

Institutional Environment, Political Connection and Financial Constraints---Evidence from Private Enterprise in China

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Abstract

On the condition that formal institution of China has not protected the main economic entities especially non-public cases adequately, "political connection" existed, and it has become a good complement to the formal institution. The majority of non-public economic entities form the political connection with the government actively in various ways, thus it improves their own ability to access debt capital and increases enterprises' value. We make a further refinement of the intensity of political connection in reference to historical research and make a combination of institutional environment, political connection and capital structure. We analyze the relationship between the three from both the "theory" and "data validation" perspectives. Firstly, we review the relevant papers from different angles. Then, we make some hypotheses, select the variables and build models to test the relationship between the three. We use the descriptive statistical analysis, Pearson correlation test, OLS regression testing and some other methods to make inference and proof to the theoretical hypotheses in order to provide quantitative basis for the theory of sublimation. Our research found that the listed private companies in the areas where have lower level of property rights protection and financial development are more likely to form a stronger political connection. The enterprises which have or have a stronger political connection can obtain more bank credit.

Keywords: Institutional environment, Political connection, Private enterprise, Financial constraints

1. Introduction

Allen et al (2005) believes that the relationship between China's financial and legal systems and economic growth challenges on the research of "law and finance" which is currently the most influential study concludes in the international academic community. The research of "law and finance" concludes that the legal protection determines the financial development and further impacts on economic growth (La Porta etc, 1997, 1998, 2002; Levine, 1998). However, the financial market and economic of China has achieved rapid growth in the case of inadequate legal protection, particularly, China's private economy develops at top speed, which is the key to achieve the above-mentioned success (Murrell, 2001). Meanwhile, they believe that "reputation" and "relationship" are the most important alternative mechanism.

In China, many private companies are active to form political associations with government in various ways. According to the "1993-2008 China's private sector large-scale survey" of China National Industry and Commerce Union, private entrepreneurs showed a strong interest in political participation and 28.8% of them deemed eagerly to be the NPC deputies and CPPCC members.

Most of the past literature concerned about the economic consequences caused by political connection, few people pay close attention to the condition of the political connection and corporate finance. Thus, this paper will focus on the relationship between political connection and capital structure. We make a further refinement of the intensity of political connection in reference to historical research and make a combination of institutional environment, political connection and capital structure. We analyze the relationship between the three from both the "theory" and "data validation" perspectives. This paper mainly analyzes the following issues: Is the robustness of the institutional environment to some extent affect the strength of political connection and political connection? Could the intensity of political connection and

political connection reduce the financial constraints, thus affect the financial consequences? If so, how much influence on the results for the financing - capital structure?

2. Study Design

2.1 Research hypothesis

The paper proposed the following four hypothesis on the base of the relationship between institutional environment, political association and the capital structure:

(1) The level of intellectual property and political connection

In accordance with national laws, intellectual property are endow to qualified authors, inventors or owners of the results within a certain period of time to enjoy the exclusive rights, generally including copyright and industrial property rights. Intellectual property protection has become the strategic commanding point in the international economic order and become the focus of national competition.

Intellectual property protection is still in development stage in China and the research of China's intellectual property began relatively late, thus a bit weak in intellectual property protection. In law, although the provisions of intellectual property protection in China have reached a considerable height, the fact is it can not play the corresponding effect.

Inadequate protection of intellectual property under the local environment, whether the Chinese private enterprises are able to promote their survival and development by other alternative mechanisms, private enterprise where property protection is in different affect their levels of political connection. Based on the above statement, we proposed a hypothesis of this article:

H1: Private enterprises where the worse the level of intellectual property protection, the easier the formation of political connection with the government.

(2) The degree of government intervention and political connection

Government intervention also called macro-control is the government's overall management of the national economy and it is national government, especially the central government's economic functions. Government intervention is mainly as follows: the nation takes advantage of economic policies, economic regulations, planning guidance and the necessary administration to play a regulatory role on the effective functioning of the market economy.

