

# The contingent effects of political strategies on firm performance: A political network perspective

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**Research Summary:** We examine the performance impact of corporate political strategies by analyzing the relationships among firms and various government institutions. While a firm's political connections to a focal government with decision-making authority enhance performance, connections to a rival government competing with the focal government harm performance, particularly when the rivalry is intense. Firms can neutralize the negative effect from this political rivalry by using direct or indirect connections to a constraining government with power over the focal government. We find support for our conjectures based on an analysis of interactions among Chinese steel firms and the central and provincial governments in acquisition decisions during the industry's consolidation period of 1999–2010.

**Managerial Summary:** Firms invest in political capital in order to influence public policies in their favor. However, the government is not a monolithic entity and the relationships among various government institutions can alter and even reverse the effects of a firm's political strategy. This research shows that a firm's political connections can be both an asset and a liability. That is, although firms benefit from their connections to governments with decision-making authority, they can be caught in the crossfire when there is a rivalry between governments. Furthermore, our research suggests that firms can cope with the negative impact from political rivalry by taking advantage of the structural relationships within the political system and influencing governments that have constraining power.

## KEY WORDS

acquisition, competitive dynamics, political connection, political network, political strategy

## 1 | INTRODUCTION

Firms make substantial political investments in an attempt to shape policy decisions in their favor. Prior research suggests that political strategies generate value for firms by increasing their access to the government (Fisman, 2001; Hillman & Hitt, 1999). However, empirical work to date presents inconsistent findings, showing positive, neutral, and even negative effects of political strategies on firm performance. A growing body of research suggests that the effectiveness of political strategies depends on the structure of the political system (Choi, Jia, & Lu, 2015; Kozhikode & Li, 2012; Macher & Mayo, 2015). This article aims to extend this literature and explain the performance effects of political strategies by analyzing the relationships among firms and various government institutions. In doing so, we seek to shed light on an underlying cause that could explain the mixed findings to date.

The conventional view held in the political strategy literature suggests that firms provide information and resources to politicians and government officials through lobbying, campaign contributions, and managerial public service in exchange for political favors that enhance firm performance. While some studies find a positive performance effect for such political strategies (e.g., Hillman, 2005), others find neutral or even negative performance effects (e.g., Hadani & Schuler, 2013). Scholars have offered various explanations for the inconsistent results, including agency cost (Aggarwal, Meschke, & Wang, 2012), lack of collective action (Clawson, Neustadtl, & Bearden, 1986), firms' heterogeneous dynamic capabilities (Oliver & Holzinger, 2008), and regime changes (Henisz & Delios, 2004; Siegel, 2007). In particular, a growing body of research suggests that, when the government is fragmented and power is divided, the relationships between government institutions constrain their ability to offer benefits to firms, thereby limiting the effectiveness of political strategies (Choi et al., 2015; Holburn & Vanden Bergh, 2008; Macher & Mayo, 2015). While these studies have advanced our understanding of the structural factors that can alter the magnitude of the value generated by political strategies, we still have a limited understanding of whether and when pursuing political strategies can backfire due to rivalrous relationships between government institutions, and how firms can cope with this potential hazard.

This article intends to fill this gap in the literature by analyzing the relationships among firms and various government institutions in order to examine the effectiveness of political strategies. We draw on the political network literature to develop our theory (Coleman, 1972; Knoke, 1990; Laumann & Knoke, 1987). Research on political networks analyzes policymaking processes and outcomes by considering the power relationships among private and public actors with divergent and conflicting interests. We augment political network theory with the competitive dynamics perspective, in particular, the awareness-motivation-capability framework (Chen, Su, & Tsai, 2007). This approach enables us to analyze rivalries between government institutions, which have a critical impact on the effectiveness of a firm's political strategies. We argue that a firm's connection to a *focal government* enhances performance, while connection to a *rival government* hurts performance, particularly when rivalry intensity is high. We further argue that the firm develops coping strategies, using direct and indirect connections to a *constraining government*, to neutralize the damage caused by political rivalry.

We test our conjectures in the context of acquisitions by Chinese steel firms during the industry's consolidation period of 1999–2010. Given the decentralized authority over economic policies, China provides an ideal setting in which to examine the relationships among firms and various government institutions. We analyze these relationships by focusing on the relationships among key individuals in charge of these organizations because inter-organizational relationships are often created by interpersonal relationships. In particular, we measure firms' connections to governments based on CEO

government service (Jia, 2014; Zheng, Singh, & Mitchell, 2015). We take advantage of the competitive relationships among provincial governments and measure the intensity of rivalry based on the similarity of provincial officials' age and party tenure, provincial governments' geographic location, and provincial GDP (Choi, 2012; Li & Zhou, 2005). Further, we explore firms' indirect connections to the constraining government by examining their connections to the central government through the informal political network among provincial and central officials based on birthplace, school, and workplace ties (Opper, Nee, & Brehm, 2015; Shih, Adolph, & Liu, 2012). We find that an acquiring firm's connections to a focal provincial government with approval authority increase the likelihood of acquisition. In contrast, connections to a rival provincial government decrease the likelihood of acquisition when the intensity of political rivalry between the focal and rival provincial governments is high. We further show that the firm can neutralize this negative effect by using direct and indirect connections to the central government.

This study seeks to make a few important contributions to the nonmarket strategy literature by analyzing the political network among firms and various government institutions, while controlling for market side factors. First, this study contributes to the literature on how government structure influences the effectiveness of political strategies (Choi et al., 2015; Macher & Mayo, 2015). Drawing on the political network framework, our analysis shows that political strategies can create both benefits and detriments to firms, depending on the relationships among firms and various government institutions, thereby offering a possible explanation for the mixed empirical findings to date (Hadani & Schuler, 2013). Second, this study confirms and extends the findings from prior studies on regime change (Henisz & Delios, 2004; Siegel, 2007) by showing that political rivalry can pose a threat to firms, even within a stable regime. Our findings suggest that firms pursuing political strategies in a fragmented regime face an even more imminent trade-off because managers must weigh present benefits against present harms of political strategies at the same time. Further, by integrating the competitive dynamics framework (Chen et al., 2007) into the political network model (Knoke, 1990), we offer a fine-grained analysis that can be used to determine the intensity of political rivalry, and thus, more accurately assess the impact of political strategies (Hillman & Hitt, 1999). Finally, our framework overcomes this structural determinism by proposing coping strategies that allow firms to neutralize the negative impact of political rivalry. In this regard, our study joins the growing body of research that suggests that firms can take advantage of the structural relations in a government when devising political strategies (Holburn & Vanden Bergh, 2008; Macher & Mayo, 2015).

## 2 | THEORY AND HYPOTHESES

### 2.1 | Political strategies for various government institutions

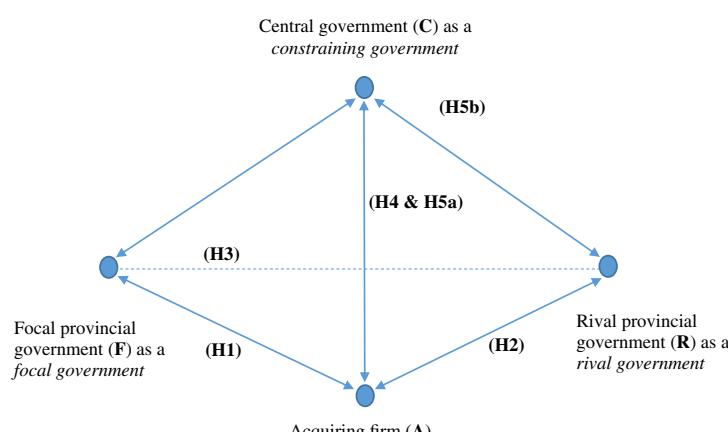
In order to examine the impact of political strategies, this article draws on political network theory to analyze the relationships among firms and various government institutions. Political network theory is deeply rooted in the political sociology literature and has been used to study policymaking processes and outcomes at both national and local levels (Knoke, 1990; Laumann & Knoke, 1987; Mizruchi, 2007). Prior work emphasizes two dimensions of power in political network relationships: influence and domination (Knoke, 1993). *Influence* refers to one actor attempting to provide information to alter the perceptions and actions of another actor, whereas *domination* refers to one actor's control over another actor through offered or withheld benefits or harms. In a policy event, actors who possess divergent and conflicting interests deploy their power resources through communication and exchange relationships in an attempt to sway the position and decision of other actors to whom

they are connected, thereby shaping the policy decision in their favor (Knoke, 1990, 1993). Our application of the political network framework focuses on *firms* as the private actors that seek to influence public actors for favorable policy decisions. We define a *focal government* as the public actor with the decision-making authority in a policy event, a *rival government* as another public actor competing with the focal government, and a *constraining government* as a public actor with power over focal and rival governments. Figure 1 illustrates the power relationships in the form of influence and domination between these various actors.

