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Institutional Environments and Firm Capabilities as Determinants of Corporate Political Activities: A Cross-Country Study

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Abstract

This paper investigates how firms' political capabilities and a country's political market structures affect those firms' lobbying decisions. Using a cross-country firm-level dataset of more than 22,000 firms in 46 countries, we find that a firm's individual and collective political capabilities are positively associated with its possibility of lobbying while horizontal and vertical checks and balances among bureaucrats in a country's political market are negatively associated with the possibility of lobbying for firms in the country. In addition, the positive effects of a firm's political capabilities for lobbying are mitigated by checks and balances among bureaucrats in a country's political market.

Key words

Political capabilities; political market structure; corporate political activities; lobby; cross-country

INTRODUCTION

Antecedents of corporate political activities (CPA) have attracted the research interests of a broad range of scholars in public policy, political economy, and management fields who study CPA from different perspectives. Public policy scholars focus more on public interests; political economists emphasize collective actions by firms; while management scholars emphasize both microlevel firm characteristics and macrolevel political market characteristics on firms' CPA (Hillman, Keim, and Schuler 2004).

CPA studies in earlier years mainly focused on developed countries including the US (Hillman et al. 1999), the EU (Coen 1997), and Japan (Broadbent 2000). However, as CPA diffuses widely across the world, scholars have started to pay attention to international variations in the business-government interface and have conducted more studies on the political strategies of multinationals in later years (e.g., Hillman 2003). This paper takes advantage of a large, cross-country, firm-level survey to contribute to the understanding of antecedences of corporate lobbying decisions across countries.

Previous studies on CPA determinants mostly take the resource-based view and resource-dependence view and use the firm's size and resources as surrogates for their ability to conduct CPA. Recently, scholars called for CPA studies that link firms' political capabilities more directly with their CPA (Hillman et al. 2004). Firms may participate in political activities at an individual level and at the collective level, implying they may have both individual political capabilities and collective political capabilities (Ozer and Lee 2009). Previous research has largely treated firms' political capabilities as a whole, and little scholarly attention has been paid to different types of political capabilities and the

implication on firms' CPA. In this paper, we extend the literature by contending that firms' political capabilities at both the individual and collective levels affect their CPA.

The dynamic capability literature emphasizes that "the pattern of effective dynamic capability depends upon market dynamism" (Eisenhardt and Martin 2000, 1110), and political "strategies will be heterogeneous with respect to their effectiveness in creating competitive advantage for firms and that this effectiveness will depend on the pace of environment change" (Oliver and Holzinger 2008). The literature on political market attractiveness also points out that "future research should include not only market attractiveness but also internal political resources and capabilities.… and researchers could examine political resources as they affect exchange between firms and suppliers of public policies as the way by which firms mitigate transaction costs and facilitate contract making in political markets" (Bonardi, Hillman, and Keim 2005). However, a recent review of the literature on dynamic capabilities pointed out that, "So far, only a few studies have included in their analyses the role of contingencies" (Barreto 2010, 277). In this study, we contribute to the literature on political capabilities and on political market attractiveness by investigating how firms' political capabilities affect their CPA contingent on the structure of political markets in their countries in an integrated framework of firms' political capabilities and political market structure.

Firms and policymakers are two sides of the political market. Recent theoretical development of CPA literature highlighted that the attractiveness of a political market depends on the rivalry among policymakers in the political market and concluded that the higher the degree of rivalry in a political

market, the less attractive the political market is for firms, thus reducing firms' motives for CPA (Bonardi et al. 2005). Although the theoretical arguments of political market attractiveness are convincing, empirical tests of these theoretical arguments are very rare. In addition, existing political market attractiveness studies focus only on the political market at the national level but neglect the cross-level political market which is highly related to firms' business environments. Taking advantages of studies on the decentralization of political systems, we consider both the horizontal political market structure at the national level and the vertical political market structure across different levels within countries (Fan, Lin, and Treisman 2009). The paper contributes to the literature on political market attractiveness by taking into consideration a more complete political market structure into the framework of firms' CPA decision.

In the next section we summarize relevant prior research and advance testable hypotheses. We then describe the research design and empirical methods. Next, we report empirical results in the following section. Finally, we discuss the implications of our results and suggest further research directions for CPA research.

THEORY AND HYPOTHESES DEVELOPMENT

Recent developments in CPA literature has identified that both macrolevel structural characteristics of political markets and microlevel political capabilities of firms are important determinants of firms' CPA. At the macrolevel, Bonardi et al. (2005) built a framework in which the structural characteristics

of political markets, such as competition among demanders and rivalry among suppliers, make political markets more or less attractive for firms, thereby influencing firms' decisions to engage in CPA. At the microlevel, Oliver and Holzinger (2008) argued that an important component of corporate political strategy lies in the firms' dynamic political capabilities which enable firms to execute political strategies successfully. The integration of the macrolevel characteristics of political markets and microlevel characteristics of firms are important for a deeper understanding of participation and success in the political marketplace. To date, however, most of the literature studies these two levels of factors separately. In the following sections, we develop an integrated framework which predicts firms' participation in lobbying using their political capabilities and countries' political market structures.

Firms' political capabilities

In high-velocity environments, it is hard for firms to achieve a long-term competitive advantage without dynamic capabilities which are "the ability to sense and then seize new opportunities, and to reconfigure and protect knowledge assets, competencies, and complementary assets in rapidly changing environments with the aim of achieving a sustained competitive advantage" (Augier and Teece 2009, 412). Specifically, Oliver and Holzinger (2008, 497) define dynamic political capabilities as "the dynamic process by which a firm influences or complies with its political environment for the purpose of generating future value or protecting the current value of the firm from future loss or

erosion." As firms operate not only in market environments but also nonmarket environments, firms' dynamic political capabilities of conformance, selection, manipulation, and creation of nonmarket environments, including political environments, are critical to their efforts for building legitimacy, accessing resources, going beyond survival, and achieving growth (Zimmerman and Zeitz 2002).

Based on the resource-based view, scholars suggest that political capabilities that draw on firms' internal processes, resources, and knowledge related to political activities are firm specific and unevenly distributed among firms; hence, firms with such political market capabilities should be more effective in individually conducting CPA (Hillman and Hitt 1999; Hillman et al. 2004). In other cases, some individuals or groups who envision the need for some form of institutional change to address a problem they face in the political market may not individually have the resources or capabilities to produce institutional changes and therefore engage in a collective action to pursue their common interests in the political market (Hargrave and Van de Ven 2006). Thus, firms may execute political strategy individually and/or collectively. However, existing literature typically studies firms' individual political capabilities and collective political capabilities separately (Hargrave and Van de Ven 2006; Oliver and Holzinger 2008) while little scholarly attention has been paid to both individual and collective political capabilities (Ozer and Lee 2009). In this paper, we investigate the effects of firms' individual political capabilities and collective political capabilities on their lobbying strategy.

