, we manually collect data on all venture capitalists that have backed companies in our sample from online and media sources. We define a venture capitalist to be politically connected if he or she has experience of working for the government. In addition, we say that a venture capitalist is politically connected if he or she is a member of one of three major state bodies at the national, provincial or city level at the time of the IPO. The three state bodies are the Congress of the Chinese Communist Party (CCCP), the National People's Congress (NPC), and the Chinese People's Political Consultative Conference (CPPCC), respectively.

### *4.2 The Sample*

To analyze the research hypotheses in Section 3, we first collect all IPOs backed by venture capitalists during the period 2006-2015. There are several reasons for why we choose to start the sample period in 2006. First, the small and median board was established in 2004, thereby creating a new and suitable venue for venture capitalists. Second, book-building was introduced in 2004, making the institutional setting consistent for the whole sample period. Third, the non-tradable share reform was

officially initiated in April 2005.[2] As a direct result of this reform, CSRC imposed formal suspensions of new offerings from 7 June 2005 to 19 June 2006.

The annual distribution of the IPOs is presented in Panel A of Table 1. As can be seen in the first column, the number of IPOs backed by venture capitalists vary considerable throughout the sample period. This pattern mirrors the variation in the annual number of IPOs. In total, 690 IPOs by firms backed by venture capitalists took place during the sample period. The second column reports the number of IPOs backed by politically connected venture capitalists, while the third column show them as a percentage of the total number of venture capital-backed IPOs. The total number of IPOs backed by politically connected venture capitalists amounts to 342. Similar to what we saw in the first column, there is considerable variation across years for IPOs backed by politically connected venture capitalists. Moreover, the ratio of such IPOs to the total number of IPOs vary noticeably, with a very high 83.33 percent in 2006, a much lower 37.23 percent in 2015, and an average of 49.56 percent for the whole sample. While there is no monotonical pattern, the share of IPOs backed by politically connected venture capitalists decrease gradually over time. As noted in Section 3, the CSRC carried out a comprehensive inspection of the IPO applications that were in the pipeline in 2013. This helps explain the absence of IPOs backed by venture capitalists that year.

Panel B of Table 1 displays the industry distribution of all IPOs backed by venture capitalists and politically venture capitalists, respectively. Most of the firms

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[2] For more information on this reform, see the official document *Notice of the China Securities Regulatory Commission on Piloting the Share-trading Reform of Listed Companies*. Li et al. (2012), Liu and Tian (2012) discuss the reform in more detail.

were active in the manufacturing sector, with 506 IPOs backed by venture capitalists and 244 IPOs backed by politically connected venture capitalists. The second most prominent industry is information technology with 77 and 42 IPOs backed by venture capitalists and politically connected venture capitalists, respectively. Overall, all industries are represented in the sample, even though the number of IPOs in some is quite low (e.g., agriculture, forestry, livestock farming and fishery industry). Appendix 2 provides more information on IPO firms and VC-backed IPO firms in the sample.

[TABLE 1 HERE]

## 5 Empirical Analysis

### *5.1 IPO Approval*

We begin the empirical analysis by examining how backing by politically connected venture capitalists affect the likelihood of getting an IPO approval. During 2006-2015, CSRC reviewed a total of 1764 applications, 81 percent of which were subsequently approved. 846 of firms applying for an IPO were backed by venture capitalists and 431 of those were backed by politically connected venture capitalists.[3] Panel A of Table 2 presents the percentage of approved applications for firms backed by politically connected venture capitalists and firms backed by other venture capitalists. The approval rates are relatively high, especially for firms backed by politically connected venture capitalists. 91.42 percent of them were approved,

[3] The analysis in later sections will have a slightly different number of observations of firms backed by venture capitalists as they focus on firms that were finally approved for an IPO by CSRC.

compared to 72.29 percent of firms backed by venture capitalists without political connections. We first run univariate tests for differences in the mean and median between the two firm samples, with the results showing a significant difference at the 1 percent level.

While these initial tests suggest that firms backed by politically connected venture capitalists are more likely to have their IPO applications approved, there are several possible factors that may drive this relationship. We therefore run a multivariate logit regression with the likelihood of IPO approval as the dependent variable and a dummy variable for backing by a politically connected venture capitalist as the key explanatory variable. We also include standard firm-specific control variables including: *Firm size*, *ROE*, *Sales growth*, *Firm leverage*, *Largest ownership*, and *Family firm*. Detailed definitions of the control variables are provided in Appendix 3 and their summary statistics are presented in Appendix 5. To control for other types of government involvement, we include *Government VC*, a dummy variable which equals one if a government entity or a state-owned firm is the largest owner of the venture capital firm, and zero otherwise. Moreover, to control for the possibility that it is the political connections of firm that apply for an IPO that drive our results, we also include the control variable *Political connection of firm*. We define it as a dummy variable which equals one if the Chair or CEO of the IPO firm is a member of the NPC, the CPPCC or the CCCP at the national, provincial or city level, or was previously an officer a central or local government or the military, and zero otherwise. Huang (2011) notes that CSRC is well-known for adjusting the pace at which it allows for new public offerings based on current market conditions and that the domestic stock markets have been used as a tool to implement national

industrial policies. To control for CSRC's timing with market conditions and the influence of industrial policies, we include year and industry dummies. In addition, two new boards catering to small- and medium enterprises (the SME board) and tech firms (ChiNext) were established in 2004 and 2009, respectively. We therefore include board dummies to control for the potential effect that different types of firms are listed on different boards may have on the empirical results. Chi-square statistics are computed using heteroskedasticity-robust standard errors clustered by year and industry.

Panel B of Table 3 presents the results of the multivariate logit regression. The coefficient for the main explanatory variable (politically connected venture capitalists) is positive and significant at the 1 percent level. This result provides support to our preliminary finding of a positive relationship between politically connected venture capitalists and IPO approval. We can thus conclude that having a political network is important for venture capitalists who operate in an institutional setting characterized by a highly politicized capital market system.

[TABLE 2 HERE]

### *5.2 Venture Capital Exit Pace*

Next, we examine how fast venture capitalists can exit their investments via the stock market. To do this, we first create a new variable, *Log(months)*, which is the natural logarithm of the number of months between an investment by the venture capitalist and a formal IPO approval. We first compare this period for firms backed by politically connected venture capitalists and firms backed by other venture capitalists in Panel A of Table 3. The value of the time variable is 3.138 and 3.769 for the two

groups of firms, respectively. There is a significant difference between them in both the mean and median, supporting the hypothesis that politically connected venture capitalists exit their investments via the stock market faster than other venture capitalists.

As the univariate tests only provides an initial indication of the relationship between politically connected venture capitalists and time between investment and exit, we run a multivariate regression in which we control for the same firm-specific variables as in the analysis on the likelihood of IPO approval, this time with *Log(months)* as the dependent variable. The results of this estimation are presented in Panel B of Table 3. *t*-statistics are computed using heteroskedasticity-robust standard errors clustered by year and industry (later sections use the same method). The coefficient for the dummy variable politically connected venture capitalists is negative and significant at the 1 percent level. We can thus conclude that there is a significant and negative relationship between venture capitalists being politically connected and the time it takes for them to exit their investments via an IPO.

[TABLE 3 HERE]

### *5.3 Price-to-Earnings Ratio and IPO Underpricing*

In China's IPO market, offering prices and offerings price-to-earnings (P/E) ratios are subject to approval by CSRC. There may be ways for firms to drive up the offering price to obtain more financing or reduce the shares they will offer. One method to accomplish higher prices is to use political connections. Francis et al. (2009) find that firms with political connections can leverage these connections to receive a higher than the median P/E ratio from the government. To test how political networks

of venture capitalists influence the pricing of new offerings, we again divide the sample of venture capital-backed IPOs into two groups and run tests on the offer P/E ratio. The univariate tests for difference between the two groups are presented in Panel A of Table 4. Firms backed by politically connected venture capitalists have an average offer P/E ratio of 38.54 while firms backed by other venture capitalists have an average P/E ratio of 34.52. The difference in the mean and median of the offer P/E ratio between the two groups is significant at the 1 percent level. This suggests that venture capitalists can leverage their political networks to obtain higher offering prices in the Chinese IPO market.

To control for other factors that may influence the relationship between venture capitalists' political networks and the offer price, we run a multivariate regression with the offer P/E ratio as the dependent variable. Panel B of Table 4 displays the estimation results. The coefficient for politically connected venture capitalist is positive and significant at the 1 percent level, thus lending further support to the hypothesis that venture capitalists can use their political networks to obtain preferential treatment in the form of higher offer prices in the IPO market. It is worth noting that the coefficient for political connections of the firm is positive but insignificant in the regression, suggesting that venture capitalists' networks play a more important role for firms looking to go public in China.

[TABLE 4 HERE]

Having established that venture capitalists' political connections are positively associated with higher P/E ratios for firms that go public, we take a closer look at IPO underpricing. A higher offer price is associated with a lower level of underpricing, as the upward adjustment from the initial price point is smaller. Also, Feng et al. (2014)

have shown that Chinese business owners with political networks are able to leave less on the table with resulting lower underpricing after their firms go public. To analyze if this holds true for our sample, we run tests on various measures of underpricing. Panel A of Table 5 provides univariate tests for differences in six measures of underpricing. Here, IPO underpricing1 (underpricing10, underpricing20) is the difference between the closing price on the first (tenth, twentieth) trading day and the offering price divided by the offering price. The market-adjusted underpricing1 (underpricing10, underpricing20) is the difference between IPO underpricing1 (underpricing10, underpricing20) and the market return during the same period. Here, the market return is measured as the return on the tradable value-weighted index of all A-share stocks in the Shanghai and Shenzhen stock markets. All the univariate tests in the panel support the hypothesis that firms backed by politically connected venture capitalists exhibit lower underpricing after their IPO.