Since the Third Plenary Session of the Fourth Central Committee, China's macro-control has initially formed a model that in the central coordination, mainly based on planning, taxation, financial sector, and simultaneously make use of indirect means to control and guide the activities of market. The ability and level of macro-control has scaled a new step. However, China's macro-control also faces the problems that the lack of coordination among the various departments, fiscal and financial risk increases and "rent-seeking" behavior problems occur frequently.

We can not ignore the fact that enterprises contacts with tax authorities, regulatory authorities, environmental protection departments, police departments and other departments for the sake of reaching an agreement with government to facilitate their access to bank credit and a series of acts of political connection, further to promote enterprise development. Hermann et al (2002) examined the trading relationship between transition state government and enterprise, their research shows that because government departments can intervene in the enterprises according to the rules, they receive considerable rental income. The expenditure of corporate bribes to government officials has a direct correlation with the reduction of government intervention. Thus this article proposes hypothesis 2:

The greater the degree of government intervenes of the private enterprises, the easier the formation of political connection with the government.

(3) Regional financial development and political connection

Finance is the core of modern economy and it has very important strategic significance for the rising of one country. China as the world's largest emerging economies, the relationship between national economic development and finance is of particular relevance. On April 30, 2008, the CPC Beijing Municipal Committee, Beijing Municipal Government issued the "views on the promotion of the financial industry of the capital". "Views" pointed that: Beijing is the country's financial decision-making center, financial management center, information and financial services center and put forward the goal to build Beijing into an internationally influential financial center city. On March 25, 2009, the State Council considered and adopted the "views that Shanghai should speed up the development of modern service industry and advanced manufacturing, build Shanghai into an international financial center and an international shipping center." Different levels of financial development of cities determine different competitiveness, the level of the financial center promotes the development of the local business.

In order to assess the levels of financial development of different cities, we analyzed each city's financial, economic, ecological environment, human resource indicators based entirely on objective data from the perspective of financial capabilities. The study found that the levels of financial development among regions showed a large gap (Zhou Li, Wang Ziming, 2002).

As the levels of financial development among regions are different, private enterprises make different financial decisions. The level of financial development in the more backward areas are more likely to restrict financing channels for private enterprises greater, the funding difficulties for the development of private enterprises are more obvious, so the enterprises are more motivated to obtain their own development through informal channels, that is, to form political connection with the government. So we propose hypothesis 3:

H3: the worse the level of financial development where the private enterprises locate, the easier the formation of political connection with the government.

(4)The strength of political connection capital structure

Establishment of the political connection can bring multiple benefits to the enterprises. One of the most important benefits is to access to bank loans. In China, more and more private entrepreneurs actively participate in politics, many of whom become deputies or CPPCC members at all levels (Li Shenglan, 2006).

Johnson & Mitton(2003), Kwahja & Mian(2005), Fraser, Zhang & Derashid(2006), Charumilind, Kali & Wiwattanakantang(2006), Claessens, Feijen & Laeven(2007)studied the influence of political connection on the bank loans about Malaysia, Pakistan, China, Thailand and Brazil respectively and found that in emerging markets, political connection help enterprises to obtain bank loans.

The strength of political connection is an important criterion to measure the political relevance and the past literature mostly limited their study on the phenomenon of political connection whether it is associated. Very few people further distinction on the strength of association for. This paper argues that it is not enough to study the connection only to explain the relationship between the institutional environment and the role of alternative political connection and political connection to the consequences associated with the financing. Enterprises which have different strength of Political connection are different in the financing effectiveness with the use of political connection and are different in levels of obtaining credit, thus affecting the company's capital structure. Therefore, we propose the fourth hypothesis of this paper:

H4: Private enterprises which have political connection and the stronger strength of political connection are easier to obtain more bank credit.

2.2 Sample screening and data sources

In this paper, we chose the private companies as a research source of data is because the state company itself is government enterprise, therefore, the problem is government-controlled study but not the study of the political connection. As for the cost of government control of disorder and tyranny are not included in this paper. Because private companies are better able to explain the financing consequences of political connection, while it is not easy to obtain data from small and medium private companies, so this paper uses data from listed private enterprises.