Existing studies emphasizing firms' CPA argue that individual political capabilities come from resource advantages owned by individual firms and show that firms with more tangible resources,

such as total assets, are more likely to conduct political actions alone (Hillman et al. 2004). In addition to tangible resources, intangible resources owned by individual firms, such as a top management team's (TMT) political capital, may also have important impacts on firms' CPA. A TMT's political capital is considered an important determinant of firms' performance because it enables firms "to leverage and exploit other types of resources, to develop a competitive advantage, and to achieve better performance" (Li and Zhang 2007, 791).

With strong managerial political capital, which can be defined as "resources that firms secure through direct and indirect social ties to policy agents that facilitate government lobbying in favor of focal firms' interests" (Oliver and Holzinger 2008, 510), individual firms have the ability to mitigate the transaction costs in political markets and are able to shape the political strategy to fit their own needs. Thus, firms with a higher level of managerial political capital with policymakers and a greater ability to utilize the political capital though the development of relational ties with those policymakers are more likely to secure their interests through lobbying. Accordingly, we propose the following hypothesis:

Hypothesis 1a: Firms with higher individual political capabilities are more likely to lobby.

Effective lobbying always induces heavy costs and requires a long-term relationship with government officials. Thus, in many cases individual firms cannot afford to lobby individually. When firms do not have the resources to conduct CPA individually, they often engage in organizational networks to build their coalition and ally themselves with other groups with complementary interests

and resources. Individual political actions load all costs directly on the participating firm whereas in collective actions, such as CPA organized by business associations, costs are shared among members (Olson 1995). In addition to cost sharing, members of business associations share information on the political market, allow firms to learn from one other's experiences, and further reduce transaction costs due to a lower frequency of transactions in political markets. Meanwhile, business associations perform monitoring functions in the political process through collective actions, thereby enjoying economies of scale. Therefore, collective actions provide a more forceful voice at lower cost than an individual firm and play important roles in the process of institutional change.

Some existing studies proxy firms' lobbying activity with their business association membership (e.g., Campos and Giovannoni 2007). However, as Hillman (2003) argues, participating in business associations is not equal to actual lobby action because firms can be inactive in lobbying even when they are business association members. We argue that although business association membership does not necessarily imply actual lobby action, it increases firms' collective political capability. Keeping other things equal, firms with business association membership can more easily cover the costs of lobby activities through information sharing, resource pooling, and economies of scale and therefore are more capable of lobbying. Accordingly, we propose the following hypothesis:

Hypothesis 1b: Firms with higher collective political capabilities are more likely to lobby.

Countries' political market structures

Hillman and Keim (1995) proposed a theoretical framework in which policymakers are considered as suppliers in political markets while checks and balances among policymakers affect the attractiveness of political markets. As an important type of policymaker, the larger number of bureaucratic agencies will increase checks and balances, thus reducing the likelihood of manipulating policies to suit the interests of specific bureaucratic agencies. Thus, checks and balances among bureaucrats and the attractiveness of political markets are expected to be negatively associated with each other.

Bureaucratic agencies in any country exist at national and subnational levels. Existing CPA studies focus on horizontal checks and balances among policymakers at the national level (Hillman et al. 2004) while vertical checks and balances among policymakers across different hierarchical levels in a country are neglected. In this paper, we develop hypotheses for both the *horizontal* structure of the political market at the national level and the *vertical* structure of the political market across different hierarchical levels.

At the national level of a country's bureaucratic system, policymakers include bureaucrats such as presidents, prime ministers, and their staffs. The feasibility of policy change depends on the alignment of interests among these bureaucrats. When only a few political constraints at the national level of government exist, bureaucrats can easily modify political issues in their favor. However, when too many bureaucrats try to participate in the policy decision, the level of checks and balances among bureaucrats increases. In such a situation, no single bureaucrat is dominant enough in

regulatory power to easily modify political issues in its favor. Fierce checks and balances among bureaucrats require agreement across a broader range of agencies to make a shift in policy and reduce the likelihood of changing the policy's status, thus making policy changes more costly (Bonardi et al. 2005). Consequently, when the national-level bureaucratic system of a country has a higher level of checks and balances, firms need to persuade more bureaucrats and to make tradeoffs between bureaucrats' interests. Thus, the cost of pursuing policy changes increases, the attractiveness of political markets to firms decreases, and the likelihood of firms lobbying is reduced. Hence, we hypothesize that:

Hypothesis 2a: The higher the degree of horizontal checks and balances among national-level bureaucrats in a country, the less likely firms in that country engage in lobbying.

A firm's business in a country is ruled by not only by bureaucrats at the national level but also by bureaucrats at lower levels. The political system in a country is more decentralized when there are more levels of bureaucrats in the political system. Decentralization plays an important role in the economic development of transitional and developing economies, such as China and India (Bardhan 2002). However, the impact of decentralization on firms' lobby behaviors has not been addressed in the literature.

We argue that the vertical political market structure in a country affects firms' lobby behaviors through changing the level of complexity in political markets. In countries with a high degree of decentralization, one region is under the governance of multiple tiers of government. A decentralized

political system allows for competition among jurisdictions. Competition among these different levels of government works in similar ways to the checks-and-balances constraint of national-level bureaucrats. Since each level of government has less regulatory power, the chance of changing policy through firms' lobbying efforts is lower than in the case in which each level of government has more power and there are fewer government levels. A decentralized system makes lobbying more costly because one level of bureaucrats' ability to commit to certain policies is more likely to be constrained when bureaucrats at other levels in the hierarchy can also make changes. Meanwhile, when multiple levels of government regulate the same area, firms are likely to be confused by whom to lobby and cannot concentrate their resources for lobbying, inducing information asymmetry and a higher cost of lobbying. Thus, vertical checks and balances in the bureaucratic hierarchy make the political market less attractive and thus hinder firms from lobbying. Therefore, we propose the following hypothesis:

Hypothesis 2b: The higher the degree of vertical checks and balances among bureaucrats at different bureaucratic levels in a country, the less likely firms in that country engaging in lobbying.

Interactions between firms' political capabilities and countries' political market structures

The contingent dynamic capability view argues that a superior organizational competitive advantage is a result of the proper alignment of endogenous organizational resources and capabilities with exogenous environments. Although the importance of the contingency theory has long been recognized (Lawrence and Lorsch 1967), a recent review of dynamic capabilities reviews that "only a

few studies have included it in their analyses the role of contingencies" (Barreto 2010). An exception is the contingent corporate environmental strategy perspective, which integrates the corporate environmental capabilities of firm and environmental regulation markets and argues that environmental regulation market characteristics moderate the relationship between organizational environmental capabilities and a proactive corporate environment strategy (Aragon-Correa and Sharma 2003). To test the relevance of the contingency perspective in CPA, we apply the contingent dynamic capability view to develop hypotheses related to the effects of firms' individual and collective political capabilities on lobbying of the structure of the political market.

