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RESEARCH ARTICLE

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The relationship between political resources and diversification of private enterprises: An empirical study of the top 500 private enterprises in China

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Abstract This paper argues that the political resources owned by Chinese private enterprises affect their diversification strategy under the context of China's transitional economy. Based on the sample of top 500 private enterprises in 2004 in China, we find the following empirical evidence: First, political resources owned by private enterprises are positively and significantly related to their degree of diversification. Second, the possibility for private enterprises to diversify their business by entering industries under government regulation is positively related to their political resources. Third, the possibility of related diversification for private enterprise is negatively related to its political resources.

Keywords private enterprise, political resources, diversification, government regulation

摘要 在中国经济转轨背景下,民营企业拥有的政治资源通过影响民营企业的多元 化策略而影响民营企业的成长。以全国工商联颁布的民营企业 500 强(2004)为样 本,在控制其他影响因素的情况下,发现了支持以上论断的经验证据:第一,民营 企业拥有的政治资源与民营企业的多元化程度之间存在显著正相关关系;第二,民 营企业进入政府规制行业进行多元化的可能性与民营企业拥有的政治资源正相关; 第三,民营企业进行相关多元化的可能性与民营企业拥有的政治资源负相关。

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关键词 民营企业,政治资源,多元化投资,政府管制

1 Introduction

Business environment consists of both market and non-market elements. The latter is mainly composed of enterprise-government relations. Just like enterprises need to adopt suitable market strategies to adapt to uncertain market environment and build competitiveness, strategic management experts believe that an enterprise's political strategies are equally important as market strategies, or even more important under certain circumstances (Zhang and Zhang, 2005). As political systems vary in different countries, enterprises in different countries may adopt quite different political strategies and behaviors. For instance, under the representative democracy of the U.S., enterprises form interest groups to implement political strategies by political donation and lobby to obtain favorable public policies. In Indonesia or Malaysia, however, enterprises implement their political strategies by trying to build certain political connections with key political figures (Faccio, 2006).

Researchers interested in the impact of enterprises' political strategies and behaviors on performance usually focus on the following two questions: Will an enterprise's political connections significantly affect its enterprise value? If the answer is yes, how do political connections influence enterprise value? Faccio (2006) studied 20 202 enterprises in 47 countries and found that political connections influencing enterprise value is a common phenomenon. Her study shows that when the controlling shareholder or top managers of a certain enterprise makes his/her way to senior government positions, the enterprise's value will increase significantly. Johnson and Mitton's (2003) studied the performance of politically-connected enterprises in Malaysia during 1997–1998 Southeast Asia financial crisis and drew similar conclusions. Fishman (2002) found, based on his study about Suharto-related firms in Indonesia, that connection with key political figures is a key determinant of enterprise value for Indonesian enterprises. For example, during Suharto's time, his health situation could direct influence the value of those enterprises connected to him.

As for the mechanism by which political connections affect enterprise value, a large amount of research has shown that it is done through various ways. For instance, Faccio, Masulis and McConnell (2006) argued that firms have closer connections with government have greater chances to obtain bailout in financial difficulties. Faccio (2006) found that in compassion with those enterprises with little political connections, politically-connected enterprises tend to have higher assets liabilities ratio, higher market power, and lower tax rate, showing that

good political connections improve enterprise value by gaining government credit aid, favorable tax rate and raising market entry barriers. Though it is generally believed that enterprise political strategies and behavior affect enterprise development, this influence varies in different countries (Faccio, 2006).

Under China's special economic transition conditions, how do political strategies affect business development has drawn wide attention from scholars both home and abroad. Some researchers have explored how Chinese enterprises seek and cultivate favorable external political environment by implementing suitable political strategies from the perspective of strategic management (Wei, Tian and Liu, 2004; Wei, 2006).

In comparison with state-owned enterprises, government-enterprises relationships have greater impact on the development of private-owned enterprises. At a time of economic transition, in addition to traditional entrepreneur capabilities, enterprisers' "political competence" (mainly refers to the capability to handle enterprise-government relationships) is also vital to the development of their enterprises (Wang and Shi, 2005). However, although these researchers emphasize the importance of political connections to private enterprises, they did not explore deeper the specific mechanism by which political connections influences enterprise development. From the perspective of the influence of private enterprises' political resources on their diversification, we attempt to reveal the above mechanism. We assume that a private enterprise's political resources affect its degree of diversification and choice of diversification strategies.

