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Political connections and corporate diversification in emerging economies: Evidence from China

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Political connections and corporate diversification in emerging economies: Evidence from China

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Abstract Drawing upon the resource-based view, this study examines how political connections affect corporate diversification in an emerging economy. Data from a sample of 1,280 Chinese public firms over 2002–2005 show a strong positive relationship between political connections and corporate diversification. We also find that the positive relationship between political connections and corporate diversification is moderated by the level of state ownership in firms and the level of regional institutional development. Theoretical and managerial implications are discussed.

Keywords Corporate diversification · Resource-based view · Political connections · Emerging economy

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For an individual firm, whether it is a single line business or widely diversified, the critical task is to use its available resources to the greatest end they can support.

Margaret A. Peteraf (1993: 189)

Corporate diversification is a topic that has received significant attention in strategic management. Despite a wealth of research, the determinants of corporate diversification are far from clear (Hoskisson & Hitt, 1990; Peng, Lee, & Wang, 2005; Wan, Hoskisson, Short, & Yiu, 2010). Over the years, some scholars have followed the general economics assumption of relative market perfection, and thus have viewed corporate diversification as suboptimal and largely driven by senior managers' pursuit of self-interests (Hoskisson & Hitt, 1990; Wan et al., 2010). Recent studies, however, have argued that the assumption of relative market perfection may not be realistic. These studies were carried out under the assumption that the market is imperfect, and claimed that corporate diversification can be either seen as driven by high exchange hazard in the market or by excess company resources that are costly to release through market transactions (Markides & Williamson, 1996; Teece, 1982).

In particular, excess managerial resources have been emphasized by the proponents of the resource-based view (RBV) as one of the key antecedents of corporate diversification (Farjoun, 1994; Kor & Leblebici, 2005; Mahoney & Pandian, 1992; Penrose, 1959). The term "managerial resources" refers to the knowledge, skills, experience, and external ties associated with top managers (Barney, 1991; Li & Zhang, 2007). When managerial resources are unexploited or underexploited, it will be very difficult for a company to trade these resources in external market transactions. As a result, these excess managerial resources, which are typically not tightly restricted to a single product market, will encourage those who possess them to diversify into other lines of business (Guillen, 2000; Peng, et al., 2005; Wan 2005).

Previous studies in this area are primarily limited to companies in Western developed economies with relatively advanced institutions. Yet little is known about which managerial resources are specifically important—and how these resources are related to corporate diversification—in emerging economies where institutions are underdeveloped. While prior studies have demonstrated the importance of managerial political connections in emerging economies (Li, Poppo, & Zhou, 2008; Peng & Luo, 2000; Sheng, Zhou, & Li, 2011; Xin & Pearce, 1996), the major focus of this line of research has been their effects on firm performance rather than on corporate diversification. This narrow focus limits understanding of how political connections are related to firm growth, and is a significant research gap in the literature. Because the value of political connections is not tightly restricted to any specific industries, companies possessing these connections may choose to diversify across industries rather than become specialists in one industry (Guillen, 2000; Peng et al., 2005).

More importantly, the link between political connections and corporate diversification is not universal but, rather, could be context specific. Prior research notes that emerging economies represent an institutional context characterized by (1) the coexistence of state-owned enterprises (SOEs) and non-state-owned enterprises (non-SOEs) (Li & Zhang, 2007) and (2) subnational regional differences in the

level of institutional development (Chan, Makino, & Isobe, 2010). These institutional characteristics impact the effectiveness of political connections in leveraging and exploiting other types of resources. Thus, the institutional characteristics of emerging economies can influence the roles of political connections in driving corporate diversification. So far, however, little theoretical or empirical work has addressed this issue.

In this study, we address the indicated gaps in the literature by examining the role of managers' political connections in companies in China. Specifically, we will investigate two related research questions: (1) how political connections are related to corporate diversification in emerging economies, and (2) how institutional contexts (i.e., level of state ownership in firms and level of regional institutional development) moderate the link between political connections and corporate diversification. Using the RBV (Barney, 1991; Penrose, 1959), we argue that managers' political connections will have a positive relationship with corporate diversification, as these connections are generic resources which are valuable across industries. In addition, based upon a strategic contingency model, we propose that managers' political connections will have a stronger relationship with corporate diversification when the institutional support is weak than when it is strong.

Our study will have significant theoretical and practical importance. Theoretically, our study can provide evidence on how institutional contexts influence the role of managerial resources in firm growth, and thus will contribute to knowledge of the boundaries of the well-established RBV (Priem & Butler, 2001). Practically, findings of this study will provide a better understanding of how companies can leverage managerial political connections in order to enter new industries in an emerging economy. This paper is organized as follows: first, we develop our theory and hypotheses, which is followed by the methods to test the hypotheses. Then, we present the results of hypothesis testing and discuss implications of the findings.