An important dimension of transaction costs in political markets is low transaction frequency (Kaufman, Englander, and Marcus 1993). Considering a firm's individual political capabilities as social ties between the manager and bureaucrats which were established through long-term connections, the repeating feature of interactions between the manager and bureaucrats reduce transaction costs through increasing transaction frequency. However, with the increasing number of bureaucrats who constrain the policymaking power of other bureaucrats, firms with a high level of individual political capabilities need to dilute their resources among a larger number of bureaucrats, and this will reduce transaction frequency with each influential bureaucrat. Meanwhile, for a firm with a low level of individual political capabilities, the resource dilution effect of increasing the number of bureaucrats is smaller because the overall political capabilities of the firm are limited. Thus, the dilution effect could be much larger on firms with a high level of individual political capabilities

because the amount of resources allocated to each bureaucrat may drop below a threshold level at which a bureaucrat can be effectively convinced.

The dilution effect of increasing the number of bureaucrats on the effectiveness of individual political capability could be even larger considering the checks-and-balances feature among bureaucrats. Although political connections were traditionally considered political assets for firms, political connections can also be significant liabilities for firms when unexpected changes in a political regime happen (Siegel 2007). Therefore, firms with a high level of individual political capabilities that are more likely to establish strong relationships with certain bureaucrats do not only enjoy the benefits from the strong relationship but also possibly suffer negative discrimination and exclusion because of the checks and balances among bureaucrats. With this potential risk in mind, firms are less likely to increase the likelihood of lobbying with the increase of their individual political capabilities in political markets that have a high level of checks and balances among national-level bureaucrats and bureaucrats across different levels. Thus, we have the following hypothesis:

Hypothesis 3a (3b): The positive relationship between firms' individual political capabilities and the likelihood of engaging in lobbying is weakened with increasing horizontal (vertical) checks and balances among bureaucrats in a country.

Business associations often embody shared values and articulate shared norms for their members. Organizational members gather around common interests like fewer regulations. Business

associations exist and prosper because they help member firms that cannot achieve their nonmarket strategic goals individually but can achieve these goals collectively. As in all other collective actions, business associations suffer free-riding problems because, to make a collective lobby strategy successful, some members in business associations need to act as leaders and put in extra effort to lobby policymakers (Lenway and Rehbein 1991). If the regulatory decision is unfavorable, these leaders do not get rewards for their additional efforts. If the regulatory decision is favorable, as decisions made by policymakers are always not exclusive to any business association members, the benefits from the favorable policies are enjoyed not only by the members that contributed extra effort but by all the members of the business association. Thus, when uncertainty in political markets is high due to the high levels of checks and balances among national-level bureaucrats and bureaucrats across different levels, business association members are more likely to act as free-riders in collective CPAs. Therefore, we have the following hypothesis:

Hypothesis 3c (3d): The positive relationship between firms' collective political capabilities and the likelihood of engaging in lobbying is weakened with increasing horizontal (vertical) checks and balances among bureaucrats in a country.

DATA

Data

The main data source of this paper is the Enterprise Surveys conducted by the World Bank from 2002--06 (hereafter referred to as the WBES). Earlier versions of the WBES (e.g., Business Environment

and Enterprise Performance Survey: BEEPS 1999) have been used in recent studies covering a wide range of topics such as nonmarket strategy (e.g., Martin et al. 2007), firm size distribution (e.g., Angelini and Generale 2008), and corruption in banks (e.g., Barth et al. 2009). Existing studies of firms' nonmarket strategies based on the WBES focused mainly on passive political reactions (e.g., bribery) of firms (e.g., Lee, Oh, and Eden 2010; Luo and Han 2009; Martin et al. 2007) and largely ignored firms using lobbying as a proactive strategy to influence policymaking institutions with the end goal of obtaining sustainable competitive advantages (Hillman et al. 2004).

Using the WBES has several advantages for studies on firms' lobbying decisions. First, compared to existing studies on lobbying in which a firm's lobby activities are implied from its membership in a business association (e.g., Campos and Giovannoni 2007), the WBES allows us to measure lobbying directly from a firm' answer to the question of whether it "seeks to lobby government to influence the content of laws or regulations." Second, compared to previous studies of CPA that focus mainly on lobbying in developed economies (Hillman 2003; Hillman, Zardkoohi, and Bierman 1999) or lobbying by subsidiaries of multinational enterprises (MNEs) in host countries (Desbordes and Vauday 2007; Hillman and Wan 2005), the WBES allows us to investigate lobby activities in a large number of emerging economies where lobby activities have received much less attention (Harstad and Svensson 2009). Third, the large number of countries covered by the WBES allows us to empirically study how political market structure affects the lobbying activities of firms in

multiple countries and to employ multilevel analysis techniques that fit the multilevel theory of CPA (Bonardi et al. 2005).

The WBES data used in the paper were gathered through face-to-face interviews with firm managers and owners between 2002 and 2006. The main purpose of this survey was to identify the driving factors behind, and obstacles to, enterprises' performance and growth around the world. The respondents of the survey were senior business executives or entrepreneurs who were likely to be aware of political strategies (such as lobbying) of firms. However, due to lobbying being a sensitive subject in many countries, the data suffer from missing values. The final sample consisted of 22,013 firms in 46 countries (see table 1 for detailed information). The majority of firms in the final sample operated primarily in the manufacturing and service industries, with nearly 39 percent in manufacturing; approximately 48 percent in service; and the rest in agriculture, construction management, and other industries. Consistently, with the overall sample of the WBES, the majority (79 percent) of the firms in the final sample were small- to medium-sized, with each firm having fewer than 100 employees and sales of less than US$10 million annually. The median age of the firms in the sample was 11 years at the time of the survey.

Table 1. Country list and sample size (N=22,013)

Region	Countries	Sample Size	Countries	Sample Size
Transition	Albania	330	Latvia	331
Europe	Armenia	515	Lithuania	355
	Azer Baijan	456	Moldova	564
	Belarus	503	Romania	786

	Bosnia and Herzegovina	340	Russia	1010
	Bulgaria	491	Serbia and Montenegro	418
	Croatia	401	Serbia	257
	Macedonia	320	Tajikistan	465
	Georgia	309	Ukraine	934
	Kazakhstan	800	Uzbekistan	620
	Kyrgyzstan	431		
Africa	Benin	23	South Africa	546
	Kenya	49	Tanzania	35
	Mali	2	Zambia	150
	Senegal	26		
East Asia	Cambodia	434	Vietnam	500
	Philippines	566		
South Asia	Sri Lanka	357		
Latin America	Ecuador	315		
OECD	South Korea	598	Slovenia	408
	Germany	1192	Estonia	309
	Ireland	482	Czech	552
	Portugal	501	Hungary	678
	Turkey	738	Spain	591
	Greece	540	Poland	1508
	Slovakia	277		

Although the WBES is a confidential survey, it may suffer either a nonresponse or potential false response because corporate lobbying is a politically sensitive issue (Jensen, Li, and Rahman 2010). Thus, we compared responding and nonresponding firms to assess a nonresponse bias and found no significant differences ($p>0.05$) in terms of firm age and total sales. However, we found that firms with more employees, foreign-owned firms, and government-owned firms were more likely to respond to lobbying questions ($p<0.01$). Furthermore, we also confirmed that firms in countries with little political freedom were significantly less likely to respond the question of lobbying ($p<0.01$). We discuss this problem and provide possible remedies in following section.