Panel B of Table 5 provides the results from a multivariate regression with underpricing as the dependent variable and politically connected venture capitalists backing the firm as the main explanatory variable. We use the same control variables as in the previous multivariate regressions. For the sake of brevity, we only present the results for undepricing10 as the measure of underpricing (the main results hold up when we use the alternative measures). The coefficient for politically connected venture capitalists is positive and significant and the 1 percent level. The coefficient for political connections of the firm is negative but insignificant. The estimation results support the initial univariate test results and provide further evidence for the hypothesis that venture capitalists can leverage their political connections to leave less on the table for new investors during the IPO process.

[TABLE 5 HERE]

### *5.4 Earnings Management and the Changing Face of Firm Performance*

Next, we examine earnings management among IPO firms. To do this, we use a proxy that we calculate based on the Jones (1991) model (Dechow et al., 1995). The model estimates discretionary accruals from cross-sectional regressions of total accruals on changes in sales and on property, plant, and equipment within industries for each year. For more details on the definition of earnings management, see Appendix 4.

Panel A in Table 6 provides simple univariate tests for the correlation between venture capitalists political connections and abnormal accruals as a percentage of total assets, the proxy for earnings management. The relationship between politically connected venture capitalists backing an IPO firm and the level of earnings management is positive and significant at the 1 percent level. Panel B in Table 6 presents multivariate regression results with our proxy for earnings management as the dependent variable. The coefficient for politically connected venture capitalists is positive and significant at the 1 percent level. The results in Table 6 thus support the hypothesis that firms backed by politically connected venture capitalists tend to engage more in earnings management than their peers.

[TABLE 6 HERE]

Having identified a significant relationship between politically connected venture capitalists and earnings management in the firms they back, we now examine the occurrence of news reports focusing on significant deterioration in performance shortly after IPOs. Illicit practices including financial fraud (*caiwu zaojia*), profit

manipulation (*lirun caozong*) and false information disclosure (*xujia pilù*) during the IPO process are typically seen as main drivers of a rapidly deteriorating post-IPO accounting performance. To analyze this, we create the dummy variable "face change", which we set equal to 1 if the firm appears in news articles on the changing face of firm performance (*yeji bianlian*) during the year after it went public and 0 otherwise. We manually collect this data by carefully reading each news report on changes in firm performance during the first year after their IPO. The news articles are collected from Genius Finance, Wisenews, GTA Financial News Database, and the China Core Newspapers Full-text Database.

Panel A in Table 7 provides initial results on the relationship between politically connected venture capitalists and news on a change in firm performance after the IPO. Univariate tests for differences in the mean and median shows that there is a relationship between a firm being backed by a politically connected venture capitalists and news about a rapid deterioration in accounting performance for that firm after the IPO. The relationship is positive and significant at the 1 percent level, suggesting that being backed by politically connected venture capitalists is positively associated with occurring in news articles about significant changes in performance after an IPO.

To analyze whether this initial finding holds up when we control for other variables that may influence the occurrence of such news in media, we run a multivariate logit model, where the likelihood of being mentioned in that type of news is the dependent variable. Panel B in Table 7 presents the results of this regression. The coefficient for the main explanatory variable, politically connected venture capitalists, is positive and significant at the one percent level. The multivariate

regression results thus support the initial univariate tests and the hypothesis that firms backed by politically connected venture capitalists are more likely to appear in news articles about significant changes in performance during the year after the IPO.

[TABLE 7 HERE]

### *5.5 Illegal Information Disclosure*

To analyze firms' involvement in the disclosure of illegal information, we again analyze media reports the year following an IPO. If a firm is mentioned in an article on illegal information disclosure (*xinxi pilu weigui*), the dummy variable illegal information disclosure is equal to one and zero otherwise. The dummy variable equals one if at least one news article from Genius Finance, Wisenews, GTA Financial News Database, or the China Core Newspapers Full-text Database report illegal information disclosure on firms during the first year after an IPO.

Panel A displays the occurrence of news related to illegal information disclosure for our two firm samples. 7.9 percent of newly listed firms backed by politically connected venture capitalists are mentioned in news articles on illegal information disclosure, compared to 3.2 percent for newly listed firms backed by other venture capitalists. This initial finding suggests that firms backed by politically connected venture capitalists are more likely to illegally disclose information and the univariate tests show that the difference is significant at the one percent level.

To see if these initial results are robust, we run a multivariate logit regression with illegal information disclosure as the dependent variable. Panel A in Table 8 presents the results of this regression. The coefficient for the key explanatory variable, politically connected venture capitalists, is positive and significant at the one percent

level. This result provides further support for the hypothesis that firms backed by politically connected venture capitalists are more likely to engage in illegal information disclosure after their IPO.

[TABLE 8 HERE]

### *5.6 The 2013 Inspection*

In late 2012 and most of 2013, the CSRC carried out a comprehensive financial inspection of the IPO process. The inspection resulted in almost a third of the companies withdrawing their applications. In Section 3, we hypothesize that venture capitalists with strong political networks were better able to avoid the firms they back having to withdraw their IPO applications. To test this, we create a new dummy variable which equals one if the firm in question withdrew its application during the 2013 inspection and zero otherwise. Panel A of Table 9 presents the share of firms in the respective firm samples that withdrew their applications during the inspection period. Out of a total number of 289 firms backed by politically connected venture capitalists, 64 (22.1 percent) withdrew their IPO application, compared to 91 out of 263 (34.6 percent) for firms backed by other venture capitalists. A much smaller share of firms backed by politically connected venture capitalists thus ended up withdrawing their applications, as supported by a simple test for differences in the mean.

A variety of firm-specific factors may influence the decision to withdraw an IPO application. To control for such factors, we run a new multivariate logit regression, this time with IPO application withdrawal as the dependent variable. The results of this regression are presented in Panel B of Table 9. The explanatory variable

politically connected venture capitalist is negative and significant at the one percent level. This indicates that a firm being backed by a politically connected venture capitalist is negatively associated with the likelihood of withdrawing its IPO application.

[TABLE 9 HERE]

### *5.7 Benefits of Political Connections for Venture Capitalists*

Next, we analyze the potential benefit for venture capitalists to be connected to a political network. It is typically difficulty to identify when venture capitalists exit firms as they tend to sell shares repeatedly and as the exact date and price of the sale are often not disclosed to the public. To work around this problem, we look at venture capitals' book returns, which are typically reported by the media. Here, book returns are defined as the ratio of the revenue that venture capitalists can receive if they sell shares during the IPO process to the cost of their investment. As the total initial investment is found in databases, we can calculate the book return of the investment in question.

Panel A in Table 10 shows book returns for the two groups of venture capitalists. The average book return for politically connected venture capitalists is 8.56, while the average book return for other venture capitalists is a much lower 6.73. The difference in the mean between the two groups of venture capitalists is significant at the one percent level, suggesting that politically connected venture capitalists earn significantly higher returns on their investments compared to other venture capitalists without access to such networks. Panel B in Table 10 reports results from a

multivariate regression with book return as the dependent variable. The key explanatory variable politically connected venture capitalist is positive and significant at the 1 percent level. The results of both the univariate and multivariate tests thus support the hypothesis that venture capitalists with political networks can obtain significantly higher returns on their initial investments.

[TABLE 10 HERE]

To analyze the benefits for venture capitalists to build political networks further, we take a closer look at fund flows. We create a new variable, *Venture capital family fund flow*, which is the natural logarithm of the money raised by the venture capital firm which backed at least one firm that went public in the previous year. Panel A of Table 11 shows the mean of flows into the two groups of venture capital firms. Firms with politically connected venture capitalists exhibit higher fund inflows during years following an IPO. Simple tests for differences in the mean and median for the two groups shows that the difference is statistically significant at the one percent level.

To test the robustness of this finding, we run a multivariate regression with family fund flows as the dependent variable. It is a challenge to find comprehensive data on venture capital firms in China. As a result, our control variables in the multivariate analysis are limited to the size and age of the fund family as well as a dummy variable for government control. The regression results are presented in Panel B of Table 11. While somewhat tentative due to data limits discussed earlier, the results paint an interesting picture. As expected, the coefficient for IPO in the previous year is positively and significant, suggesting that venture capital firms that

backed IPO firms experience a positive effect on inflows into their funds during the year after the IPO. Politically connected venture capitalist is not significantly related to inflows to venture capital firms. However, the interaction term for IPO and politically connected venture capitalist is significant and positive. This result suggests that the positive effect an IPO has on future fund inflows is influenced by venture capitalists' political networks.

[TABLE 11 HERE]

### *5.8 Long-Run Stock Performance*

Next, we examine the economic consequences of firms backed by politically connected venture capitalists. More specifically, we analyze the long-run stock performance of such firms after their IPO. We measure long-run stock performance as the buy-and-hold abnormal returns (BHARs).[4] Fama and French (1992, 1993) show that size and the book-to-market ratio are important determinants of the cross-section of stock returns. We therefore form 25 value-weighted portfolios based on these factors and use them to match each IPO firm. Following Brav et al. (1995), we first use all stocks at the end of each quarter to form size quintile breakpoints with equal number of firms in each size quintile. We then construct five book-to-market quintiles within each size quintile to form 25 size and book-to-market portfolios and calculate value-weighted returns for each portfolio for the following three months. We delete IPO and SOE firms from these matching portfolios for three years after an equity

[4] Barber and Lyon (1997) and Lyon et al. (1999) argue that BHARs provide well-specified test statistics for the long-run behavior of stock returns following significant corporate events.

issue to eliminate the abnormal return for such firms (Ritter, 1991 and Loughran and Ritter, 1995). We repeat this procedure for each quarter, after which each IPO is matched to its corresponding benchmark portfolio. This enables us to create a separate benchmark for each IPO and take the time-varying firm risk characteristics of each IPO and each matching portfolio into consideration.

