



MORE IS LESS? THE CURVILINEAR EFFECTS OF POLITICAL TIES ON CORPORATE INNOVATION PERFORMANCE

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Received 7 October 2018; accepted 1 June 2019

Abstract. Previous research has explored the impact of political ties on corporate innovation performance, yet with controversial results. This study proposes that political ties has a curvilinear impact on innovation performance, and the resulting curvilinear relationship is moderated by absorptive capacity and external environment. We conduct examination based on a survey among Chinese manufacturing firms, which demonstrates an inverted U-shape relationship between political ties and corporate innovation performance. This inverted U-shape relationship is moderated by the absorptive capacity, which means the positive effect of political ties on corporate innovation performance is strong when the absorptive capacity of a firm is high. Furthermore, political ties, absorptive capacity and external environment (i.e. dynamism, munificence, and complexity) have a three-way interactive effect on corporate innovation, which means firms with strong political ties exhibit the highest innovation performance when their absorptive capacity and external environmental condition (dynamism or munificence or complexity) stand at high level simultaneously. The research findings provide a comprehensive understanding for firms, especially for those with different characteristics and under different external environments, to exploit political ties to facilitate corporate innovation performance.

Keywords: absorptive capacity, external environment, innovation performance, political ties.

JEL Classification: D01, D22, O12, O31.

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Introduction

Innovation has been identified as a significant strategy and practice contributing to corporate competitiveness and survival (Amabile, Conti, Coon, Lazenby, & Herron, 1996; Kehoe & Tzabbar, 2015; Lin, Zeng, Liu, & Li, 2018; Lungeanu, Stern, & Zajac, 2016; Zhao, Cacciolatti, Lee, & Song, 2015; Yu, Zheng, Wang, Dai, & Yan, 2018; Zhou & Hoever, 2014). Operating in a comprehensive institutional and industrial environment, firms demonstrate diverse innovation performance affected by a range of factors, such as organizational structures, firm capabilities of absorbing/adopting new knowledge and adapting to institutional conditions, and external environment (Baron & Tang, 2011; Jansen, Den Bosch, & Volberda, 2006; Jiao, Koo, & Cui, 2015). The development of innovation at firm level is not limited to internal activities, but also involves a high level of interaction with the external environment (Cheung, Myers, & Mentzer, 2010; Li, Poppo, & Zhou, 2008b; Lin, Zeng, Liu, & Li, 2016; McFadyen & Cannella, 2004; Pfeffer, & Salancik, 2003; Zhou, Zhang, Sheng, Xie, & Bao, 2014).

Interaction with the external environment can help firms obtain the abundant external innovative resource they needed (Li et al., 2008b; Zhou et al. 2014). For example, firms embedded in strong ties could gain access to complex, noncodified information or special resource (Li, Poppo, & Zhou, 2010; Perry-Smith & Shalley, 2003). Political ties, which represent an important type of social ties that connect focal firms and government officials, are often emphasized as one of the key resource in previous literature (Sheng, Zhou, & Li, 2011; Shu, Page, Gao, & Jiang, 2012; Wu, 2011). Using the social network theory, many researchers argued that strong ties with government officials could enhance innovation performance, since close relationships between top managers and government officials could increase the opportunity for firms to access valuable government and public resources and information that were beneficial for corporate innovation (Acquaah, 2007). However, these previous research has not obtained consistent results on the relationship between political ties and innovation performance (Lin, Zeng, Ma, Qi, & Tam, 2014; Sheng et al., 2011). For example, Lin et al. (2014) found that political ties negatively related to green innovation performance because that highly connected political ties may lead firm to be disincentive, pressure extraction and inefficacy. Thus, whether political ties facilitate or inhibit enterprise innovation performance remains unclear. Based on the above controversial findings, Wu (2011) call on researchers to explore the complex curvilinear relationship between political ties and innovation performance. This research therefore aims to explore the curvilinear relationship between political ties and corporate innovation performance. Based on a thorough analysis of existing literature on political ties (e.g., Peng, 2003; Peng & Luo, 2000; Wu, 2011), it demonstrates that there is an inverted U-shaped relationship, between political ties and corporate innovation performance.

Recent research on social network theory has suggested that political ties might not always be advantageous – the utility of political ties may be contingent on important contextual factors (Li, Meng, Wang, & Zhou, 2008a). Therefore, to gain a deep understanding on the effectiveness of political ties, this study examines several representative internal and external contingent factors that could impact the effectiveness of political ties (Guo, Xu, & Jacobs, 2014; Li & Zhang, 2007; Peng & Luo, 2000). Review of previous research reveals a contingent

factor that may alter the value of political ties: absorptive capacity. Enterprise developed close connections with government should be easy to obtain innovation-related information and resource (Acquaah, 2007), resulting in more freedom to explore production with new technologies to respond to external changes. However, whether the enterprise can make good use of these information and resources depends on the capability of firms to recognize, assimilate, and apply the value of the information and resources received from the connection with government (Kotabe, Jiang, & Murray, 2017). Enterprises with strong absorptive capacity are more likely to take full advantage of innovation-related resource, information, and knowledge obtained from government, which could lead to the generation of new production or service. It has been indicated in existing literature that enterprises with strong absorptive capacity can recognize, assimilate, and apply different sources of information and knowledge (Lichtenthaler, 2009), and, they should be more likely to improve innovation performance when developing strong ties with government. Extending previous literature, we propose that the value brought by political ties could differ for enterprises with different levels of absorptive capacity.

Additionally, the value of political ties is likely contingent on the environmental context faced by the focal firm. Strategic and social network scholars suggested that effects of the company's capital or resources must be aligned with its external environment (Li et al., 2008b; Zhou et al., 2014). They argued that decision and outcomes of a business largely depend on the resources available to the external environment. When the external environment is of low munificence, high dynamism or high complexity, competitors will fight for the limited resources, making external resource unstable and rare (Ang, 2008). In the context of this kind of environments, it could be difficult for enterprises to construct high-quality political ties (Li et al., 2008b), recognize, assimilate, or effectively apply external resource (Zhou et al., 2014). As a result, these firms were likely to use political ties as buffers against external environmental forces and pathways to assimilate and apply environmental information more efficiently (Wu & Pangarkar, 2010). Therefore, we argue that external environmental conditions (munificence, dynamism or complexity) can have significant and contingent influence on the moderating impact of absorptive capacity on the invert U-shaped relationship between political ties and innovation performance. This research focuses on both the internal characteristic (absorptive capacity) and external environment of firms, which could have important interactive impacts on the relationship between political ties and firm innovation performance.