Dependent variable

The dependent variable (*lobbying*) is a dummy variable which equals 1 if a firm reported that it had lobbying activity in the year before the survey and zero otherwise. The following question is used in the questionnaire to capture firms' lobbying experience: *Did your firm seek to lobby the government or otherwise influence the content of laws or regulations affecting it?* The mean of Lobby is 0.15, indicating that 15 percent of sampled firms reported that they had lobbied governments in the year before the survey.

Independent variables

H1a and H1b concern a firm's individual political capability and collective political capability, respectively. We capture a firm's individual political capability with its general manager's interactions with government officials. General managers were asked to report the managerial time they spent, in the year prior to the conduct of the survey, in meetings with officials of government agencies in the context of the regulation of the firms' business. We define *Time CEO spent with officials* (*CEO TIME*) as the percentage of senior management's time spent on regulatory issues with government officials. To capture a firm's collective political capability, we use a dummy variable of *Business association membership* (*ASSOCIATION*) which equals 1 if a firm was a member of a business association and zero otherwise.

H2a and H2b concern checks and balances among bureaucrats at the national level and across subnational levels. At the national level, we use Polcon (*POLICON*) in the Political Constraints Index initially developed by Henisz (2000). The Polcon index captures the feasibility of policy change at the national level of countries around the world. Specifically, it captures the extent of preference heterogeneity within government branches which increases the decision costs of overturning policy for aligned executive branches. Thus, the higher the value of *Polcon,* the higher the constraints there are on policy change at the national level. At the subnational level of bureaucrats, we use another measure constructed by Fan et al. (2009), which is the number of *government tiers* (*GOVTIERS*) in countries across the world. A level of government is identified if a state executive body at that level meets three conditions: (1) it is funded from the public budget, (2) it has the authority to administer a range of public services, and (3) it has territorial jurisdiction. The number of government tiers varies considerably across countries. For example, Kenya has one central government and five local government tiers (*mkoa, wilaya, taarafa, mtaa,* and *mtaa mdogo*) while Uruguay has one central government and one local government tier (*Gobierno* and *Departamento*).

We control other firm-level, industry-level, and country-level factors that might affect a firm's lobbying decisions according to existing literature. At the firm level, we control for firms' ownership, size, age, location, mobility, exporting, and degree of firm's sale dependency on government. Ownership has been identified as an important antecedent of CPA (Getz 1997). Government ownership captures formal capital linkages between a firm and the government. The government has

more common interests with firms that are mainly owned by the government and is thus more likely to make policies favorable to the interests of government-owned firms. Given these common interests, the transaction costs of lobbying government are expected to be lower for government-owned firms. Thus, it is expected that government ownership is positively related to the likelihood of lobbying. Foreign firms are also expected to be different from domestic firms in their CPA. On one hand, foreign firms suffer the twin liabilities of foreignness and having less political capability to lobby local governments. Thus, they are expected to be less likely to lobby. On the other hand, as the focus countries in the study are mostly developing ones and foreign firms come mainly from developed economies where they have accumulated more lobby experience, foreign firms are also expected to be more likely to lobby. We leave the impact of foreign ownership on lobbying to empirical analyses. We construct dummy variables to capture the impacts of government ownership and foreign ownership. The *Government-owned firm* dummy / *foreign-owned firm* dummy equals 1 if more than 50 percent of a firm's capital is owned by local governments / foreign owners and zero otherwise.

Firm size and *Firm age*, defined as natural logarithms of the total number of employees and the number of years after establishment, are used as proxies for resources that can be used in CPA (Hillman et al. 2004). To control for the effect of being located in capital cities and how it facilitates CPA, we construct a dummy variable of *Capital city* which equals 1 if a firm is located in the capital city of a country and zero otherwise. Firms that are more mobile are more able to refuse informal payments to public officials (Chen, Yasar, and Rejesus 2008). A dummy variable of whether or not a

firm operates in other countries (*mobility*) is a measure of the firm's mobility. Firms that export (*exporter*) their products to other countries are also vulnerable to export regulations. This variable is measured as a dummy, whether a firm exports directly or indirectly (i.e., through a distributor). A firm's dependency on government (*Sale to government or SOEs*) is considered to increase the likelihood of lobbying because a firm that is heavily reliant on government cannot easily refuse informal payments.

At the country level, we control for a country's economic development level and other political institution characteristics. *GDP per capita* is the natural logarithm of GDP per capita in a given country before the year of survey. GDP per capita data comes from the World Development Indicator (WDI). We also control for characteristics of political systems that were found to be important determinants of CPA in the literature, including historical heritage and whether or not a country is a federal state. British colonial heritage (*British colony*) is a dummy variable and expected to be related to a firm's political activities because the British tend to have an "obsessive focus on the procedural aspects of law" (Treisman 2000). The *Federal* (Elazar 1995) dummy equals 1 if a country's political system is federal and 0 otherwise. We also include industry dummies and region dummies to capture unobserved fixed effects at the industry and regional levels.

Adequacy of the measures

Cross-country international management research with poor data equivalence will bias empirical results and theoretical inferences (Hult et al. 2008). The WBES use standardized survey instruments and a uniform stratified sampling methodology to minimize measurement error and to yield data that are comparable across economies. The measurement equivalence and data collection equivalence have proven to be good in previous studies that used the series of surveys (Angelini and Generale 2008; Barth et al. 2009; Martin et al. 2007). In addition, the firm-level variables used in the paper are all objective while the country-level variables come from data sources widely used in international management studies, thus further ensuring that constructs have the same meaning across countries (Kirkman and Law 2005).

As with most surveys, the WBES may suffer a nonresponse bias, which is the firms' systematic refusal to participate. This may compromise the random nature of the sample. The WBES team carefully analyzed the reasons for nonresponses and distinguished the firms that refused to participate from those that had gone out of business and were unable to be located. Nonresponse firms were substituted with willing participants, randomly selected from the same location-sector-size sampling category.

Although the nonresponse bias was carefully handled in the survey, the WBES may also suffer from an under-response bias if a question is opinion based or sensitive. Sensitive questions increase the possibility of under-response. The most sensitive questions used in the study are about a firm's

lobby and bribery activities. We expect that firms may under-respond to both questions if an under-response bias exists. We use a firm's response to the lobby question as the dependent variable, control its response to the bribery question in the analyses, and thus control the under-response at the firm level. As to country-level under-response, Vaaler and McNamara (2004) argued that the nonresponse or under-response bias may be related to country-level political conditions. Including country institution indicators and controlling country effects in multilevel analyses, therefore, further help correct for systematic nonresponse or under-response bias by country.