Takeing the top 500 Chinese private enterprises in 2004 ranked by the All-China Federation of Industry & Commerce (ACFIC) as sample, we use the political identities of private entrepreneurs (such as deputy to the National People's Congress (NPC) at all levels or members of Political Consultative Conferences (PCC) at various levels) to designate the political resources owned by these enterprises and empirically explore these resources' influence on diversification. Our results show that, keep other influencing factors under control, first, political resources owned by private enterprises are positively and significantly related to their degree of diversification; second, the possibility for private enterprises to diversify by entering industries under government regulation is positively related to their political resources; third, the possibility of unrelated diversification for private enterprise is negatively related to the political resources owned by these enterprises.

The contributions of this article are as follows: First, we reveal the influence mechanism of political resources owned by private enterprises on an enterprise's degree of diversification and choice of diversification strategies under transitional context. Second, since most of the founders of Chinese private enterprises came from the grassroots, their political strategies and behaviors may be great different from that of state-owned enterprise leaders. However, there has been a limited amount of Chinese indigenous study on private enterprises' political strategies and behaviors.¹ This study will help to fill this important research gap. Third, this study provides new data and research perspective for Chinese Business diversification study. Different from existing literature on Business diversification (Jian et al., 2005; Li and Zhu, 2005), this study explores enterprise external environment's influence on private enterprise's degree of diversification and diversification strategies from the perspective of quantitative analysis.

2 Political resources and diversification of private enterprise: Theories and hypotheses

2.1 Definition

In this article, we define the political resources owned by private enterprises as channels and accesses for these enterprises to participate in political activities, cultivate political influence and build good connections with government, which may include private entrepreneurs' political status or identity (such as elected as deputy to the NPC or PCC at various levels, etc.), become a member or leader in ACFIC or good personal relationship with government official. This definition is different from the one given from the perspective of strategic management, which regards resources used for implementation of political strategy or behaviors as political resources. For instance, Wei (2006) defined all factors that can be used to influence government decision-making process or to gain political commitment to achieve enterprises' particular goals as political resources. We, however, argue that the purpose behind implementation of certain political strategies and behaviors is for gaining political resources, which is similar to Tian et al.'s (2003) viewpoint. They argued that political performance can be measured by the amount of good connection enterprises have built with government, for these connections are the precondition of acquisition of other political resources. In addition, our definition is

¹ Zhang and Zhang's (2005) study is an important exception. Their study also focused on Chinese private enterprises. However, they analyzed private enterprises' political strategies from the perspectives of management and sociology rather than from economics. In addition, they only sampled private enterprises in Zhejiang and Jiangsu. In this study, we choose top 500 private enterprises as samples, which come literally from all over China. Thus our conclusion may have better university.

similar to the political connection proposed by Faccio (2006).

2.2 Research hypotheses

Due to different study objects and perspectives, researchers have different viewpoints on motives and benefits of enterprise diversification. By mainly focusing on American enterprises, scholars holding the viewpoints of principal-agent theory argue that top managers pursue diversification to expand enterprise size thereby increase their own compensation (Jensen, 1986), to lower their own HR investment risk (Aimhud and Lev, 1981), or to increase enterprises' dependency on their special skills (Shleifer and Vishny, 1989). As diversification is beneficial for the management's self-interest rather than maximization of share-holders', diversification decreases enterprise value. Large amount of empirical evidence has been found to support the above conclusion (Montgomery, 1994).

Other researchers highlight the effects of institutional environment on the motive and results of enterprise diversification in developing countries. These researchers argue that diversification is a result of enterprises' rational adaption to the institutional environment they are in, thus is advantageous for increasing enterprise value. For example, Khanna and Palepu (1997, 2000) found that, in comparison with the well developed market and legal systems in developed countries such as America, many developing countries lack sufficient external funds and good labor force and product market. As a result, enterprises find it difficult for them to transact their slack resources in market. Under such circumstances, enterprises have strong motive for establishing diversified business group to form internal factor market to replace inefficient external market, so as to increase enterprise value through economies of scale and scope.