2.3 Model and variable definition

(1) To test hypothesis 1, hypothesis 2 and hypothesis 3, we construct the following multiple linear regression model to analyze the influence of institutional environment on the strength of the political connection, the regression equation to be tested is set:

$$PC = \alpha + \beta_1 IE + \beta_2 \chi + \beta_3 Ind + \beta_4 Year + \varepsilon \quad (1)$$

In which, α is the intercept, $\beta_1 - \beta_4$ is the coefficient, ε is the residuals.

In equation (1), ①PC(Political Connection)is explanatory variable, expression of political connection. This selection of two indicators to define the political connection of enterprise: a, the percentage of political connection director in the board (PCrate) b, the strength of the political connection in the board (CPCB).

②IE(Institutional Environment)is explanatory variable, the characteristic of the system environmental of regional. This paper selects the intellectual property rights protection index (IndexIPR), government intervention index (IndexGov) and financial market index (IndexFin) from the "China market index" compiled by Fan Gang, Zhu Hengpeng and Wang Xiaolu (2009) to measure the environment of the system.

③X is the vector characterized by a number of corporate control variables. We consider the impact of corporate debt

financing has the following characteristic variables: fixed assets (Tangible), profitability (EBIT), firm size (Size) and growth opportunities (Growth).

(2) To test hypothesis 2, we construct the following multiple linear regression model to analyze the impact on capital structure by the strength of the political connection, the regression equation to be tested is set:

$$CS = \alpha + \beta_1 PC + \beta_2 \chi + \beta_3 Ind + \beta_4 Year + \varepsilon \quad (2)$$

In equation (2), CS (Capital Structure) is explanatory variable, expression of the capital structure of private enterprises. In the paper, capital structure is defined as the "Bank Credit Debt / Assets" (with formula), so the study excluded the impact of short-term borrowings and because long-term loans includes guaranteed loans, mortgage and credit loans, while collateral and secured loans themselves have little effect on corporate political connection. Credit loans are more sensitive affected by political connection.

3. Empirical results

3.1 Descriptive analysis

(1) Descriptive statistics

Descriptive results showed that 46% of the enterprises possess political connection, the number of directors with political connection is about 8% of the total number of board, 5% of enterprises have strong political connection. The average age of chairmen was 50 years old, male chairmen of the sample enterprises accounted for the majority, about 95%. China's level of protection of property rights in all regions, the extent of government intervention and the level of financial development are indeed showing a greater difference, the average of the level of property rights protection is 18.92, the mean of government intervention index is 9.15, the average of degree of development of financial markets index is 9.87. Average Fixed assets accounts for 28.26% of total assets, the average ratio of EBIT on total assets is 4.29%, the average size of enterprises is 21 and the average growth rate of enterprises is 19.32%. The average ratio of business credit loans on total assets is 7.26%. The following table is a description of the full sample results:

Table 3-1. Descriptive statistics of main variables

	N	Min	Max	Mean	Std.Dev.
CPC	8530	1		.4576	.4999
PCrate	8530		.5556	.0776	.0793
CPCB	8530	1		.0530	.2170
Age	85338	66		50.024313	7.654
Sex	8530	1		0.9516	0.4579
IndexIPR	8531.1800	40.4700	18.9228	12.1739	
IndexGov	853.5000	12.7000	9.1570	3.0949	
IndexFin	8535.4700	12.0100	9.8731	1.5947	
Tangible	853.0014	.6918		.2826	.15384
EBIT	853-.8585	.1844		.0428	.0902
Size	85319.2042	24.2884	20.9724	8.8546	
Growth	853-.6983	2.9964		.1932	.4248
CS	853.0002	.3743		.0726	.0532

(2) Pearson correlation test

Table 3-2 lists the results of relevant variables to the Pearson correlation test, CPC and IndexIPR, IndexFin, PCrate and IndexIPR, IndexFin are negative and significant correlation on the 1% level (bilateral), this is consistency with hypothesis 1 and 3 as expected, which indicates that the level of protection of property rights of China's different regions (IndexIPR) and financial development (IndexFin) are negative to the political connection and the strength of political connection. CPC, PCrate, CPCB and CS are positive and significant correlation on the 1% level (bilateral), which is fully consistent with hypothesis 4 as expected, shows that the political connection influences on the capital structure (CS), and has positive correlation.