To address these research issues, we examine how a firm's political ties with government affect its innovation performance from the perspective of social network theory. The present study has several contributions to social ties and innovation management literature. First, most existing research paid their attention to the relatively simple linear impact of political ties on firm's outcomes, while in this study, we explore the curvilinear effect of political ties on specific innovation performance by integrating the benefits and risks of political ties. Although some previous studies highlighted the benefits of strong political ties in obtaining specific resource and information, we argue that strong political ties may hinder firm innovation efficiency. Secondly, expanding the existing literature on internal and external governance, we thoroughly examine the interaction effect between political ties and internal absorptive capacity on innovation performance. Thirdly, considering that enterprise

strategy is constrained by the surrounding environment, we consider the moderating effect of environmental factors (munificence, dynamism, and complexity) on moderating impact of absorptive capacity on the inverted U-shaped relationship between political ties and innovation performance. Through these efforts, we aim to reveal the non-linear and boundary condition in the relationship between political ties and enterprise innovation performance. Through the investigation on the relationship between political ties and corporate innovation performance and the boundary conditions influencing this relationship by using survey data from Chinese manufacturing sectors, this research will not only contribute to the theoretical understanding on political ties on corporate innovation performance, but also enrich the understanding on government-business relationships and the role of government in the process of firm innovation development in emerging and transitional economies.

1. Theoretical background and hypotheses

1.1. Role of political ties

Political ties have been defined within the scope of social ties and managerial ties, which refer to boundary-spanning activities that business-leaders conduct and their interactions with external entities (Acquaah, 2007; Guo et al., 2014). Political ties could refer to the particular activities involving government officials (Guo et al., 2014; Li & Atuahene-Gima, 2001; Peng, 2003; Peng & Luo, 2000). These activities result in close relationships with government officials, which could probably benefit firm development in multiple ways. Furtherly, political ties could also be considered when current executives hold or previously held senior positions in government organizations, or current senior government officers act as business executives as the same time (Zheng, Singh, & Mitchell, 2015). Based on previous research, Sheng et al. (2011) considered political ties as “*a firm’s informal social connections with government officials in various levels of administration, including central and local governments, and officials in regulation agencies, such as tax or stock market administrative bureau*”. Following the logic, this study defines political ties as the extent to which a firm pursue boundary-spanning activities, in order to build and maintain informal connections with government officials in various levels (Sheng et al., 2011; Xin & Pearce, 1996).

While business ties have been claimed to be beneficial for firms, with which firms can access market resources, knowledge, and technologies that are required to make improvement, connections with government officials could offer additional valuable information and rare resources which could not be gained from other connections (Kotabe, Jiang, & Murray, 2011; Zhang & Li, 2009). According to the opinion of social network (Uzzi, 1997, 1999), these political ties might bring firms with both tangible and intangible resources. For instance, in case of similar business conditions, close connection with government officers might increase the potential for firms to receive government funding and financial substitutes (Lin et al., 2014; Peng & Luo, 2000). In addition, since government policies regarding to institution construction and industrial development could largely affect firms’ business strategy, firms with close political ties might affect the direction of policy-making and profit from beneficial policies, rules and regulations (Agrawal & Knoeber, 2001; Lester & Parnell, 2008). Under

the condition with institutional and economic dynamism, political ties could be even more important than the other business ties, since government supports and policy-making could make significant impacts on industrial and economic transitions.

Previous literature claims political ties as a critical strategy for organizational development, especially in transitional economies (Acquaah, 2007; Guo et al., 2014; Peng & Luo, 2000). From social network perspective, researchers have been demonstrating the significant role of political ties in enhancing firm performance (Zheng et al., 2015). For example, close connections with local and central government officials were found positively related to organizational performance in China (Li & Zhang, 2007). In China, firms are under the condition of unstable institutional framework and insufficient political support (Guo et al., 2014; Peng & Luo, 2000), firms having close connections with government officials in relevant positions could gain more valuable resources and information, compared with their rivals without access to these resources (Acquaah, 2007; Wu, 2011; Xin & Pearce, 1996). These social network assets could act as substitutes for formal institutional support (Xin & Pearce, 1996), and help firms make appropriate decisions according to external environments.

Although it has been generally considered that political ties could benefit firm performance in multiple ways (Acquaah, 2007; Wu, 2011; Xin & Pearce, 1996), the negative effect of political ties should not be neglected. For instance, firms could suffer from unnecessary obligation and plenty of time and resource investment to maintain the relationship with governments (Boubakri, Cosset, & Saffar, 2008; Lechner, Frankenberger, & Floyd, 2010; Villena, Revilla, & Choi, 2011), and generate organizational dependence so as to restrict enterprises' openness to information and wrecking their innovation efficiency (Nahapiet & Ghoshal, 1998). Therefore, strong political ties could probably generate operational risks and may finally harm firm outcomes. Besides growing concerns on the role of political ties on firm performance, limited efforts have been made to examine the direct relationships between political ties and corporate innovation performance, which indicates the complicated relationships between political ties and firm performance.

1.2. Political ties and innovation performance

The considerable technological development taking place in recent years in global market has reflected the increasing knowledge-intensive economies and the significant role of innovation development in firms' sustainable development. Meanwhile, along with the growing collaborations of various partners in delivering innovation projects and achieving significant technological breakthroughs, the importance of knowledge-sharing has also been highlighted as a key figure of organizational development (Hendriks, 1999). The social network view of organizational development and plenty of empirical evidence have claimed that firms could benefit from external connections and additional resource (Uzzi, 1997, 1999; Wernerfelt, 1984; Dinç, 2005). While innovation is an interactive process (Fagerberg & Verspagen, 2002), instead of a linear process, firms' interaction with external partners and integration of various resources could not only provide complementary resources and information, but also be critical to the development of firm innovative capabilities and long-term development (Peng & Luo, 2000).

We argue that political ties could benefit enterprise innovation performance for two reasons. Firstly, connections with government provide enterprise access to obtain timely and high-quality information, which can improve the probability of successful new production R&D (Kotabe et al., 2017). For instance, while the government makes a huge amount of investment on innovation development, the close connections with relevant government offices would enhance the opportunities of firms to get more official substitutes and funds, compared with their rivals without close connections with government (Acquaah, 2007; Wu, 2011). Such close connections with government may reduce policy uncertainty and improve the confidence of innovation investments through increasing firms' environmental fit (Wu, 2011). Secondly, political ties could bring more resources from government for corporate innovation development (Hillman & Hitt, 1999). Firms with strong political ties are more competent in receiving more financial resources (Song & Eveland, 2015). The additional resources obtained from political ties could be used for innovation development and therefore, enhance corporate innovation performance.

However, these positive impacts of political ties may decrease and even turn into negative if connections with governmental offices are too cohesive. First, firms that are excessively embedded in political relations will bring them unnecessary responsibilities, which require extra investment of time and resources (Lechner et al., 2010; Villena et al., 2011; Zhou et al., 2014). Building and maintaining ties with government officials requires substantial financial investments and resources input, which may constrain the input of other innovative activities of the firm (Okhmatovskiy, 2010). Close connections with government officials would also increase the burden of firms to be involved in irrelevant government activities, which would also consume firm resources that could be used on research and development activities. As an example, it is found that the close connection with political resources would enhance organizational inertia and hinder green innovation by investigating the role of political ties in firm green innovation in China (Lin et al., 2014). Second, strong political ties make it easy for firms to access government resources or support, which in turn reduces the number of new product development. For example, some research has found that the more firms rely on political ties, the less managers would endeavor to improve innovation efficiency (Chen & Wu, 2011). Not only too many and deep connections with government officials would harm firm performance in long term (Li, Zhou, & Shao, 2009), increasing political ties would also ossify organizational internal routines and therefore harm corporate innovation performance (Wu, 2011). Therefore, this study proposes that political ties, to certain extent, could benefit firms with more valuable information, resources and favorable policies for innovation development, but would probably harm corporate innovation performance in case of too much unnecessary responsibilities and dependence. Hence, we propose the hypothesis on the relationship between political ties and corporate innovation performance.