Still other researchers highlight the effects of government policy on diversification. Chung (2004) argued that in countries famous for high-diversified huge enterprises such as Japan and South Korea, enterprise diversification is the direct product of national industrial policies. During the period of industrialization, governments were eager to achieve economic growth objectives. Therefore, they needed support from successful entrepreneurs. In exchange, government gave these enterprises necessary investment, favorable tax and entry permission to certain industries, thus facilitate these enterprises to realize diversification. Ghemawat and Khanna (1998) contended that enterprise diversification may correlate with government policy distortion in some developing countries based on the following two reasons: First, enterprises learn to adapt to distorted policies by diversification (e.g., enterprises under sale-revenue based taxation systems are more likely to pursue vertical integration. Second, diversified enterprises have economy of scope in government lobbying.

We argue that in a transitional economy like China, private enterprises pursue diversification mainly for the purpose of enterprise development². However, the achievement of this goal depends not only on an enterprise's internal resources, but also on its external environment. Political resources are advantageous for enterprise to overcome constraints from both inside and outside the enterprise. As Chung (2004) pointed out, the pursuit of possible government investment, favorable tax and entry permit to certain industries may lie behind enterprise diversification. That is to say, political resources owned by a private enterprise may facilitate it to gain necessary resources for diversification. In addition, we also notice that there is certain correlation between private enterprises' political resources affect the degree of diversification; on the other hand, the higher the degree of diversification and the bigger the enterprise size, the stronger a private enterprise's chance to obtain more political resources, for in China, large-sized private enterprises tend to play important roles in local economy.

In comparison with their counterparts from small/median-sized enterprises, top managers of large enterprises have higher possibility to own more political better personal resources. including build up relationship with political-performance-oriented local officials, elected as deputy to the NPC or PCC at various levels, etc. Therefore, diversification as a means to expand enterprise size is useful for private entrepreneurs to gain more political resources. In other words, diversification by itself is beneficial for an enterprise to implement it political strategies and gain political resources. In view of such an influence, we select enterprise diversification data in 2004 (the last NPC and PCC election was in 2003) so as to avoid reverse-causality relationship between diversification and political resources from influencing the accuracy of our conclusions. Therefore, we develop H1 as follows:

H1 There is a positive relationship between the political resources owned by a private enterprise and its degree of diversification.

Moreover, although private enterprises have played increasingly pivotal roles in China's economic development, they are concentrated in competitive industries. Few of them have made entries into monopolized industries (Wang, Shi and Li, 2005). As a result, intensive competition and limited development space in the most of the industries private enterprises are currently promoting

² The vast majority of Chinese private enterprises are managed by owners themselves. Thus the so-called principal-agent problem is not as serious as enterprises in countries with separated ownership and management. Under such circumstances, we believe private entrepreneurs choose to pursue diversification to maximize their own interests rather than the interests of the management.

them to enter into new industries for new opportunities. However, as ownership discrimination and government regulation still exist in some industries, to get permission from government becomes a priority for some private enterprises. As the more political resources a private enterprise has, the more influential its political power, the closer its relationship with government, the higher the possibility to obtain administrative license for entering certain industries.³ Hu's (2006) analysis of case of Zhenjiang Wanxiang Group supports this viewpoint to a certain extent. Lu Guangqiu, founder of Wanxiang Group enjoys great political influence in China. He was deputy to the Thirteenth and Fourteenth National Party Congress, the Ninth NPC, and a member of the presidium of the Tenth NPC. Therefore, Wanxiang Group was given license to the strictly regulated finance industry, including setting up finance company, investment and insurance company, and securities company. We thus develop the second hypothesis:

H2 The political resources owned by private enterprises are positively related to their possibility of entering government regulated industries.

Diversification is generally divided into related and unrelated ones. The resource-based theory points out that organization-specific resource (including entrepreneur capability and distribution channels, etc) are heterogeneous and untransferable, thus forming the foundation of an enterprise's core competitiveness. By diversifying, an enterprise makes full use of its slack resources. Related diversification refers to entering into businesses which are related to the old business. Related diversification is based on an enterprise's core resources. Thus it can increase the enterprise's value by economies of scale and scope (Montgomery, 1994). Rumelt (1982), Wernerfelt and Montgomery (1988) found that the performance of enterprises conducting related diversification tend to be better than enterprises pursuing unrelated diversification. As above, private enterprises have difficult access to some strictly-regulated industries, plus entering into an unfamiliar industry may bring forth loss in efficiency (Almeida and Wolfenzon, 2006). Therefore, when pursuing diversification, private enterprise are more likely to enter industries related to their old businesses in one way or another to utilize best economies of scale and scope and gain more competitiveness by sharing core organizational resources. In comparison, enterprises with more political resources have easier access to strictly regulated industries, leading to greater possibilities for them to pursue unrelated diversification. This leads to the third hypothesis:

³ This is not necessarily a result of rent-seeking, for under China's economic transition context, political resources private entrepreneur obtained (e.g., being selected as NPC or PCC deputies) are usually related to their contributions to the development of local economy. Under such circumstance, it is the optimal allocation of scarce political resources if politic-performance-oriented local governments grant political resources to these elite entrepreneurs.

H3 The possibility for private enterprises to pursue related diversification is negatively related to the political resources they own.

3 Sample and research design

3.1 Data collection

We used the top 500 private enterprises in 2004 as ranked by ACFIC as samples to empirically assess the effects of political resources on these enterprises' diversification.

The above top 500 enterprises included 16 Sino-foreign joint ventures and wholly foreign owned enterprises. Considering that these two types of enterprises were significantly different from other domestic private enterprises, we eliminated them from the final sample. Thus the number of final sample was 484. Data were obtained from ACFIC including enterprise ranking, name, province, primary businesses and prime operating revenues in 2004.

We used the political identity of private entrepreneurs (e.g., deputy to the NPC or PCC at various levels) to represent their political resources. Since ACFIC data did not include this type of information, these data were collected via internet. Specifically, we first visited these enterprises' websites (for those enterprises without websites, we used "enterprise name" plus "president or general manager" as keywords to search for relevant information) to get the names of their CEOs/presidents/general managers and time of establishment; second, we entered the names we got in the first step and "deputy to the NPC/PCC/party representative" as keywords to search online these CEOs/presidents/general managers' political identity.⁴ Both search engines Google and Baidu are used to double check the data obtained.

3.2 Variables

(1) Dependent variable. Three indices have been widely used to designate an enterprise's degree of diversification, namely number of industries, Herfindahl Index (HI) and Entropy Index (EI). The latter two are based on an enterprise's total revenue to the total revenue of the whole industry. Only the number of

⁴ In case that an enterprise has two or more than two deputies to NPC or PCC concurrently, we retain only the one with higher political status. For example, In Heilongjiang Oriental Group, its CEO Mr. Zhang and General Manager Mr. An are vice-chairman of the PCC and member of the standing committee of Heilongjiang Provincial PCC, respectively. Since Mr. Zhang's political status is much higher than Mr. An's, we conclude only Mr. Zhang in our data of political resources.

industries is used in this article due to data availability limit.

Two new diversification-related variables are added. First, is the focused diversification a related one? If a diversification involves upstream or downstream enterprises, or the newly entered business is homogeneous to certain degrees to the old industries, we regard it as related diversification, or unrelated diversification otherwise.⁵ To illustrate, if a former machinery manufacturing enterprise enters real estate industry, we consider it as unrelated diversification. However, if a former construction and installation enterprise enters real estate business, we regard it as related diversification. Second, is the industry entered regulated by government? Since the political resources private enterprises own are beneficial for overcoming industry entry barriers, we divide the diversification among private enterprises into regulated and unregulated ones. The former means that a private enterprise succeeds in entering into government regulated industries. The latter means that the industries a diversified enterprise enters are free of government regulation. In this article, we regard real estate, medicine, media, finance (including insurance, banking and securities) and mining as government regulated industries. Table 1 shows our definition of different diversification types.

Code Туре Definition Related diversification Enterprises enter upstream or downstream industries I Unrelated diversification There is no correlation among the diversified industries Π Regulated diversification Diversification in which private enterprise enter industries under government regulation Unregulated diversification Diversification in which private enterprise enter industries not under government regulation

Table 1Definition of different diversification types

(2) Independent variables. There are a variety of strategies an enterprise can adopt to gain political resources, such as direct participation, spokesman, financial stimulation, etc. (Tian, Gao and Wei, 2003). In addition, among the political resources obtained by enterprises, some are easy to observe (such the founder of an enterprise participates in the management of state affairs as a NPC or PCC deputy), others are not so obvious (such as good personal relationship with certain government officials). Out of consideration of data availability, we use observable behaviors to stand for private enterprise's political resources. Also,

⁵ The answer to whether an enterprise's diversification belongs to related one or unrelated varies with different researchers. There are no generally accepted standards for division of enterprise diversification. In this article, we judge a diversification as related one from the perspectives of product homogeneity and vertical integration.

drawing on Hu's (2006) method, we use different numbers to stand for different hierarchies of political status. The larger the number, the higher level of the political hierarchy and the more abundant the political resources. As shown in Table 2, if a founder of certain private enterprise is a NPC deputy, we take it for granted that he/she owns more political resources than another founder who is only a NPC deputy at the provincial level.