In a policy event, a firm seeking to shape the policymaking process may target a focal government to make a collectively binding decision through its legal authority (Knoke, 1993). A firm's attempt to influence the focal government is more likely to produce a favorable policy decision when it has a pre-established connection to the focal government (A–F in Figure 1). On the one hand, a firm's political connection provides access to the focal government through which the firm can engage in influence. Therefore, firms that compete for politicians' limited time and attention often invest in building access to the latter via political strategies like campaign contributions (Clawson et al., 1986). On the other hand, a firm's frequent interactions with the focal government help develop mutual trust (Hillman & Hitt, 1999). The government is more likely to perceive the information as credible when it has a higher level of trust in the connected firm. For example, Knoke (1990) suggested that an actor's position and behavior are more likely to be influenced by those to whom the actor is connected, resulting in shared thoughts and homogeneous attitudes among connected actors in the same communication network.

A firm may therefore invest in building connections to the focal government in an attempt to shape the latter's policy decisions in its favor. For example, firms target their lobbying at the regulatory agency that makes decisions relevant to their operations (Bonardi, Hillman, & Keim, 2005) and make campaign contributions to the legislators whose jurisdictions cover their business activities (Faccio & Parsley, 2009). In contrast, the effectiveness of political strategies may be limited by an unclear division of power under a government in which firms find it difficult to determine which focal government has the authority over a given policy event (Choi et al., 2015).

For example, in China, firms often engage in political strategies in an effort to overcome weak market institutions (Li, Meng, & Zhang, 2006; Sheng, Zhou, & Li, 2011; Xin & Pearce, 1996). Managers rely on personal connections with government officials to access resources and seek protection against expropriation (Peng & Luo, 2000; Sun, Hu, & Hillman, 2016). Firms also often employ political connections to influence local governments for favorable policy decisions (Jia, 2014; Li & Zhang, 2007; Zheng et al., 2015). In particular, during the consolidation of the steel



**FIGURE 1** Illustration of Hypotheses 1–5

industry, firms tended to rely on political connections in lobbying for acquisition approval (Kennedy, 2005). On the one hand, steel firms were motivated to expand through acquisitions in order to achieve scale economies. On the other hand, the central government, fearing industry-wide overcapacity, repeatedly issued policies to encourage consolidation (Chang, 2013). Thus, a successful acquisition during the consolidation period indicates a performance gain that would help ensure survival and long-term profitability. We therefore expect that an acquiring firm's connection to the focal provincial government, that is, the focal government, can increase the likelihood of acquisition approval.

**Hypothesis 1 (H1)** *A firm's connections to a focal government positively affect its performance.*

While prior literature largely focuses on how political strategies generate value for firms, a growing body of research has suggested that such value can be weakened by political constraints on public actors, like checks and balances between government branches (Henisz, 2000; Holburn & Vanden Bergh, 2008; Macher & Mayo, 2015). A separate body of work has shown that political capital may turn into a liability in the aftermath of a sudden and radical shift in the political environment, like a regime change. Henisz and Delios (2004) and Siegel (2007) found that firms' political capital can depreciate quickly, sometimes becoming a liability, after a regime change. Leuz and Oberholzer-Gee (2006) likewise found that firms connected to the previous regime encounter more difficulty building access to the current regime. Taken together, these studies suggest that firms pursuing political strategies face a trade-off between present benefits and future risks, as their political assets can transform into liabilities with sudden and radical political changes. According to this perspective, political strategies may work better in stable regimes like China.

However, we argue that this trade-off can also manifest in stable but fragmented regimes wherein political rivals share authority. The within-government rivalry between public actors with divergent interests may pose a threat to politically connected firms similar to the threat posed by regime change. More importantly, firms under stable but fragmented governments face the more imminent trade-off between present benefits and present harms because their political connections can simultaneously be an asset and a liability.

Specifically, we argue that a firm's connection to a rival government (A–R in Figure 1) may decrease the likelihood that the focal government will reach a policy decision favorable to the firm. The political strategy literature has long considered interactions between firms and governments as an exchange process in which firms influence public decisions for private benefit through political strategies (Hillman & Hitt, 1999).<sup>1</sup> However, this influence does not come without cost, as a firm's increased dependence on a government for resources also facilitates a higher level of control by the government, potentially resulting in the latter's domination in the exchange relationship (Pfeffer & Salancik, 1978). Political network scholars suggest that actors may purposely deploy their resources to help other actors in a policy event of less interest to the former in exchange for their resources in a future event of more interest (Coleman, 1972). In times of political conflict, the firm subject to government domination is likely obliged to return the favor by committing its resources to the government's coalition.

Therefore, in a political network, the exchange relationship between a firm and a rival government will likely raise concerns from the focal government, which may interpret the relationship as

<sup>1</sup>For example, firms use their political connections to seek public resources like government contracts (Goldman, Rocholl, & So, 2013), bank loans (Khwaja & Mian, 2005), and protection against expropriation (Peng & Luo, 2000).

the rival government's power over the firm, and thus, the firm's decreased decision-making autonomy (Knoke, 1993). The focal government will likely perceive the firm as an ally of the rival government. Research on political network theory suggests that the persistent divergence between actors' interests likely results in a polarized oppositional network in which actors from the opposing sides develop an antagonistic stance toward each other, sometimes even avoiding direct contact (Laumann & Marsden, 1979). Therefore, political rivalry between focal and rival governments likely results in the focal government's hostile attitude and behavior toward the firm, similar to the discrimination faced by politically-connected firms after a regime change (Siegel, 2007).

For example, the Chinese central government adopted a multidivisional form (M-form) to manage local officials as if they were middle-level managers in a multidivisional company (Walder & Oi, 1999). Given their limited career opportunities outside of government, local officials have strong motivation to outperform each other in this zero-sum tournament (Li & Zhou, 2005). Not only are local governments' budgets and local officials' bonuses and perks directly linked to local fiscal resources, but also local officials with strong economic achievements are also rewarded with career advancement. As a result, despite the central government's recent push for non-economic metrics like environmental protection, "excessive GDP worship" continues to determine winners and losers in the tournament system (Su, Tao, Xi, & Li, 2012) and local governments prove reluctant to shut down polluters like steel plants, which "are often the biggest taxpayers and employers" (Hornby, 2014).

As Chinese firms employ managerial political connections to seek strategic resources and protections for their property (Peng & Luo, 2000), they may become more subject to control by their connected governments, and thus, more obliged to return the favor. An exchange relationship between a firm and a rival provincial government likely leads a focal provincial government to perceive a coalition between the firm and the rival provincial government. Therefore, when the firm seeks acquisition approval from the focal provincial government, the focal provincial government may be concerned about granting economic resources to a firm from the rival coalition. In the aftermath of post-acquisition integration, the firm may be coerced by the rival provincial government to transfer investments and tax revenue from the focal province to the rival province in order to enhance the relative position of the rival provincial government in the political tournament. As such, we hypothesize that the firm's acquisition proposal is less likely to reach a favorable ruling in this setting. For example, Shougang Group, a major steel firm connected to the Beijing government, has actively pursued acquisition opportunities in Shanxi province. Despite its initial support for Shougang Group, the Shanxi provincial government secretly prepared a plan to assist Taiyuan Steel, to which it was closely connected, to consolidate 45 million tons of production capacity within its province, leaving only 15 million tons of production capacity to Shougang Group, thereby nullifying Shougang's strategic intention to consolidate (He, 2011).

