



CORPORATE GOVERNANCE AND PERFORMANCE: EVIDENCE FROM CHINESE PRIVATE LISTED COMPANIES BASED ON CASH FLOW RIGHTS AND CONTROL RIGHTS

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Abstract

This paper investigates the relationship between control rights, cash flow rights, and firm performance across a sample of 276 China's private listed companies (CPC) from 2003 to 2008. This paper finds that the performance of firms with pyramid ownership structures (POS) is lower than that of firms with direct controlling ownership structures (DOS). The separation of control rights and cash flow rights, which is the main characteristic of POS, is negatively related to the firm performance. Furthermore, in order to reduce the negative influence of control rights, this paper proposes the following countermeasures: cash flow rights should be increased because it has a positive effect on the firm performance; the supervisory powers of shareholders meeting (SM) should be strengthened because it helps improve firm performance and overrule invalid decisions taken by independent directors in China. This is proved by the findings that show a positive correlation between the attendance rate at shareholders' meetings and firm performance; moreover, there is no positive relationship between independent directors and firm performance.

Keywords: Separation of Cash Flow Rights and Control Rights, Private Listed Companies, Pyramid Ownership Structures, Firm Performance

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1. Introduction

With the development of privatization reforms in China, the number of Chinese private listed companies (CPC) is on the rise. They have become an important economic entity in China, which can be witnessed by the role that they play in the fields of investment, exports, employment, and tax revenues in China. In 2010, the investment of CPC in fixed assets was more than RMB 12 trillion, accounting for 43% of the total investment in fixed assets in China. In addition, the investments made by CPC have continued to rise rapidly, and the average annual growth rate has reached 34.5%. CPC exports have grown by 200% in five years.

The total sum of exports by CPC is over 450 billion, accounting for 30% of China's foreign trade. The total amount of tax paid by CPC is 1.1173 trillion, accounting for 16% of China's total tax revenue. The annual average increase in the tax paid by CPC is 22.2%. The employees of CPC number about 180 million, which was about 21.69% of total employment in 2010 (<http://business.sohu.com/20110118/n278947335.shtml>). Private listed companies out-perform state-owned companies (SOC; see Table 1). Hence, it is meaningful to study this vibrant economic entity.

Table 1. Performance Comparison of CPC and SOC in 2010

	Liquidity ratio	Turnover of total assets	Asset-liability ratio	Gross profit rate	Revenue growth rate
Private listed companies (CPC)	2.18	0.71	39.28	26.97	27.71
State-owned listed companies (SOE)	1.34	0.70	53.72	21.96	24.13
CPC-SOC	0.84	0.01	-14.44	5.01	3.58

Source: Official website of The All-China Federation of Industry and Commerce (ACFIC) (<http://acfic.org.cn>)

However, compared with state-owned companies (SOE), Chinese private companies face two major problems, namely, capital and management.

As far as capital is concerned, SOE find it easier to obtain loans and subsidies from banks and the government. For example, the subsidies obtained by SOE amounted to RMB 46.34 billion (<http://www.nbd.com.cn>) in 2010. However, it is difficult for CPC to apply for long-term loans, so they have to settle for the short-term option. From

2004 to 2008, the ratio of current liabilities to total liabilities of CPC was higher than that of SOE. Of this, more than 84% were short-term loans. Thus, CPC are confronted with urgent debt pressures. In addition, CPC were only able to obtain a small fraction of the total amount of short-term loans in China, less than 4% (See Table 2), and they are in great need of capital (see Table 3). Accordingly, they are motivated to opt for internal financing, that is, they obtain capital from the enterprise group that they control via pyramid ownership structures.