Theory and hypotheses

Political connections and corporate diversification

Following Penrose's (1959) view of the firm as a collection of productive resources, more recent authors suggest that company excess resources tend to encourage the firm to diversify in order to exploit the value of such resources. When there are unused productive resources, a company can choose either to release these resources through market mechanisms or to diversify into other industries by capitalizing on these resources (Farjoun, 1994; Montgomery & Wernerfelt, 1988; Teece, 1982). Market imperfections, however, make the transfer of excess resources costly. Internal diversification may be the preferred alternative.

Market imperfection may arise for both physical and managerial resources. While physical resources include the physical technology, plant, equipment, geographic location, and access to raw materials, managerial resources refer to training, experience, intelligence, and outside connections of individual managers in a firm. In circumstances where the physical resources are indivisible and there is a thin market for the excess physical resources, bilateral monopoly situations can arise, in which

buyers may attempt to extract the quasi-rents associated with the physical resources (Teece, 1982). Transfer of managerial resources can also confront an important class of market imperfection problems. These can include recognition, disclosure, and team organization problems in the labor market (Farjoun, 1994; Teece, 1982). Whereas the buyers might fail to recognize the value of managerial resources because the sellers suppress information in order to protect proprietary information, the sellers may find it difficult to disclose value to buyers in a convincing way because the buyers are wary of opportunistic representations by the sellers. In addition, managerial resources often have a team organization character, and it may be difficult to transfer a team of top managers in the labor market.

Though both physical and managerial resources may facilitate diversification, managerial resources would be the more useful in supporting diversification, because of their special qualities (Farjoun, 1994; Hoskisson & Hitt, 1990; Kor & Leblebici, 2005; Mahoney & Pandian, 1992). First, the managerial resource is typically embedded in a team or organizational context, so that it has a tacit dimension (Polanyi, 1967). The result of this embedded relationship is that the value of managerial resources may be different for one firm than it is for others. Second, managerial resources often are not tightly restricted to a single product market and the multiplicity of uses supported by such resources as functional experiences and outside connections create potential for expansion (Chang, 1996).

Managerial political connections represent a unique type of managerial resource in emerging economies (Li et al., 2008; Peng & Luo, 2000; Sheng et al., 2011; Wan et al., 2010). Particularly in those economies where the formal institutional framework has not been well developed, political connections play a more important role in facilitating economic exchange (Fan, Huang, Morck, & Yeung, 2009; Tsang, 1998). Because the government still holds the power to allocate strategic factor resources, to approve projects, and to interfere in business operations, managerial political connections become a useful way to solicit favors with government authorities (Tsang, 1998). These favors could include considerations that provide for smooth running of routine business operations, information about relevant government policies, and the receipt of valuable resources and administrative approvals (Peng et al., 2005). Accordingly, a series of empirical studies found that managerial political connections lead to better firm performance in emerging economies (Li & Zhang, 2007; Nee, 1992; Peng & Luo, 2000).

As with other managerial resources, managerial political connections are not always entirely specialized to the particular products and services which the companies are currently producing. Instead, political connections lie upstream from the end product. These connections represent a class of generalizable resources which might well find a variety of final product applications (Peng et al., 2005; Wan, 2005). Companies with political connections could leverage these connections to secure licenses, financing, and technology, which are valuable inputs for a large number of product markets (Li & Zhang, 2007; Li, Zhou, & Shao, 2009; Peng et al., 2005).

Another characteristic of managerial political connections is that they are in excess supply after entering into a new industry. Once a company has leveraged its political connections to obtain the licenses, financing, and technology necessary for industry entry, these political connections will become idle resources (Guillen,

2000). Political connections can still be exploited for the smooth running of current businesses, however, as they can prevent government interference in business operations. Notwithstanding, these connections are largely underexploited. Companies can make use of these resources to obtain more valuable resources, which can in turn be applied to other business lines.

In addition, political connections are difficult to trade because of market imperfections. Specifically, imperfections in the form of recognition, disclosure, and of team organization in the labor market, will make the transfer of political connections costly (Farjoun, 1994; Teece, 1982). This is particularly the case when considering the underdeveloped labor market of emerging economies, where there are relatively few executive search companies to facilitate transfer of managerial resources. Without the coordination and mediation of executive search firms, top managers, especially those with political connections, are reluctant to move between companies (Khurana, 2002).

Hence, in emerging economies, political connections have multiple uses and are difficult to transfer through market mechanisms. Because these connections would remain idle if a company did not prepare to enter a new industry, they encourage companies to diversify across industries (Guillen, 2000: 365). Therefore, we propose the following hypothesis:

Hypothesis 1 Political connections will be positively related to corporate diversification in an emerging economy.

A contingency perspective

No organization can be properly understood apart from its institutional contexts (Scott 2008). It should be noted that managerial political connections are embedded in institutional contexts and may not have the same effect on corporate diversification for all companies. A hallmark of emerging economies is the coexistence of SOEs and non-SOEs, and previous studies on companies in emerging economies have emphasized the distinctions of SOEs and non-SOEs in terms of their behaviors and performance (Li & Zhang, 2007; Peng & Luo, 2000). In addition, at the subnational level of emerging economies, significant difference in the extent of institutional development represents an important institutional characteristic (Chan et al., 2010).