**Hypothesis 2 (H2)** *A firm's connections to a rival government negatively affect its performance.*

## 2.2 | Rivalry among government institutions

We further expect that a firm connected to a rival government will encounter greater difficulty when seeking favorable policy decisions as the rivalry between the focal and rival governments intensifies. In order to capture rivalry intensity, we apply the competitive dynamics framework, which analyzes the antecedents, consequences, and competitive contexts of rival behavior. In particular, scholars have identified three underlying drivers of competitive behavior: awareness of competitive moves,

motivation to respond, and capability to carry out the response (Chang & Xu, 2008; Chen et al., 2007).

Following the competitive dynamics framework, we posit that the intensity of rivalry increases as rival similarity increases (Chen et al., 2007). Similarity influences both awareness and motivation, which drive competitive tension and behavior. First, since competitors tend to compare their own performance with that of similar others (Kilduff, Elfenbein, & Staw, 2010), a focal government will likely focus its limited attention on similar rival governments and the firms connected to those rivals. When a firm connected to a similar rival government approaches the focal government for accessing resources, this move may appear particularly salient in the eyes of the focal government and so precipitate a reaction to counter the move. Second, similar rivals impose greater pressure on one another, which increases their motivation to engage in competitive responses. Because similar competitors often share the same identity domain, they are more likely to perceive a move by similar others as an attack on their turf and counter the move (Livengood & Reger, 2010).

The dashed line between F and R in Figure 1 illustrates this competitive tension. For example, we expect the rivalry between Chinese provincial governments to intensify in three situations: (a) when their officials possess similar individual attributes, (b) when they are located in the same geographic area, and (c) when their provinces have similar GDP sizes. First, in terms of individual attributes, Chinese provincial officials' age and party tenure play an important role in promotion decisions (Choi, 2012). On the one hand, the central government has been trying to promote younger officials. On the other hand, party tenure indicates the seniority of an official in the Chinese Communist Party, which is critical to promotion decisions (Shih et al., 2012). Thus, government officials in the same age group or the same cohort in party service perceive each other as close competitors, while they tend to be less concerned about those older/younger or more senior/junior than them. Second, intensity of rivalry also increases with geographic similarity between provincial governments (Kilduff et al., 2010). Provincial governments located in the same geographic area are likely to keep a close watch on each other, as their economic performances are more likely to be compared against each other by the central government given their similar economic structures. For example, the Northeast region relies more on traditional heavy industries, while the East region is more export-oriented. Third, provinces with similar GDP sizes are more likely to have similar "resource profiles," and thus, be compared to each other by the central government. As such, officials from provinces of similar GDP size may perceive higher levels' competitive tension and pursue more competitive behavior toward each other. Therefore, as the focal government focuses its efforts on surpassing a similar rival in economic performance with particular concern for the transfer of economic resources to the political rival (Li & Zhou, 2005), we hypothesize that the rivalry will intensify between similar governments.

**Hypothesis 3 (H3)** *The negative performance effect of a firm's connections to a rival government increases as the similarity between the focal and rival governments increases.*

### 2.3 | Political strategies to neutralize negative impact

In a political network, a policy decision made by a focal actor possessing decision-making authority may not necessarily reflect its own interest and preferences, instead being shaped by other actors in the political network. The collective power of the network is mobilized to support and oppose various policy outcomes (Olson, 1965). A utility-maximizing focal actor will likely take into account the

preferences of other actors, who may exert influence or domination. Therefore, the outcome of a policy event depends not only on various actors' preferences, but also on the power resources they can mobilize through direct and indirect relationships in the political network (Knoke, 1990, 1993).

During the mobilization process, an actor seeks to tap into power resources controlled by other actors via pre-existing communication and exchange relationships. A mobilization process requires the actor to generate consensus among the connected actors and frame its response to a policy issue around the broad interest of the coalition (Knoke, 1990, 1993). These influence efforts aim to entice voluntary participation in the policy event. Another mobilization process is based on the exchange of power resources in which an actor commits power resources to a policy event of less relevance in exchange for others' support in another policy event of greater relevance (Coleman, 1972).

Therefore, a firm seeking to shape the decision of a focal government may form a coalition with a constraining government and mobilize the latter to participate in a policy event. When the firm brings sufficient power resources to bear on the focal government, it may alter the calculation of the focal government and increase the probability that the latter will reach a more favorable policy decision (Knoke, 1993). The degree to which a constraining government can affect the focal government's decision varies by context. For example, regulatory agencies operate under the oversight of the legislative and executive branches, and their decisions are subject to judicial review (Bonardi et al., 2005). Similarly, in many countries, national laws typically take precedence over state laws (Kozhikode & Li, 2012). Across political systems, the varying numbers of veto points result in different levels of political constraints (Henisz, 2000), thereby resulting in different numbers of "entry points" for firms to influence policy decisions (Macher & Mayo, 2015).

In China, where there is a hierarchy among government institutions, the central government, that is, the constraining government, has influence and even domination over both focal and rival provincial governments. We therefore hypothesize that a firm connected to the constraining government (A–C in Figure 1) may attempt to obtain a favorable policy decision by mobilizing the power resources of the constraining government over the focal government. For example, if the firm can access and lobby the central government by providing information about a particular acquisition, the central government may exert direct pressure on the focal government to pave the way for acquisition.

**Hypothesis 4 (H4)** *A firm's direct connections to a constraining government positively affect its performance.*

While the preceding discussion considers the overall impact of a firm's connection to a constraining government, we further posit that a firm connected to a rival government can mobilize the constraining government especially when the firm seeks to neutralize the negative impact of political rivalry. For example, when a provincial government's policy decision is under scrutiny by the central government, the provincial government may refrain from pursuing its own interests against the central government policy directives. In fact, Tieben, a Chinese steel firm in Jiangsu province, ramped up investments to build new production capacities in 2003, countering the central government's restriction on new investments (*China Business Journal*, 2004). The local government illegally endorsed the investment by breaking the project into several smaller projects. When the central government found out, the firm's CEO was ultimately imprisoned, and provincial and city officials were also punished.

We argue that a firm's access to the constraining government can be particularly useful when the firm expects a negative reaction from the focal government as a result of political rivalry. In order to

persuade the constraining government to commit its power resources and neutralize the negative effects of political rivalry, a firm has two options: It can approach the constraining government through a direct connection (A-C in Figure 1) or through a connected rival government (A-R-C in Figure 1).

In the context of China, a firm's coping strategy can be particularly effective when considering the informal political network encompassing government institutions (Dittmer, 1995; Nathan, 1973; Teiwes, 2001). Political scientists have examined the patron-client relationships between central officials and provincial officials as they exchange political favors and power resources (Nathan, 1973). As informal political exchanges depend on trust and loyalty (Knoke, 1990), the relationships connecting central officials and provincial officials are formed through birthplace, school, and workplace ties (Dittmer, 1995; Opper et al., 2015; Shih et al., 2012). Local governments with fiscal and political incentives may form coalitions with firms to lobby higher level governments (Steinfeld, 2008). Thus, firms connected to rival provincial governments may influence the central government through the informal exchange relationship between central and provincial officials in order to neutralize the negative impact of political rivalry. We therefore hypothesize that a firm's direct and indirect connections to a constraining actor will neutralize the negative impact of the firm's connection to a rival government.

**Hypothesis 5a (H5a)** *The negative effect of the firm's connections to a rival government is weakened when the firm has direct connections to a constraining government.*

**Hypothesis 5b (H5b)** *The negative effect of a firm's connections to a rival government is weakened when the firm has indirect connections to a constraining government through the rival government.*

### 3 | METHODS

#### 3.1 | Empirical context: China's steel industry

In China, provincial governments possess primary authority over the local economy, while provincial officials are directly appointed by the central government. Consistent with prior work, we focus our analysis on central and provincial governments (Li & Zhou, 2005). Since the economic reforms of 1978, authority over the local economy, like investment approval, has been delegated to local governments (Xu, 2011). In order to address information asymmetry and provide incentives for local officials to pursue economic growth, the central government created a revenue-sharing system that delineates the proportion of tax revenue collected by the central and local governments, turning local governments into de facto residual claimants (Oi, 1999). At the same time, local governments increasingly took responsibility for local spending.