Table 2. Short-term loans obtained by private companies

Year	Total short-term loans	Private companies' short-term loans	Ratio (%)
2004	65748	654.5	1.00
2005	87449	2180.8	2.49
2006	98534	2667.6	2.71
2007	114478	3507.7	3.06
2008	125182	4221.2	3.37

Source: China Statistical Yearbook (2004–2008)

Table 3. The ratio of current liabilities to total liabilities (SOE and CPC)

Year	State-owned enterprises			Private listed companies		
	Total liabilities	Current liabilities	Ratio (%)	Total Current liabilities	Total liabilities	Ratio (%)
2004	16916	24014	70.44%	3539	4067	87.04%
2005	20914	28901	72.36%	4137	4762	86.88%
2006	26956	36545	73.76%	4838	5642	85.75%
2007	34558	46813	73.82%	5986	7092	84.40%
2008	39484	54746	72.12%	6133	7293	84.10%

Source: China Statistical Yearbook (2004–2008)

Pyramid ownership structure leads to the separation of control rights and cash rights (SOCC), which may lead to a conflict between controlling shareholders and minority shareholders (P-P conflict). This conflict is widespread in many countries, especially in emerging markets (La Porta et al., 1999; Lin, 2011; Gutierrez and Pombo, 2009; Chen et al., 2008; Faccio et al., 2002). In contrast, the separation of controlling rights and cash flow rights in CPC is more significant. An interesting finding is that the average degree of separation is on the rise and has reached 10.834%; however, the net assets per share (NAP) has shown a significant decrease from 2003 to 2008. NAP was 3.2143 in 2003; however, it fell to 2.7550 in 2008 (see Table

4). Hence, we may ask whether there is a relationship between firm performance and SOCC. This question may be solved using agency theory. Agency theory is often used to discuss two important conflicts that arise from SOCC and lead to agency costs in China. SOE and CPC both have different agency conflicts that lead to different agency costs. As SOE have fuzzy property rights, their agency costs arise mainly from the conflict between minority shareholders and managers (S-M conflict). However, as CPC have clear property rights and a concentrated ownership structure, its controlling shareholders not only have the motivation but also the ability to further their personal interests, rather than the demands of

minority shareholders. This causes the conflict between controlling shareholders and minority shareholders (S-S conflict).

In recent years, as the S-S conflict attracts scholars' attention, a new term "Tunneling behavior" has become a talking point. Many scholars find that the P-P conflict is more important than the P-A conflict in corporate governance (Shleifer and Vishny, 1986). Tunneling behavior refers to the asset appropriation by large shareholders. This behavior not only encroaches on the interests of minority shareholders, but also has an adverse influence on the stock markets (Johnson et al., 2000). This was the main reason for the Asian financial crisis from 1997 to 1999 (Johnson et al., 2000). It is important to note that tunneling behavior is more severe in emerging markets than in mature markets (Gao and Kling, 2008).

As a fast developing country, China mainly supports SOE in order to retain its socialist characteristics and maintain the country's stability. CPC have to deal with a harsh external financing environment, and so current research on CPC mainly concentrates on the financing channels, financing environment and capital structure. It has been found that more and more private enterprises have become interested in equity financing and are buying a SOE listing qualification. However, we find that since China is also a large emerging market economy; the legal code that supervises the tunneling behavior is not mature, so once a private firm becomes a CPC, the main problem that arises is the tunneling behavior of controlling shareholders, who control large sums of capital. More importance should be attached to examining the root causes and results of this behavior. This paper is committed to investigate the relationship

between the root cause (the separation of control rights and cash rights) and the result (firm performance), and extend prior research. This paper contributes to the literature in three ways:

First, this paper divides private listed companies into two types—firms with a pyramid ownership structure and firms with a direct ownership structure. This paper finds that the performance of private listed companies with a direct ownership structure is better than that of companies with a pyramid ownership structure. This finding has not been emphasized in previous research.

Second, this paper finds that independent directors do not play an active role in a firm's performance, which means that CPC pay more attention to internal supervision rather than to external supervision. The reason could be that CPC are mostly traditional family enterprises, and the level of corporate governance is not high and needs further improvement. This finding is at odds with western literature, in which independent directors are considered to positively influence a firm performance.

Third, we find that shareholders' meetings play an active role in CPC, and the attendance rate at shareholders' meetings is positively related to firm performance. Shareholders' meetings may make up for the weak supervisory function of independent directors. This finding is not commonly found in previous Chinese literature.

The paper is organized as follows. Section 2 summarizes the literature on the issues surrounding a corporate performance and ownership structure, and proposes four hypotheses. Section 3 describes the sample and methodology. Section 4 presents the major discussions and conclusion.