 Table 2
 Political resources owned by private enterprises

Political resources	value
NPC (or PCC) deputy at the national level	5
NPC (or PCC) deputy at the provincial level	4
NPC (or PCC) deputy at the provincial capital city level	3
NPC (or PCC) deputy at the city level	2
NPC (or PCC) deputy at the county level	1
No deputy to NPC (or PCC)	0

(3) Control variables. The effects of private enterprises' size and history on their degree of diversification and diversification strategies are controlled. We also take into consideration both an enterprise's national and provincial ranking. For example, although Harbin Black Swan Group ranked No. 407 in ACFIC's list, it is the fourth biggest private enterprise in Heilongjiang province, we thus infer that it has strong political influence locally.

3.3 Model construction

We construct the following multiple linear regression model to analyze the impact of a private enterprise's political resources on its degree of diversification (H1).

$$y_i = b_0 + b_1 \ln(sale_i) + b_2 politic_i + b_3 setup_i + b_4 rankl_i + b_5 rankl_i + e_i$$
(1)

where *y* is degree of diversification, represented by the number of industries an enterprise has primary business in; *Sale* is enterprise size, represented by the natural logarithm of an enterprise's sales revenues in 2004; *politic* is an enterprise's political resources (as shown in Table 2); *setup* is enterprise age (2006 minuses the year it was founded. For example, if an enterprise's position in 1980, then its age is 2006–1980=26); *rank1* is an enterprise's position in ACFIC's list; rank2 is the enterprise's provincial ranking.

To test H2 and H3, we construct the following Logistic regression equation:

$$p_i = E(y = 1 | sale_i, politic_i, setup_i) = \frac{1}{1 + e^{-(\beta_0 + \beta_1 * \ln(sale_i) + \beta_2 * politic_i + \beta_3 * setup_i)}}$$

Equation (2) is the natural logarithms of the above equation after algebraic transformation:

$$L_i = \ln(\frac{p_i}{1-p_i}) = \beta_0 + \beta_1 * \ln(sale_i) + \beta_2 * politic_i + \beta_3 * setup_i + \mu_i \quad (2)$$

When testing H2, dummy variable y indicates whether the diversification is regulated or not, with 1 stands for regulated diversification and 0 for unregulated diversification. Similarly, when testing H3, dummy variable y indicates whether the diversification is related or not, with 1 stands for related diversification and 0 for unrelated diversification.

4 Results

4.1 Descriptive statistics and correlation analysis

Although the 484 sampled enterprises are from 27 different provinces, autonomous regions, and municipalities directly under the central government, they have extremely uneven provincial distribution. Among them, enterprises from Zhejiang, Jiangsu and Shandong provinces amount to 178, 108 and 44, respectively, accounting for 68% of the total samples. By comparison, only 18 enterprises (3.7%) come from the last 10 provinces or cities (i.e. Guangxi, Jiangxi, Beijing, Fujian, Jilin, Shanxi, Hainan, Ningxia, Xingjian and Yunnan). The average sales revenue, political resources, and degree of diversification for these enterprises are 3.05 billion Yuan, 2.44 and 1.97, respectively.

The correlation analysis results of sampled enterprises' sales revenue, political resources and degree of diversification are shown in Table 3. The definitions of all variables are the same as above.

	Total sales	Political	Degree of	Regulated	Related
	revenues	resources	diversification	diversification	diversification
Total sales revenues	1	0.288***	0.120***	0.186***	-0.125****
Political resources		1	0.214***	0.221****	-0.199***
Degree of diversify- cation			1	0.459***	-0.631***
Regulated diversify- cation				1	-0.485***

 Table 3
 Correlation analysis of political resources and diversification

(To be continued)

					(Continued)
	Total sales	Political	Degree of	Regulated	Related
	revenues	resources	diversification	diversification	diversification
Related					1
diversify-					
cation					

Note: *** stands for significant at 1% level.