In contrast to economic decentralization, personnel control remains centralized with the central government. The Chinese central government modeled the cadre evaluation system after a tournament that rewards local officials according to their relative economic performance (Li & Zhou, 2005). The central government delegates full discretion to local officials to manage the local economy and holds those officials accountable for economic performance (Xu, 2011). As a result, local officials behave like economic actors whose incentives are shaped by competitive pressures in the market (Walder & Oi, 1999).

While this governance model encourages high economic growth, one of its downsides is that the central government has to rely only on quantifiable and measurable metrics like GDP growth and fiscal revenue growth to evaluate the performance of provincial governments in an objective manner (Guo, 2009). Local governments often maneuver against central policies and keep a minimum level of compliance when these policies are in conflict with their own interests. As such, “the reforms and the emergence of local state corporatism further intensified the moral hazard problem because they increased the need of agents to protect first the locality and only second the center” (Oi, 1999, p. 140).

China's steel production reached 626.7 million metric tons in 2010, accounting for 44.3% of the world's total production (Worldsteel Association, 2011). During our study period, Chinese steel firms faced tremendous pressure to grow through mergers and acquisitions. On the one hand, steel firms were motivated to expand in order to achieve economies of scale, with acquisition providing a fast track to tap into target firms' existing production capacities. On the other hand, the central government repeatedly issued policies to facilitate consolidation in order to curb industry-wide overcapacity. In 2005, the central government introduced a comprehensive industrial policy, known as the Iron and Steel Industry Development Policy. This policy includes measures ranging from tighter approval of land and credit to firms building new capacity, to tougher production regulations that push small firms to be merged or shut down. These economic and policy incentives combined to fuel the expansion motives of steel firms, in turn intensifying competition for available target firms. However, the consolidation process faced strong resistance from local governments (Chang, 2013). The 10-firm concentration ratio actually fell from 49% in 1998 to 34% in 2004, only climbing back to 48.6% in 2010 (Zhao, 2015). As steel firms contribute a large amount of economic output and fiscal revenue, local governments were reluctant to restrict their investments. Further, and as previously discussed, local governments are often cautious about transferring economic and fiscal resources to political rivals.

### 3.2 | Data and sample

We build our data set from several sources. First, we use the *China Steel Yearbook* to identify firms in China's steel industry. The *Yearbook* is published by the China Iron and Steel Association and lists all major steel firms in China, as identified by industry experts and regulatory officials and representing about 70% of China's crude steel production. To retrieve firm profiles and financial information, we match firm names with the *Annual Industrial Survey Database* compiled by the National Bureau of Statistics of China. The *Survey Database* covers firms with all types of ownership structures in China and has been widely used in prior research (e.g., Chang & Xu, 2008). By law, all firms are required to complete the survey if their annual sales exceed 5 million RMB (USD 760,000 based on the exchange rate in 2010). Finally, we aggregate firms with common ownership into a parent company based on affiliation information collected from corporate websites.

We obtained several lists of acquisitions in China's steel industry, as compiled by various sources, including an equity transaction exchange, consulting firms, and business news media in China. These lists provide the names of acquiring and target firms as well as the year the acquisitions took place. These lists are then combined to generate a complete list of acquisitions from 1999 to 2010. To further reconfirm the accuracy of the lists, we manually searched for acquisitions associated with all the major steel firms using the leading Chinese internet search engine, Baidu.com. In most cases, we were able to cross check the acquisition information. The final list includes 79 acquisitions undertaken by 115 steel firms from 1999 to 2010. Overall, the pace of merger and acquisition activity increased after 2004, with the average number of acquisitions per year rising from 2.7 in the

1999–2004 period to 10.5 in the 2005–2010 period. This increase corresponds to the policy initiatives introduced by the central government in 2005 to facilitate industry consolidation, as previously described. Among the 79 acquisitions that took place, 53 were within-province acquisitions and 26 were cross-province acquisitions.<sup>2</sup>

We then matched acquisition data with firm-level financial data. The mean total assets of target firms is approximately US\$1.34 billion (based on the 2010 exchange rate). We manually collected information on CEOs from various sources, including corporate and government websites, media announcements, and news reports. We also collected provincial-level data from China Data Online, a database from the University of Michigan, as well as demographic and background information about central and provincial officials from xinhuanet.com (the website of China's state-run press, Xinhua Agency) and people.com.cn (the website of China's state-run newspaper, *People's Daily*).

### 3.3 | Measurement

#### 3.3.1 | Dependent variable

We define *Acquisition* as a binary variable, coded as 1 for the actual acquisitions, and 0 for potential, unrealized acquisitions. In our empirical context, acquisition is a more relevant performance indicator than other measures, like survival or profitability. First, as previously described, during this time period, the Chinese steel industry, mature and plagued by overcapacity, faced an economic imperative to expand in order to achieve scale economies, with acquisition the only means to reach this goal. Second, government policies aimed at facilitating consolidation made it clear that only large firms would emerge as survivors. These economic and policy pressures combined to push firms to focus on seeking acquisitions nationwide during the consolidation period, as acquisitions were almost equivalent to survival during consolidation and increased the chances of industry domination in the post-consolidation era.

Consistent with our choice of measure, media reports have suggested that steel firms are more concerned about keeping up with competitors in scale than financial-based measures like profitability (Li, 2014). The China Steel Association reported that the total production of crude steel in China grew by 80% between 2006 and 2010, while major steel firms' return on sales fell to 0.47%, with an increasing number of firms reporting losses (Pan, 2012). This supports our view that acquisition is a more relevant measure of performance.

#### 3.3.2 | Political connection

While political strategies employed in Western countries like campaign contributions are not feasible in China, one of the most commonly adopted political strategies by Chinese firms is to build personal connections with officials through managerial services in the People's Congress (Congress), the People's Consultative Conference (Conference), or the government (Jia, 2014; Li et al., 2006; Zheng et al., 2015). Government service provides ample opportunities to socialize with officials. Li et al. (2006) and Jia (2014) found that Chinese managers consider public service in Congress or Conference to be a crucial means by which to establish political connections. The media reported that among the 2,987 National Congress representatives and 2,267 National Conference representatives in 2012, 156 served as CEOs of listed firms (Liu, 2012).

<sup>2</sup>During the consolidation period, when every steel firm strived to survive by acquiring target firms, any target firm was attractive, regardless of geography, because the industry consolidation pushed by the central government was nationwide as opposed to restricted to a particular region. Therefore, our model considers both within- and across-province target firms.

To measure firms' political connections, we searched CEOs' previous and current service experience in Congress, Conference, and government at both the national and provincial levels. Since the vast majority of political connections in the current sample are associated with CEOs' representative positions in Congress and Conference, focusing on CEOs allows for a consistent measure of political connections. Specifically, each of China's 31 provincial-level jurisdictions has its own provincial Congress, provincial Conference, and provincial government, in addition to the National Congress, National Conference, and the central government. A CEO serving in provincial Congress or Conference directly interacts with provincial government officials.<sup>3</sup> Similarly, a CEO serving in the National Congress enjoys access to government officials from the province that he represents, as the National Congress is grouped by province, with representatives led by provincial chief administrators.

Consistent with prior studies on political strategy in China (Jia, 2014; Li et al., 2006; Zheng et al., 2015), we code *Acquiring firm's connection to focal provincial government* as 1 if the CEO has previous or current service experience as (a) an official in the provincial government of the focal province where the target firm is located, (b) a representative in the provincial Congress or Conference of the focal province, or (c) a representative of the focal province in the National Congress, and 0 otherwise.<sup>4</sup> Similarly, *Acquiring firm's connection to rival provincial government* is coded as 1 if the CEO has previous or current service experience as (a) an official in the provincial government of another province outside the focal province, (b) a representative in the provincial Congress or Conference of another province, or (c) a representative representing another province in the National Congress, and 0 otherwise. To measure a firm's direct connection to the constraining government, we code *Acquiring firm's direct connection to central government* as 1 if the CEO has previous or current service experience as (a) an official in the central government, or (b) a representative in the National Congress or Conference, and 0 otherwise.