Table 4. Controlling rights, cash flow rights, and NAP (2003–2008)

	2003	2004	2005	2006	2007	2008	Average
Controlling rights (%)	33.338	33.275	33.032	32.648	32.589	32.594	32.912
Cash flow rights (%)	27.266	24.231	22.047	19.566	19.334	20.025	22.078
Separation (%)	6.072	9.0441	10.985	13.082	13.253	12.570	10.834
Net assets per share (NAP)	3.214	2.983	2.804	2.628	3.032	2.755	2.903

Data sourced and collated from the CSMAR database

2. Literature review and hypotheses

This paper investigates the relationship between the control rights, cash flow rights, and firm performance. After reviewing the literature related to our research, we developed four hypotheses.

2.1. Control rights, cash flow rights, and firm performance

The study on control rights is related to four key words: control rights, cash rights, control mode, and the separation of control and cash flow rights.

2.1.1. Cash flow rights and firm performance

Cash flow rights refer to the fraction of a firm's profits or losses that a shareholder should have

according to the amount of his investment (Jeremy and Edwards, 2009). Cash flow rights are an incentive for Controlling shareholders to supervise the managers and decrease the agency cost that arise between shareholders and managers. Corporate value is higher when the largest shareholder owns more cash flow rights; however, the negative entrenchment effect becomes evident when the largest shareholder's cash flow rights are less than the median (Yeh, 2005).

Controlling shareholders' cash flow rights act as an incentive to align the interests of the ultimate controller to the firm performance (Hughes, 2009). The reasons are as follows:

First, according to the alignment effects theory, the more funds a firm gets from controlling shareholders, the closer is the relationship between the interests of individual controlling shareholders. Once a firm goes bankrupt, controlling shareholders are burdened with greater losses than are other minority shareholders. Second, according to the asset specificity theory, unlike debt capital, companies need not repay equity capital. It is difficult for a large shareholder to take back his investment. Therefore, once a firm goes bankrupt, controlling shareholders have to face higher risks and costs during the process of share transfer. Hence, the incentive effect of cash flow rights plays an important role in firm performance. Based on the above theoretical analysis, we make the following assumptions:

H1: The cash flow rights of ultimate controlling shareholders are positively related to the performance of Chinese private listed companies.

H2: The control rights of ultimate controlling shareholders are negatively related to the performance of Chinese private listed companies.

2.1.2. The separation of control rights from cash flow rights, and firm performance

The separation of ownership refers to the separation of control rights and cash flow rights. Control rights of ownership refer to an owner's ability to influence the way a firm operates.

In theory, control rights are equal to cash flow rights, and controlling shareholders will not have any motive for entrenchment behavior. However, as more and more firms adopt complex business models characterized by pyramid ownership structures (La Porta et al., 1999; Claessens et al., 2000), controlling shareholders gain more control rights than cash flow rights (Claessens et al., 2000; La Porta et al., 1999). For example, firm A holds a certain number of shares of firm B, firm B holds a certain number of shares of firm C, and so on. The ultimate controlling shareholder is firm D, which

controls firm A, and thereby the lower-level firms B and C. Firm D can exert control over lower-level firms belonging to the pyramid chain without holding the majority of the cash flow rights. That is, firm D has control over its subsidiaries without making much of an investment. When cash flow rights are fixed, excess control rights increase the likelihood of expropriation from other investors (Lin et al., 2011). The excess control enhances the misalignment of interests between the ultimate controlling shareholder and minority shareholders. In family-controlled companies, the corporate value will conspicuously decrease if the largest shareholder enhances their controlling rights through pyramid ownership structures (Yeh, 2005). Why does the separation of controlling rights and cash flows rights influence firm performance? This can be explained from the behavior of controlling shareholders.