BHARs for one, two, and three years after the IPO are presented for the two groups of firms in Panel A of Table 12. The mean and median BHARs for firms backed by politically connected venture capitalists are significantly lower for all three performance horizons. To examine the robustness of these initial results, we run multivariate regressions with BHARs as the dependent variable. Panel B presents the regression results for three-year BHARs.[5] The coefficient for politically connected venture capitalist is negative and significant at the one percent level, supporting the initial univariate results in Panel A. We can therefore conclude that firms which are backed by politically connected venture capitalists exhibit significantly worse long-term stock performance compared to firms backed by other venture capitalists. These findings highlight the negative consequences of venture capitalists' political connections which primarily affect minority investors in the secondary market.

[TABLE 12 HERE]

[5] As we need stock prices for three years after an IPO, IPOs that took place in 2014 and 2015 are not included in this regression.

### *5.9 Robustness Checks*

We carry out two tests to see how well the results in the previous sections hold up. First, we use a treatment effect framework in which we create a counterfactual using propensity score matching. The underlying question is what the effect would be on the firms that received treatment, i.e. were backed by a politically connected venture capitalist, if they had not received that treatment. Propensity score matching helps us create that counterfactual by selecting non-treated firms with similar characteristics to those of treated firms. If the selection model is well designed, the difference we identify between the treatment and control samples should be driven by the treatment effect, i.e. being backed by a politically connected venture capitalist.

We use three alternative approaches to select the control sample: firm size and industry classification, caliper matching, and kernel matching. For the caliper and kernel matching, we use firm size, ROE, sales growth, and firm leverage as prediction variables. We then calculate the average treatment effect as the difference between outcomes for treated and control firms. Focusing on the same set of outcome variables as in the previous sections, we get the results presented in Table 13. As can be seen in the table, the significance and sign of the treatment effect support our previous findings across the whole set of outcome variables. These results thus provide further evidence of the relationship between firms being backed by politically connected venture capitalist and the likelihood of being accepted to go public, length of the IPO process, earnings-to-price ratio, IPO underpricing, earnings management, media reports of significant declines in firm performance, illegal information disclosure, likelihood of withdrawing the IPO application during the 2013 inspection, venture

capitalists' book returns, venture capitalists' fund flows, and long-term firm performance.

[TABLE 13 HERE]

Second, we address the potential endogeneity concern when analyzing how being backed by a politically connected venture capitalist relates to the different outcome variables that we analyze by employing a two-stage least square regression. We first construct a selection model in which we predict the probability of a firm being backed by a politically connected venture capitalist. To do this, we use the instrumental variable (IV) *IPO_City*, which is defined as the natural logarithm of the number of IPOs in the city where the firm is located one year before the investment was made by the venture capitalist. We believe that this IV predicts the probability of a firm being backed by a politically connected venture capitalist in the first-stage estimation since cities with higher number of IPOs attract politically connected venture capitalists while being independent of IPO characteristics.

Panel A of Table 14 presents the summary statistics of the IVs for the two firm samples. The IV *IPO_City* differs between the two samples and is significantly larger for firms backed by politically connected venture capitalists. The first column in Panel B presents the results of the first-stage regression. Here, *IPO_City* is significant at the one percent level, indicating that it is an important determinant for being backed by a politically connected venture capitalist. The remaining columns present the second-stage regressions for the different outcome variables. The sign of the coefficient for predicted politically connected venture capitalist is as expected in all cases. It is also significant at the one percent level, thus providing further support for the results in the previous sections. While not reported for the sake of brevity, the partial F-statistics in

the first stage is 31.98, thus alleviating potential concerns that the IV may be weak. We also did similar regressions for IPO approval and IPO application withdrawals. We leave these results out for the sake of brevity, but they support to our initial results.

[TABLE 14 HERE]

## 6 Conclusion

This study examines how venture capitalists in China build networks with political leaders to obtain preferential treatment for the firms in which they invest. We find that firms backed by politically connected venture capitalists are more likely to be accepted for an IPO and that the period from venture capital investment to IPO approval is shorter. We also provide evidence that these firms exhibit higher price-to-earnings ratios and lower underpricing in the IPO process. They also have higher levels of earnings management, are more often found in news reports about significant declines in accounting performance and illegal information disclosures after the IPO, and were less likely to withdraw their IPO application during the 2013 inspection period. When it comes to politically venture capitalists themselves, we find that they exhibit a higher book returns and that they attract more funds after successful IPOs. Finally, long-term firm performance among the listed firms backed by politically connected venture capitalists is significantly worse, suggesting that there is a significant negative economic consequence that primarily burdens minority investors in the secondary market. These findings suggest that the network-based strategy used by some venture capitalists both acts as a substitute for good institutions and, correspondingly, can be used to exploit institutional weaknesses for personal profit.

As noted by Bruton et al. (2009), there are fundamental differences in the venture capital industry across countries, and these differences can to a large extent be traced back to institutional differences. As venture capital in China continues to grow (see Appendix 1), a greater understanding of how institutions have influenced it and how it functions is important. This holds true for Chinese venture capital firms themselves, domestic and international entrepreneurial firms looking to attract finance, and foreign competitors looking to understand how the Chinese venture capital market and access to exits via the stock market function.

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**Table 1. Sample**

This table presents the sample used in this study. Column 2 reports the number of VC-backed IPOs, i.e. firms that received funding from at least one venture capital firm before its IPO. Column 3 and 4 report the number of politically connected VC-backed IPOs and such firms as a percentage of total VC-backed IPOs, respectively. Politically connected VC refers to a VC firm whose general partner/top management is now a member of the National People's Congress (NPC), the Chinese People's Political Consultative Conference (CPPCC) or the National Congress of Chinese Communist Party (CCP) at and above city levels, or was formerly an officer in the central government, a local government, or the military.

**Panel A. Distribution of Sample by Year**

This panel presents the distribution of the sample by year during 2006-2015.

| Year | VC-backed IPO | Politically connected VC-backed IPO | |
|---|---|---|---|
| | | N | As percentage of IPOs (%) |
| 2006 | 12 | 10 | 83.333 |
| 2007 | 37 | 21 | 56.757 |
| 2008 | 24 | 14 | 58.333 |
| 2009 | 49 | 27 | 55.102 |
| 2010 | 161 | 73 | 45.342 |
| 2011 | 150 | 71 | 47.333 |
| 2012 | 88 | 51 | 57.955 |
| 2013 | 0 | 0 | n.a. |
| 2014 | 75 | 40 | 53.333 |
| 2015 | 94 | 35 | 37.234 |
| Total | 690 | 342 | 49.562 |

**Table 1. Sample**

**Panel B. Distribution of Sample by Industry**

This panel presents the distribution of the sample by industry during 2006-2015. Industry is classified based on the Guidelines for the Industry Classification of Listed Companies by CSRC.

| Industry | VC-backed IPO | Politically connected VC-backed IPO | |
|---|---|---|---|
| | | N | As percentage of IPOs (%) |
| Agriculture, forestry, livestock farming & fishery | 9 | 2 | 22.222 |
| Mining | 10 | 6 | 60.000 |
| Manufacturing | 506 | 244 | 48.221 |
| Utilities | 3 | 2 | 66.667 |
| Construction | 14 | 9 | 64.286 |
| Wholesale & retail | 17 | 8 | 47.059 |
| Transportation | 5 | 3 | 60.000 |
| Information transmission, software & information technology service | 77 | 42 | 54.545 |
| Finance | 13 | 6 | 46.154 |
| Real estate | 1 | 1 | 100.000 |
| Leasing & commerce service | 8 | 5 | 62.500 |
| Scientific research & technology service | 7 | 3 | 42.857 |
| Water conservancy, environment & public facilities management | 8 | 4 | 50.000 |
| Hygienism & social work | 3 | 2 | 66.667 |
| Culture, sports & entertainment | 9 | 5 | 55.556 |
| Total | 690 | 342 | 49.562 |

**Table 2. IPO Approval**

**Panel A: Univariate Test**

This panel reports the descriptive statistics of IPO approval for VC-backed IPO firms during 2006-2015, distinguished by whether or not the VC is politically connected. IPO approval is a dummy variable which equals one if the IPO is approved by the Issuance Examination Committee (*fa shen wei*) of China Securities Regulatory Commission (CSRC), and zero otherwise. The mean values of IPO approval is provided for the two different samples and their corresponding median values are given in parenthesis. T-tests and Wilcoxon-Mann-Whitney tests are provided for the comparison of the mean and median of IPO approval between IPO firms with and without politically connected VC backing. ***, **, and * denote significance at the 1%, 5% and 10% level, respectively.

| | Does VC have political connection? | | T-Value |
|---|---|---|---|
| | Yes | No | (Wilcoxon-Mann-Whitney tests) |
| IPO approval | 0.914 | 0.723 | 7.47*** |
| | (1.000) | (1.000) | (7.24***) |