### 3.3.3 | Moderators and control variables

In order to measure the similarity between focal and rival provincial governments, we compare the profiles of focal and rival provinces' chief administrators. Researchers in the fields of economics and political science find the promotion of Chinese officials to be linked to individual attributes, like age and tenure of membership in the China Communist Party (Guo, 2009; Li & Zhou, 2005; Shih et al., 2012; Xu, 2011); some officials even fake their age and party tenure in order to improve their chances of promotion (Li, 2012). We therefore focus on the age and party tenure of provincial chief administrators to assess similarity. Political competition is likely to be more intense when provincial officials are more similar in terms of age and party tenure because chief administrators from competing provinces of comparable age and party tenure are more likely to be considered for the same position by the central government. To account for this, we first calculate the difference in age and difference in tenure of party membership between party secretaries and between governors. These differences are then summed for party secretary and governor, respectively. Finally, to calculate *provincial official similarity*, we reverse code the sum of age and party tenure differences between both party secretaries and governors.

We further measure similarity by comparing the GDP sizes of the focal and rival provinces, as competing provinces with similar GDP sizes are more likely to have similar "resource profiles" in

<sup>3</sup>In our context, a firm can either be connected to the focal or rival government, but not both because a firm's CEO can be a member of the People's Congress/Political Consultative Conference of only one province.

<sup>4</sup>We also test an alternative measure of firms' political connections based on a count of the CEO's service in Congress, Conference, and/or government. In our sample, less than 4% of CEOs have two connections and none more than two connections to a provincial government. Nonetheless, we perform a robustness test using the count variables; results are consistent with our main tables using the dichotomous variables.

their economic competition and are therefore more likely to be compared with each other by the central government. As such, officials from provinces with similar GDP sizes may perceive higher levels' competitive tension (Chen et al., 2007). We reverse code the difference of GDP size between provinces to measure *provincial GDP similarity*. Our third measure of similarity indicates whether or not the focal and rival provincial governments are in the same greater administrative area. Provincial governments located in the same geographic area are likely to keep a close watch on each other, as their economic performances are more likely to be compared against each other by the central government given their similar economic structures. For example, the Northeast region relies more on traditional heavy industries, while the East region is more export-oriented. In China, the 33 provincial-level divisions can be grouped into six greater administrative areas: North China, Northeast China, East China, Central and South China, Northwest China, and Southwest China. *Same greater administrative area* is coded as 1 if two provincial governments are in the same greater administrative area, and 0 otherwise.

Apart from firms' direct connections to the central government, close personal connections between central government officials and provincial government officials likely provide firms with indirect access to the central government. In the Chinese political context, the Central Politburo represents the highest power in the central government. As such, we first compare the birthplace and alma mater of provincial chief administrators and Politburo members. We then calculate the percentage of Politburo members born in the same province as the provincial government's party secretary and governor, respectively. Birthplace ties between the central and provincial governments are measured as the sum of birthplace ties between Politburo members and provincial chief administrators. We similarly calculate school ties between Politburo members and provincial chief administrators. Finally, we calculate workplace ties as the percentage of Politburo members who served as chief administrators in the provincial government before being promoted to the central government. Whereas *Acquiring firm's direct connection to central government* is a dichotomous variable based on the CEO's government service, *Acquiring firm's indirect connection to central government* is a continuous variable, defined as the sum of percentages indicating birthplace ties, school ties, and workplace ties between central officials and provincial officials. Prior research in political economy has similarly focused on these ties to measure factional ties between central and local government officials (e.g., Choi, 2012; Jia, 2014; Shih et al., 2012). The media have also reported on officials using these ties in exchange for favor and support (Oriental Daily News, 2015).

We control for *Acquiring firm size* as the log form of the acquiring firm's total assets, *Acquiring firm SOE* as a dummy that indicates whether the acquiring firm is a state-owned company, *Acquiring firm liquidity* as the ratio of current assets to current liabilities, *Acquiring firm leverage* as the ratio of total debt to total assets, *Acquiring firm's subsidiary in rival province* as a dummy that indicates whether the acquiring firm has a subsidiary in a rival province, and *Distance* as the log form of the geographic distance between an acquiring firm and a target firm. Further, *Rival provincial official in Politburo* is a dummy that indicates whether the chief administrators of the rival provincial government sit in Politburo, while *Acquiring firm's provincial GDP* is the log form of provincial GDP for the acquiring firms. Finally, *Acquiring firm's provincial market institution index* is the index constructed by the National Economic Research Institute to gauge the development of market institutions across provinces and over time.

### 3.4 | Models

In order to test the effects of acquiring firms' political connections on their likelihood of acquisition, we use the potential acquirer-actual target conditional logit approach. Suppose there are M firms in

total and N of them are acquired during a period of T years. This approach will result in a sample of M × N potential and actual acquisitions that can be analyzed by the conditional logit model. Our sample is composed of 6,638 acquirer-target pairs, including 79 actual acquisitions and 6,559 potential but unrealized acquisitions.<sup>5</sup> A conditional logit model is essentially a fixed effects model controlling for observable and unobservable common factors within the group of pairs associated with the same target (Sorenson & Stuart, 2001). The conditional logit model treats the utility of choices as a function of attributes of choice alternatives, as opposed to attributes of firms that make choice decisions (McFadden, 1973). This study considers whether acquiring firm attributes, specifically political connections, can lead the focal provincial government to approve or reject a proposal to acquire a target firm, thereby affecting the likelihood of acquisition. Thus, our model describes the likelihood of acquisition as a function of the political connections of acquiring firms in the choice set (i.e., no connection, connection to a focal provincial government, or connection to a rival provincial government), while controlling for firm-level and province-level factors for acquiring firms as well as for the common factors shared across the actual and potential acquisitions involving the same target firm.

In addition, we include province fixed effects for acquiring firms and year fixed effects in all analyses. Independent variables, moderating variables, and control variables are all lagged by one year. To handle potential heteroskedasticity issues, all models are estimated using the robust estimator of variance clustered by firm. The conditional logit model in this study can be specified as follows:

$$\pi_i = \frac{\exp\{\alpha_k + \beta x_i\}}{1 + \exp\{\alpha_k + \beta x_i\}}, \quad (1)$$

where  $\pi_i$  denotes the likelihood of acquisition for pair  $i$ ,  $\alpha_k$  denotes the intercept for set  $k$ , which includes the actual and potential acquisitions involving target  $k$ ,  $\beta$  denotes the coefficient vector, and  $x$  denotes the vector of covariates including acquirer-, provincial-, and acquirer-target-level variables, the interaction terms, and year dummies.

## 4 | RESULTS

Table 1 provides descriptive statistics for all variables included in our models. In our constructed sample, 18% of the potential and actual acquiring firms have connections to focal governments, 49% have connections to rival governments, and 45% have direct connections to the central government. Consistent with our hypotheses, an acquiring firm's likelihood of acquisition is positively correlated with connections to focal governments and direct connections to the central government, but negatively correlated with connections to rival governments. Table 2 presents the results of the conditional logit regression models.

In nonlinear models, it is difficult to interpret the estimated coefficients from regression results because the marginal effect of an independent variable depends on both the coefficient of the independent variable and the values of all independent variables (Hoetker, 2007; Zelner, 2009). Similarly, confidence intervals also depend on the values of all independent variables. Therefore, we follow King, Tomz, and Wittenberg (2000) and Zelner (2009) to employ a simulation-based approach that

<sup>5</sup>An alternative approach would consider all M firms as potential acquirers and potential targets for each year and result in a sample of approximately  $M \times (M - 1) \times T$  potential and actual acquisitions that can be analyzed with a logit model. Sorenson and Stuart (2001) highlighted a key limitation in the potential acquirer-potential target pairing ( $M \times (M - 1) \times T$ ) approach as it requires each firm to enter the sample many times, thus violating the assumption of independence across pairs. Nonetheless, we confirm the robustness of our results with the  $M \times (M - 1) \times T$  approach, available in Appendix S1.