The separation of control rights and cash flow rights causes two types of behavior in controlling shareholders—tunneling behavior and propping behavior. Tunneling behavior refers to related-party transactions which move funds from a lower-level firm to a higher-level firm in the pyramid chain, while propping behavior refers to the transfers of funds in the opposite direction (Friedman et al., 2003). The choice of behavior depends on the financial state of firms, the legal and economic environment, and the maturity of investors. By financial state, we mean that a firm can be either in a state of financial distress, or in a financially healthy state. For firms in financial distress, controlling shareholders resort to propping behavior in order to obtain a long-term interest. However, in most healthy firms, controlling shareholders resort to tunneling behavior. In China, as the stock market was established only twenty years ago, the legal and economic environment still needs further improvement. Investors pay more attention to short-term rather than long-term interests. If the private investors are irrational, they do not concern themselves with supervision of the firms; hence, controlling shareholders prefer the pyramid ownership structure and implement tunneling behavior. This behavior decreases the firm performance. Thus, irrational investors enable the adverse effect of separation of controlling rights. The separation of cash flow rights and control rights motivate controlling shareholders to choose tunneling behaviors. One important point worth mentioning is the financial environment of Chinese private enterprises. Compared to state-owned enterprises, it is very difficult for Chinese private enterprises to apply for loans from banks and other financial institutions. Controlling shareholders can take advantage of the internal capital market of the pyramid structure to compensate for insufficient funds. Given the difficult macro capital market

environment, the internal capital market is an important way to raise funds.

Controlling shareholders usually engage in related party transactions, including internal asset sales, equity sales, and transfer pricing contracts, to transfer funds of lower-level firms in the pyramid ownership structure (Johnson et al., 2000). The more control rights the ultimate controlling shareholder has, the higher their capacity to expropriate other shareholders and harm firm performance (Bennedsen and Nielsen, 2010). Based on the above theoretical analysis, we make the following assumptions:

H3: The degree of separation of cash flow rights from control rights of ultimate shareholders is negatively related to the performance of Chinese private listed companies.

H4: The performance of firms with pyramid ownership structures is lower than that of firms with direct controlling ownership structures.

3. Methodology

This paper investigates the relationship between control rights, cash flow rights, and firm performance using panel data analysis. In this section, we describe the sample, data sources and ownership structures of the sample firms, and test hypotheses developed in the prior section.

3.1. Sample selection

We obtained our dataset from the WIND database and the China Stock Market Accounting Research (CSMAR) database. For data not available in the WIND and CSMAR databases, we manually collected data from the audited annual reports of sample companies. The industries in our sample included agriculture, non-metallic mining, manufacturing, heating and hot water industry, civil engineering construction, auxiliary transportation industry, computer application services industry, retail industry, financial trust industry, real estate development industry, tourist industry, and other industries. In order to ensure the consistency of the caliber of study, we excluded the following special samples: (1) Private listed companies with missing data; (2) Firms labeled "ST" (Special Treatment)¹⁴

¹⁴ Chinese listed companies are labeled as Special Treatment (ST) firms and face termination of their listings in the Chinese stock market if: (1) External auditors express a negative opinion or state that they are unable to issue an audit opinion in a listed company's annual report. (2) The company's financial conditions are considered abnormal by the stock exchange or the CSRC. (3) The company has a negative net income over two consecutive years or net asset value per share falls below

on the Shanghai Stock Exchange (SHSE) and the Shenzhen Stock Exchange (SZSE) (3) The financial private listed companies. Finally, we chose 276 private listed companies from 2003 to 2008.

3.2. Variables

3.2.1. Dependent variables

Net assets per share (NAP) = total owner's equity / total shares. This indicator reflects the book value of the net assets (BVNA). BVNA is equal to total assets minus total liabilities, that is, the total owner's equity. NAP reflects firm performance and investment risk. If the net asset per share is on the decrease, it means that the firm faces the danger of bankruptcy.

NAP is widely used in Chinese literature to evaluate firm performance. NAP is an important index because investors always use it to evaluate firm performance (Chen, 2008; Yuan 2009). Investors evaluate firm performance by analyzing the separation between NAP and stock price (Li and Shao, 2011). Based on the previous research, we also utilize NAP to estimate firm performance.

3.2.2. Independent variables

All the independent variables and controlling variables are defined in Table 5.