As noted, managerial political connections in an emerging economy are important to firm growth because they can substitute for insufficiency of formal institutions. We would expect, therefore, that political connections would be more important when the institutional support for firm growth is weak than when it is strong. Institutional support in the form of state ownership, or from regional institutional development, may nullify the need for political connections as part of business practices, because companies could obtain the necessary resources either through government support or through market mechanisms (Li & Zhang, 2007; Sheng et al., 2011; Wan, 2005). In situations of strong institutional support, political connections would become less important to firm growth and companies can rely on other resources such as functional experience to achieve company expansion. Based upon these concepts, we examine how ownership and regional institutional development can moderate the relationship between managerial political connections and corporate diversification.

Ownership Setting up a definitive contrast with non-SOEs, the governmental or governmental agency foundation of SOEs establishes a number of functional differentials. Government leaders have incentives to assist local and central SOEs because SOE success can enhance the government leaders' political status and increase their chances for promotion. In addition, because government leaders might rely on SOEs to achieve goals such as reducing the regional unemployment rate and fiscal deficit, these leaders tend to give preferential treatment to SOEs (Fan, Wong, & Zhang, 2007). Consequently, SOEs in emerging economies enjoy far more government support than non-SOEs, not only in input factors and product markets, but also in the capital market. A clear example of the differing level of support in China is that, when a company applies for listing, the government allows SOEs to report the 3 years of pre-IPO earnings based on estimations, while non-SOEs are required to report 3 years of actual earnings. The strong support provided by government agencies means that SOEs can secure valuable strategic resources with far less emphasis on political connections. Though SOE managers may still maintain close relationships with government officials in order to advance their own careers, the political connections are of less value for firm growth (Li & Zhang, 2007).

In contrast, because the non-SOEs have very limited access to government-controlled resources, political connections become crucial in order to solicit favors from government leaders. These firms can leverage their connections with government officials to secure the licenses, financing, and technology that are otherwise unavailable for non-SOEs. Not surprisingly, in studies of Chinese companies, Li and Zhang (2007) and Peng and Luo (2000) found that political connections are of more value for non-SOEs than they are for SOEs. The political connections that are more important for non-SOE firm growth are also more likely to be the driving force of corporate diversification in these enterprises. Therefore, we propose the following hypothesis:

Hypothesis 2 The positive relationship between political connections and corporate diversification will be stronger in non-SOEs than in SOEs in an emerging economy.

Regional institutional development In emerging economies, large subnational regional differences exist in the level of institutional development. The responsibility for regional economic development in emerging economies has been transferred gradually from the central government to the local governments (Chan et al., 2010; Meyer & Nguyen, 2005). Such a gradual shift, in turn, results in varying degrees of change within the country. Regional authorities vary in how they use their newly gained discretion to develop institutional infrastructures, creating significant heterogeneity in the level of institutional development across regions (Qian & Weingast, 1997).

Companies from regions with developed institutional infrastructures would find political connections less important in firm growth, because efficient external markets may

facilitate the securing of strategic resources in the open market (Wan, 2005). Probably the most relevant of all institutions, as they pertain to the value of political connections in firm growth, are free market mechanisms and intermediate institutions (Gao, Murray, Kotabe, & Lu, 2010; Li, Meng, & Zhang, 2006; Wan & Hoskisson, 2003).

Free market mechanisms affect how political connections are related to firm growth. They capture the extent to which the prices of resources and products are determined by the market (Fan & Wang, 2006), and it should be noted that the development of free market mechanisms varies across regions within a country (Chan et al., 2010). In regions where there are underdeveloped free market mechanisms, regional governments control the supply and demand of the most important resources. As a result, in such regions the prices of both raw materials and end products are, to a large extent, influenced by local governments. Given that the governments of these regions control valuable strategic resources, companies with political connections could obtain such resources by leveraging their connections. In contrast, because the governments in regions with developed free market mechanisms are willing to take a less important role in determining prices than that of the market, companies might rely less on political connections to secure the resources necessary for firm growth. Instead, they might well buy a variety of resources in the open market.

In addition to free market mechanisms, intermediate institutions also play a role in influencing the value of political connections in firm growth. Intermediate institutions include market intermediaries such as investment banks, auditors, solicitors, consultants, brokers, traders, dealers, and executive search companies (Chan, Isobe, & Makino, 2008). These market intermediaries credibly communicate information between traction parties, and serve to resolve transaction costs in the product, capital, and financial markets (Khanna & Rivkin, 2001).

Political connections are especially important in firm growth in regions with undeveloped intermediate institutions. In regions with underdeveloped market intermediaries, or where market intermediaries are rare, companies would find it costly to operate through market mechanisms (Khanna & Palepu, 1997). Under these conditions, companies possessing political connections enjoy great advantage over their competitors, as they can secure necessary inputs by leveraging their relationships with government officials. In contrast, companies in regions with developed market intermediaries are more likely to acquire necessary inputs through the help of market intermediaries. Their political connections might lose their exclusive value for securing resources and thus will be less important for firm growth (Sheng et al., 2011).