3.2 The analysis of test results of multiple linear regression model

(1) Institutional environment and political connection inspection

For testing hypothesis 1-3, we use OLS regression analysis. In order to avoid possible heteroscedasticity problem, the regression analysis of this paper uses White (1980) heteroscedasticity correction. In this paper, we test the impact of institutional environment on the political connection from three aspects of the CPC, PCrate, CPCB. The following table shows the regression results of different factors of the institutional environment affecting the political connection. From the table we find, IndexIPR and IndexFin have significant influence on corporate political connection (CPC, PCrate, CPCB), namely the worse of the level of protection of private listed property companies, the more backward of financial development, the easier the corporate to form political connection with the government, meanwhile, the greater proportion of the board of directors with political connection the corporate have and the stronger strength of political association. But IndexGov has little effect on the political connection, in other words, the degree of government intervention is not significant relevant to the political connection. Through the above regression analysis, we prove the hypothesis 1 and hypothesis 3 are correct. As control variables, the larger the scale, the greater the likelihood of the political connection, the greater the strength of its political relevance. Similarly, the higher the level of corporate profits, the stronger the economic strength, solvency is stronger and corporate is more likely to favor the government and easier to access to political connection

(2) The test of relations between political connection and capital structure

The following table is the test results of the impact of political connection on capital structure. From the table we find that corporate with the political background (CPC), the ratio of director of corporate political background (PCrate) and whether a company has a strong political background (CPCB) of the firm have different effects on capital structure, in which CPC and CPCB are even more significant and are significantly correlated at 10% level, PCrate is significantly correlated at the 5% level, that is, corporate with political connection has high credit debt level and the stronger of the strength of political connection, the higher the level of corporate debt. This is consistent with previous findings, namely political connection is conducive to private enterprises to obtain bank loans and access to a higher amount of bank loans. This proves hypothesis 4, in other words, to the same conditions of other business, private enterprises with political connection and the stronger of the strength of political connection have high debt ratios. As control variables, Tangible, EBIT, Size, Growth and capital structure are positively correlated, that is, the better operating results, the larger the size, the large the fixed assets and the higher the growth rate of enterprises have high debt levels. As industry characteristics, the mature industrial of stable market and high-tech companies are more likely to increase the proportion of debt. As business development cycle, mature companies have high debt ratio.

4. Conclusions and Implications

This paper makes a combination of institutional environment, political connection and the capital structure of private enterprises to analyze the intrinsic link between the three. We chose China's Shanghai and Shenzhen Stock Exchange of private companies in 1998-2007 as research samples, define the institutional environment by the level of IPR protection, the degree of government intervention and the level of financial markets which also are used to analyze the impact on corporate political connection; determine the corporate political connection by whether the chairman of these companies have the political background, the proportion of the directors of enterprises with political background and enterprises have strong political background. In addition, the paper determines its impact on corporate capital structure through descriptive statistics, Pearson correlation test and OLS regression analysis. Empirical results show that: the level of protection of private property where listed companies locate and financial development is significantly negatively correlated with the political connection and the strength of political connection, suggesting that the worse the level of protection of property rights, the more backward of the finance development, enterprises are easier to form political connection with the government. However, the impact of the extent of government intervention on political connection is not significant. Additionally, as for the research on the relationship between political connection and the capital structure, chairman with the political background, the higher the proportion of directors and the stronger the political background, enterprises are more easily to obtain bank credit, which is reflected from the results of enterprises financing --the capital structure.

The results of this study mean: firstly, in the case of China's market system not perfect, the lower the level of protection of property rights index and financial development index, private enterprises have the higher level of political connection; Secondly, these enterprises improve their level of bank credit and optimize their capital structure through establishing political connection, showing that political connection has a positive and effective role in promoting the development of enterprises. But we also have to see its defects, first of all, enterprises wishing to obtain bank loans through the political connection should increase the capital investment related to the political connection, thereby

enhancing the enterprise's cost of capital, raising the level of debt which will increase the company's financial risk. In addition, the company seeking too much internal political connection will inevitably lead to government "rent-seeking" behavior. The major damage of "rent-seeking" is production operators have no motivation to improve economic efficiency, easily lead to a lot of the economic resources spending on the search of rent activities, corruption and sectarian activities will increase the transaction costs in the economy, which is an important source lead to many failure of government interference.