3.2.3. Control variables

In order to assess the influence of the board of directors, we use the percentage of independent directors who had no prior relationship with the company before being appointed as board members. These directors come from diverse backgrounds. Some scholars hold that the existence of independent directors can influence the performance of firms (Yermack, 1996). Hence, we should take this factor into consideration. This variable is named "ddbl." The rate of attendance at the shareholders' meetings indicates the importance of the shareholders in the firm's decision making. Thus, a higher attendance rate would indicate that the more attention shareholders to the future development of firms, the higher the possibility of preventing asset appropriation by managers and large shareholders. We name this variable "gdcx." We believe that size may influence the performance of firm, and use the natural log of a firm's total assets as a proxy for firm size. This variable is named "gsgm." In order to control the influence of the property of industries, we create a dummy variable named "sshly." In Chinese private listed firms, controlling shareholders monitor the managers actively. These shareholders often work

its par value.(4) The audited report shows that shareholders' equity is lower than the registered capital.

as managers or nominate their representatives as the CEO or chairman of the listed firm (Chen et al., 2008). However, when the chairman and general manager is the same person, the supervisory role is not significant. This phenomenon is called the “insider control effect” and is helpful for ultimate controlling shareholders to gain undue personal benefits via entrenchment behavior. We hold that the insider control exercised by ultimate shareholders may influence the performance of Chinese private listed companies. We define a variable “jzqk” to describe the situation where a

person works as both chairman and general manager.

We also consider differences among industries and specify 12 dummy variables that include agriculture, non-metallic mining, manufacturing, heating and hot water industry, civil engineering construction, auxiliary transportation industry, computer application services industry, retail industry, financial trust industry, real estate development industry, tourism industry, and other industries.

All the variables can be seen in Table 5 below.

Table 5. Definitions of variables

Name	Variables	Calculating formulae
Performance	mgjzc	mgjzc = total owner’s equity/total shares
Control rights	kzqb	$kzqb = \sum_{i=1}^n \min_i(a_{i1}, a_{i2}, a_{i3} \dots a_{it})$, $a_{i1} \dots a_{it}$ are the control rights in the control chain
Cash flow rights	syqb	$syqb = \sum_{i=1}^n \prod_{t=1}^t a_{it}$, $a_{i1} \dots a_{it}$ are the cash flow rights in the control chain
The separation of control rights and cash flow rights	pld	pld = kzqb - syqb. SEPR is the separation of cash rights and control rights.
Control mode	kzfs	kzfs refers to the control mode; kzfs = 0 means direct control mode; kzfs = 1 means pyramid mode
The ratio of independent directors	ddsb	ddsb = the number of independent directors/the number of total directors
The attendance rate of shareholders’ meetings	gdcx	gdcx = shares of attendance/ total shares
The condition of chairman and general manager	jzqk	jzqk = 1 means that the chairman and general manager is the same person jzqk = 0 means that the chairman and general manager is not the same person
The size of firms	gsgm	gsgm = Ln (total assets)
Industry	sshy	sshy = 1 implies that the firm belongs to the industry j sshy = 0 implies that the firm does not belong to the industry j

Based on the theoretical and empirical evidence, we hypothesize the signs of the coefficients (see Table 5).

3.3 Regression analysis

3.3.1. Model constructing

We use the general least squares (GLS) method to test proposed hypotheses and construct a panel regression model. Using a cross-sectional time

series sample as the dataset of this study, the pooled GLS technique allows for cross-sectional heterogeneity and serial correlation. Based on the research hypotheses mentioned above, we construct the following random effects model.

$$mgjzc_{it} = \alpha_i + \beta_1 x_{it} + \beta_2 \gamma_{it} con_{it} + \varepsilon_{it}$$

$$mgjzc_{it} = \alpha_0 + \beta_1 syqb_{it} + \beta_2 ddbl_{it} + \beta_3 jzqk_{it} + \beta_4 gsgm_{it} + \beta_5 inds_{it} + \varepsilon_{it} \tag{1}$$

$$mgjzc_{it} = \alpha_0 + \beta_1 kzqb_{it} + \beta_2 ddbl_{it} + \beta_3 jzqk_{it} + \beta_4 gsgm_{it} + \beta_5 inds_{it} + \varepsilon_{it} \tag{2}$$

$$mgjzc_{it} = \alpha_0 + \beta_1 pld_{it} + \beta_2 ddbl_{it} + \beta_3 jzqk_{it} + \beta_4 gsgm_{it} + \beta_5 inds_{it} + \varepsilon_{it} \tag{3}$$