H1: *There will be an inverted U-shaped relationship between **political ties** and corporate **innovation performance**.*

1.3. Contingent role of internal and external factors

1.3.1. The contingent role of absorptive capacity

Innovation is an interactive learning process, which requires firms to be actively related to external resources, and at the same time, to be capable to identify knowledge and opportunities in the market, absorb it as their own property and make appropriate strategies to finally provide competitive products in the market (Lin et al., 2016). Previous research on social network shows that political ties can provide firms more information on government innovative policy and fund support (Kotabe et al., 2017; Peng & Luo, 2000). Therefore, to a certain extent, the value of political ties depends on the ability to assimilate and utilize external information and resources (Sun, Mellahi, & Wright, 2012), manifested as absorptive capacity. It refers to the ability of acquiring, assimilating, transforming, exploiting external information, resource and knowledge (Ahuja & Lampert, 2001; Jansen, Van Den Bosch, & Volberda, 2005). Though absorptive capacity of firms has been generally recognized as a key driver of innovation performance and competitive advantage (Cohen & Levinthal, 1990), few studies operate it as contingent variable to examine its moderating effect.

While political ties could benefit corporate innovation performance by offering the firm with rare and valuable information and resources that cannot be obtained from other channels (Peng & Luo, 2000), the absorptive capacity which enables firms to better utilize the information and resources could be critical to transfer the benefits of political ties into innovation performance (Kotabe et al., 2017). In this case, with similar extent of political ties and received information and resources, firms with high absorptive capacity could be more likely to realize the value of the information and utilize the resources obtained from government to develop new product. On the other hand, firms with low absorptive capacity could probably not make the best judgement and strategies of innovative investment and therefore could not best utilize the information and resources received from political ties. Therefore, this study proposes that absorptive capacity moderates the relationship between political ties and corporate innovation performance.

H2: Absorptive capacity positively moderates the inverted U-shaped relationship between political ties and corporate innovation performance. Specifically, high levels of absorptive capacity will reduce the negative curvilinear effects of political ties, while low levels of absorptive capacity will exacerbate the negative curvilinear effects.

1.3.2. The contingent role of environmental factors

Besides absorptive capacity, which is considered as a significant internal factor that moderates the inverted U-shaped relationship between political ties and innovation performance, the present study will also examine the role of external environmental factors, which could have important impacts on the value of social networks (Li et al. 2008b; Zhou et al., 2014). Previous literature has identified three important environmental factors, including munificence, complexity and dynamism. These three factors have been identified as contingent factors of the relationship between firm strategy (e.g. building political ties) and firm outcomes relationship (McArthur & Nystrom, 1991). Respectively, environmental munificence indicates the availability of environmental resources to support the growth of firm (Aldrich,

2008; Hitt, Keats, & DeMarie, 1998), environmental complexity refers to the competitive and heterogeneous extent (Grimm, Lee, & Smith, 2005), while environmental dynamism represents the unpredictable and unstable figure of a firm's operating environment (Finkelstein & Boyd, 1998). They generally describe the complicated environment of firms, which would interact with firms' strategies and affect their performance derived from particular strategies. As proposed by McArthur and Nystrom (1991), researchers should consider all the three dimensions of external environment to figure out a complicated picture of environmental influence on firms' strategies and performance.

Role of environmental munificence

This study predicts that political ties are beneficial to innovation performance when firm's absorptive capacity and environmental munificence are high simultaneously. External environment with high-level munificence has been claimed to be able to provide more opportunities and resources to firms, (Goll & Rasheed, 2004), suggesting that firms operating in a more munificent environment could get access to more resources to execute their strategies and enhance performance (Lin et al., 2016).

It has been known that innovation requires large input and intensive interaction with external resources. In the environment with high level of munificence, firms with high absorptive capacity are not only able to assimilate and make use of information and resource provided by political ties, but also can utilize information, resource, knowledge obtained from external environment. Several studies have reported that environmental munificence could promote firm's new product development with necessary resources (e.g., Lin et al., 2016). Environment with high munificence is friend to firms, and various parties (such as suppliers, customers, and other business partners) could be involved, which not only provide resources and information like government officials, but also directly participate in the innovation process (Tan & Litsschert, 1994). In this environment, firms can obtain sufficient innovation-related resource that is necessary but different from obtained from political ties. Hence, this study argues that firms can utilize diverse information and resource obtained from political ties and environments when their absorptive capacity is high. This study predicts that firms who are closely connected with government have the highest innovation performance when their absorptive capacity and environmental munificence are both high. The following hypothesis is proposed.

H3a: There is a three-way interaction effect of political ties, absorptive capacity, and environmental munificence on corporate innovation performance. Specifically, Confronting with high level of environmental munificence, the firms who have high level of absorptive capacity, their political ties is positively related to innovation performance.

Environmental dynamism

Referring to the rate and instability of environmental change (Dess & Beard, 1984), environmental dynamism is associated with risk and unpredictability (Wang & Chen, 2010; Wang & Li, 2008). For a long time, dynamism has been regarded as the most significant environmental factor influencing enterprise resource allocation, operational capability and the use of cooperative relationships (Porter, 1985; Jansen et al., 2005). High-level dynamism could lead

to unpredictable changes in market, making enterprises in a vulnerable position (Ang, 2008). In a dynamic environment, it's more likely for firms to conduct entrepreneurial behaviors, compared with those in a stable environment (Miles, Covin, & Heeley, 2000; Jansen, Vera, & Crossan, 2009); Otherwise, they will be expelled from the market (Li et al., 2008b).

We predict that when absorptive capacity and environmental dynamism are both high, a high level of political ties are beneficial for firm innovation performance. In a dynamic environment, firms need not only high-quality information (Luo, 2003), but also the ability to use information to take proactive actions responding to the changes of external environment (Zahra, Filatotchev, & Wright, 2009). As mentioned by Tan and Litsschert (1994), firms operate in highly dynamic environment, with fast-developing technological and social changes. Political ties, which offer valuable resources, information and favorable policy (Kotabe et al., 2017; Peng & Luo, 2000), could be more important for firms under high environmental dynamism. To a certain extent, the tie can bring positive effect on firm innovation performance, but the effect is limited if these information and resources cannot be well utilized. Obtaining valuable resources that other competitors do not have, firms with strong political ties and high absorptive capacity would not only make better adjustment on innovation strategies, but also make good use of information and resource obtained from government. Therefore, we argue that firms of high-level absorptive capacity in a dynamic environment, have higher innovation performance in case of closer political ties. Therefore, we propose the following hypothesis.