**Table 2. IPO Approval**

**Panel B: Multivariate test**

This panel reports logit model results for politically connected VC and IPO approval. All the variables are defined in Appendix 2. Year, industry and listing board dummies are included but not reported. Chi-square statistics are computed using heteroskedasticity-robust standard errors clustered by year and industry. All continuous variables are winsorized at the top and bottom 1%.***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

| | IPO approval |
|---|---|
| Politically connected VC | 0.314*** |
| | (10.73) |
| Firm size | 0.975 |
| | (1.61) |
| ROE | 4.786** |
| | (4.35) |
| Sale growth | 0.972* |
| | (2.84) |
| Firm leverage | -1.793 |
| | (0.91) |
| Largest ownership | -0.104 |
| | (0.82) |
| Family firm | 0.357 |
| | (1.05) |
| Political connection of firm | 0.386 |
| | (1.49) |
| Government VC | 0.103 |
| | (0.52) |
| Intercept | -11.863 |
| | (1.29) |
| Industry dummies | Yes |
| Year dummies | Yes |
| Listing board dummies | Yes |
| N | 846 |
| Pseudo $R^2$ | 0.294 |

**Table 3. Time between VC Investment and IPO Approval**

**Panel A: Univariate Test**

This panel reports the descriptive statistics of log(months) for VC-backed IPO firms during 2006-2015, distinguished by whether or not the VC is politically connected. Log(months) is defined as the natural logarithm of the months between VC investment and IPO approval for the firm. The mean values of log(months) are provided for the two samples and their corresponding median values are given in parentheses. All continuous variables are winsorized at the top and bottom 1%. T-tests and Wilcoxon-Mann-Whitney tests are provided for the comparison of the mean and median of log(months) between IPO firms with and without politically connected VC backing. ***, **, and * denote significance at the 1%, 5% and 10% level, respectively.

| | Does VC have political connection? | | T-Value |
|---|---|---|---|
| | Yes | No | (Wilcoxon-Mann-Whitney tests) |
| Log(months) | 3.138 | 3.769 | 4.75*** |
| | (3.247) | (3.996) | (4.39***) |

**Panel B: Multivariate test**

This panel reports ordinary least square regression results for politically connected VC and log(months). All the variables are defined in Appendix 2. Year, industry and listing board dummies are included but not reported and *t*-statistics are computed using heteroskedasticity-robust standard errors clustered by year and industry. All continuous variables are winsorized at the top and bottom 1%.***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

| | Log(months) |
|---|---|
| Politically connected V.C. | -0.383*** |
| | (-2.91) |
| Firm size | 0.091*** |
| | (3.16) |
| ROE | -0.734*** |
| | (-3.24) |
| Sale growth | -0.137** |
| | (-2.03) |
| Firm leverage | 0.426*** |
| | (2.60) |
| Largest ownership | -0.633 |
| | (-1.21) |
| Family firm | -0.248*** |
| | (-3.54) |
| Political connection of firm | 0.044 |
| | (1.05) |
| Government VC | 0.019 |
| | (0.81) |
| Intercept | 2.827*** |
| | (4.76) |
| Industry dummies | Yes |
| Year dummies | Yes |
| Listing board dummies | Yes |
| Observations | 690 |
| Adjusted $R^2$ | 0.263 |

**Table 4. Offer Price-to-earnings Ratio**

**Panel A: Univariate Test**

This panel reports the descriptive statistics of offer price-to-earnings ratio for VC backed IPO firms during 2006-2015, distinguished by whether or not the VC is politically connected. The offer price-to-earnings ratio is defined as the offer price over the average annual earnings per share (EPS) during three years before the IPO. The mean values of the offer price-to-earnings ratio are provided for different samples and their corresponding median values are given in parentheses. All continuous variables are winsorized at the top and bottom 1%. T-tests and Wilcoxon-Mann-Whitney tests are provided for the comparison of the mean and median of log(months) between IPO firms with and without politically connected VC backing. ***, **, and * denote significance at the 1%, 5% and 10% level, respectively.

| | Does VC have political connection? | | T-Value |
|---|---|---|---|
| | Yes | No | (Wilcoxon-Mann-Whitney tests) |
| Offer price-to-earnings ratio | 38.536 (35.174) | 34.519 (31.7518) | 3.19*** (2.97***) |

**Table 4. Offer Price-to-earnings Ratio**

**Panel B: Multivariate test**

This panel reports ordinary least square regression results for politically connected VC and the offer price-to-earnings ratio. All variables are defined in Appendix 2. Year, industry and listing board dummies are included but not reported and *t*-statistics are computed using heteroskedasticity- robust standard errors clustered by year and industry. All continuous variables are winsorized at the top and bottom 1%.***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

| | Offer price-to-earnings ratio |
|---|---|
| Politically connected VC | 1.879*** |
| | (4.55) |
| Firm size | -3.520*** |
| | (-4.00) |
| ROE | 13.075* |
| | (1.89) |
| Sale growth | 14.615*** |
| | (7.10) |
| Firm leverage | -1.149 |
| | (-0.23) |
| Largest ownership | 2.981 |
| | (0.35) |
| Family firm | 1.437 |
| | (0.87) |
| Political connection of firm | 0.811 |
| | (0.64) |
| Government VC | -0.130 |
| | (-0.29) |
| Intercept | 61.732*** |
| | (5.06) |
| Industry dummies | Yes |
| Year dummies | Yes |
| Listing board dummies | Yes |
| Observations | 690 |
| Adjusted $R^2$ | 0.462 |

**Table 5. IPO Underpricing**

**Panel A: Univariate Test**

This panel reports the descriptive statistics of IPO underpricing for VC-backed IPO firms during 2006-2015, distinguished by whether or not the VC is political connected. The mean values of the raw IPO underpricing and market-adjusted IPO underpricing are all provided for the two samples and their corresponding median values are given in parentheses. IPO underpricing1 (IPO underpricing10, IPO underpricing20) is measured as the difference between the closing price on the first (tenth, twentieth) trading day and the offering price, divided by the offering price. Market adjusted IPO underpricing1 (underpricing10, underpricing20) is the difference between IPO under pricing1 (underpricing10, underpricing20) and market return in the same period, where the market return is measured as the tradable value-weighted index of all A-share stocks in the Shanghai and Shenzhen stock markets. All continuous variables are winsorized at the top and bottom 1%. T-tests and Wilcoxon-Mann-Whitney tests are provided for the comparison of the mean and median of IPO underpricing between firms with and without politically connected VC backing. ***, **, and * denote significance at the 1%, 5% and 10% level, respectively.

| | Does VC have political connection? | | T-Value |
|---|---|---|---|
| | Yes | No | (Wilcoxon-Mann-Whitney tests) |
| IPO underpricing1 | 0.481 | 0.551 | 2.61*** |
| | (0.439) | (0.440) | (2.37**) |
| Market adjusted IPO underpricing1 | 0.466 | 0.530 | 2.90*** |
| | (0.361) | (0.375) | (2.83***) |
| IPO underpricing10 | 0.707 | 0.851 | 2.68*** |
| | (0.353) | (0.494) | (2.52**) |
| Market adjusted IPO underpricing10 | 0.680 | 0.838 | 3.02*** |
| | (0.327) | (0.478) | (2.77***) |
| IPO underpricing20 | 0.911 | 1.208 | 2.95*** |
| | (0.431) | (0.634) | (2.71**) |
| Market adjusted IPO underpricing20 | 0.907 | 1.173 | 2.85*** |
| | (0.415) | (0.466) | (2.49**) |

**Table 5. IPO Underpricing**

**Panel B: Multivariate Test**

This panel reports ordinary least square regression results for politically connected VC and IPO underpricing. All variables are defined in Appendix 2. Year, industry and listing board dummies are included but not reported and *t*-statistics are computed using heteroskedasticity- robust standard errors clustered by year and industry. All continuous variables are winsorized at the top and bottom 1%.***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

| | IPO underpricing10 |
|---|---|
| Politically connected VC | -0.013*** |
| | (-3.32) |
| Market return | 0.868*** |
| | (3.21) |
| Firm size | -0.097*** |
| | (-3.34) |
| ROE | -0.929*** |
| | (-4.05) |
| Sale growth | 0.024 |
| | (0.35) |
| Firm leverage | -0.083 |
| | (-0.50) |
| Largest ownership | 0.110 |
| | (0.72) |
| Family firm | -0.227*** |
| | (-3.20) |
| Political connection of firm | -0.033 |
| | (-0.78) |
| Government VC | 0.014 |
| | (0.50) |
| Intercept | 3.112*** |
| | (5.15) |
| Industry dummies | Yes |
| Year dummies | Yes |
| Listing board dummies | Yes |
| Observations | 690 |
| Adjusted $R^2$ | 0.373 |

**Table 6. IPO Earnings Management**

**Panel A: Univariate Test**

This panel reports the descriptive statistics for IPO earnings management in VC-backed IPO firms during 2006-2015, distinguished by whether or not VC is politically connected. IPO earnings management is measured as abnormal accruals (% of total assets) in the IPO year, where a cross-sectional modified Jones (1991) model is used to obtain the discretionary accruals for firm *i* in year *t*. The mean values of abnormal accruals (% of total assets) is provided for different samples and their corresponding median values are also given in parentheses. All continuous variables are winsorized at the top and bottom 1%. T-tests and Wilcoxon-Mann-Whitney tests are provided for the comparison of the mean and median of log(months) between IPO firms with and without politically connected VC backing. ***, **, and * denote significance at the 1%, 5% and 10% level, respectively.

| | Does VC have political connection? | | T-Value |
|---|---|---|---|
| | Yes | No | (Wilcoxon-Mann-Whitney tests) |
| Abnormal accruals | 0.167 | 0.115 | 4.07*** |
| (% of total assets) | (0.159) | (0.104) | (3.62***) |