$$mgjzc_{it} = \alpha_0 + \beta_1 kzfs_{it} + \beta_2 ddbl_{it} + \beta_3 jzqk_{it} + \beta_4 gsgm_{it} + \beta_5 inds_{it} + \varepsilon_{it} \tag{4}$$

$$mgjzc_{it} = \alpha_0 + \beta_1 syqb_{it} + \beta_2 kzqb_{it} + \beta_3 pld_{it} + \beta_4 ddbl_{it} + \beta_5 jzqk_{it} + \beta_6 gsgm_{it} + \beta_7 inds_{it} + \varepsilon_{it} \tag{5}$$

$$mgjzc_{it} = \alpha_0 + \beta_1 syqb_{it} + \beta_2 pld_{it} + \beta_4 ddbl_{it} + \beta_5 jzqk_{it} + \beta_6 gsgm_{it} + \beta_7 inds_{it} + \varepsilon_{it} \tag{6}$$

$$mgjzc_{it} = \alpha_0 + \beta_1 pld_{it} + \beta_2 gddhcx_{it} + \beta_3 jzqk_{it} + \beta_4 gsgm_{it} + \beta_5 inds_{it} + \varepsilon_{it} \tag{7}$$

where the NAPS is the firm performance; X_{it} represents a group of explanatory variables which include: control ratio (CONR), cash flow right ratio (CASR), the separation of control and cash flow right (SEPR), the control mode of controlling shareholders (KZFS), the attendance rate at shareholders' meeting (GDCX). α_i represents a group of control variables including independent directors' ratio (DDBL), the condition of chairman of the board and general manager being the same person (JZQK), the size of firms (GSGM) and industry (SSHY). Concrete definitions of these variables can be seen in Table 5. ϵ_{it} represents the individual effect of section data. If the difference between individuals is random and α_i is a random variable, the random effects model should be adopted; if the difference between individuals is systematic and α_i is a constant, the fixed effects model should be adopted.

By using the Hausman test, this study adopts the random effects model. ϵ_{it} refers to the model of random errors.

3.3.2. Regression results

The regression results are shown in Table 6.

As can be seen in table 6, model 1 and model 6 indicates that the ratio of cash flow rights has a significant positive effect on the firm performance. Model 2 suggests that the ratio of control rights has a negative influence on firm performance. Models 3 and 7 indicate that the separation of control model and cash flow rights has a significant negative influence on firm performance. Model 4 shows that the control mode has a significant negative influence on firm performance; that is, the performance of firms with pyramid ownership structures is lower than that of firms with direct controlling ownership structures. Models 1, 2, 3, 4, 5, and 6 commonly indicate that there is no significant relationship between independent directors and firm performance. Models 5 and 7 indicate that the attendance rate at shareholders' meetings has a significant positive influence on firm performance.

Table 6. The relationship between control rights, cash flow rights, and firm performance

Variables	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)
constant	-11.156** (-8.437)	-11.326*** (-8.134)	-9.106*** (-4.959)	-6.275*** (-4.689)	-13.100*** (-9.717)	-11.193*** (-8.448)	-12.332*** (-6.404)
syqb	0.010** (3.289)				0.007 (1.527)	0.010*** (3.003)	
kzqb		-0.01*** (-2.588)			-0.005 (-0.894)		
pld			-0.011** (-1.995)			-0.001 (-0.312)	-0.011** (-1.976)
kzfs				-0.375*** (-3.585)			
gddhcx					0.016*** (5.370)		0.017*** (5.352)
ddbl	0.337 (0.511)	0.505 (0.725)	0.467 (0.706)	0.300 (0.451)	0.127 (0.195)	0.360 (0.545)	0.099 (0.147)
jzqk	-0.132 (-1.153)	-0.190 (-1.559)	-0.144 (-1.098)	-0.188 (-1.533)	-0.129 (-1.131)	-0.134 (-1.161)	-0.144 (0.268)
gsgm	0.587*** (6.917)	0.657*** (10.457)	0.586*** (6.920)	0.421*** (7.000)	0.716*** (11.846)	0.653*** (10.868)	0.670*** (8.072)
R ²	0.094	0.094	0.090	0.119	0.109	0.095	0.112
Adjustment R ²	0.084	0.083	0.080	0.102	0.100	0.084	0.102
F	9.600***	8.368***	8.991***	7.104***	11.236***	9.060***	10.936***
Chi-Sq	16.234	13.078	19.863	20.028	19.318	18.224	15.570

Notes: ***, ** and * denote significance at the < 0.01, < 0.05 and < 0.10 levels, respectively, for the two-tailed test.