H3b: *There is a three-way interaction effect of political ties, absorptive capacity, and environmental dynamism on corporate innovation performance. Specifically, confronting with high level of environmental dynamism, the firms who have high level of absorptive capacity, their political ties is positively related to innovation performance.*

Environmental complexity

Environmental complexity, differentiated from environmental munificence and dynamism, describes a third dimension of firms' external environment, which is defined as the competitiveness and heterogeneous conditions of a market. Firms operating under high environmental complexity face more competitions from rivals and severer conditions to survive and develop (McArthur & Nystrom, 1991). Similar to environmental dynamism, previous research has confirmed that the competitive environment caused by environmental complexity also have important impacts on firms resource allocation (De Noni, Ganzaroli, Orsi, & Roberta, 2013; Jansen et al., 2005), and also promote firms to behave more proactive when responding competition (Dervitsiotis, 2012). In a complex environment, if firms do not take proactive behavior, they are likely to be eliminated by the market (Zahra et al., 2009). However, the success probability of proactive strategy also depends on the access to information and resource (e.g. political ties) and the ability of utilizing such information and resources.

We predict that when absorptive capacity and environmental complexity are both high, a high level of political ties are beneficial for firm innovation performance. Similar to dynamic environment, when firms face complex environment, they need external high-quality information, resource and internal ability to utilize such resources if they want to behave proactively to adapt to the external environment (Zahra et al., 2009). Because only the firms who

make effective and proactive changes to response external environment cannot be eliminated by the market. In this case, with an urgent need for innovation, it could be easier for firms with close political ties to obtain valuable information from government connections. And firms with the presence of high absorptive capacity could be more effective to assimilate and exploit such obtained resources. By this logic, we argue that a strong business-government connected firm who confronts a complex environment and possess high-level absorptive capacity can achieve best innovation performance. Therefore, we propose the following hypothesis.

H3c: *There is a three-way interaction effect of political ties, absorptive capacity, and environmental complexity on corporate innovation performance. Specifically, confronting with high level of environmental complexity, the firms who have high level of absorptive capacity, their political ties is positively related to innovation performance.*

2. Methodology

2.1. Sample and data collection

In particular, this study investigates companies in China, which could provide a an appropriate and representative setting to examine the role of political ties on organizational innovation and contribute to the debate about the roles of government in facilitating innovation in emerging nations. Firstly, like other emerging countries, although the plan of market-oriented economy has been initiated and launched for decades, the Chinese government still has a significant impact on their domestic market development, especially on public resources allocation among different sectors (Han, Lin, Wang, Wang, & Jiang, 2019; Wu, 2011). Operating in a less mature and sophisticated market environment, Chinese firms would be strongly affected by relevant policies and regulations made by both central and local governments (Lin, Zeng, Ma, & Chen, 2015; Shi, Markóczy, & Stan, 2014). Secondly, in the transitional and emerging markets like China, institutional framework is yet not sophisticated and organized, under which condition, firms might not be able to obtain enough support from formal institutional framework and market mechanisms. Ties with external parties, especially political parties such as relevant government offices or representatives, might benefit firms with more valuable resources and information, which could not be obtained from other channels or by their rivals without political ties. Finally, in the past decades, China has made considerable achievements on innovative development. A great number of supportive policies, including a huge amount of investments, funding programs, and tax returns have been made to pursue the objective of innovation development (Cao, Simon, & Suttmeier, 2009; Liu, Simon, Sun, & Cao, 2011; Liu & Yu, 2008). The increasing investments and supports ensure the availability of relevant resources and therefore provide opportunities for Chinese firms to approach government officials to get valuable information, or receive more subsidies. Hence, the investigation on Chinese companies in the current market conditions could provide an appropriate setting to discuss the issues studied in this paper.

During this study, we collected data from top managers in 302 manufacturing enterprises at Yangtze River Delta in China. We translated the English version scale into China

version scale in back-translation proposed by (Brislin, 1970). A total of 354 questionnaires were distributed to top managers. To control the potential influence of common method bias to research findings, this study used procedural remedies recommended by (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003) that two top managers were involved for each company in the survey. One completes Part I (environment munificence, innovation performance and organizational demography) and the other completes Part II (political ties and absorptive capacity). After the questionnaires were collected, invalid questionnaires were removed and 302 valid matched questionnaires were obtained from these enterprises, the validation rate was 85.31%. The statistical characteristics of the samples are shown in Table 1. There is no response bias between responding and non-responding firms by comparing the two classical firms in size or age.

Table 1. Statistical characteristics of the samples

Characteristics	Freq.	Percent	Characteristics	Freq.	Percent
Firm Size			Industry		
1	15	4.97	Wood and furniture	14	4.64
2	33	10.93	Pharmaceuticals	26	8.61
3	175	57.95	Food	14	4.64
4	68	22.52	Petroleum and chemicals	20	6.62
5	11	3.64	Textile and garment	23	7.62
Firm Age			Paper-making and printing	24	7.95
0–10	67	22.19	Machine and equipment industry	75	24.83
11–15	129	42.72	Metals and nonmetals manufacturing	60	19.87
16–20	65	21.52	Electronic products	44	14.57
21–25	24	7.95	Others	2	0.66
>=26	17	5.63	Ownership		
			State-ownership	20	6.62
			Private-ownership	232	76.82
			Foreign-ownership	32	10.60
			Others	18	5.96

2.2. Measures

In this study, all constructs variables were measured by a 7-point scale, and calculated the average score to form an index.

Political ties. We used 4-item scale derived from (Sheng et al., 2011) to measure political ties. The four items reflect the relationship between corporate and officials at different levels of government, such as task and executive council. All items were rated from 1 (strongly disagree) to 7 (strongly agree). One sample item is “top managers at our firm have developed good connections with officials in regulatory and supporting organizations such as tax bureaus, state banks, and commercial administration bureaus”. The Cronbach’s alpha coefficients for political ties is 0.75.

Absorptive capacity. We derived a 19-item scale of absorptive capacity developed by Jansen, Van Den Bosch, and Volberda (2005). This scale composed four dimensions: acquisition (e.g. our firm has frequent interactions with corporate headquarters to acquire new knowledge), assimilation (e.g. our firm quickly recognizes the usefulness of new external knowledge to existing knowledge), transformation (our firm quickly recognizes the usefulness of new external knowledge to existing knowledge), and exploitation (e.g. our firm constantly consider how to better exploit knowledge). The respondents rated from 1 (strongly disagree) to 7 (strongly agree) according to their firm's actual realities over the last 3 years. The Cronbach's alpha coefficients for absorptive capacity is 0.96.

Environment. Following Tan and Litsschert (1994), 8-item scale was used to measure environment munificence, dynamism, and complexity. The respondents rated the extent to favorability, variability and predictability, heterogeneity and diversity of external environment from the following 8 aspects: (1) competitors; (2) customers; (3) suppliers; (4) technology; (5) regulations; (6) economic; (7) social-culture; and (8) international. The Cronbach's alpha coefficients for environmental munificence, dynamism, and complexity are 0.88, 0.88, and 0.87 respectively.

Innovation performance. We used 3-items to measure innovation performance, the three items are "The number of introducing new products," "The number of applying new patents", and "The number of developing new technology or process". The three items were proved to be reliable in previous study (Lin et al., 2016). All three items were rated from 1 ("very small") to 7 ("very large"). The Cronbach's alpha coefficients for innovation performance is 0.87.