As shown in Table 3, there is a positive relationship between a private enterprise's political resources and its degree of diversification (correlation coefficient=0.214, significant at 1% level), implying that the more political resources an enterprises has, the higher its degree of diversification. Also, political resources is positively related to regulated diversification (correlation coefficient=0.214, significant at 1% level), implying that the more political resources an enterprise has, the more political resources an enterprise has, the more likely it will pursue regulated diversification. Table 3 also shows a negative relationship between political resources and related diversification (correlation coefficient = -0.1999, significant at 1% level), implying the less political resources an enterprise has, the less powerful its political influence, the more likely the enterprise will pursue related diversification. Taken together, the results of correlation analysis are consistent with H1–H3.

The above results also show that: First, enterprise size is positively related to political resources (correlation coefficient=0.288, significant at 1% level), implying that the bigger the size of a private enterprise, the higher the founder of the enterprise, the more political resources it owns. This finding is consistent with Hu's (2006) study on the relationship between the political statuses of the founders of the top 100 private enterprises in Zhejiang province and enterprise size. Second, enterprise size is related to degree of diversification (correlation coefficient=0.120, significant at 1% level), implying that the bigger the enterprise size, the bigger the number of industries it may enter. The correlation coefficients between enterprise size and regulated diversification and related diversification are 0.186 and -0.125 (both are significant at 1% level), respectively, implying that the bigger the size of an enterprise, the more likely it is to pursue regulated diversification, the less likely it is to pursue related diversification. In addition, there is a negative relationship between regulated diversification and related diversification (correlation coefficient = -0.485, significant at 1% level), showing that enterprises pursuing regulated diversification are less likely to turn to related diversification. Finally, the correlation coefficient between degree of diversification and related diversification is -0.631 (significant at 1% level), implying that the higher the degree of diversification, the weaker the possibility of related diversification.

4.2 Hypothesis testing

(1) Testing of H1. As above, for sampled enterprises, there are significant correlations between enterprise size and political resources and diversification, implying a possible mediation effect of enterprise size may have on the relationship between political resources and diversification. Morck, Wolfonzen and Yeung (2005) found that an enterprise's political influence is positively related with its economic strength: The stronger an enterprise's economic strength, the more resources it has for political activities. Hence an enterprise's political influence is positively related to its size (which to a large extent equals economic strength). While Khannah and Palepu (2000) argued that under the context of poor infrastructure market institutions, diversified enterprise group is beneficial for solving the problem of external market failure. For example, external markets such as capital or HR markets are less developed in many countries. To solve the problem, many big enterprise group set up internal capital or HR markets of their own. Based on these findings, we assume that enterprise size may act as a mediator between political resources and degree of diversification. As shown in Table 4, hold enterprise size and other variables constant, we analyze the influence of political resources on degree of diversification.

 Table 4
 Results of multiple linear regression analysis of H1

	1	2	3	4	5	6
Constant	0.511	1.738***	1.760***	2.057***	1.95***	11.641
ln (sale)	0.275^{**}					0.080^{**}
politic		0.097^{***}				0.095^{***}
setup			0.013***			0.007
rank1				0.001		0.000
rank2					0.002	0.000
Adjusted R^2	0.01	0.046	0.013	0.003	0.000	0.063
F	4.77**	23.101***	7.58***	1.27	0.212	6.981***
N	484	484	484	484	484	484

Note: ***, **, * stand for significant at 1%, 5%, 10% levels, respectively. The same in tables below.

Table 4 (volume 1–5 in the table) presents the results of single variable regression, which show that besides political resources, a private enterprise's size and age all significantly affect its degree of diversification, while the enterprise's ranking (as represented by *rank1*, *rank2*) does not affect its degree of diversification significantly. The multiple linear regression analysis results (volume 6 in table 4) shows that after keep sales revenue, enterprise age and other variables under control, the coefficient of variable *politic* equals 0.095 (significant at 1% level), showing that political resources is still significantly and

positively related to degree of diversification even after we control the influences from enterprise size, age, and ranking. Thus H1 is supported.