The regression coefficient of syqb is 0.01 in Model 1, which means that the increase of cash flow rights helps to increase the performance of

Chinese private companies, which supports Hypothesis 1. The regression coefficient of kzqb is -0.01 in Model 2, showing that excessive kzqb does

not help to increase the performance of Chinese private companies, which supports Hypothesis 2. The regression coefficients of *pld* and *kzfs* in Models 3 and 4 are -0.011 and -0.375, showing that the separation of control rights and cash flow rights negatively influences performance, and the performance of firms with direct controlling structures is better than that of firms with pyramid

structures. From Model 1 to Model 7, we find that the relationship between *ddb1* and firm performance is not significant, which means that independent directors do not have a significant influence on the performance of Chinese private companies. The relationship between the regression results and hypotheses tests can be seen in Table 7.

Table 7. Panel data regression : relationship between ownership structure and firm performance

Variables	Expected sign	Actual sign	Model	Research results
<i>syqb</i>	positive	positive	Model (1) Model (5) Model (6)	The cash flow rights of ultimate shareholders are positively related to the performance of Chinese private listed companies. (H1)
<i>kzqb</i>	negative	negative	Model (2) Model (5)	The control rights of ultimate shareholders are negatively related to the performance of Chinese private listed companies. (H2)
<i>pld</i>	negative	negative	Model (3) Model (6) Model (7)	The degree of separation of cash flow rights from control rights of ultimate shareholders is negatively related to the performance of Chinese private listed companies. (H3)
<i>kzfs</i>	negative	negative	Model (4)	The performance of firms with pyramid ownership structures is lower than that of firms with direct controlling ownership structures. (H4)

From Table 7, we find that the research hypotheses are tested in Models 1–7. The actual signs are in accordance with the expected signs.

4. Conclusion and discussion

This paper investigates the relationship between control rights, cash flow rights, and the performance of China's private listed companies. Samples are taken from the Shanghai Stock Exchange (SHSE) and the Shenzhen Stock Exchange (SZSE) from 2003 to 2008. Our results are as follows.

(1) In private listed companies in China, the separation of control rights and cash rights is high. The average ratio of cash flow right and control rights is 22.078% and 32.912% respectively, and the average ratio of the separation is 10.834%, indicating that the individual gains of controlling shareholders are more than their investment risk. This result is consistent with previous studies that found that the separation of cash flow rights and control rights adversely influences the long-term performance of Chinese state-owned listed companies. We conclude that the separation of cash flow rights and control rights is not beneficial for both private listed companies and state-owned listed companies in China.

(2) As the capital market and financing environment are not mature, controlling shareholders of Chinese private companies prefer pyramid ownership structure. However, we find that the performance of firms with pyramid ownership structures is lower than that of firms with direct controlling ownership structures. This

conclusion seems to contradict the rational choice of the shareholder. However, the big problem for Chinese private firms is access to external finance; therefore, they may choose pyramid ownership to create an internal financing market and opt for tunnel behavior that may not be beneficial to firm performance. It is important for the Chinese government to create a capital market that supports the long-term development of private companies.

(3) Independent directors do not have any obvious effect on the performance of Chinese private firms at present. The reason may lie in the fact that CPC are mostly traditional family enterprises, and they mainly depend on internal rather than external supervision.

(4) This paper finds that shareholders' meetings play an active role in CPC, and the attendance rate at shareholders' meetings positively influences firm performance. This finding further proves that CPC pay more attention to internal rather than external supervision. The system of independent directors should be improved in the long term; however, we can take good advantage of shareholders' meetings to make up for the weak supervision of independent directors at present.

(5) Private enterprises play an increasingly important role in the Chinese market economy, which is why the Chinese government should build a strong economic and policy environment and promote fair competition between state-owned and private enterprises.

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