**Table 6. IPO Earnings Management**

**Panel B: Multivariate Test**

This panel reports ordinary least square regression results for politically connected VC and abnormal accruals (% of total assets). All variables are defined in Appendix 2. Year, industry and listing board dummies are included but not reported and *t*-statistics are computed using heteroskedasticity-robust standard errors clustered by year and industry. All continuous variables are winsorized at the top and bottom 1%.***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

| | Abnormal accruals (% of total assets) |
|---|---|
| Politically connected VC | 0.039*** |
| | (3.75) |
| Firm size | -0.035* |
| | (-1.87) |
| ROE | 0.125 |
| | (0.39) |
| Sale growth | 0.053** |
| | (2.04) |
| Firm leverage | 0.138** |
| | (2.16) |
| Largest ownership | 0.026 |
| | (0.74) |
| Family firm | 0.051** |
| | (2.49) |
| Political connection of firm | 0.012 |
| | (0.59) |
| Government VC | 0.003 |
| | (0.46) |
| Intercept | 0.892* |
| | (1.95) |
| Industry dummies | Yes |
| Year dummies | Yes |
| Listing board dummies | Yes |
| Observations | 690 |
| Adjusted $R^2$ | 0.125 |

**Table 7. Media Reports on the Changing Face of Firm Performance**

**Panel A: Univariate Test.**

This panel reports the descriptive statistics of media reports on severe declines in firm performance for VC backed IPO firms during 2006-2015, distinguished by whether or not VC has political connection. IPO face change is defined as a dummy variable which equals one if the media report "IPO face change" (*yeji bianlian*) about the first publicly announced operating performance after the IPO, and zero otherwise. Change in sales (earnings) growth is calculated as the difference in the average annual sales (earnings) growth during three years after the IPO and the three years before it. The mean values of proxies for operating performance change are provided for different samples and their corresponding median values are also given in parenthesis. All continuous variables are winsorized at the top and bottom 1%. T-tests and Wilcoxon-Mann-Whitney tests are provided for the comparison of the mean and median of log(months) between IPO firms with and without politically connected VC. ***, **, and * denote significance at the 1%, 5% and 10% level, respectively.

| | Does VC have political connection? | | T-Value (Wilcoxon-Mann-Whitney tests) |
|---|---|---|---|
| | Yes | No | |
| IPO face change | 0.091 (0.000) | 0.037 (0.000) | 2.89*** (2.87***) |
| Change in sales growth | -1.286 (-1.070) | -0.916 (-0.859) | 2.04** (2.00**) |
| Change in earnings growth | -1.742 (-1.142) | -1.349 (-1.259) | 2.53** (2.47**) |

**Table 7. Media Reports on the Changing Face of Firm Performance**

**Panel B: Multivariate test**

This panel reports logit model results of politically connected VC and media reports on severe declines in firm performance after the IPO. All variables are defined in Appendix 2. Year, industry and listing board dummies are included but not reported and Chi-square statistics are computed using heteroskedasticity-robust standard errors clustered by year and industry. All continuous variables are winsorized at the top and bottom 1%. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

| | IPO face change |
|---|---|
| Politically connected V.C. | 0.076*** |
| | (9.04) |
| Firm size | 0.255 |
| | (1.12) |
| ROE | 2.071 |
| | (1.25) |
| Sale growth | -0.274 |
| | (0.16) |
| Firm leverage | 1.253 |
| | (0.74) |
| Largest ownership | -0.757 |
| | (0.34) |
| Family firm | -0.855* |
| | (2.83) |
| Political connection of firm | -0.345 |
| | (0.90) |
| Government VC | -0.090 |
| | (0.52) |
| Intercept | -17.318 |
| | (0.61) |
| Industry dummies | Yes |
| Year dummies | Yes |
| Listing board dummies | Yes |
| Observations | 690 |
| Pseudo $R^2$ | 0.184 |

**Table 8. Illegal Information Disclosure**

**Panel A: Univariate Test**

This panel reports the descriptive statistics of illegal information disclosure for VC-backed IPO firms during 2006-2015, distinguished by whether or not the VC is politically connected. Illegal information disclosure is defined as a dummy variable which equals one if the media reports that the firm is involved in illegal information disclosure during the first year after the IPO, and zero otherwise. The mean values of illegal information disclosure reports are provided for the two samples and their corresponding median values are given in parentheses. All continuous variables are winsorized at the top and bottom 1%. T-tests and Wilcoxon-Mann-Whitney tests are provided for the comparison of the mean and median of log(months) between IPO firms with and without politically connected VC. ***, **, and * denote significance at the 1%, 5% and 10% level, respectively.

| | Does VC have political connection? | | T-Value (Wilcoxon-Mann-Whitney tests) |
|---|---|---|---|
| | Yes | No | |
| Illegal information disclosure | 0.079 (0.000) | 0.032 (0.000) | 2.75*** (2.73***) |

**Table 8. Illegal Information Disclosure**

**Panel B: Multivariate Test**

This panel reports logit model results for politically connected VC and illegal information disclosure in the first year after the IPO. All variables are defined in Appendix 2. Year, industry and listing board dummies are included but not reported and Chi-square statistics are computed using heteroskedasticity-robust standard errors clustered by year and industry. All continuous variables are winsorized at the top and bottom 1%.***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

| | Illegal information disclosure |
|---|---|
| Politically connected VC | 0.024*** |
| | (14.31) |
| Firm size | 0.108 |
| | (1.42) |
| ROE | 0.329 |
| | (1.05) |
| Sale growth | 0.161 |
| | (0.38) |
| Firm leverage | 0.865 |
| | (1.27) |
| Largest ownership | 0.286 |
| | (0.74) |
| Family firm | 0.126* |
| | (3.12) |
| Political connection of firm | -0.182 |
| | (0.54) |
| Government VC | 0.084 |
| | (0.93) |
| Intercept | -8.703 |
| | (0.89) |
| Industry dummies | Yes |
| Year dummies | Yes |
| Listing board dummies | Yes |
| Observations | 690 |
| Adjusted $R^2$ | 0.116 |

**Table 9. IPO Application Withdrawal during the 2013 Inspection**

**Panel A: Univariate Test**

This panel reports the descriptive statistics for IPO application withdrawal for VC-backed IPO firms during 2006-2015, distinguished by whether or not the VC is politically connected. IPO application withdrawal is defined as a dummy variable which equals one if the firm withdrew its IPO application during the 2013 strict inspection, and zero otherwise. The mean values of IPO application withdrawal are provided for the two samples and their corresponding median values are given in parentheses. T-tests and Wilcoxon-Mann-Whitney tests are provided for the comparison of the mean and median of log(months) between IPO firms with and without politically connected VC backing. ***, **, and * denote significance at the 1%, 5% and 10% level, respectively.

| | Does VC have political connection? | | T-Value (Wilcoxon-Mann-Whitney tests) |
|---|---|---|---|
| | Yes | No | |
| IPO application withdrawal | 0.221 (0.000) | 0.346 (0.000) | 3.28*** (3.24***) |

**Table 9. IPO Application Withdrawal during the 2013 Inspection**

**Panel B: Multivariate Test**

This panel reports logit model results for politically connected VC and IPO application withdrawal during the 2013 inspection. All variables are defined in Appendix 2. Year, industry and listing board dummies are included but not reported and Chi-square statistics are computed using heteroskedasticity-robust standard errors clustered by year and industry. All continuous variables are winsorized at the top and bottom 1%.***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

| | IPO withdrawal |
|---|---|
| Politically connected VC | -0.091*** |
| | (11.64) |
| Firm size | -0.287 |
| | (1.05) |
| ROE | 0.154 |
| | (0.86) |
| Sale growth | 0.103 |
| | (0.96) |
| Firm leverage | 0.975 |
| | (1.42) |
| Largest ownership | 0.190 |
| | (0.83) |
| Family firm | 0.107* |
| | (4.21) |
| Political connection of firm | -0.284 |
| | (1.61) |
| Government VC | -0.092 |
| | (0.35) |
| Intercept | -11.386 |
| | (1.73) |
| Industry dummies | Yes |
| Year dummies | Yes |
| Listing board dummies | Yes |
| Observations | 552 |
| Adjusted $R^2$ | 0.275 |

**Table 10. VC Book Returns**

**Panel A: Univariate Test**

This panel reports the descriptive statistics of VC book returns for VC-backed IPOs during 2006-2015, distinguished by whether or not the VC is politically connected. The mean values of VC book returns are provided for the two samples and their corresponding median values are given in parentheses. All continuous variables are winsorized at the top and bottom 1%. T-tests and Wilcoxon-Mann-Whitney tests are provided for the comparison of the mean and median of log(months) between IPO firms with and without politically connected VC backing. ***, **, and * denote significance at the 1%, 5% and 10% level, respectively.

| | Does VC have political connection? | | T-Value (Wilcoxon-Mann-Whitney tests) |
|---|---|---|---|
| | Yes | No | |
| VC Book returns | 8.564 (4.883) | 6.728 (3.485) | -4.45*** (-3.78***) |