Control variables. In order to reduce the possible impact of other variables on innovation performance, which would confound the relationship between the variables, this study controlled for firm size, age, industry and ownership. Previous studies suggested that firm size may have potential effects on corporate innovation performance (Cloodt, Hagedoorn, & Van Kranenburg, 2006; Cohen & Levin, 1989). We use one item – the number of fulltime employees compared to major competitors – to measure firm size. The study by Huerigo and Jaumandreu (2004) indicated a statistical relationship between firm age and innovation performance, this control variable obtained through self-reporting date of firm establishment by a top manager. Industry is also a potential factor affecting corporate innovation performance (Cloodt et al., 2006). We coded the industry into nine dummy variables to reduce the impact of industry on innovation performance. The study conducted by Desender et al. (2013) suggested that firm with different ownership has different innovation performance, therefore, we also control for differences between different ownership. We coded ownership into three dummy variables, including state-ownership (1 = yes, 0 = no), foreign investment (1 = yes, 0 = no), and private-ownership (1 = yes, 0 = no), while the others as the base group in the analysis.

2.3. Construct validity

We used a set of confirmatory factor analysis to test the validity of the measurements. First, the measure model composed of all six constructs was estimated. Since the model would

exceed the ration between recommended parameters and sample size (1:5) (Bentler & Chou, 1987) if the model contains all measurement items, we use the method of parceling item to estimate the structural relationships among the six constructs in this study (Landis, Beal, & Tesluk, 2000). The number of indicators is reduced to three per factor. We created item parcels for political ties, absorptive capacity and external environment (munificence, dynamism, and complexity). We combined the item based on a set of exploratory factor analysis, for each construct, the item with the highest factor loading and the lowest factor loading was averaged to create the first new indicator, the item with the second highest and lowest factor loading was averaged to create the second indicator, and so forth to create three new indicators. Table 2 shows that the baseline model has good fitting index ($\chi^2/df = 4.05$, IFI = 0.91, TLI = 0.90, CFI = 0.91, RMSEA = 0.10, SRMR = 0.07), while the factor loading of all items is statistical significant ($p < 0.001$), indicating that the four constructs have good convergent validity. To test the discriminant validity, this study tested alternative models through combining factors to examine whether some other models also perform good fit (see Table 2). Comparing to baseline model, all alternative models perform poor fitting index, indicating that the four constructs have good discriminant validity. Therefore, the six constructs have good construct validity.

2.4. Common method variance issue

In this study, we used perceptual data to measure independent, moderating and dependent variables, which may raise the issues of common method variance (CMV). However, many previous studies believed that CMV might not be as artifact as is usually assumed (e.g., Avolio, Yammarino, & Bass, 1991; Podsakoff et al., 2003; Zhang & Li, 2010). Taking a careful study of prior literature, Podsakoff et al. (2003, p. 900) argued that behavioral researchers should consider CMV and adopt approaches to control for it. Following recommendations proposed by Podsakoff et al. (2003), we reduce and examine potential influences of CMV through procedural approaches and statistical techniques. Regarding procedural approaches, as mentioned in Podsakoff et al. (2003), we collected data from two different top managers instead of one single top manager. As Podsakoff et al. (2003, p. 887) argued, collecting data of variables from different sources “makes it impossible for the mindset of the source or rater to bias the observed relationship between the predictor and criterion variable”. In addition, we assured respondents that their responses are confidential and that there are no correct or incorrect answers to each statements in our survey. These procedural approaches may reduce the assessment concerns of respondents and “make them less likely to edit their responses to be more socially desirable, lenient, acquiescent, and consistent with how they think the researcher wants them to respond” (Podsakoff et al., 2003, p. 888). In terms of statistical technology, we adopted Harman’s one-factor methods to examine potential influence of CMV (Podsakoff & Organ, 1986). Great CMV would lead to a common factor accounting for the majority of the perceptual constructs covariance. We conduct all items of the four variables to an exploratory factor analysis. The results show that the first factor accounting for only 12.81% of total variance, which suggests that CMV is not an issue in our study.

Table 2. Mean, S.D. and correlations

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. year																				
2. scale	-0.02																			
3. State-ownership	-0.25***	0.00																		
4. Private-ownership	0.19***	0.07	-0.48***																	
5. Foreign-ownership	0.04	0.03	-0.09	-0.63***																
6. indus1	-0.23***	0.07	0.19***	-0.29***	0.08															
7. indus2	0.02	0.05	-0.08	0.06	0.05	-0.07														
8. indus3	0.01	-0.14*	0.07	-0.03	-0.08	-0.05	-0.07													
9. indus4	0.07	0.05	-0.07	-0.04	0.08	-0.06	-0.08	-0.06												
10. indus5	0.04	-0.15**	-0.08	0.04	-0.10†	-0.06	-0.09	-0.06	-0.08											
11. indus6	-0.03	0.21***	0.27***	-0.36***	0.26***	-0.06	-0.09	-0.06	-0.08	-0.08										
12. indus7	0.12*	0.03	-0.15**	0.30***	-0.17***	-0.13*	-0.18***	-0.13*	-0.15**	-0.17***	-0.17***									
13. indus8	-0.14*	-0.09†	-0.13*	0.10†	0.02	-0.11†	-0.15**	-0.11†	-0.13*	-0.14*	-0.15*	-0.29***								
14. indus9	0.11†	-0.01	0.15*	-0.02	-0.02	-0.09	-0.13*	-0.09	-0.11†	-0.12*	-0.12*	-0.24***	-0.21***							
15. PT	-0.05	0.11†	0.14*	-0.14*	0.07	-0.02	0.02	-0.04	0.00	0.00	0.09	-0.16***	-0.02	0.14*	(0.75)					
16. AC	0.09	0.15*	-0.13*	0.13*	-0.04	-0.06	-0.07	0.00	-0.08	0.11†	0.05	-0.03	-0.02	0.08	0.60***	(0.96)				
17. EM	0.15*	0.14*	-0.06	0.08	-0.04	-0.04	-0.02	0.00	-0.02	0.03	-0.03	0.15*	-0.09	-0.03	0.35***	0.54***	(0.88)			
18. ED	-0.10†	0.05	0.07	-0.01	-0.09	-0.07	-0.09	0.07	0.07	0.15*	-0.04	-0.08	0.06	-0.04	0.51***	0.51***	0.49***	(0.88)		
19. EC	-0.11†	0.08	0.04	-0.04	-0.02	-0.05	-0.03	-0.08	0.08	-0.13*	0.00	0.13*	0.00	-0.01	0.27***	0.16*	0.25***	0.26***	(0.87)	
20. IP	-0.03	0.31***	0.08	0.05	-0.14*	0.08	-0.06	0.17**	-0.04	0.02	0.08	0.01	-0.14*	-0.03	0.25***	0.41***	0.47***	0.31***	0.06	(0.87)
Mean	15.18	3.09	0.07	0.77	0.11	0.05	0.09	0.05	0.07	0.08	0.08	0.25	0.20	0.15	4.84	5.30	4.40	4.84	4.44	4.24
SD	9.44	0.82	0.25	0.42	0.31	0.21	0.28	0.21	0.25	0.27	0.27	0.43	0.40	0.35	1.17	1.20	1.09	1.15	1.10	1.40

Note: † $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, PT = Politic Ties, AC = Absorptive Capacity, EM = Environmental Munificence, ED = Environmental Dynamics, EC = Environmental Complexity, IP = Innovation performance.