Therefore, given that political connections are more important in firm growth for companies in regions with underdeveloped free market mechanisms and intermediate institutions, we would expect that these connections are more likely to be the driving forces of corporate diversification in these regions.

Hypothesis 3a The positive relationship between political connections and corporate diversification will be stronger when the development level of free market mechanisms is low than when it is high.

Hypothesis 3b The positive relationship between political connections and corporate diversification will be stronger when the development level of intermediate institutions is low than when it is high.

Methods

The data for this study was collected from Wind Information (Wind Info), the leading financial data and financial software provider in Mainland China. The sample included the A-share companies listed on the Shanghai and Shenzhen Stock Exchanges from 2002 to 2005. We obtained a sample of 4,513 firm-year observations representing 1,280 firms for which we have information on political connections and corporate diversification. Across all four years, more than half of the companies were from the manufacturing sector, about one-fourth of the companies were from the service and trade sectors, and a comparatively small number of companies were from the natural resources, public utilities, and finance and real estate sectors.

Dependent variable

Following previous diversification research (e.g., Jensen & Zajac, 2004; Rumelt, 1982; Wierseman & Bantel, 1992), we measured diversification using the entropy measure of diversification (Jacquemin & Berry, 1979; Palepu, 1985), and the specialization ratio (Rumelt, 1982), respectively.

Jacquemin and Berry (1979) developed an entropy diversification measure based on Standard Industrial Classification codes (SIC codes). The China Securities Regulatory Commission (CSRC) provides an industrial classification standard, but it differs from the SIC codes established by the US government, in the sense that the CSRC code provide two levels of industries for some businesses and four levels for others. We thus chose the Global Industry Classification Standard (GICS) provided by Wind Info to obtain the entropy measures. The GICS was developed by Morgan Stanley Capital International (MSCI), providing a classification standard similar to that of the SIC. The entropy diversification measure captures both the extent of diversification across a firm's activities, and the related versus unrelated elements of diversification (Palepu, 1985). It is calculated as follows:

$$\sum P_j \ln(1/P_j)$$

where P_j is defined as the share of sales in segment j and $\ln(1/P_j)$ is the weight for each segment j. For each company, line-of-business data at the four-, three-, and two-digit GICS code levels were used to obtain the entropy measure.

A company's specialization ratio is the fraction of revenues accounted for by its largest single four-digit business segment (Rumelt, 1982). Note that the company specialization ratio is negatively related to the entropy measure, because the higher a company's specialization ratio is, the more the revenues that come from a single business sector and, thus, the lower the level of diversification.

Independent variables

Following the methods used in previous research on the political connections of China's listed firms (Fan et al., 2007; Li et al., 2006; Li, Meng, Wang, & Zhou, 2008, Wang & Qian, 2010), we used the CEO's affiliation with the government as an indicator of the firm's *political connections*. This variable is set to 1 if the CEO was an official of the central government, the local government, an industry bureau, or the military; otherwise it is set to 0. The CEO profile information was retrieved from the Wind Info, which provides detailed information about the experience of most top managers. Accordingly, those CEOs who are former government officials were coded as politically connected. Two of this study's authors manually coded the data, determining the interrater reliability to be .82.

State ownership was measured by the percentage of shares owned by the central and local governments.

For the 31 regions of China, two regional-level variables served as proxy for the level of *free market mechanisms* and the level of *intermediate institutions*, which were obtained from the National Economic Research Institute (NERI) Indices of Marketization of China's provinces. These indices were developed by Fan and Wang (2006) under the sponsorship of both NERI and its parent organization, the China Reform Foundation. Given the wide use of the NERI indices in business studies (e.g., Gao et al., 2010), they enabled us to use the indices to reflect the level of institutional development across different regions.

Specifically, the index of free market mechanisms was captured by three items. These items indicate the extent to which the prices of retail products, raw materials, and primary products are determined by market mechanisms rather than by government. The final indicator of a free market mechanism is a summated index of the three items. The index of intermediate institutions was captured by two items measuring the development of market intermediaries. These two indices were computed by NERI, using data mainly from the statistical yearbooks, reports from the administration of industry and commerce, and surveys conducted by government agencies. A score for each province was provided, based on objective measures and then normalized to a value between 0 and 10 to measure institutional development relative to other provinces. The NERI indices are available for the years 2001 to 2005.

Control variables

This study also includes several controls. We measured *Top Management Team (TMT) size* as the number of persons comprising the TMT. Power is an important factor in studies of strategy making, and because the CEO was typically the single most powerful member of the TMT, we controlled for *CEO power*. CEO power was measured by CEO duality, an indicator variable set to 1 if the same individual is both CEO and chairperson of the board, and set to 0 otherwise.