As in most international management research based on survey data, the use of dependent and independent variables from the same survey may raise the concerns of common method variance (CMV). CMV can be serious when the dependent variable and independent variables are perceptions of respondents (Chang, Van Witteloostuijn, and Eden 2010). Following Chang et al.'s (2010) recommendation, we take both procedural methods and statistical techniques to reduce the potential of CMV. First, we collect measures for different variables from different sources. For example, the dependent variable can be from the WBES but some independent variables can come from other sources like Henisz (2000) and Fan et al. (2009). Second, to reduce respondents' evaluation apprehension and make them less likely to edit their responses to be more socially desirable, respondents were assured of anonymity and confidentiality so that they would answer the questions as honestly as possible. The questionnaire was organized into several sections starting with less sensitive questions such as general information and then followed with more sensitive questions such as

business-government relations and performance. It is worth noting that the major variables used in the study appear before those sensitive questions in the questionnaire, thus reducing the possibility that respondents would reply dishonestly. Interviews were conducted by well-trained interviewers guided by standardized and detailed questionnaire manuals and are thus of high quality. Third, as Aiken and West (1991) pointed out, hypotheses based on interactions are less subjected to the common method variance because it is unlikely that respondents would have an "interaction-based theory" in their minds that could systematically bias their responses to produce these results. Fourth, we employ statistical remedies to address concerns regarding CMV following Podsakoff et al.'s (2003) recommendation. In order to check for the eventuality of this problem, we adopted a confirmatory factor analysis (CFA) on competing models that increase in complexity (Podsakoff et al. 2003). If method variance is a significant problem, a simple model (e.g., single-factor model) should fit the data as well as a more complex model. The theoretical model, containing two-factors (two factors: CPAs and firm features, NFI=0.891; CFI=0.892 and RMSEA=0.039) yielded a better fit of the data than the simple model (one factor model, NFI=0.881; CFI=0.882 and RMSEA=0.040). Another statistical procedure to detect CMV is Harman's single-factor test (Podsakoff et al. 2003). This procedure requires that unrotated factor analysis be performed on all of the variables studied. If a single factor emerges or one general factor explains most of the covariance in the independent and dependent variables, it is reasonable to conclude that a significant CMV is present (Podsakoff et al. 2003). The unrotated factor analysis of the sample yielded four factors with eigenvalues greater than one, with a

total explained variance of 58.28 percent, and no single factor accounted for more than 21.75 percent of the variance. These findings suggest that a method factor is not predominant in this study, thus reducing the threat of common method variance.

METHODS

Our data has a multilevel structure, with each firm nested within a country. In this case, both lower-level (i.e., firm-level) variables and higher level (i.e., country-level) variables may influence a firm's decision on lobby activities. A hierarchical (multilevel) logistic model is the predominant approach for dealing with nested data structures with a binary dependent variable (i.e., *xtmelogit* command in Stata). The primary advantage of hierarchical logistic models is that they allow researchers to simultaneously investigate relationships within a particular hierarchical level as well as relationships between or across hierarchical levels (Hofmann 1997). Firms' lobby activities may vary across the countries which may not be captured by a statistical fixed-effect model assuming the same intercept and slopes of regression equations for all countries.

In hierarchical logistic modeling (HLM), the first step to model the tendency towards different lobby patterns in different parts of the country is to allow each country to have its own random intercept of regression equation. Our initial statistical tests confirm that the inclusion of a random intercept for each countries is an improvement over a fixed-effects logistic model (P=0.000) and that there exists significant country-to-country variation in the slope coefficients. Snijders and Bosker

(1999) developed a formula to compute an intraclass coefficient for the multilevel logistic model: $\rho=\tau_0^2/(\tau_0^2+3.29)$. We found from the data analysis that 87.7 percent of the variance in lobby decisions is at the firm level and 12.3 percent of the variance resided within countries.

The full estimation model is:

$$LOBBY_{i,j}=\beta_1 CEOTIME_{i,j}+\beta_2 ASSOCIATION_{i,j}+\beta_3 POLCON_j+\beta_4 GOVTIERS_j+$$
$$\beta_5 POLCON_j*CEOTIME_{i,j}+\beta_6 GOVTIERS_j*CEOTIME_{i,j}+\beta_7 POLCON_j*ASSOCIATION_{i,j}+$$
$$\beta_8 GOVTIERS_j*ASSOCIATION_{i,j}+\beta_9(\text{FirmControls})_{i,j}+\beta_{10}(\text{CountryControls})_j+\mu_{0,j}+$$
$$\mu_{1,j} ASSOCIATION_{i,j}+\varepsilon_{i,j}$$

where the likelihood of lobby for the *i*th firm and the *j*th country is a function of firm- and country-level explanatory variables and control variables. In addition, random intercept $\mu_{0,j}$ and random slope $\mu_{1,j}$ allow for the possibility that the mean level of lobbying and likelihood of association is systematically different among the countries. Results of HLM are reported in table 3.

Although HLM has advantages discussed above, it has an important disadvantage, which is that the interpretation of coefficients of interaction variables in HLM is challenging. As with interpreting the coefficients of interaction variables in nonlinear models, we cannot simply rely on the sign and significance levels of coefficients (Hoetker 2007). We therefore employ the simulation-based approach (King, Tomz, and Wittenberg 2000) and the "Intgph" command developed in Zelner (2009) with logit models. Results of logit models are reported in table 4 while interaction effects between firm political capabilities and country political market structure are plotted in figures 1a to 1d.

RESULTS

Table 2 provides the correlation matrix and summary statistics of the sample. Most correlation coefficients have predicted signs and are mostly statistically significant. We adopt the mean-centering approach in our regressions to deal with potential multicollinearity. The variance inflation factors of all variables (except region and industry dummies) are well below 10, an acceptable cut-off point (Neter et al. 1996). Thus, multicollinearity is not a concern.