3. Results

The mean, standard deviance, and correlations were presented in Table 3. As shown in Table 3, political ties were positively related to innovation performance ($r = 0.25, p < 0.001$). Absorptive capacity positively correlates with innovation performance ($r = .41, p < 0.001$), and both environmental munificence and dynamism were positively related to innovation performance ($r = 0.47, p < 0.001; r = 0.31, p < 0.001$). Meanwhile, environmental complexity has no significant correlation with innovation performance ($r = 0.06, n.s.$).

Multiple regression was conducted to test our hypotheses by using Stata 12.0, and the results were presented in Table 4. To reduce the potential issue of multicollinearity, we first centralized independent variable (political ties) and moderating variables (absorptive capacity, environmental munificence, dynamism, and complexity). Then, we generated quadratic independent variable term and interactive term (Aiken, West, & Reno, 1991).

To examine the inverted-U effect of political ties on innovation performance (Hypothesis 1), we introduced the quadratic political ties term in model 1. As shown in Table 4, the square of political ties is negatively related to innovation performance ($\beta = -0.13, p < 0.05$),

Table 3. Comparison of the measurement models

Model	Factors	χ^2	<i>df</i>	χ^2/df	$\Delta\chi^2/\Delta df$	IFI	TLI	CFI	RMSEA	SRMR
Baseline model	Six factors	485.94	120	4.05	–	0.91	0.90	0.91	0.10	0.07
Model 1	Five factors: AC and IP were combined	912.90	125	7.30	85.38***	0.80	0.74	0.80	0.15	0.11
Model 2	Five factors: PT and AC were combined	669.57	125	5.36	36.73***	0.86	0.83	0.86	0.12	0.09
Model 3	Five factors: EC and ED were combined	928.19	125	7.43	88.45***	0.80	0.75	0.80	0.15	0.11
Model 4	Five factors: EM and EC were combined	1054.39	125	8.44	113.69***	0.77	0.71	0.76	0.16	0.18
Model 5	Five factors: EM and ED were combined	800.32	125	6.40	62.88***	0.83	0.79	0.83	0.13	0.09
Model 6	Four factors: PT, AC and IP were combined	1097.57	129	8.51	67.96***	0.76	0.71	0.75	0.16	0.12
Model 7	Four factors: EM, EC and ED were combined	1233.60	129	9.56	80.07***	0.70	0.67	0.72	0.17	0.12
Model 8	Three factors: PT, EM, EC and ED were combined	1432.83	132	10.86	79.07***	0.67	0.62	0.67	0.18	0.13
Model 9	All constructs were combined	2151.33	135	15.84	111.03***	0.49	0.42	0.49	0.22	0.16

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, PT = Politic Ties, AC = Absorptive Capacity, EM = Environmental Munificence, IP = Innovation performance.

Table 4. Regression analyses

Variables	Innovation performance							
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Year	0.00	-0.07	-0.09	0.03	0.02	-0.04	-0.06	-0.04
Size	0.31***	0.30***	0.22***	0.30***	0.30***	0.27***	0.30***	0.28***
State-ownership	0.02	0.10	0.03	0.04	0.04	0.11	0.13†	0.11
Private-Ownership	0.10	0.06	0.08	0.10	0.11	0.08	0.08	0.09
Foreign-Ownership	-0.10	-0.06	-0.11	-0.07	-0.09	-0.06	-0.05	-0.09
Ind1	-0.19	-0.13	-0.09	-0.19*	-0.16	-0.09	-0.13	-0.06
Ind2	-0.43*	-0.30	-0.28	-0.41	-0.38†	-0.26	-0.26	-0.22
Ind3	-0.06	-0.01	0.02	-0.10	-0.04	0.04	-0.02	-0.01
Ind4	-0.35*	-0.24	-0.25	-0.38*	-0.32†	-0.23	-0.24	-0.23
Ind5	-0.30	-0.23	-0.23	-0.34†	-0.25	-0.22	-0.25	-0.22
Ind6	-0.32	-0.23	-0.15	-0.32†	-0.28	-0.15	-0.21	-0.17
Ind7	-0.58†	-0.40	-0.43	-0.60†	-0.51	-0.39	-0.38	-0.32
Ind8	-0.59*	-0.43	-0.39	-0.63*	-0.55†	-0.35	-0.42	-0.38
Ind9	-0.50*	-0.37	-0.30	-0.50*	-0.45†	-0.27	-0.35	-0.32
PT	0.26***	-0.12	-0.01	0.09	0.24***	-0.20*	-0.26**	-0.11
PT*PT	-0.13*	-0.07	0.07	-0.13*	-0.10†	-0.02	-0.04	-0.07
AC		0.23**				0.05	0.23*	0.17*
PT*AC		-0.03				0.03	-0.04	0.08
PT*PT*AC		0.29**				0.39**	0.28**	0.29**
EM			0.38***			0.30**		
AC*EM						-0.16*		
PT*EM			-0.23***			-0.33**		
PT*PT*EM			0.15†			0.29†		
PT*AC*EM						-0.21*		
PT*PT*AC*EM						0.38**		
ED				0.12			-0.04	
AC*ED							-0.05	
PT*ED				0.00			-0.22*	
PT*PT*ED				0.16†			0.31†	
PT*AC*ED							-0.08	
PT*PT*AC*ED							0.24†	
EC					-0.16*			-0.04
AC*EC								-0.42***
PT*EC					-0.06			-0.24**
PT*PT*EC					0.22**			0.18
PT*AC*EC								0.01
PT*PT*AC*EC								0.38***
R ²	0.26***	0.36***	0.41***	0.30***	0.29***	0.46***	0.39***	0.43***
ΔR ²		0.10**	0.15**	0.04*	0.03*	0.10**	0.09**	0.14**

Note: † $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, PT = Politic Ties, AC = Absorptive Capacity, EM = Environmental Munificence, ED = Environmental Dynamics, EC = Environmental Complexity, IP = Innovation performance.

Hypothesis 1 was supported. The finding confirms that political ties to some extent is beneficial to corporate innovation performance. However, it will be harmful to innovation performance when a firm has very strong ties with government. To clarify the curvilinear relationship between political ties and innovative, we plotted the inverted-U shape presented in Figure 1.

In order to examine the moderating effect of absorptive capacity, we entered quadratic-by-linear term (political ties² × absorptive capacity) based on model 3 into regression equation. This interaction term is positively related to corporate innovation performance ($\beta = 0.29, p < 0.01$, model 2), and the R^2 change is also significant ($\Delta R^2 = 0.10, p < 0.01$). This finding indicates that the inverted-U shape relationship between political ties and innovation performance is stronger when firms hold stronger absorptive capacity, and Hypothesis 2 is supported. Figure 2 presents the moderating effect of absorptive capacity on the inverted-U shape relationship between political ties and innovation performance.