We also controlled for *firm size*, which has been shown to be associated with diversification levels (Jensen & Zajac, 2004). Firm size was measured as the natural logarithm of total company sales. In addition, because the availability of internal funds or unused debt capacity favors higher levels of diversification (Chatterjee &

Wernerfelt, 1991), we define internal funds in terms of company *leverage,* which is the ratio of debt to assets, and the debt capacity in terms of *current ratio*, which is the ratio of current assets to current liabilities. We also controlled for *firm performance*, which has been shown to be associated with diversification (Jensen & Zajac, 2004; Wierseman & Bantel, 1992). Firm performance is defined and measured as return on assets (ROA). As a further consideration, older companies in emerging economies are more likely to maintain an inherited strategy (Yiu, Bruton, & Lu, 2005). Thus, firm age was included as a control variable.

Following previous research, we also controlled for the *largest shareholder's ownership*, because the more shares that are controlled by the largest shareholder, the more influence that shareholder could have on company strategy. In addition, *ownership change* might also affect the company diversification because the new owners might bring new resources to the companies. Hence, we controlled ownership change. Finally, the analyses also controlled for industry and year effects by including *industry* and *year dummies*.

Analysis

From the several options we had available for the panel data analysis, we choose the generalized estimating equations (GEE) (Liang & Zenger, 1986) for several reasons. First, this method generalizes quasi-likelihood estimation to the panel data context, and provides a better way to deal with the problems of pooling multiple observations for each firm over time. Second, the GEE method allows taking different correlation structures into account by specifying a working correlation matrix.

To implement the GEE models, we used an identity link function, connecting company diversification to specified covariates, and then used the exchangeable correlation matrix for the within-firm variation. We applied a sandwich-type robust estimator of the standard errors in our analysis.

To strengthen the assumptions of causality, we employed a 1-year lagged design. All independent variables and control variables are lagged 1 year.

Results

Table 1 presents the descriptive statistics and a correlation matrix for the study variables. The magnitude of correlations between independent variables was in the range of low to medium, suggesting that multicollinearity could be a problem in the testing of hypotheses. To address this issue, we inspected variance inflation factors (VIFs) in a parallel set of models. The VIFs were well within the limit of 10, indicating that mulicollinearity did not have an undue influence on the estimates.

We report the regression results of using an entropy measure of corporate diversification and specialization ratio as the dependent variables in Tables 2 and 3 (respectively). Table 4 provides a summary of hypothesis testing. Model 1 in Tables 2 and 3 is the baseline model, which includes only control variables. Hypothesis 1 predicted that political connections will have a positive relationship with corporate diversification. Model 2 in Tables 2 and 3 shows the result of testing this hypothesis by adding the variable of CEO political connections to the baseline

Table 1 Descriptive statistics and correlations.

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Corporate diversification	.519	.503														
2. Specification ratio	.820	.198	−.895													
3. TMT size	6.411	2.540	.004	−.012												
4. CEO duality	.137	.344	.045	−.030	.082											
5. Sales (ln)	20.259	1.303	−.100	.109	.071	−.034										
6. Leverage	.431	.170	−.178	.141	−.064	−.062	.241									
7. Current ratio	1.734	2.125	−.061	.041	−.080	.003	−.120	.010								
8. ROA (%)	.009	.207	−.013	.014	−.071	−.020	.199	.087	.079							
9. Firm age	8.267	4.898	.090	−.061	−.002	.004	−.036	−.298	−.089	−.081						
10. Largest shareholder's ownership (%)	.494	.428	.028	−.019	.065	.002	−.086	−.109	−.248	−.613	.141					
11. Ownership change	1.347	.476	−.019	.019	.012	.027	.081	−.065	.083	.086	−.044	−.089				
12. State ownership	.358	.260	−.143	.124	−.013	−.077	.218	.574	−.004	.056	−.214	−.067	−.115			
13. Free market mechanisms	7.653	2.047	.046	−.038	−.052	−.019	.107	−.052	−.004	−.010	.133	.040	.036	.314		
14. Intermediate institutions	3.430	3.129	.091	−.063	−.018	−.038	.164	.063	−.001	.004	.006	.036	.006	−.005	−.014	
15. Political connections	.175	.380	.077	−.066	−.022	.107	−.038	−.034	.008	.004	−.011	−.017	−.003	−.014	.006	−.005

n=4,513 observations; correlations greater than .03 or less than −.03 are significant at the .05 level (two-tailed test).

Table 2 GEE regression of entropy measure at $t + 1$ on predictors at t[abc].

Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Intercept	1.393**	1.373**	1.344**	1.357**	1.364**	.572**
	(.201)	(.202)	(.203)	(.203)	(.201)	(.075)
1. TMT size	.005+	.005+	.005+	.005+	.005+	.005+
	(.003)	(.003)	(.003)	(.003)	(.003)	(.003)
2. CEO duality	.000	−.004	−.003	−.004	−.004	−.003
	(.019)	(.019)	(.019)	(.019)	(.019)	(.019)
3. Sales (ln)	−.025**	−.025**	−.025**	−.025**	−.025**	−.025**
	(.010)	(.010)	(.010)	(.010)	(.010)	(.010)
4. Largest shareholder's ownership (%)	−.002*	−.002*	−.002*	−.002*	−.002*	−.002*
	(.001)	(.0010)	(.001)	(.001)	(.001)	(.001)
5. Current ratio	−.008**	−.008**	−.008**	−.008**	−.008**	−.008**
	(.002)	(.003)	(.003)	(.002)	(.003)	(.002)
6. ROA (%)	.031	.030	.028	.030	.029	.028
	(.026)	(.026)	(.026)	(.026)	(.026)	(.026)
7. Firm age	.007**	.007**	.007**	.007**	.007**	.007**
	(.0020)	(.002)	(.002)	(.002)	(.002)	(.002)
8. Leverage	.017	.018	.017	.018	.017	.017
	(.020)	(.020)	(.020)	(.020)	(.020)	(.020)
9. Ownership Change	−.023*	−.023*	−.023*	−.023*	−.023*	−.023*
	(.010)	(.010)	(.011)	(.010)	(.010)	(.010)
10. State ownership	.002	−.001	.015	.002	−.002	.015
	(.045)	(.045)	(.045)	(.044)	(.045)	(.045)
11. Product market development	−.000	−.000	.001	.002	−.000	.002
	(.005)	(.005)	(.005)	(.005)	(.005)	(.005)
12. Intermediary development	.011**	.011**	.013**	.011**	.014**	.013**
	(.004)	(.004)	(.004)	(.004)	(.004)	(.004)
13. Political connections		.062**	.196**	.154*	.113**	.196*
		(.023)	(.087)	(.079)	(.033)	(.087)
14. Political connections × State ownership			−.093			−.093
			(.077)			(.077)
15. Political connections × Free market mechanisms				−.012		−.008
				(.010)		(.010)
16. Political connections × Intermediate institutions					−.016*	−.130*
					(.006)	(.006)
Wald chi-square	478.01**	498.52**	503.71**	500.61**	502.87**	503.71**

[a] n = 4,513 observations; 1,280 firms are covered. Cell entries are standardized coefficient estimates.
[b] + $p < .10$; * $p < .05$; ** $p < .01$; two-tailed tests.

[c] All six models include 20 industry dummy variables and three year dummy variables, not reported here.

Table 3 GEE regression of specialization ratio at $t + 1$ on predictors at t[abc].

Variables	Model 1	Model 2	Model 5	Model 3	Model 4	Model 6
Intercept	.537**	.547**	.564**	.556**	.550**	.564**
	(.075)	(.075)	(.075)	(.075)	(.075)	(.075)
1. TMT size	−.002	−.002	−.002	−.002	−.002	−.002
	(.001)	(.001)	(.001)	(.001)	(.001)	(.001)
2. CEO duality	.018*	.020**	.019**	.020**	.002**	.019**
	(.001)	(.007)	(.007)	(.001)	(.001)	(.007)
3. Sales (ln)	.009*	.009*	.009*	.009*	.009*	.009*
	(.004)	(.004)	(.004)	(.004)	(.004)	(.004)
4. Largest shareholder's ownership (%)	.001*	.001*	.001*	.001	.001*	.001*
	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)
5. Current ratio	.001	.002	.002	.002	.002	.002
	(.002)	.002	(.002)	(.002)	(.002)	(.002)
6. ROA (%)	−.008	−.008	−.007	−.008	−.007	−.007
	(.011)	(.011)	(.011)	(.011)	(.011)	(.011)
7. Firm age	−.002+	−.002*	−.002*	−.002*	−.002*	−.002*
	(.001)	(.001)	(.001)	(.001)	(.001)	(.001)
8. Leverage	−.009	−.009	−.009	−.009	−.009	−.009
	(.010)	(.009)	(.010)	(.010)	(.009)	(.009)
9. Ownership Change	.011*	.010*	.010	.010*	.010*	.010*
	(.005)	(.005)	(.005)	(.005)	(.005)	(.005)
10. State ownership	.017	.019	.008	.017	.019	.008
	(.019)	(.019)	(.019)	(.018)	(.018)	(.019)
11. Product market development	−.001	−.001	−.002	−.002	−.001	−.002
	(.001)	(.002)	(.002)	(.002)	(.002)	(.002)
12. Intermediary development	−.003+	−.003+	−.003*	−.003+	−.004*	−.003*
	(.002)	(.002)	(.002)	(.002)	(.002)	(.002)
13. Political connections		−.030**	−.101**	−.076**	−.049**	−.101**
		(.009)	(.035)	(.031)	(.014)	(.035)
14. Political connections × State ownership			.061*			.061*
			(.031)			(.002)
15. Political connections × Free market mechanisms				.006+		.005
				(.004)		(.004)
16. Political connections × Intermediate institutions					.006*	.005+
					(.002)	(.002)
Wald chi-square	470.44**	464.14**	528.22**	516.87**	475.89**	528.22**

[a] n = 4,513 observations; 1,280 firms are covered. Cell entries are standardized coefficient estimates.
[b] + $p < .10$; * $p < .05$; ** $p < .01$; two-tailed tests.
[c] All six models include 20 industry dummy variables and three year dummy variables, not reported here.