Table 2. Summary statistics and correlations

		Obs.	Mean	S.D.	Min	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	LOBBY	22013	0.15	0.36	0	1	1														
2	CEO TIME	21431	50.62	10.53	0	100	0.15***	1													
3	ASSOCIATION	22013	0.48	0.5	0	1	0.18***	0.03***	1												
4	POLCON	21338	0.35	0.18	0	0.62	0.03***	-0.03***	0.21***	1											
5	GOVTIERS	21193	30.59	0.57	2	6	-0.06***	0.01†	0.02*	-0.35***	1										
6	Firm bribery	22013	0.37	0.48	0	1	0.040***	0.16***	-0.02*	-0.08***	0.11***	1									
7	Firm size§	22013	30.22	10.62	0.69	90.84	0.24***	0.10***	0.23***	-0.03***	0.00	0.00	1								
8	Firm age§	22013	20.72	0.65	10.39	50.33	0.13***	0.02***	0.21***	0.14***	-0.01†	-0.1***	0.38***	1							
9	Foreign owned firm	22013	0.11	0.32	0	1	0.06***	0.02***	0.10***	0.00	0.00	0.02*	0.23***	-0.03***	1						
10	Government owned firm	22013	0.08	0.27	0	1	0.13***	0.04***	-0.03***	-0.04***	-0.02*	-0.08***	0.25***	0.26***	-0.1***	1					
11	Sale to government of SOEs	22013	390.98	460.16	0	100	0.11***	0.11***	-0.05***	-0.04***	-0.05***	0.14***	0.13***	0.05***	0.07***	0.17***	1				
12	Exporter	22013	0.27	0.44	0	1	0.16***	0.04***	0.22***	0.10***	-0.09***	-0.02*	0.41***	0.20***	0.25***	0.01†	0.09***	1			
13	Mobility	22013	0.08	0.27	0	1	0.09***	0.04***	0.14***	0.03***	0.04***	0.01	0.25***	0.07***	0.31***	-0.02***	0.04***	0.29***	1		
14	Capital	22013	0.28	0.45	0	1	0.06***	0.03***	0.01†	-0.03***	-0.03***	0.07***	0.06***	-0.04***	0.10***	0.01	0.06***	0.05***	0.09***	1	
15	GDP per Capita§	22013	80.3	10.32	50.7	10.72	-0.07***	-0.16***	0.24***	0.36***	-0.16***	-0.22***	-0.15***	0.11***	-0.04***	-0.06***	-0.23***	0.01†	0.00	-0.14***	1
16	British colony	22013	0.08	0.27	0	1	0.05***	0.04***	0.11***	0.15***	-0.11***	-0.14***	0.16***	0.17***	0.04***	-0.06***	-0.05***	0.18***	0.09***	-0.02***	0.03***
17	Federal	22013	0.16	0.36	0	1	-0.09***	-0.05***	0.09***	-0.15***	0.30***	0.01	-0.05***	0.02***	-0.03***	-0.02***	-0.13***	-0.07***	0.00	-0.10***	0.36***
18	Manufacturing	22013	0.39	0.49	0	1	0.00	0.02*	0.07***	0.04***	-0.07***	-0.04***	0.27***	0.15***	0.08***	-0.08***	-0.05***	0.30***	0.07***	-0.04***	-0.16***
19	Service	22013	0.48	0.5	0	1	0.00	-0.04***	-0.07***	-0.01	0.05***	0.00	-0.30***	-0.14***	-0.03***	0.05***	0.01	-0.22***	-0.06***	0.06***	0.14***
20	Construction	22013	0.11	0.31	0	1	-0.03***	0.01	-0.02*	-0.05***	0.03***	0.07***	0.02*	-0.01†	-0.07***	0.02***	0.08***	-0.13***	-0.02***	-0.03***	0.07***
21	Agricultural	22013	0.01	0.08	0	1	0.04***	0.03***	0.02***	0.02***	0.02*	0.03***	0.01†	0.00	0.01	-0.02*	-0.06***	0.01†	0.00	0.01*	-0.15***

		16	17	18	19	20	21
16	British colony	1					
17	Federal	-0.13***	1				
18	Manufacturing	0.21***	-0.14***	1			
19	Service	-0.19***	0.09***	-0.78***	1		
20	Construction	-0.07***	0.08***	-0.28***	-0.33***	1	
21	Agricultural	0.15***	-0.04***	-0.07***	-0.08***	-0.03***	1

Note : † p<.10, * p<.05, ** p<.01, *** p<.00, § *Natural logarithm*

Table 3 presents results based on the hierarchical logistic regression specified above. Model 1 includes only control variables. As expected, firms' bribery activities are positively correlated with their lobby activities. Older and larger firms are more likely to lobby than younger and smaller firms. Firms controlled by foreign investors and governments are more likely to lobby governments. Locating in capitals also increases the likelihood of lobbying. Exporting firms are more likely to lobby to government. Additionally, the more the sales of firms depend on government or SOEs, the more likely firms are engaged in lobbying activities.

In model 1, country-level control variables like GDP per capita and heritage of British colony are statistically insignificant.

Model 2 of table 3 introduces proxies of a firm's individual and collective political capabilities. Proxies of both individual political capability (*CEOTIME*) and collective political capability (*ASSOCIATION*) are positively and significantly associated with a firm's likelihood of lobbying, thus supporting Hypotheses 1a and 1b. In model 3 of table 3, proxies of horizontal political market structure (*POLCON*) and vertical political market structure (*GOVTIERS*) are added. The coefficient of horizontal checks and balances in a political market is negative but statistically insignificant. Thus, Hypothesis 2a is not supported in model 3 of table 3. The coefficient of vertical checks and balances in a political market is negative and statistically significant, which supports hypothesis 2b. In model 4 of table 3, we introduce all interacting relationships hypothesized in hypotheses 3a to 3d. All these interaction coefficients are negative and statistically significant, providing strong support to hypotheses 3a to 3d. Aikake Information Criterion (AIC) values are reported at the bottom of table 3, showing that the full model (model 4) has the lowest values for the criteria and, therefore, can better explain firms' lobbying decision.

Although most results in table 3 are in line with our hypotheses, we need to exercise a certain degree of caution when concluding that hypotheses 3a to 3d are supported based on the results of multilevel analyses because it is problematic to interpret interactions in nonlinear models based on the sign and significance estimated from the model. Therefore, we discuss the results of hypotheses 3a to 3d using further evidence obtained from logit models and simulation techniques developed in King et al. (2000) and Zelner (2009).

Table 3. Hierarchical logistic modeling results for firm lobbying

	Model 1	Model 2	Model 3	Model 4
Controls				
Firm bribery	0.281***	0.219***	0.216***	0.215***
	(0.000)	(0.000)	(0.000)	(0.000)
Firm size	0.266***	0.263***	0.269***	0.270***
	(0.000)	(0.000)	(0.000)	(0.000)
Firm age	0.181***	0.168***	0.162***	0.164***
	(0.000)	(0.000)	(0.000)	(0.000)
Foreign-owned firm	0.019	-0.011	-0.053	-0.059
	(0.758)	(0.867)	(0.430)	(0.381)
Government-owned firm	0.525***	0.503***	0.530***	0.528***
	(0.000)	(0.000)	(0.000)	(0.000)
Sale to government or SOEs	0.004***	0.004***	0.004***	0.003***
	(0.000)	(0.000)	(0.000)	(0.000)
Exporter	0.270***	0.272***	0.275***	0.273***
	(0.000)	(0.000)	(0.000)	(0.000)
Mobility	0.095	0.092	0.109	0.114
	(0.163)	(0.189)	(0.137)	(0.121)
Firm located in capital city	0.103**	0.107**	0.101**	0.105**
	(0.030)	(0.026)	(0.045)	(0.036)
GDP per Capita	-0.031	-0.038	-0.081	-0.101*
	(0.641)	(0.563)	(0.208)	(0.096)
British colony	0.405	0.205	0.276	0.287
	(0.145)	(0.440)	(0.236)	(0.198)
Federal	-0.526**	-0.706***	-0.612**	-0.591**
	(0.043)	(0.006)	(0.028)	(0.026)
Hypotheses				
CEOTIME (H1a, +)		0.021***	0.022***	0.021***
		(0.000	(0.000)	(0.000)
ASSOCIATION (H1b, +)		0.966***	0.994***	0.940***
		(0.000	(0.000)	(0.000)
POLCON (H2a, -)			-0.016	-0.166
			(0.952)	(0.521)
GOVTIERS (H2b, -)			-0.230*	-0.227*
			(0.068)	(0.054)
POLCON * CEOTIME (H3a, -)				-0.078***
				(0.006)
GOVTIERS * CEOTIME (H3b, -)				-0.080**
				(0.048)
POLCON * ASSOCIATION (H3c, -)				-0.160***
				(0.000)
GOVTIERS * ASSOCIATION (H3d, -)				-0.121**
				(0.042)
Industry dummies	Yes	Yes	Yes	Yes
chi2	10390.573	13390.994	12710.958	13180.424
ll	-80370.094	-77240.807	-71070.627	-70930.296
AIC	161120.19	154910.61	142610.25	142400.59
BIC	162540.18	156590.04	144430.01	144530.96
N	**22013**	**21431**	**19978**	**19978**

Note: *, ** and *** are significantly different from zero at the 10%, 5%, and 1% level, respectively.