(2) Testing of H2. As assumed in H2, considering that many industries in China are still under government regulation, private enterprises with abundant political resources, powerful political influence and better relationship with government have greater opportunities to gain access to regulated industries. Thus we construct Model (2) to test H2. Testing results are shown in Table 5. Since only 295 private enterprises out of the total 484 engaged in diversification, the number of sampled enterprises for testing H2 is only 295 (the same as below for testing of H3).

As shown in Table 5, enterprise size (represented by the variable *sale*) and political resources (represented by the variable *politic*) are determinants of diversification. Also, the coefficient of variable *politic* is 0.311 (significant at 1% level), indicating that the more political resources an enterprise has, the more likely it is to pursue regulated diversification. These results are supportive of H2.

Table 5 Results of Logistic regression analysis of H2

Variable	Coefficient	Standard deviation	Significance		
Constant	-65.229*	34.264	0.057		
ln (sale)	0.609	0.362	0.139		
politic	0.245***	0.085	0.004		
setup	0.031*	0.014	0.074		
Cox & Snell R^2 =0.068, Nagelkerke R^2 =0.103, N=295					

(3) Testing of H3. H3 assumes that private enterprises with less political resources are more likely to pursue related diversification, while enterprises with abundant political resources have easier access to government regulated industries. Since these industries tend to have little to do with their former primary businesses, enterprises with a lot of political resources are more likely to conduct unrelated diversification. Thus political resources are negatively related to related diversification. We use Model (2) to test H3.

As shown in Table 6, out of the three independent variables, only *politic* has significant influence on dependent variable (correlation coefficient = -0.201, significant at 1% level), indicating the more political resources an enterprise has, the less likely it is to pursue related diversification, hence H3 is supported.

 Table 6
 Results of Logistic regression analysis of H3

		-		
Variable	Coefficient	Standard deviation	Significance	
Constant	3.933**	1.725	0.023	
ln (sale)	-0.504	0.329	0.125	
politic	-0.201***	0.060	0.001	
setup	-0.010	0.012	0.381	
Cox & Snell R^2 =0.053, Nagelkerke R^2 =0.071, N=295				

4.3 Robustness Analysis of conclusions

Although the 484 sampled enterprises come from 27 different provinces, autonomous regions, and municipalities directly under the central government, they have extremely uneven regional distribution. Among them, enterprises from Zhejiang, Jiangsu and Shandong provinces amount to 178, 108 and 44, respectively, accounting for 68% of the total samples. Will the sample's unbalance regional distribution influence negatively the accuracy of our conclusions? In other words, are there any differences between the top three provinces and other regions when it comes to the impact of an enterprise's political resources on its diversification?

To answer the above question, we first divide the 484 sampled enterprises into two sub-groups, name Subsample 1(consisting of 330 enterprises from Zhejiang, Jiangsu and Shandong provinces) and Subsample 2 (the rest 154 enterprises from other regions). We then use Model (1) and (2) to separately analyze H1, H2 and H3. Table 7 demonstrates the analysis results of Model (1) on H1. Table 8 demonstrates the analysis results of Model (2) on H2 and H3.

Table 7 shows that the coefficients of variable *politic* Subsample 1 and 2 are 0.062 (significant at 5% level) and 0.155 (significant at 1% level), respectively. These results are consistent with our assumption, showing that political resources are positively related to degree of diversification, regardless of regional differences. However, the differences in variable *politic*'s coefficients (0.062 versus 0.155) and degree of significance (5.55 versus 7.053) show that political resources have greater influences on degree of diversification in less developed regions than in developed regions.

	Subsample 1	Subsample 2
Constant	1.125	1.412
ln (sale)	0.126	0.031
politic	0.062**	0.155****
setup	0.005	0.009
Adjusted R^2	0.052	0.118
<i>F</i> (significance of equation)	5.550****	7.053****

Table 7Results of sub-sample analysis of H1

Table 8 shows that the coefficient signs of variable *politic* remain constant, irrespective of subsample 1 or 2, showing that H2 and H3 are still valid even if we divide private enterprises into two subsamples.

	H2		H	13
	Subsample 1	Subsample 2	Subsample 1	Subsample 2
Constant	-3.504**	-8.583***	4.327*	3.269*
ln (sale)	0.329	1.063*	-0.617	-0.299
politic	0.311***	0.324**	-0.208***	-0.231***
setup	-0.022	0.047	-0.003	-0.022
Nagelkerke R ²	0.082	0.175	0.075	0.078

Table 8 Results of sub-sample analysis of H2 and H3

The above robustness test are also supportive of H1–H3, implying that no matter in provinces with highly developed private enterprises (such as Zhejiang, Shandong and Jiangsu), or in provinces with less developed private enterprises, political resources exert more or less the same impact on diversification.