Table 4 Summary of hypothesis testing.

	H1	H2	H3a	H3b
Table 2 (Dependent Variable: entropy measure)	Supported	Not supported	Not supported	Supported
Table 3 (Dependent Variable: specialization ratio)	Supported	Supported	Supported	Supported

model. As expected, CEO political connections have a positive impact on entropy measure, and have a negative impact on the specialization ratio. The effects were statistically significant ($p < .01$). Hypothesis 1 was thus supported.

Model 3 in Tables 2 and 3 shows the results of testing Hypothesis 2, which predicted that the positive influence of political connections on company diversification will be stronger for companies that have less state ownership. The coefficient estimates of the interactions between CEO political connections and state ownership were not significant when the dependent variable was entropy measure. In contrast, this coefficient was significant when the dependent variable was specialization ratio. In line with our prediction, as the level of state ownership increases, the negative influence of political connections on specialization ratio decreases. Hypothesis 2 was thus partially supported. Figure 1 illustrates the moderating effect of state ownership on the relationship between political connections and firm specialization ratio.

Model 4 in Tables 2 and 3 presents the results of testing Hypothesis 3a, which predicted that the positive effect of political connections on corporate diversification is stronger in regions with underdeveloped free market mechanisms. As predicted, the level of free market mechanism development negatively moderates the relationship between political connections and specialization ratio ($p < .10$), but not the relationship between political connections and entropy measure of corporate diversification. Hypothesis 3a was thus partially supported. Figure 2 illustrates the moderating effect of free market mechanisms on the relationship between political connections and firm specialization ratio.

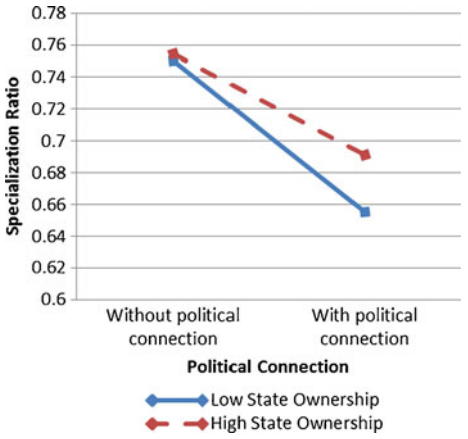

Figure 1 Interaction effect between political connections and company state ownership on specialization ratio

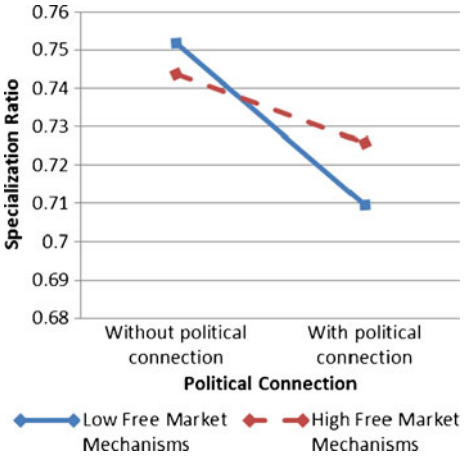

Figure 2 Interaction effect between political connections and product market development on specialization ratio

Model 5 in Tables 2 and 3 presents the results of testing Hypothesis 3b. The data strongly supported Hypothesis 3b, which predicted that the presence of CEO political connections has stronger impact on company diversification in regions with underdeveloped intermediate institutions. As predicted, as the level of intermediate institution development increases, the positive influence of the political connections on entropy measure increases and the negative influence of political connections on specialization ratio decreases. Hypothesis 3b was supported. Figure 3 illustrates the moderating effect of intermediate institution development on the relationship between political connections and firm specialization ratio. The figure for this moderating effect on the relationship between political connections and entropy measure was very similar to that of Figure 3, and thus was not reported here.

Model 6 in Tables 2 and 3 shows the results of simultaneously testing Hypotheses 2, 3a, and 3b. Again, the results provided strong support for Hypothesis 3b and partial support for Hypotheses 2.

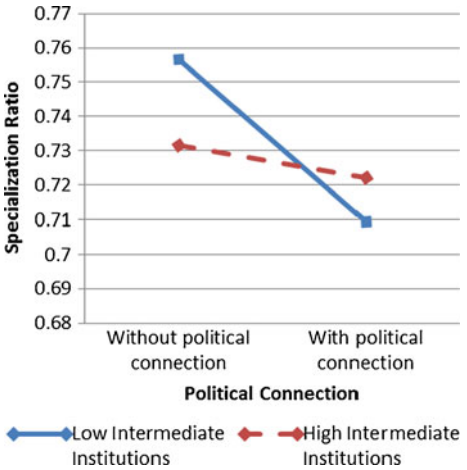

Figure 3 Interaction effect between political connections and intermediary development on specialization ratio

Discussion and conclusion

In this study, we investigated whether, and under what conditions, political connections would have an impact on the scope of a firm. Drawing on insights from the RBV, we developed a theoretical framework to theorize when and how political connections could play a role in influencing corporate diversification in emerging economies. By and large, our results from a sample of 1,280 companies in China over 2002–2005 confirmed the value of applying the RBV in linking managerial political connections and corporate diversification.