**Table 10. VC Book Returns**

**Panel B: Multivariate Test**

This panel reports ordinary least square regression results for politically connected VC and VC book returns. All variables are defined in Appendix 2. Year, industry and listing board dummies are included but not reported and *t*-statistics are computed using heteroskedasticity- robust standard errors clustered by year and industry. All continuous variables are winsorized at the top and bottom 1%.***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

| | VC Book returns |
|---|---|
| Politically connected VC | 1.047*** |
| | (3.18) |
| Firm size | 0.218 |
| | (0.34) |
| ROE | 13.737*** |
| | (2.72) |
| Sale growth | 5.380*** |
| | (3.58) |
| Firm leverage | -8.320** |
| | (-2.28) |
| Largest ownership | -13.188*** |
| | (-3.93) |
| Family firm | -6.221 |
| | (-0.99) |
| Political connection of firm | 0.754 |
| | (0.81) |
| Government VC | 0.146 |
| | (0.57) |
| Intercept | 18.280 |
| | (1.38) |
| Industry dummies | Yes |
| Year dummies | Yes |
| Listing board dummies | Yes |
| Observations | 690 |
| Adjusted $R^2$ | 0.137 |

**Table 11. VC Family Fund Flows**

**Panel A: Univariate Test**

This panel reports the descriptive statistics of VC family fund flows in year *t*+1 for VC families in which at least one VC has backed an IPO firm in year *t*, distinguished by whether or not the VC is politically connected. The mean values of VC family fund flows are provided for the two samples and their corresponding median values are given in parentheses. All continuous variables are winsorized at the top and bottom 1%. T-tests and Wilcoxon-Mann-Whitney tests are provided for the comparison of the mean and median of log(months) between IPO firms with and without politically connected VC backing. ***, **, and * denote significance at the 1%, 5% and 10% level, respectively.

| | Does VC have political connection? | | T-Value (Wilcoxon-Mann-Whitney tests) |
|---|---|---|---|
| | Yes | No | |
| VC family fund flows | 20.649 (19.113) | 18.534 (18.420) | 2.41*** (2.07***) |

**Table 11. VC Family Fund Flows**

**Panel B: Multivariate Test**

This panel reports ordinary least square regression results for politically connected VC and VC family fund flows. All variables are defined in Appendix 2. Year dummies are included but not reported and *t*-statistics are computed using heteroskedasticity- robust standard errors clustered by year. All continuous variables are winsorized at the top and bottom 1%. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

| | VC family fund flows |
|---|---|
| Politically connected VC | 7.970 |
| | (1.42) |
| IPO* Politically connected VC | 5.152** |
| | (2.38) |
| IPO | 8.251** |
| | (2.16) |
| Size of VC family | -0.127 |
| | (-0.45) |
| Age of VC family | 3.129 |
| | (1.17) |
| Government VC | -0.297 |
| | (-0.28) |
| Intercept | -3.358 |
| | (-1.30) |
| Year dummies | Yes |
| Observations | 18896 |
| Adjusted $R^2$ | 0.162 |

**Table 12. IPO Long-run Stock Performance**

**Panel A: Univariate Test**

This panel reports the descriptive statistics of the IPO long-run stock performance for VC backed IPO firms during 2006-2015, distinguished by whether or not the VC is politically connected. IPO long-run stock performance is alternatively measured as the one-, two-, and three-year buy-and-hold abnormal returns (BHARs), starting from one month after the IPO month. The mean values of IPO long-run stock performance are provided for the two samples and their corresponding median values are given in parentheses. All continuous variables are winsorized at the top and bottom 1%. T-tests and Wilcoxon-Mann-Whitney tests are provided for the comparison of the mean and median of log(months) between IPO firms with and without politically connected VC backing. ***, **, and * denote significance at the 1%, 5% and 10% level, respectively.

| | Does VC have political connection? | | T-Value |
|---|---|---|---|
| | Yes | No | (Wilcoxon-Mann-Whitney tests) |
| BHARs 1 year | -0.068 | -0.024 | 3.96*** |
| | (-0.116) | (-0.077) | (2.85***) |
| BHARs 2 year | -0.101 | -0.045 | 4.71*** |
| | (-0.159) | (-0.090) | (3.16***) |
| BHARs 3 year | -0.163 | -0.061 | 4.49*** |
| | (-0.221) | (-0.112) | (4.14***) |

**Table 12. IPO Long-run Stock Performance**

**Panel B: Multivariate test**

This panel reports ordinary least square regression results for politically connected VC and IPO long-run stock performance. All variables are defined in Appendix 2. Year, industry and listing board dummies are included but not reported and *t*-statistics are computed using heteroskedasticity-robust standard errors clustered by year and industry. All continuous variables are winsorized at the top and bottom 1%.***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

| | 3-year BHARs |
|---|---|
| Politically connected VC | -0.078*** |
| | (-5.24) |
| Firm size | -0.068*** |
| | (-3.23) |
| ROE | 0.028 |
| | (0.17) |
| Sale growth | -0.054 |
| | (-1.09) |
| Firm leverage | 0.083 |
| | (0.69) |
| Largest ownership | 0.011 |
| | (0.79) |
| Family firm | -0.042 |
| | (-0.82) |
| Political connection of firm | 0.003 |
| | (1.10) |
| Government VC | -0.012 |
| | (-0.69) |
| Intercept | 0.116 |
| | (0.27) |
| Industry dummies | Yes |
| Year dummies | Yes |
| Listing board dummies | Yes |
| Observations | 521 |
| Adjusted $R^2$ | 0.247 |

**Table 13. Matching Methods for IPO Characteristics**

This table presents average treatment effects, i.e. the difference between outcomes of treated and control firms with similar characteristics or propensity scores. "(1) Size/Industry matching" is matching each treated firm with control firm which has the nearest market capitalization and is also in the same industry. (2) and (3) are propensity score matching methods and the score is estimated using Firm size, ROE, Sale growth and Firm leverage as prediction variables. "Caliper matching" presents the treatment effect using caliper matching with a caliper of 0.05. "Kernel matching" gives the treatment effect using kernel matching. *T*-statistics are calculated using bootstrapping. ***, **, and * denote significance at the 1%, 5% and 10% level, respectively.

| | |
|---|---|
| Panel A: IPO approval | |
| (1) Size/Industry matching | 0.163*** |
| | (3.87) |
| (2) Caliper matching | 0.147*** |
| | (4.16) |
| (3) Kernel matching | 0.142*** |
| | (4.02) |
| Panel B: Log(months) | |
| (1) Size/Industry matching | -0.518** |
| | (-2.61) |
| (2) Caliper matching | -0.437** |
| | (-2.43) |
| (3) Kernel matching | -0.430** |
| | (-2.51) |
| Panel C: Offer price -to -earnings ratio | |
| (1) Size/Industry matching | 2.706*** |
| | (3.19) |
| (2) Caliper matching | 2.417** |
| | (2.40) |
| (3) Kernel matching | 2.528** |
| | (2.56) |
| Panel D: Market adjusted IPO underpricing10 | |
| (1) Size/Industry matching | -0.217** |
| | (-2.35) |
| (2) Caliper matching | -0.184** |
| | (-2.29) |
| (3) Kernel matching | -0.165*** |
| | (-2.80) |
| Panel E: Abnormal accruals (% of total assets) | |
| (1) Size/Industry matching | 0.043*** |
| | (3.19) |
| (2) Caliper matching | 0.036*** |
| | (3.58) |
| (3) Kernel matching | 0.032*** |
| | (2.71) |
| Panel F: IPO face change | |
| (1) Size/Industry matching | 0.063*** |
| | (4.20) |
| (2) Caliper matching | 0.051*** |
| | (5.18) |
| (3) Kernel matching | 0.057*** |
| | (4.29) |
| Panel G: Illegal information disclosure | |
| (1) Size/Industry matching | 0.049** |

| | |
|---|---|
| | (2.21) |
| (2) Caliper matching | 0.036*** |
| | (3.15) |
| (3) Kernel matching | 0.041*** |
| | (2.83) |
| Panel H: IPO application withdrawal | |
| (1) Size/Industry matching | -0.101** |
| | (-2.37) |
| (2) Caliper matching | -0.114*** |
| | (-2.80) |
| (3) Kernel matching | -0.109*** |
| | (-2.74) |
| Panel I: V.C. Book return | |
| (1) Size/Industry matching | 2.308*** |
| | (5.71) |
| (2) Caliper matching | 2.011*** |
| | (3.69) |
| (3) Kernel matching | 2.127*** |
| | (3.10) |
| Panel J: V.C. family fund flow | |
| (1) Size/Industry matching | 1.728** |
| | (2.04) |
| (2) Caliper matching | 1.509* |
| | (1.83) |
| (3) Kernel matching | 1.686* |
| | (1.91) |
| Panel K: BHARs 3 year | |
| (1) Size/Industry matching | -0.117*** |
| | (-4.62) |
| (2) Caliper matching | -0.094*** |
| | (-5.31) |
| (3) Kernel matching | -0.098*** |
| | (-4.26) |

**Table 14. IV Analysis for Politically Connected VC and IPO Characteristics**

**Panel A: Summary Statistics for Instrument Variable**

This panel presents the summary statistics for the instrument variable, which is defined as the number of IPOs in the city where the firm located one year before the VC investment. The mean value is provided with the corresponding median value in parenthesis. All continuous variables are winsorized at the top and bottom 1%. T-tests and Wilcoxon-Mann-Whitney tests are provided for the comparison of the mean and median of IPO_City between samples with and without politically connected VC backing. ***, **, and * denote significance at the 1%, 5% and 10% level, respectively.

| | Does VC have political connection? | | T-Value (Wilcoxon-Mann-Whitney tests) |
|---|---|---|---|
| | Yes | No | |
| IPO_City | 9.357<br>(4.000) | 8.573<br>(3.000) | 3.21***<br>(3.04***) |