**TABLE 1** Descriptive statistics

Variables	Mean	S.D.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
1. Acquisition	0.01	0.11																
2. Acquiring firm's connection to focal provincial government	0.03	0.18	0.27															
3. Acquiring firm's connection to rival provincial government	0.42	0.49	-0.04	-0.16														
4. Acquiring firm's direct connection to central government	0.27	0.45	0.08	0.16	0.43													
5. Provincial official similarity	-20.35	11.26	0.12	0.33	-0.14	0.02												
6. Provincial GDP similarity	-0.74	0.61	0.09	0.22	-0.11	0.09	0.22											
7. Same greater administrative area	0.22	0.42	0.14	0.35	-0.13	0.06	0.37	0.24										
8. Acquiring firm's indirect connection to central government	0.19	0.10	0.02	0.01	-0.08	0.09	-0.05	0.07	0.05									
9. Acquiring firm's provincial official in politburo	0.12	0.33	0.02	-0.05	0.03	0.09	-0.03	0.01	0.01	0.01								
10. Acquiring firm's provincial GDP	9.01	0.84	0.02	0.09	-0.03	0.10	0.16	0.24	0.10	-0.01	-0.03							
11. Acquiring firm's provincial market institution index	6.96	1.91	0.02	0.03	0.09	0.08	0.09	0.12	0.09	-0.07	0.22	0.79						
12. Acquiring firm size	15.64	1.67	0.12	0.08	0.35	0.39	0.04	0.07	0.02	-0.10	0.12	0.15	0.22					
13. Acquiring firm SOE	0.36	0.48	0.01	-0.03	0.23	0.12	-0.09	-0.02	-0.08	-0.06	0.07	-0.28	-0.21	0.21				
14. Acquiring firm liquidity	6.00	123.56	0.00	0.01	0.04	-0.02	-0.01	0.01	0.01	0.00	-0.02	0.06	0.07	-0.04	-0.03			
15. Acquiring firm leverage	0.66	0.18	-0.03	-0.03	-0.06	-0.20	0.01	-0.04	0.00	-0.06	-0.03	0.02	0.00	-0.26	-0.04	-0.07		
16. Acquiring firm's subsidiary in rival province	0.93	0.26	-0.12	-0.46	0.24	0.03	-0.50	-0.33	-0.52	-0.02	0.08	-0.12	-0.01	0.07	0.12	0.00	0.04	
17. Distance	6.43	0.96	-0.19	-0.34	0.15	-0.03	-0.38	-0.31	-0.60	-0.03	-0.01	-0.17	-0.13	0.00	0.09	-0.01	-0.01	

Note. Correlations higher than 0.03 are significant at the  $p < .05$  level, N = 6,638.

**TABLE 2** Conditional logit model of acquisitions for the full sample

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Acquiring firm's connection to focal provincial government (H1)	1.308 (0.542)	0.844 (0.499)	1.120 (0.503)	1.123 (0.531)	1.570 (0.557)	1.236 (0.577)	0.937 (0.507)
Acquiring firm's connection to rival provincial government (H2)	.016 [.016]	.090 [.090]	.026 [.026]	.035 [.035]	.005 [.005]	.032 [.032]	.064 [.064]
Acquiring firm's direct connection to central government (H4)	-0.542 (0.434)	-3.341 (0.878)	-1.800 (0.665)	0.517 (0.682)	-2.456 (0.872)	-2.451 (0.825)	-6.051 (1.821)
Acquiring firm's connection to rival provincial government × provincial official similarity (H3)	0.059 (0.353)	0.066 (0.358)	0.014 (0.352)	0.002 (0.361)	-0.435 (0.420)	0.171 (0.340)	-0.434 (0.436)
Acquiring firm's connection to rival provincial government × provincial GDP similarity (H3)	.868 [.868]	.854 [.854]	.967 [.967]	.995 [.995]	.300 [.300]	.615 [.615]	.319 [.319]
Acquiring firm's connection to rival provincial government × same greater administrative area (H3)		-0.149 (0.042)	-0.149 (0.042)			-0.107 (0.044)	
Acquiring firm's connection to rival provincial government × provincial GDP similarity (H3)		.000 [.000]		-2.059 (0.813)		.015 [.015]	
Acquiring firm's connection to rival provincial government × same greater administrative area (H3)			.011 [.011]		-2.386 (0.918)	-1.039 (0.849)	
Acquiring firm's connection to rival provincial government × acquiring firm's direct connection to central government (H5a)				.009 [.009]	2.644 (0.858)	.221 [.221]	
Acquiring firm's connection to rival provincial government × acquiring firm's indirect connection to central government (H5b)					-2.386 (0.918)	-1.846 (0.850)	
Provincial official similarity	0.041 (0.027)	0.127 (0.041)	0.033 (0.026)	0.027 (0.024)	0.040 (0.026)	0.036 (0.026)	[.041] [.035]
	.123 [.123]	.002 [.002]	.199 [.199]	.261 [.261]	.129 [.129]	.159 [.159]	[.019] [.019]

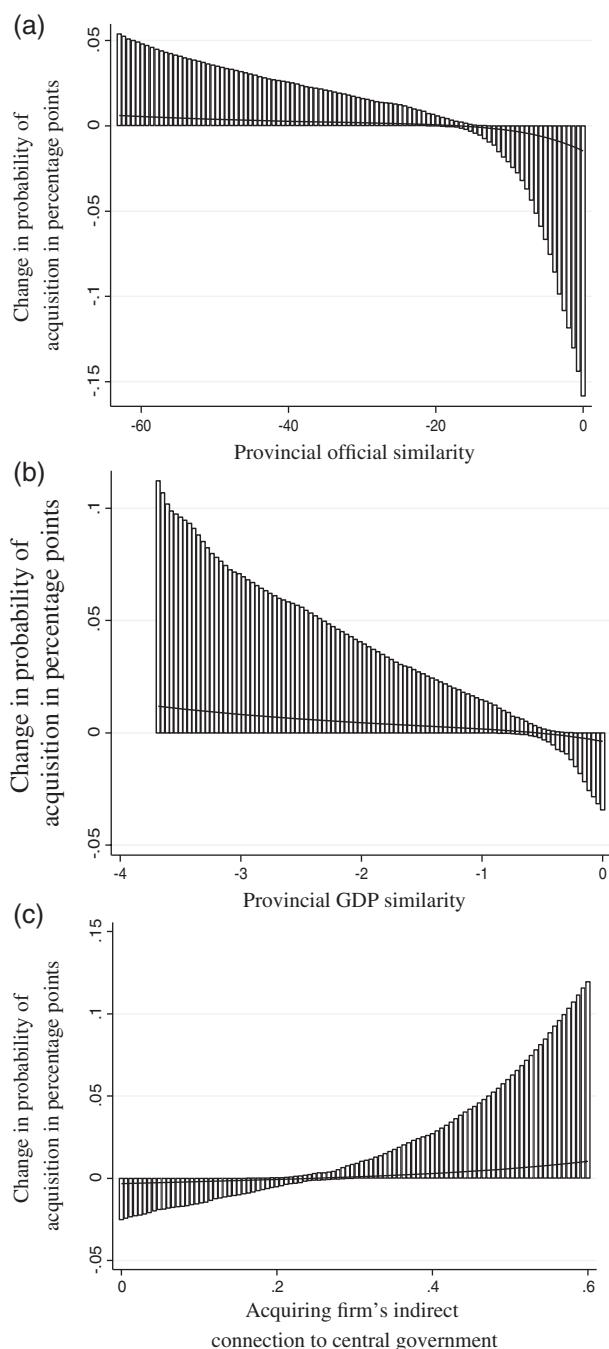
TABLE 2 (Continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Provincial GDP similarity	0.772 (0.485)	0.460 (0.514)	1.991 (0.735)	0.678 (0.488)	0.793 (0.478)	0.822 (0.533)	1.122 (0.699)
Same greater administrative area	0.928 (0.495)	0.614 (0.503)	0.915 (0.513)	2.419 (0.696)	0.880 (0.490)	0.892 (0.502)	1.719 (0.640)
Acquiring firm's indirect connection to central government	1.898 (1.890)	2.792 (1.615)	2.299 (1.871)	2.475 (2.024)	1.913 (1.749)	-3.986 (2.652)	-2.069 (3.111)
Acquiring firm size	1.189 (0.273)	1.146 (0.277)	1.153 (0.274)	1.184 (0.284)	1.185 (0.268)	1.242 (0.292)	1.158 (0.293)
Acquiring firm SOE	-0.758 (0.457)	-0.704 (0.455)	-0.704 (0.442)	-0.715 (0.442)	-0.807 (0.467)	-0.673 (0.460)	-0.648 (0.453)
Acquiring firm liquidity	-1.089 (0.764)	-1.057 (0.775)	-1.109 (0.760)	-1.080 (0.748)	-1.101 (0.806)	-0.992 (0.739)	-1.122 (0.792)
Acquiring firm leverage	-1.774 (1.162)	-1.746 (1.161)	-1.751 (1.178)	-2.037 (1.174)	-1.925 (1.229)	-1.722 (1.176)	-2.228 (1.286)
Acquiring firm's subsidiary in rival province	-0.164 (0.420)	0.134 (0.411)	0.008 (0.419)	-0.105 (0.405)	-0.080 (0.425)	-0.261 (0.425)	0.259 (0.438)
Distance	-0.994 (0.189)	-0.906 (0.175)	-0.957 (0.182)	-0.940 (0.188)	-0.991 (0.188)	-1.009 (0.202)	-0.891 (0.180)
	[.000]	[.000]	[.000]	[.000]	[.000]	[.000]	[.000]