Therefore, strengthen the corporate property rights protection, strengthen government supervision, and promote the development of financial market are also important for the growth of private enterprises and the development of national economic.

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Table 3-1 Variable definition

Variables	Abbreviated	Definition
Chairman of political connection	CPC	Dummy variables, chairman of political connection is 1, 0 otherwise
The proportion of politically connected directors	PCrate	The number of directors of political connection / board size
The Board of strong political connection	CPCB	Dummy variables, when the chairman is of political connection and the board number is greater than 2 to 1, otherwise 0
The age of chairman	Age	The age of chairman
The gender of Chairman	Sex	If the gender of chairman is male, take 1; otherwise 0
Intellectual property rights protection index	IndexIPR	The greater the index, the higher the level of intellectual property protection
Government intervention index	IndexGov	The greater the index, the less government intervention
Financial market index	IndexFin	The greater the index, the higher level of financial marketization
Fixed assets	Tangible	Net value of fixed assets/total assets
Profitability	EBIT	EBIT / total assets
Firm size	Size	Natural logarithm of total assets
Growth opportunities	Growth	(the main business income of the current year minus the main business income before) / the main business income before
Capital Structure	CS	Credit loans / total assets
Industry	Ind	In the industry takes 1, otherwise 0
Year	Year	In 1998 as the base year, set nine year dummies

Table 3-2 Pearson correlation test

	CPC	PCrate	CPCB	IndexIPR	IndexGov	IndexFin	Tangible	EBIT	Growth	Size	CS
CPC	1										
PCrate	.703**	1									
CPCB	.246**	.616**	1								
IndexIPR	-.232**	-.130*	-.077	1							
IndexGov	-.091	-.048	-.027	.856**	1						
IndexFin	-.323**	-.235**	-.085	.834**	.729**	1					
Tangible	.062	.141*	.252**	-.035	-.070	-.003	1				
EBIT	-.090	-.318**	-.193**	.074	.042	.028	-.058	1			
Growth	-.027	-.083	-.066	.051	-.008	-.005	-.109	.115	1		
Size	.049	.046	-.008	-.002	-.065	.017	-.059	.072	.006	1	
CS	.429**	.823**	.774**	.035	.050	.039	.212**	-.353**	-.093	.039	1

Note: ** indicate that it is significantly correlated at the 0.01 level (bilateral); * indicate that it is significantly correlated at the 0.05 level (bilateral)

Table 3-3 the empirical test results of hypothesis 1-3

	CPC	PCrate	CPCB
IndexIPR	-.244***(-2.052)	.056**(.431)	-.113*(-.810)
IndexGov	.430(4.487)	.295(2.811)	.180(1.608)
IndexFin	-.460***(-5.152)	-.497***(-5.080)	-.120*(-1.143)
Tangible	-.012(-.243)	.140(2.578)	.253(4.358)
EBIT	.081(1.539)	-.313***(-5.763)	-.176***(-3.034)
Size	.056***(1.118)	.101**(.852)	.035*(.603)
Growth	.017(.350)	-.036(-.652)	-.012(-.209)
Ind	Yes	Yes	Yes
Year	Yes	Yes	Yes
Cases	853	853	853
F	54.232	52.342	51.223
Adj-R ²	0.305	0.256	0.307

Note: *** indicate that it is significantly correlated at the 0.1 level, ** indicate that it is significantly correlated at the 0.05 level, * indicate that it is significantly correlated at the 0.01 level.

Table 3-4 the empirical test results of hypothesis 4

	CS
CPC	-1.402***(-.500)
PCrate	.635*(.373)
CPCB	3.272***(.462)
Tangible	.611(.362)
EBIT	.323**(.244)
Size	.034**(.178)
Growth	.036***(.164)
Ind	Yes
Year	Yes
Cases	853
F	50.798
Adj-R ²	0.298

Note: *** indicate that it is significantly correlated at the 0.1 level, ** indicate that it is significantly correlated at the 0.05 level, * indicate that it is significantly correlated at the 0.01 level.