**Table 14. IV Analysis for Politically Connected VC and IPO Characteristics**

**Panel B: Multivariate Test**

This panel reports the two stage least square regression results of politically connected VC and IPO characteristics. The instrument variable in the first stage is IPO_City, defined as the number of IPOs in the city where the firm is located one year before the VC investment. All variables are defined in Appendix 2. Predicted politically connected VC is the predicted probability of IPO being backed by a politically connected VC based on the estimation in the first-stage model. The dependent variables in the second stage are Log(months), Offer price -to -earnings ratio, Market adjusted IPOunderpricing10, Abnormal accruals (% of total assets), IPO face change, Illegal information disclosure, VC book returns, and 3-year BHARs in (2)-(9), respectively. Year, industry and listing board dummies are included but not reported. The logit model is used in (1), (6) and (7) and Chi-square statistics are computed using heteroskedasticity-robust standard errors clustered by year and industry. The ordinary least square regression is used in other models and *t*-statistics are computed using heteroskedasticity-robust standard errors clustered by year and industry. All continuous variables are winsorized at the top and bottom 1%.***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

| | First stage | Second stage | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Politically connected VC | Log(months) | Offer price -to -earnings ratio | Market adjusted IPO underpricing10 | Abnormal accruals (% of total assets) | IPO face change | Illegal information disclosure | VC book returns | 3-year BHARs |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Predicted politically connected VC | | -0.418***<br>(-3.82) | 1.970***<br>(3.49) | -0.022***<br>(-5.18) | 0.047***<br>(5.46) | 0.091***<br>(12.61) | 0.039***<br>(8.17) | 1.268***<br>(4.72) | -0.092***<br>(-4.37) |
| IPO_City | 0.016***<br>(13.01) | | | | | | | | |
| Firm size | 0.037<br>(1.12) | 0.080***<br>(3.12) | -3.248***<br>(-4.21) | -0.093***<br>(-3.41) | -0.032*<br>(-1.85) | 0.231<br>(1.47) | 0.152<br>(1.01) | 0.236<br>(0.94) | -0.071***<br>(-3.80) |
| ROE | -0.470<br>(0.26) | -0.731***<br>(-3.28) | 13.031*<br>(1.82) | -0.926***<br>(-4.11) | 0.131<br>(0.46) | 2.024<br>(1.37) | 0.316<br>(1.38) | 13.290***<br>(3.05) | 0.022<br>(0.59) |
| Sale growth | -0.279<br>(1.54) | -0.135**<br>(-2.09) | 11.098***<br>(6.24) | 0.031<br>(0.72) | 0.050**<br>(2.12) | -0.209<br>(0.53) | 0.128<br>(0.39) | 5.327***<br>(3.91) | -0.058<br>(-1.31) |
| Firm leverage | -0.709<br>(1.16) | 0.411**<br>(2.25) | -1.122<br>(-0.30) | -0.093<br>(-0.64) | 0.133**<br>(2.34) | 1.212<br>(0.70) | 0.814<br>(1.50) | -8.210**<br>(-2.20) | 0.067<br>(0.94) |
| Largest ownership | 0.145<br>(0.56) | -0.543<br>(-1.08) | 2.235<br>(0.49) | 0.103<br>(0.91) | 0.038<br>(0.40) | -0.721<br>(0.46) | 0.292<br>(0.94) | -13.098***<br>(-3.21) | 0.030<br>(0.51) |
| Family firm | -0.363 | -0.231*** | 1.416 | -0.205*** | 0.053** | -0.814* | 0.114* | -6.108 | -0.097 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | (1.61) | (-3.87) | (0.81) | (-3.60) | (2.31) | (1.90) | (3.19) | (-0.85) | (-1.21) |
| Political connection of firm | 0.469 | 0.051 | 0.824 | -0.038 | 0.036 | -0.312 | -0.191 | 0.721 | -0.012 |
| | (1.48) | (1.24) | (0.67) | (-0.54) | (0.40) | (0.95) | (0.84) | (0.85) | (-0.49) |
| Government VC | 0.107 | 0.011 | -0.108 | 0.010 | -0.001 | -0.047 | 0.065 | 0.120 | -0.011 |
| | (0.80) | (0.45) | (-0.21) | (0.43) | (-0.32) | (0.35) | (0.81) | (0.76) | (-0.63) |
| Intercept | 0.224 | 3.148*** | 58.017*** | 4.980*** | 0.828* | -15.324 | -9.790 | 14.216 | 0.907 |
| | (0.79) | (4.92) | (5.06) | (3.34) | (1.81) | (1.34) | (1.27) | (1.31) | (1.35) |
| Industry dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Listing board dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 690 | 690 | 690 | 690 | 690 | 690 | 690 | 690 | 521 |
| Pseudo/Adjusted $R^2$ | 0.316 | 0.267 | 0.464 | 0.375 | 0.127 | 0.188 | 0.119 | 0.138 | 0.249 |

**Appendix 1. VC/PE Development in China**

This appendix describes the development of the venture capital and private equity industry in China.

| | Fund inflows (RMB, 100M) | Investment (RMB, 100M) |
|---|---|---|
| 2006 | 1418.76 | 1151.85 |
| 2007 | 2992.91 | 1173.48 |
| 2008 | 4676.09 | 943.65 |
| 2009 | 1285.00 | 775.38 |
| 2010 | 2567.90 | 1043.83 |
| 2011 | 4231.49 | 2561.91 |
| 2012 | 2117.85 | 1704.85 |
| 2013 | 2514.50 | 1886.78 |
| 2014 | 5117.97 | 4376.74 |
| 2015 | 7849.47 | 5254.96 |
| 2016 | 13712.05 | 7449.10 |

*Source*: Zero2IPO.

## Appendix 2. VC-backed IPOs

### Panel A. Distribution of Sample by Year

This panel presents the distribution of VC-backed IPOs by year during 2006-2015. Column 2 reports the number of A-share IPOs. Column 3 and 4 report the number of VC-backed IPOs and such firms as a percentage of total A-share IPOs, respectively.

| Year | A-share IPOs | VC-backed IPOs | |
|---|---|---|---|
| | | N | As percentage of IPOs (%) |
| 2006 | 66 | 12 | 18.182 |
| 2007 | 126 | 37 | 29.365 |
| 2008 | 77 | 24 | 31.169 |
| 2009 | 99 | 49 | 49.495 |
| 2010 | 349 | 161 | 46.132 |
| 2011 | 282 | 150 | 53.191 |
| 2012 | 155 | 88 | 56.774 |
| 2013 | 1 | 0 | 0.000 |
| 2014 | 125 | 75 | 60.000 |
| 2015 | 223 | 94 | 42.152 |
| Total | 1503 | 690 | 45.908 |

**Appendix 2. VC-backed IPOs**

**Panel B. Distribution of Sample by Industry**

This panel presents the distribution of VC-backed IPO by industry during 2006-2015. Industry is classified according to the Guidelines for the Industry Classification of Listed Companies by CSRC.

| Industry | A-share IPOs | VC-backed IPOs | |
|---|---|---|---|
| | | N | As percentage of IPOs (%) |
| Agriculture, forestry, livestock farming & fishery | 23 | 9 | 39.130 |
| Mining | 27 | 10 | 37.037 |
| Manufacturing | 1062 | 506 | 47.650 |
| Utilities | 15 | 3 | 20.000 |
| Construction | 44 | 14 | 31.818 |
| Wholesale & retail | 37 | 17 | 45.946 |
| Transportation | 31 | 5 | 16.129 |
| Hotel & Catering industry | 3 | 0 | 0.000 |
| Information transmission, software & information technology service | 139 | 77 | 55.396 |
| Finance | 29 | 13 | 44.828 |
| Real estate | 13 | 1 | 7.692 |
| Leasing & commerce service | 22 | 8 | 36.364 |
| Scientific research & technology service | 19 | 7 | 36.842 |
| Water conservancy, environment & public facilities management | 17 | 8 | 47.059 |
| Hygienism & social work | 3 | 3 | 100.000 |
| Culture, sports & entertainment | 19 | 9 | 47.368 |
| Total | 1503 | 690 | 45.908 |

**Appendix 3. Definition of Variables**

| Variable | Definition |
|---|---|
| IPO Approval | A dummy variable which equals one if the IPO is approved by the Issuance Examination Committee (*fa shen wei*) of China Securities Regulatory Commission (CSRC) and zero otherwise. |
| Log(months) | The natural logarithm of months between a VC investment and IPO approval. |
| Offer price-to-earnings ratio | The ratio of IPO offer price to the average annual earnings per share (EPS) during the three years prior to the IPO. |
| IPO under pricing | The difference between the closing price on the first trading day and the offering price, divided by the offering price. |
| Abnormal accruals (% of total assets) | A proxy for earnings management based on the modified Jones (1991) model. |
| IPO face change | A dummy variable which equals one if the media reports of "IPO face change" (*yeji bianlian*) about the first publicly announced operating performance after the IPO and zero otherwise. |
| Illegal information disclosure | A dummy variable which equals one if the media reports that the firm is involved in illegal information disclosure during the first year after the IPO and zero otherwise. |
| IPO application withdrawal | A dummy variable which equals one if the firm withdrew its IPO application during the 2013 inspection and zero otherwise. |
| Book return | The book returns that the VC acquires if it sells shares in the IPO process. |
| V.C. family fund flow | The natural logarithm of money that the VC family raised in year *t*. |
| IPO long-run stock performance | The one-, two-, and three-year buy-and-hold abnormal returns (BHARs), starting from one month after the IPO month, respectively. |
| Politically connected V.C. | A dummy variable which equals one if the general partner/top management of VC is a member of the National People's Congress (NPC), the Chinese People's Political Consultative Conference (CPPCC), or the National Congress of Chinese Communist Party(CCP) at all levels, or was previously an offical in the central government, a local government, or in the military, and zero otherwise. |
| Firm size | The natural logarithm of the average annual total assets during three years prior to the IPO. |
| ROE | The average annual return on equities during three years before the IPO. |
| Sale growth | The average annual sales growth during three years before the IPO. |
| Firm leverage | The average annual leverage ratio during three years before the IPO. |
| Largest ownership | The percentage ownership by the largest owner before the IPO. |
| Family firm | A dummy variable which equals one if the firm is ultimately controlled by individuals and their families, and zero otherwise. |
| Politically connected firms | A dummy variable which equals one if the Chair or CEO of IPO firm is a member of the National People's Congress (NPC), the Chinese People's Political Consultative Conference (CPPCC) or the National Congress of Chinese Communist Party(CCP) at and above city levels, or formerly was an official in the central government, a local government, or in the military, and zero otherwise. |
| Government VC | A dummy variable which equals one if the government or astate-owned firm is the largest owner of VC firm, and zero otherwise. |