TABLE 2 (Continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Acquiring firm's provincial official in politburo	-0.882 (0.798)	-0.641 (0.706)	-0.766 (0.775)	-0.501 (0.893)	-0.710 (0.764)	-0.208 (0.672)	0.087 (0.753)
Acquiring firm's provincial GDP	[.269] 0.380	[.364] 0.519	[.323] 0.017	[.575] -0.310	[.353] 0.338	[.757] 1.318	[.908] 0.531
Acquiring firm's provincial market institution index	(3.357) [.910]	(3.527) [.883]	(3.072) [.996]	(3.192) [.923]	(3.555) [.924]	(3.296) [.689]	(3.566) [.882]
Observations	0.342 (0.510)	0.268 (0.615)	0.306 (0.548)	0.392 (0.548)	0.188 (0.478)	-0.006 (0.491)	-0.110 (0.604)
Pseudo R-squared	0.572 0.588	0.580 0.582	0.582 0.580	0.580 0.582	0.582 0.580	0.582 0.580	0.609 0.609

Note. Robust standard errors in parentheses; *p*-values in square brackets.



**FIGURE 2** (a) Marginal effect of an acquiring firm's connection to a rival provincial government, conditional on provincial official similarity.  
 (b) Marginal effect of an acquiring firm's connection to a rival provincial government, conditional on provincial GDP similarity.  
 (c) Marginal effect of an acquiring firm's connection to a rival provincial government, conditional on the acquiring firm's indirect connection to the central government

examines the marginal effects of independent variables in nonlinear models. Based on the change in simulated predicted probability, along with the associated confidence intervals (typically 95%), a marginal effect is considered to be statistically different from zero if the confidence interval does not include zero. In addition, for continuous moderating variables, the simulation approach offers a graphic presentation of the marginal effects of the independent variable conditional on different values of the moderating variables. We test our hypotheses using this simulation approach in order to examine marginal effects and economic significance.

In Model 1 of Table 2, the coefficient for *Acquiring firm's connection to focal provincial government* is positive and significant, with a *p*-value of .016. Holding other variables at their mean levels, the marginal effect of *Acquiring firm's connection to focal provincial government* is positive and statistically different from zero, while the likelihood of acquisition for an acquiring firm that has a connection to the focal provincial government is 1.09 times higher than an acquiring firm without such a connection. These results lend support to Hypothesis 1. On the other hand, the coefficients and marginal effects for *Acquiring firm's connection to rival provincial government* and *Acquiring firm's direct connection to central government* are not significant, with *p*-values of .212 and .868, respectively, offering no support for Hypotheses 2 or 4. As we show in the following, when we consider Hypothesis 3, the effect of a firm's connection to a rival provincial government depends on the level of rivalry intensity. Similarly, as we show in the following, when we test Hypothesis 5, although the central government may not directly intervene in individual acquisitions, since the economic decision-making authority has been decentralized, it may step in to constrain the focal provincial government when the latter puts its own interests ahead of national policies.

For our moderating hypotheses, the coefficient for the interaction term between *Acquiring firm's connection to rival provincial government* and *Provincial official similarity* is negative and significant, with a *p*-value less than .001, as in Model 2. In Figure 2a, we plot the marginal effect when the horizontal axis is a continuous variable like *Provincial official similarity*, holding other variables at their mean levels. The marginal effect of *Acquiring firm's connection to rival provincial government* is negative and statistically different from zero when *Provincial official similarity* is high (i.e., one standard deviation above the sample mean), but loses significance when *Provincial official similarity* decreases to the sample mean. The likelihood of acquisition for an acquiring firm without connection to a rival provincial government is two times higher than when an acquiring firm has a connection to a rival provincial government whose officials are of a similar age and have a similar party tenure to focal provincial officials. These results suggest that an acquiring firm's connection to a rival provincial government hurts acquisition attempts only when the focal and rival provincial officials are of a similar age and have a similar party tenure, which together indicate a high level of political rivalry.

In Model 3, the coefficient for the interaction term between *Acquiring firm's connection to rival provincial government* and *Provincial GDP similarity* is negative and significant, with a *p*-value of .011. In Figure 2b, we plot the marginal effect of *Acquiring firm's connection to rival provincial government* conditional on the value of *Provincial GDP similarity*, holding other variables at their mean levels. The marginal effect of *Acquiring firm's connection to rival provincial government* is negative and statistically different from zero when *Provincial GDP similarity* is high (i.e., one standard deviation above the sample mean), but loses its significance when *provincial GDP similarity* decreases to the sample mean. The likelihood of acquisition for an acquiring firm without connection to a rival provincial government is 1.3 times higher than when an acquiring firm has a connection to a rival government of a province with a similar GDP to the focal province. Together, these results suggest that an acquiring firm's connection to a rival provincial government hurts acquisition attempts only when the focal and rival provinces have similar GDP sizes, and thus, a high level of political rivalry between their provincial governments.

In Model 4, the coefficient for the interaction term between *Acquiring firm's connection to rival provincial government* and *Same greater administrative area* is negative and significant, with a *p*-value of .009. We examine the marginal effect of *Acquiring firm's connection to rival provincial government* conditional on the value of the *Same greater administrative area*, holding other variables at their mean levels. The marginal effect of *Acquiring firm's connection to rival provincial government* is negative and statistically different from zero when *Same greater administrative area* takes a value

of 1 but loses significance when *Same greater administrative area* takes a value of 0. The likelihood of acquisition for an acquiring firm without connection to a rival provincial government is 1.3 times higher than when the acquiring firm has a connection to a rival provincial government located in the same greater administrative area as the focal provincial government. Together, these results suggest that an acquiring firm's connection to a rival provincial government hurts acquisition attempts only when the focal and rival provincial governments are located in the same greater administrative area, thus indicating a high level of political rivalry. Taken together, these results support Hypothesis 3.