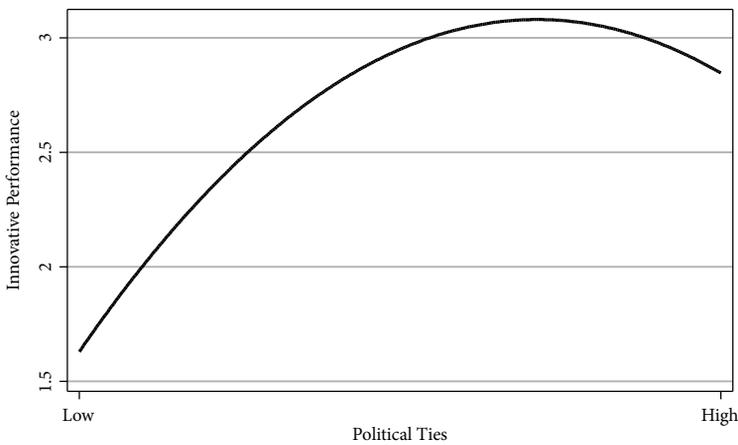


Figure 1. The inverted-U relationship between politic ties and corporate innovation performance

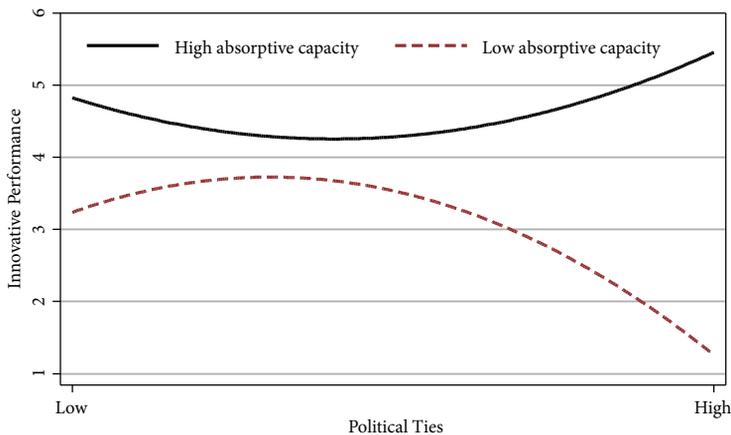


Figure 2. Curvilinear interaction of politic ties and absorptive capacity on corporate innovation performance

Finally, we predicted that external environments could moderate the moderating effect of absorptive capacity on the curvilinear relationship between political ties and corporate innovation performance (Hypothesis 3a–3c). In order to examine hypothesis 3a, we entered the environmental munificence and relevant interaction term (political ties \times environmental munificence, political ties² \times environmental munificence, political ties² \times absorptive capacity \times environmental munificence) into the regression equation based on model 2. Results in Table 4 (model 6) show that the three-way interaction term (political ties² \times absorptive capacity \times environmental munificence) is positively related to innovation performance ($\beta = 0.38, p < 0.01$, model 6), and ΔR^2 is also significant ($\Delta R^2 = 0.10, p < 0.01$). It suggests that there will be the strongest positive relationship between political ties and corporate innovation performance when absorptive capacity and environmental munificence are high simultaneously. This conclusion can also be obtained in Figure 3. In order to examine hypothesis 3b, we entered the environmental dynamism and relevant interaction term (political ties \times environmental dynamism, political ties² \times environmental dynamism, political ties² \times absorptive capacity \times environmental dynamism) into the regression equation based on model 2. Results in Table 4 (model 7) show that the three-way interaction term (political ties² \times absorptive capacity \times environmental dynamism) is positively related to innovation performance ($\beta = 0.24, p < 0.05$, model 7), and ΔR^2 is also significant ($\Delta R^2 = 0.09, p < 0.01$). It suggests that there will be the strongest positively relationship between political ties and corporate innovation performance when absorptive capacity and environmental dynamism are high simultaneously. This conclusion can also be obtained in Figure 4. In order to examine Hypothesis 3c, we entered the environmental munificence and relevant interaction term (political ties \times environmental complexity, political ties² \times environmental complexity, political ties² \times absorptive capacity \times environmental complexity) into the regression equation based on model 2. Results in Table 4 (model 8) show that the three-way interaction term (political ties² \times absorptive capacity \times environmental complexity) is positively related to innovation performance ($\beta = 0.38, p < 0.001$, model 8), and ΔR^2 is also significant ($\Delta R^2 = 0.14, p < 0.01$). It suggests that there will be the strongest positively relationship between political ties and corporate innovation performance when absorptive capacity and environmental complexity are high simultaneously. This conclusion can also be obtained in Figure 5.

Conclusions

Discussion and implications

This study reconciles the existing mixed results by identifying the inverted U-shape relationship between political ties and innovation performance and its boundary conditions (absorptive capacity, external environment) which enriches the current literature on political ties by providing an in-depth understanding on the complicated role of political ties on firm innovation under various conditions.

The findings offer several theoretical contributions and practical implications. First, the result of this study shows that the relationship between political ties and corporate innovation performance is an inverted U-shape, which means, to a certain extent, political ties could be beneficial for corporate innovation performance, yet too much dependence on these connections would harm corporate innovation. On one hand, this finding is partially

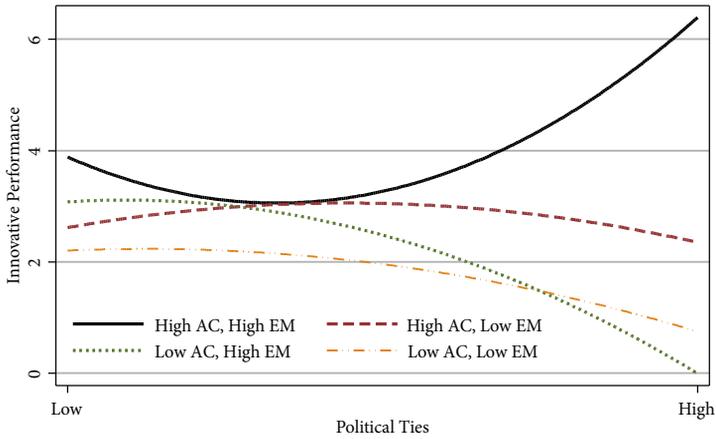


Figure 3. Curvilinear interaction of politic ties, absorptive capacity, and environmental munificence on corporate innovation performance

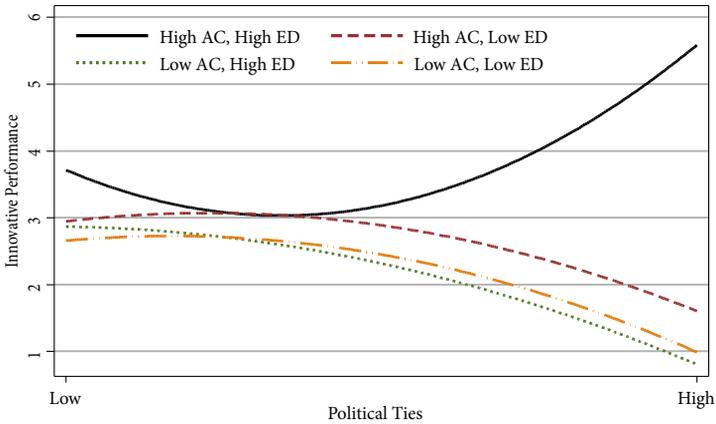


Figure 4. Curvilinear interaction of politic ties, absorptive capacity, and environmental dynamics on corporate innovation performance