Table 4. Logistic model results for firm lobbying

	Model 1	Model 2	Model 3	Model 4

Controls				
Firm bribery	0.244***	0.143***	0.173***	0.186***
	(0.000)	(0.001)	(0.000)	(0.000)
Firm size	0.282***	0.237***	0.252***	0.257***
	(0.000)	(0.000)	(0.000)	(0.000)
Firm age	0.231***	0.164***	0.158***	0.160***
	(0.000)	(0.000)	(0.000)	(0.000)
Foreign-owned firm	0.020	-0.030	-0.064	-0.065
	(0.746)	(0.630)	(0.331)	(0.324)
Government-owned firm	0.390***	0.472***	0.530***	0.531***
	(0.000)	(0.000)	(0.000)	(0.000)
Sale to government or SOEs	0.004***	0.004***	0.003***	0.003***
	(0.000)	(0.000)	(0.000)	(0.000)
Exporter	0.491***	0.383***	0.360***	0.350***
	(0.000)	(0.000)	(0.000)	(0.000)
Mobility	0.154**	0.108	0.116	0.127*
	(0.017)	(0.108)	(0.105)	(0.077)
Firm located in capital city	0.245***	0.219***	0.158***	0.187***
	(0.000)	(0.000)	(0.001)	(0.000)
GDP per Capita	-0.067***	-0.141***	-0.162***	-0.135***
	(0.000)	(0.000)	(0.000)	(0.000)
British colony	0.518***	0.496***	0.473***	0.419***
	(0.000)	(0.000)	(0.001)	(0.003)
Federal	-0.439***	-0.587***	-0.550***	-0.599***
	(0.000)	(0.000)	(0.000)	(0.000)
Hypotheses				
CEOTIME (H1a, +)		0.023***	0.024***	0.023***
		(0.000)	(0.000)	(0.000)
ASSOCIATION (H1b, +)		0.987***	1.006***	0.774***
		(0.000)	(0.000)	(0.000)
POLCON (H2a, -)			-0.148	-0.199
			(0.316)	(0.183)
GOVTIERS (H2b, -)			-0.304***	-0.196***
			(0.000)	(0.000)
POLCON * CEOTIME (H3a, -)				-0.073***
				(0.009)
GOVTIERS * CEOTIME (H3b, -)				-0.058
				(0.134)
POLCON * ASSOCIATION (H3c, -)				-0.199***
				(0.000)
GOVTIERS * ASSOCIATION (H3d, -)				-0.275***
				(0.000)
Industry dummies	Yes	Yes	Yes	Yes
Region dummies	Yes	Yes	Yes	Yes
R-squared	0.0984	0.1378	0.1443	0.1496
chi2	18680.405	25520.056	24530.048	25430.386
ll	-85590.816	-79850.803	-72750.903	-7230.735
AIC	171610.63	160170.61	146010.81	145190.47
BIC	173290.62	162000.98	147990.37	147480.64
N	**22013**	**21431**	**19978**	**19978**

Note: *, ** and *** are significantly different from zero at the 10%, 5%, and 1% level, respectively.

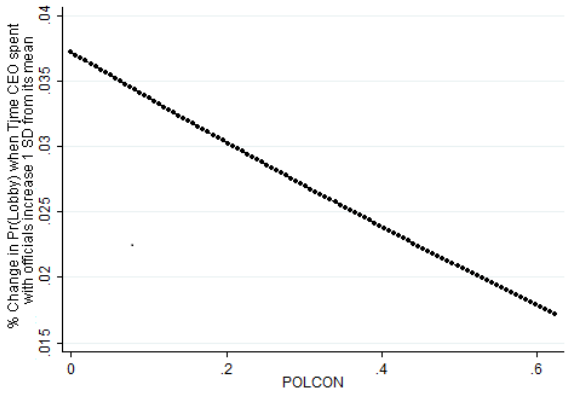
Columns 1 to 3 in table 4 contain results for logit models without interaction effects. The results are largely consistent with those reported in columns 1 to 3 in table 3. In model 4 of table 4, we report

the full model with interactions hypothesized in hypotheses 3a to 3d. The signs of coefficients in interaction terms are significantly negative except for GOVTIERS * CEOTIME which align with hypotheses 3a, 4a, and 4b. The sign of coefficients of GOVTIERS * CEOTIME are negative but insignificant (p<0.14). We further interpret the effects of interactions using the simulation-based approach plotted figures 1a to 1d.

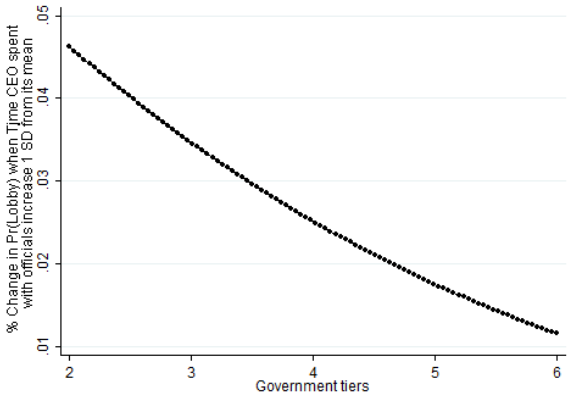
Figure 1a presents the estimated effects of *POLCON * CEOTIME* on the probability of lobby. For a given point on the schedule, the corresponding value on the X-axis represents the level of *POLCON* while the corresponding value on the Y-axis represents the percentage change in the predicted probability of lobbying when *CEOTIME* increases one standard deviation from its mean. The solid circles on the schedule indicate regions where the change in the predicted probability of lobbying differs significantly from zero at p≤0.05.