In Model 5, the coefficient for the interaction term between *Acquiring firm's connection to rival provincial government* and *Acquiring firm's direct connection to central government* is positive and significant, with a *p*-value of .002. We examine the marginal effect of *Acquiring firm's connection to rival provincial government* conditional on the value of an *Acquiring firm's direct connection to central government*, holding other variables at their mean levels. The marginal effect of *Acquiring firm's connection to rival provincial government* is negative and statistically different from zero when the *Acquiring firm's direct connection to central government* takes a value of 0 but loses significance when the *Acquiring firm's direct connection to central government* takes a value of 1. The likelihood of acquisition for an acquiring firm without connection to a rival provincial government is 2.4 times higher than when an acquiring firm has a connection to a rival provincial government, but lacks direct connection to the central government. Together, these results suggest that an acquiring firm's direct connection to the central government helps neutralize the negative effect of its connection to a rival provincial government, thereby lending support for Hypothesis 5a.

In Model 6, the coefficient for the interaction term between *Acquiring firm's connection to rival provincial government* and *Acquiring firm's indirect connection to central government* is positive and significant, with a *p*-value of .002. In Figure 2c, we plot the marginal effect of *Acquiring firm's connection to rival provincial government* conditional on the value of *Acquiring firm's indirect connection to central government*, holding other variables at their mean levels. The marginal effect of an *Acquiring firm's connection to rival provincial government* is negative and statistically different from zero when the *Acquiring firm's indirect connection to central government* is low (i.e., one standard deviation below the sample mean), but loses significance when the *Acquiring firm's indirect connection to central government* increases to the sample mean. The likelihood of acquisition for an acquiring firm without connection to a rival provincial government is 1.6 times higher than when an acquiring firm has a connection to a rival provincial government but only a weak, indirect connection to the central government. These results suggest that an acquiring firm's indirect connection to the central government helps neutralize the negative effect of its connection to a rival provincial government, thus confirming Hypothesis 5b.

#### 4.1 | Robustness tests

We also conduct several robustness tests. First, we screen out unlikely acquirers by removing potential acquirers that are smaller than the targets and requiring acquirers' liquidity to be at least 0.6, as it is generally difficult for smaller, cash strapped firms to initiate acquisitions. The models in Table S1 that include these screening criteria generate consistent results. We also conduct sensitivity analyses by adjusting the screening criteria, as shown in Table S2. Results from models using various levels of these pre-screening criteria are likewise largely consistent. Second, we re-run models using the potential acquirer-potential target pairing ( $M \times [M - 1] \times T$ ) approach that considers all firms as potential acquirers and potential targets for each year. We also use the state-based random sampling in order to address concerns that there are too many 0 values in the dependent variable (Manski & McFadden, 1981). Results in Tables S3 and S4 show consistent patterns. Finally, we conduct further

robustness tests using the rare event logit model developed by King and Zeng (2001), which corrects for the potential rare event bias and generates unbiased, lower-variance estimates. Results in Table S5 show consistent patterns.

We also consider potential endogeneity issues. If a firm recruits a CEO with a specific political connection to help with a specific target, this may create an endogeneity issue. However, CEOs in China tend to attain their membership in Congress or Conference only after assuming the CEO position in their companies (Li et al., 2006). In our data collection process, we hand-collected information about CEOs and confirmed that the political connections identified in this study were formed only after they had become CEOs. Therefore, it is unlikely that firms pick CEOs with a specific strategy to acquire a particular target firm. Further, during the industry consolidation period, firms seek to pursue as many acquisitions as possible in order to survive the consolidation game. As such, there is a high degree of uncertainty regarding which target firms they should approach first and which target firms they should approach later. It is therefore unlikely that an acquiring firm would appoint politically connected CEOs or build political connections for specific acquisition targets, as potential target firms are located in many different provinces.

## 5 | DISCUSSION AND CONCLUSION

This study examines the performance effects of political strategies by analyzing the relationships among firms and various government institutions. Based on a data set of acquisitions by Chinese steel firms during the industry's consolidation period of 1999–2010, results show that an acquiring firm's connections to a focal provincial government that has approval authority facilitate its acquisition, while connections to a rival provincial government hinder acquisition when the similarity between the focal and rival provincial governments is high. We further find that an acquiring firm can neutralize the negative effect of political rivalry by leveraging direct or indirect connections to the central government.

This research makes several important theoretical and empirical contributions. First, by adopting a political network framework (Coleman, 1972; Knoke, 1990), this study focuses on the relationships among firms and various government institutions to evaluate the effectiveness of firms' political strategies (Fisman, 2001; Hillman & Hitt, 1999). This allows us to go beyond the conventional approach of political strategy literature, which tends to view the government as a monolithic entity (Ring, Bigley, D'Aunno, & Khanna, 2005). Although a growing body of research takes into account the structure of government (Choi et al., 2015; Holburn & Vanden Bergh, 2008), analysis tends to focus on structural factors that can amplify or weaken the performance benefits of political strategies. In contrast, by analyzing the rivalrous relationships between government institutions, this study highlights both the benefits and detriments of political strategies, thereby offering a new lens through which to view the mixed empirical findings to date regarding the performance effects of political strategies (Hadani & Schuler, 2013). In doing so, we respond to the call "to look beyond the surface of 'government' or 'the state', to analyze the structure or patterns of relationships among the actors in these bureaucracies and how the observed relationships among them can affect organizational fields and behavior within them" (Ring et al., 2005, p. 312).

Second, this study builds on and extends previous work examining regime change (Henisz & Delios, 2004; Leuz & Oberholzer-Gee, 2006; Siegel, 2007). Our findings confirm the insight from these studies that connections to political rivals can indeed hurt firms. Yet, our results differ in two important ways. First, we show that political connections can simultaneously be an asset and a liability. This important nuance challenges the conclusion from prior works that political connections work

better in stable regimes than in unstable regimes and firms that invest in political capital need only consider the trade-off between *present* benefits and *future* risks. Instead, we show that in a stable regime like China, rivalrous relationships between power-sharing government institutions within the same regime can impose an even more imminent trade-off for firms because managers must weigh *present* benefits against *present* harms. Second, our approach differs from and extends prior work by showing how firms exploit relationships between government institutions in an effort to neutralize the harms caused by political rivalry. Instead of a simple trade-off between present benefits and future risks, we show that firms pursuing political strategies in a fragmented government should incorporate potential coping strategies.

Third, by integrating the competitive dynamics framework (Chen et al., 2007) into the political network model (Knoke, 1990), we offer a fine-grained analysis that can be used to determine the intensity of political rivalry and its impact on firms. This study shows that similarity between political rivals can increase the rivals' awareness and motivation, thereby increasing competitive tension (Chen et al., 2007; Kilduff et al., 2010). Our study provides a framework that can be used to more precisely assess the effect of corporate political strategy (Hadani & Schuler, 2013; Hillman & Hitt, 1999).

Last but not least, and as previously noted, this study overcomes structural determinism by proposing coping strategies that can neutralize the negative impact of political rivalry. We have shown that firms can either attempt influence through direct connections to the constraining government or indirect connections via the rival government. As such, this study contributes to the emerging body of work that highlights the strategic implications of political constraints on governments and the increased effectiveness of firms' political strategies via indirect channels (Holburn & Vanden Bergh, 2008; Macher & Mayo, 2015). This study therefore answers the call from Henisz and Zelner (2003) to examine nonmarket strategies by taking into account both the political environment and firms' heterogeneous resources, like political capital, as affecting their ability to manage the political environment.

This study's limitations present opportunities for future research. First, because it is difficult to obtain consistent information on informal political connections like friendships between politicians and CEOs (Faccio, 2006; Xin & Pearce, 1996), this study focuses on firms' formal political connections. As such, future studies could measure these more subtle informal political connections. Second, future studies may also consider the coexistence of competition and cooperation between government institutions. Although provincial governments compete fiercely with each other and are unlikely to resolve their conflict by trading steel firms during consolidation, it is worthwhile to examine this possibility and consider the conditions under which the focal and rival governments may trade economic resources across industries. Finally, future studies can also examine how a constraining government can mediate the conflict between the focal and rival governments to achieve a win-win solution.

In sum, we theoretically argue and empirically show that firms benefit from connections to a focal government with decision-making authority, but are harmed by connections to a rival government competing with the focal government, particularly when that rivalry is intense. More important, we show that firms can cope with this political rivalry by exploiting either direct or indirect relationships with a constraining government. Taken together, these findings advance our understanding of corporate political strategy.

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