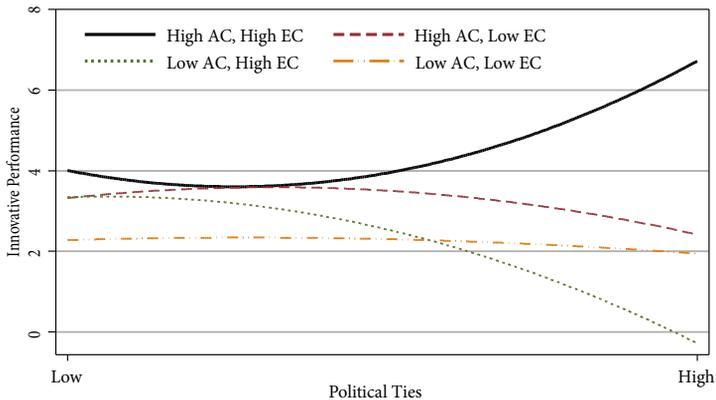


Figure 5. Curvilinear interaction of politic ties, absorptive capacity, and environmental complexity on corporate innovation performance

similar to previous results (e.g., Song & Eveland, 2015), moderate political ties bring firms with valuable and rare resources that their competitors could not obtain from other channels, and these resources obtained from social network would act as complementary resources, which might lead to additional resources for firm innovative investments. And close political ties would also affect policy-making of government and results in favorable policies and regulations for these firms (Lin et al., 2015). Both the tangible and intangible benefits could lead to better innovation performance. On the other hand, we also found some different results compared with previous studies (e.g., Song & Eveland, 2015; Wu, 2011), such as high political ties may hurt corporate innovation performance. Building and maintaining the connections requires considerable input (Zhou et al., 2014), which occupies the capacity of firms to conduct other activities. Furthermore, the organizational motivation to innovate could also be constrained by these connections, since too much dependent on political ties could decrease their intention to develop new products and be harmful to corporate innovation performance. The results showed that political ties have an inverted U-shape relationship with corporate innovation performance, which could explain why previous scholars have reached inconsistent conclusions.

Secondly, this study further identifies the contingent role of absorptive capacity on the inverted U-shape relationship between political ties and innovation performance. Most previous studies focused on testing the direct effect of absorptive capacity on firm outcomes, while few explored contingent impact of absorptive capacity on the relationship between antecedents and firm outcomes. Interestingly, in this study we found that higher level of absorptive capacity could not only enhance the benefit that firms gain from political ties, it could also eliminate the limitations of political ties on corporate innovation performance. Specifically, under the condition of high absorptive capacity, the benefit from closer political ties exceeds the disadvantages from closer political ties and results in better innovation performance. This means that if firms could develop high-level absorptive capacity, it could reduce the limitations (e.g. unnecessary obligations and organizational dependence) that generated from massive government connections. This finding shows that firms in emerging countries should not only focus on pursuing political connections, but also develop internal absorptive capacity and be prepared to absorb and utilize resources from external ties.

Thirdly, this study also examines the contingent role of external environment on the moderating effect of absorptive capacity on the inverted U-shaped relationship between political ties and innovation performance. These results are consistent with the conceptual framework that we developed on the basis of the literature concerning external environment. The results show that when external environment is more munificent, dynamic, or complex, strong political ties can promote innovation performance of firms who possess high level absorptive capacity. It means that, under high-level of environmental munificence, dynamism, and complexity, high level absorptive capacity of a firm who strongly connected to government has highest innovation performance. High-level of environmental munificence could provide more external resources to support firm development, which could be complementary to resources gained from political ties. With high absorptive capacity, firms could better utilize the resources from various connections and enhance the value of political ties on innovation performance. In case of high environmental dynamism, when the market

changes are unpredictable, firms need high-quality information and resources as well as the ability to utilize such resources, so as to effectively take the proactive strategy to respond to the dynamism of this environment. Therefore, firms with strong political ties could receive favorable information and supportive policies, and high level absorptive capacity make them more confident to make judgment on innovative investment and achieve better performance. Finally, similar to environmental dynamism, in the market of high environmental complexity, firms face severe competition. While firms consider how to obtain information and resources from political ties, they should not neglect how to make good use of these resources.

At least three practical implications can be obtained according to findings of this study. First, both government officials and managers should be aware to establish and maintain appropriate relationships to the level which could best contribute to innovation development, instead of diminishing the benefits. Political connections should be established cautiously considering the extent and the closeness of the relationship. Results of the present study could be borrowed by business managers to better operate in markets, and also by government officials to facilitate innovation performance in business sectors. Second, firms should focus on improving its absorptive capacity when establishing social ties with government, because it ensures the benefits for innovation development. It means that firm should not only pay effort to the construction of political ties, but also keep attention on the improvement of internal absorptive capacity. Therefore, a firm should pay effort to improve absorptive capability (e.g. internal frequent interactions, and recognize the usefulness of new knowledge) to ensure the contribution of political ties. Thirdly, the results also provide implications for government officials when they initiate innovation policy, market mechanisms and institutional frameworks, such as the focal government can make more loose regulations, provide more support to firms to facilitate corporate to improve their innovation, and even create competitive environment to stimulate corporate develop new products to maintain their competitive advantage.

Limitations

This study inevitably has several limitations as well. Firstly, this study is conducted in the Chinese context, which is the largest developing country and in the process of rapid development and innovative transition. Although China has many similar characteristics with other emerging countries, such as low labor cost, resource-intensive production, and a powerful government, it does show specific figures, such as the transitional market mechanisms. The research results would probably not be generated to all the other countries. However, the authors believe it could reflect the general mechanisms between political ties, absorptive capacity, market munificence, and innovation performance. More research is called to be conducted in other countries, to replicate and further examine the relationships identified in this research. Secondly, this research used survey approach to collect data, this may cause common method bias that contaminate the results of the study. However since survey is the most practical way to collect data on political ties, innovation performance and other indicators in a large scale, and the examination of common method bias show that it is not an issue in this study. Further research can use object data to characterize these constructs and

test the relationships between them. Thirdly, although the study identified the relationships between different constructs, there is still lack of understanding beyond the relationships and the internal process how particularly the firm with close political ties would utilize it to achieve better innovation performance. Further research could be conducted via qualitative methods, to investigate the internal process and illustrate how these relationships work.

Acknowledgements

The authors are grateful for the contributions of the guest editors and anonymous reviewers for their suggestions on revising this manuscript. This study is supported by the National Natural Science Foundation of China (Grant Nos. 71771125, 71620107004, 71802134, 71573178), China Postdoctoral Science Foundation (Grant No. 2018M632124), Major Project of Natural Science Foundation of Jiangsu Education Department (19KJA180002), and Humanities and Social Sciences Project of Shanghai Normal University (310-AC7031-19-003012).

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