We found that managerial political connections are significantly related to corporate diversification. This evidence is consistent with previous research findings that managerial political connections are of considerable value in emerging economies (e.g., Li & Zhang, 2007; Peng & Luo, 2000). The significant positive effect of political connections on corporate diversification also provides strong support for the resource-based argument that diversification is mainly the result of excess capacity in resources.

This study also originally argued that companies with political connections are more likely to diversify in places when the institutional support is weak. Accordingly, we proposed that political connections are less important to firm growth for SOEs, and for companies from regions with developed free market mechanisms and intermediate institutions. We found that the link between political connections and specialization ratio is moderated by ownership—a finding that is consistent with Peng and Luo (2000), who found that political connections are especially valuable for non-SOEs.

Following the same line, this study also provided evidence that political connections are more important in regions with underdeveloped free market mechanisms and intermediate institutions. These findings are consistent with Wan's (2005) prediction that political connections are likely to become increasingly less effective as institutions continue to mature in emerging economies. Indeed, more efficient external markets could reduce the costs of formal transactions and provide companies with resources necessary for growth.

It should be noted that the moderating effects of state ownership and free market mechanisms are not significant when the dependent variable is an entropy measure of corporate diversification. This may be attributed to the fact that entropy measure includes both related and unrelated elements of diversification. Because the value of political connections can be more salient for unrelated diversifications (Wan et al., 2010), the inclusion of related elements in entropy measures makes the link between political connections and corporate diversification less evident.

Theoretical and managerial implications

The present study makes several important contributions to the literature. First, while the role of managerial resources in the growth of the firm has long been highlighted in the RBV, most previous studies have focused on business expertise in Western developed economies. Relative to their counterparts in developed economies, companies in emerging economies face more resource constraints and market failures in the factor markets. As a result, political connections are more important

than business expertise in the facilitation of firm growth. Our study contributes to this line of research by empirically demonstrating how and under what conditions managerial political connections are linked with firm growth in the form of corporate diversification.

Second, we also bring together the RBV and institutional economics to identity institutional contexts as contingency factors in affecting the relationship between political connections and corporate diversification. Our focus on China's emerging economy provided us with a unique opportunity to investigate the contingent value of political connections. The significant moderating effects of state ownership and the level of regional institutional development conforms to the notion that effective exploitation of a firm's resources is conditioned by contextual factors (Li & Zhang, 2007; Priem & Butler, 2001; Wan et al., 2010). These findings thus contribute to an understanding of the boundaries of the RBV.

Additionally, findings of this study have important managerial implications. Top managers in emerging economies have long believed that political connections provide the lubricant to achieve corporate goals, and they have applied significant effort to cultivating political connections in order to achieve firm growth. Our findings, however, suggest that the value of political connections might be contingent on institutional characteristics. When developed institutional infrastructures exist, practitioners might well collect necessary resources in the open markets. Thus, top managers in emerging economies need to pay special attention to the institutional contexts in which they are doing businesses, rather than simply believing that political connections are essential to access to any entity.

Limitations and future research

Several limitations of this study should be acknowledged. First, our sample was limited to Chinese companies listed on the stock exchange, and the nature of the sample may limit the generalizability of the findings to other contexts. This study limited the sample to public companies because information on these firms is publicly available. Whether our results can be generalized to private companies or organizations in non-profit sectors remains a question. This provides an opportunity for future research to examine the effect of political connections on corporate diversification in different organizational contexts.

Second, the time period employed in the present study is relatively short. Data on political connections and institutional development were collected for the period from 2001 to 2004. One important reason for this was data availability. The institutional environments, however, are subject to change over time. Emerging economies have experienced significant institutional transitions during the past decade (Peng, 2003). The development of free market mechanisms and intermediate institutions would lead to lower needs for political connections. Future research should examine how the importance of political connections in firm growth may be changing in the evolving institutional environment.

Last, there are limitations in our measurement of the independent variable designated as political connections. Following previous studies, this study focused on CEO affiliation with government as the measurement of political connections. Though government affiliation is certainly an important indicator of political

connections, company managers might establish their relationships with government officials through other ways. For example, company managers can bribe local authorities in order to maintain a close relationship. Future research could examine other indicators of political connections and see whether these indicators of political connections are related to corporate diversification.

Conclusion

We build on the RBV in order to investigate the relationship between political connections and corporate diversification in emerging economies. This study argues that political connections will, in general, drive companies to diversify into different industries, and that the link between political connections and corporate diversification depends on the institutional support companies received from their institutional contexts. The findings of this study contribute to an understanding of the role of political connections in the firm growth in emerging economies.

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