Figures 1a, 1b, 1c, and 1d plot the estimated effects of *POLCON * CEOTIME*, *GOVTIERS * CEOTIME*, *POLCON * ASSOCIATION* and *GOVTIERS * ASSOCIATION* on the probability of lobbying, respectively. The downward schedules reveal negative moderation effects while the solid circles on the schedule indicate that the change in the predicted probability of lobbying differs significantly from zero at p≤0.05 in most regions. Specifically, figure 1a shows that compared to a firm in a country with the highest level of *POLCON* (on the right side of the X-axis), the change in the possibility of lobbying for a firm in a country with the lowest level of *POLCON* (on the left side of the X-axis) is 2 percent (3.7 percent-1.7 percent=2 percent) higher when *CEOTIME* increases one standard deviation from its mean. Figure 1b shows that compared to a firm in a country with the highest level of *GOVTIERS* (on the right side of the X-axis), the change in the possibility of lobbying for a firm in a country with the lowest level of *GOVTIERS* (on the left side of the X-axis) is 35 percent (47 percent-12 percent=35 percent) higher when *CEOTIME* increases one standard deviation from its mean. Figure 1c shows that compared to a firm in a country with the highest level of *POLCON* (on the right side of the X-axis), the change in the possibility of lobbying for a firm in a country with the lowest level of *POLCON* (on the left side of the X-axis) is 13 percent (15 percent-2 percent=13 percent) higher when *ASSOCIATION* increases one standard deviation from its mean. Figure 1d shows that compared to a firm in a country with the highest level of *GOVTIERS* (on the

right side of the X-axis), the change in the possibility of lobbying for a firm in a country with the lowest level of *GOVTIERS* (on the left side of the X-axis) is 30 percent (27 percent-(-3) percent=30 percent) higher when *ASSOCIATION* increases one standard deviation from its mean. Although the change in the possibility of lobbying is relatively small in *POLCON * CEO TIME*, we can conclude that all hypotheses 3a to 3d are strongly supported.



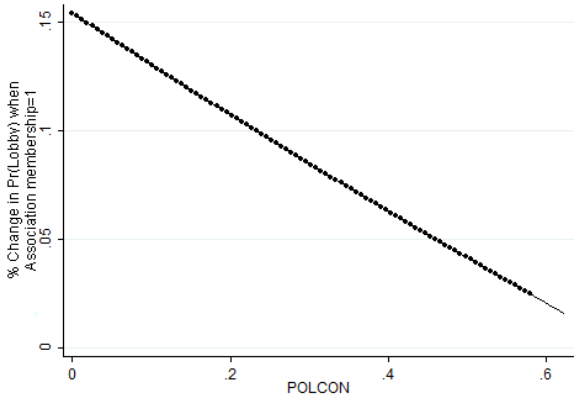
1a



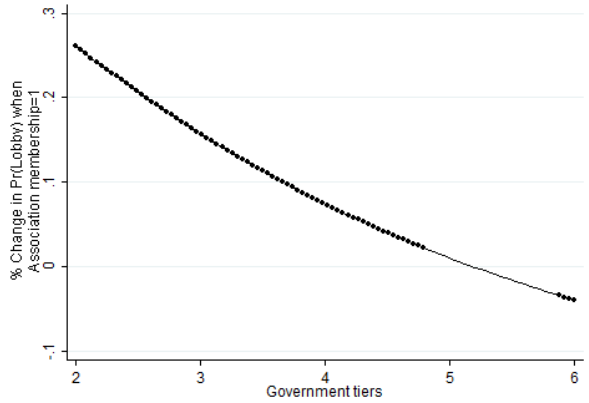
1b

FIGURE 1a-1b:

Estimated moderating effect of political market structure on firms' individual political capability with Monte-Carlo Simulation



1c



1d

FIGURE 1c-1d:

Estimated moderating effect of political market structure on firms' collective political capability with Monte-Carlo Simulation

Note: The solid circles on the schedules indicate regions where the change in the predicted probability of lobbying differs significantly from zero at $p \leq 0.05$

DISCUSSION

In this study, we develop and test an integrated framework that predicts firms' lobbying decisions in

relation to their political capabilities and the structure of political markets in their countries. We empirically test the framework with a data set covering more than 22,000 firms in 46 countries. We find that firms' lobbying decisions are positively related to their political capabilities, including their individual and collective capabilities but negatively related to vertical checks and balances among the different levels of government agencies. We also find that the checks and balances among bureaucrats negatively moderate the effects of firms' political capabilities on their lobbying decisions.

We make several contributions to the existing literature of CPA. First, our framework addresses both firms' individual political capabilities and their collective political capabilities. Compared to prior research in which firms' political capabilities are measured by their size, we construct more direct measures of firms' individual and collective political capabilities. The study also responds to Hillman et al.'s (2004) call for more studies on political capabilities and political strategies. Second, previous studies on the political market and CPA focused on only national-level political markets and largely neglected the vertical structure of political markets. To the extent that partisan competition is examined at the same administrative levels, this aspect of political structure may be viewed as "horizontal" in nature. Beyond the horizontal political structure, however, checks and balances on politicians may also be generated from the presence of multiple subnational administrative levels, a scenario that has received much less attention in the literature. Variations across administrative levels may represent a "vertical" feature of the political structure. Our examination of the vertical political structure provides a more comprehensive view because many countries with little partisan competition still demonstrate constraints on politicians amid the presence of multiple subnational administrative levels. Third, our framework considers both the individual and collective political capabilities of firms, addressing the limitation in the literature which focuses on one aspect of firms' political capabilities but neglects another aspect. Fourth, the paper contributes to the literature on contingency dynamic capabilities by studying how firms' political capabilities affect their CPA contingent on the structure of the political market these firms operate in. Last, the paper contributes to the literature on lobbying by studying the lobby activities of firms in 46 countries. The large number of countries increases the generalizability of conclusions in the paper.

As with other studies, the paper also has limitations, which reveal future research opportunities

in more in-depth analyses of CPA across countries. The first limitation is that although we separate firms' political capabilities into individual political capabilities and collective political capabilities, we do not separate firms' individual lobby activities and their collective lobby activities. In future studies, scholars can investigate whether individual political capabilities and collective political capabilities affect corresponding political activities. A second limitation is that we focus on government agencies but not elected politicians. In the future, it would be worthwhile to study how checks and balances among elected politicians affect corporate political activities. The third limitation is that we emphasize the costs of CPA in the paper as firms need capabilities to overcome these costs to engage in CPA. However, whether a firm engages in CPA depends on the trade-off between benefits and costs from political actions. A more balanced framework that integrates both the costs and benefits of CPA can be established and tested in future studies.

CONCLUSION

Lobbying is an important format of corporate political activities existing in many countries. Using a comprehensive firm-level survey on lobby activities in a large number of countries, we find that firms' lobbying decisions depend not only on their political capabilities but also on the structure of the political market in their countries. A firm with a certain level of political capability is less likely to lobby when the political market in its country features a higher level of checks and balances among bureaucrats than if the firm was in a country with a lower level of checks and balances among bureaucrats. Our results imply that firms need more political capabilities when the political market in their countries has a higher level of checks and balances among bureaucrats. Our study also has implications for MNEs from countries with a low level of checks and balances among bureaucrats that set up business in countries with a high level of checks and balances among bureaucrats. If these MNEs want to lobby in these host countries, they need higher political capabilities to successfully conduct their political strategies.

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