## Appendix 4. Estimating Earnings Management

We use a modified Jones (1991) model to obtain a proxy for earnings management. To determine the discretionary accruals, we first run the following cross-sectional OLS regression by CSRC industrial classification to estimate the coefficients:

$$\frac{TA_{it}}{A_{it-1}} = \alpha_1 \frac{1}{A_{it-1}} + \alpha_2 \frac{\Delta Sales}{A_{it-1}} + \alpha_2 \frac{PPE_{it}}{A_{it-}} + \varepsilon_{it},$$

where *i* indicates year, and *t* indicates time. $TA_{it}$ is the net income minus cash flow from operation, $\Delta Sales$ is the change in sales, and $PPE_{it}$ is gross property, plant and equipment. All variables are scaled by total assets at the beginning of the year. This is estimated separately for each combination of year and industry. The estimated coefficients $\hat{\alpha}_1$, $\hat{\alpha}_2$, and $\hat{\alpha}_2$ are then used to calculate the nondiscretionary accruals:

$$NDA_{it} = \hat{\alpha}_1 \frac{1}{A_{it-1}} + \hat{\alpha}_2 \left(\frac{\Delta Sales}{A_{it-1}} - \frac{\Delta AR_{it}}{A_{it-}}\right) + \hat{\alpha}_3 \frac{PPE_{it}}{A_{it-1}}.$$

Here, $\Delta AR_{it}$ is the change in account receivables. We then compute the discretionary accruals the following way:

$$DA_{it} = \frac{TA_{it}}{A_{it-}} - NDA_{it}.$$

All variables are scaled by total assets at the beginning of the year, which means that the magnitude of discretionary accruals is a percentage of total assets.

**Appendix 5. Summary Statistics**

This table presents the summary statistics for the main variables in this study. Variable definitions are found in Appendix 1. All continuous variables are winsorized at the top and bottom 1%.

| Variables | Mean | Median | STD | Q1 | Q3 |
|---|---|---|---|---|---|
| IPO Approval | 0.820 | 1.000 | 0.384 | 1.000 | 1.000 |
| Log(months) | 3.457 | 3.497 | 0.589 | 2.996 | 3.871 |
| Offer price-to-earnings ratio | 36.507 | 31.353 | 21.033 | 19.672 | 47.244 |
| Market adjusted IPO under pricing10 | 0.761 | 0.456 | 0.859 | 0.111 | 1.185 |
| Abnormal accruals (% of total assets) | 0.141 | 0.163 | 0.257 | 0.043 | 1.254 |
| IPO face change | 0.064 | 0.000 | 0.244 | 0.000 | 0.000 |
| Illegal information disclosure | 0.055 | 0.000 | 0.228 | 0.000 | 0.000 |
| IPO application withdrawal | 0.281 | 0.000 | 0.450 | 0.000 | 1.000 |
| Book returns | 7.390 | 3.985 | 12.158 | 1.900 | 7.910 |
| VC family fund flows | 19.931 | 18.084 | 21.311 | 0.000 | 20.500 |
| 3-year BHARs | -0.113 | -0.138 | 0.426 | -0.226 | 0.152 |
| Politically connected VC | 0.495 | 0.000 | 0.500 | 0.000 | 1.000 |
| Firm size | 20.023 | 19.884 | 1.116 | 19.288 | 20.455 |
| ROE | 0.259 | 0.240 | 0.100 | 0.191 | 0.303 |
| Sale growth | 0.351 | 0.265 | 0.336 | 0.156 | 0.441 |
| Firm leverage | 0.479 | 0.490 | 0.164 | 0.367 | 0.597 |
| Largest ownership | 0.359 | 0.344 | 0.136 | 0.259 | 0.456 |
| Family firm | 0.900 | 1.000 | 0.300 | 1.000 | 1.000 |
| Political connection of firm | 0.437 | 0.000 | 0.496 | 0.000 | 1.000 |
| Government VC | 0.372 | 0.000 | 0.483 | 0.000 | 1.000 |

**Appendix 6: Correlation Matrix**

This table presents the correlation matrix of the variables. The upper triangle presents the Pearson correlation coefficient and the lower triangle presents the Spearman correlation coefficient. ***, **, and * denote significance at the 1%, 5% and 10% level, respectively.

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (1)Log(months) | 1.000*** | -0.233 | 0.349 | 0.007 | -0.016 | -0.121 | -0.011 | -0.014 | 0.018*** | 0.160 | -0.300** | -0.270** | -0.084 | -0.083 | -0.151 | 0.028 |
| (2)Offer price-to- earnings ratio | -0.295 | 1.000*** | -0.454 | 0.016 | -0.108 | 0.031 | 0.082 | -0.105 | 0.004*** | -0.294** | 0.175** | 0.367*** | -0.051 | -0.068 | 0.115 | 0.073 |
| (3)Market adjusted IPO under pricing10 | 0.392 | -0.529 | 1.000*** | -0.005 | 0.024 | 0.103 | -0.012 | 0.058 | -0.026*** | -0.070** | -0.276** | -0.204 | -0.111 | 0.034 | -0.129 | -0.100 |
| (4)Abnormal accruals (% of total assets) | 0.009 | 0.012 | -0.005 | 1.000*** | 0.012 | 0.022 | -0.015 | 0.097 | 0.178*** | -0.013* | 0.105 | 0.089** | 0.097** | 0.206 | 0.089 | 0.025 |
| (5)IPO face change | -0.011 | -0.102 | 0.021 | 0.013 | 1.000*** | 0.276*** | 0.091 | 0.182 | 0.054*** | -0.025 | -0.126*** | 0.035*** | 0.029*** | 0.121*** | -0.021 | 0.048 |
| (6)Illegal information disclosure | -0.108 | 0.037 | 0.107 | 0.021 | 0.276*** | 1.000*** | 0.172 | 0.118 | 0.021*** | 0.061 | 0.097 | 0.041 | 0.027 | 0.032 | 0.106 | -0.115 |
| (7)Book return | -0.015 | 0.089 | -0.008 | -0.014 | 0.087 | 0.165 | 1.000*** | 0.091 | 0.058*** | 0.136 | 0.181 | 0.225 | -0.046 | -0.154 | -0.091 | 0.036 |
| (8)BHAR 3 years | -0.009 | -0.107 | 0.054 | 0.097 | 0.187 | 0.103 | 0.094 | 1.000*** | -0.148*** | -0.206** | 0.102 | -0.078 | 0.035 | 0.032 | -0.021 | 0.054 |
| (9)Politically connected V.C. | 0.018*** | 0.004*** | -0.026*** | 0.178*** | 0.032*** | 0.021*** | 0.051*** | -0.142*** | 1.000*** | -0.012 | -0.021 | -0.022 | -0.016 | -0.001 | -0.057 | 0.079** |
| (10)Firm size | 0.236 | -0.321*** | -0.063** | -0.012* | -0.023 | 0.065 | 0.261 | -0.209** | -0.041 | 1.000*** | -0.284*** | -0.240*** | 0.535*** | 0.110*** | -0.249*** | 0.158*** |
| (11)ROE | -0.331** | 0.193** | -0.296** | 0.101 | -0.120 | 0.091 | 0.193*** | 0.107 | -0.016 | -0.341*** | 1.000*** | 0.375*** | -0.084** | 0.056 | 0.130*** | -0.154*** |
| (12)Sale growth | -0.330** | 0.390*** | -0.257 | 0.081** | 0.031 | 0.043 | 0.336*** | -0.071 | 0.025 | -0.346*** | 0.395*** | 1.000*** | -0.051 | -0.078** | 0.084* | -0.018 |
| (13)Firm leverage | -0.079 | 0.018 | -0.114 | 0.093** | 0.024 | 0.028 | 0.014*** | 0.039 | -0.005 | 0.501*** | -0.094** | -0.024 | 1.000*** | -0.009 | -0.117*** | 0.203* |
| (14)Largest ownership | -0.085 | -0.052 | 0.021 | 0.204 | 0.126 | 0.035 | -0.202*** | 0.033 | -0.005 | 0.133*** | 0.036 | -0.069** | 0.013 | 1.000*** | -0.092 | -0.067* |
| (15)Family firm | -0.152 | 0.116 | -0.115 | 0.081 | -0.023 | 0.101 | -0.075 | -0.025 | -0.057 | -0.205*** | 0.154*** | 0.105* | -0.125*** | -0.078 | 1.000*** | 0.022 |
| (16)Political connection of firm | 0.019 | 0.103 | -0.089 | 0.023 | 0.042 | -0.110 | 0.032 | 0.051 | 0.079** | 0.157*** | -0.150*** | -0.031 | 0.198* | -0.066* | 0.022 | 1.000 *** |