5 Conclusions

By taking the top 500 Chinese private enterprises in 2004 as samples and using private entrepreneurs' political identities as an indicator of their political resources, this paper investigates the relationship between private enterprises' political resources and their diversification. Findings include: First, there is a positive and significant relationship between a private enterprise's political resources to its degree of diversification. Second, the more political resources a private enterprise has, the more likely it is to enter government regulated industries to realize diversification. Third, there is a negative relationship between an enterprise's political resources and its pursuing of related diversification. This paper shows that in the context of China's transitional period, enterprises' political resources affect their economic behaviors through the following mechanism: the political resources owned by private enterprises influence the development of these enterprises by adjusting their motives for diversification and choice of diversification strategies.

References

- Chung K (2004). Business groups in Japan and Korea. International Journal of Political Economy, 34(3): 67–98
- Faccio M (2006). Politically connected firms. American Economic Review, 96(1): 369-386
- Faccio M, McConnell J, Masulis R (2006). Political connection and corporate bailouts. Journal of Finance, 61(6): 2597–2635
- Ghemawat P, Khanna T (1998). The nature of diversified business groups: A research design and two case studies. Journal of Industrial Economics, 46(1): 35–61

- Johnson S, Mitton T (2003). Cronyism and capital controls: Evidence from Malaysia. Journal of Financial Economics, 67: 351–382
- Kali R(2003). Business groups, the financial market and modernization. Economics of Transition, 11(4): 671–696
- Khanna T, Palepu K (1997). Why focused strategies may be wrong for emerging markets. Harvard Business Review, 75(4): 41–51
- Khanna T, Palepu K (2000). Is group affiliation profitable in emerging market? An analysis of diversified Indian business groups. The Journal of Finance, 55: 867–891
- Khanna T, Palepu K (2000). The future of business groups in emerging markets: Long-run evidence from Chile. Academy of Management Journal, 43(3): 268–285
- Morck R D, Wolfenzon D, Yeung B (2005). Corporate governance, economic entrenchment, and growth. Journal of Economic Literature, 43: 657–722
- Montgomery C (1994). Corporate diversification. Journal of Economic Perspectives, 8(3): 163–178
- Rumelt R (1982). Diversification strategy and profitability. Strategic Management Journal, (3): 359–369
- Shleifer A, Vishny R(1989). Management entrenchment: The case of manager-specific investments. Journal of Financial Economic, 25: 123–139
- Whited T (2001). Is it inefficient investment that causes the diversification discount? Journal of Finance, 56: 1667–1691
- 胡旭阳 (Hu Xuyang) (2006). 民营企业家的政治身份与民营企业的融资便利 (Political identification of Chinese private entrepreneurs and the financing facility of Chinese private enterprises—Evidence from 100 largest enterprises of ZheJiang Province). 管理世界, (5): 107–113,141
- 李善民,朱滔 (Li Shanmin, Zhu Tao) (2005). 转轨经济环境下的企业多元化分析框架 (The research paradigm of corporate diversification under the context of transition economy). 学术研究, (5): 49–55
- 汪伟,史晋川 (Wang Wei, Shi Jinchuan) (2005). 进入壁垒与民营企业的成长——吉利集团案例 研究 (Entrance barrier and the development of Chinese private enterprise—A case study of JiLi Group). 管理世界, (7): 132–140
- 卫武,田志龙,刘晶 (Wei Wu, Tian Zhilong, Liu Jing) (2004). 我国企业经营活动中的政治关联 性研究 (Corporate political connection in China). 中国工业经济, (4): 67–75
- 卫武 (Wei Wu) (2006). 中国环境下企业政治资源、政治策略和政治绩效及其关系研究 (Corporate political resource, political strategy and political performance and their relationship in China). 管理世界, (2): 95–109
- 张建君, 张志学 (Zhang Jianjun, Zhang Zhixue) (2005). 中国民营企业家的政治战略 (Political strategies of Chinese private entrepreneurs). 管理世界, (7): 94–105