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## The Influence of Firms on Government

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# The Influence of Firms on Government\*

Jeffrey T. Macher, John W. Mayo, and Mirjam Schiffer

## Abstract

While interest group explanations have considerably advanced our understanding of governmental outcomes, much remains to be understood about the specific country-level, industry-level and firm-level characteristics that underlie the influence firms have on the establishment of governmental rules, laws and regulations. In this study, we draw upon a unique database of roughly 6000 international firms to investigate the abilities of firms to affect governmental policies. We find that country-level institutional characteristics, such as the legal origin and political diversity of the firm's home country, significantly affect the ability to influence government. We also find that industry-level characteristics, such as the number of industry competitors, and firm-level characteristics, such as size and age, are determinants of firm influence on governments.

**KEYWORDS:** influence, government, interest groups, legal origins

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## 1 INTRODUCTION

The mechanisms by and extent to which firms influence governmental decision-making have been the subject of several studies in economics, management and political science.<sup>1</sup> And this literature has added theoretical insights into the kinds of firms that are likely to receive more (or less) favorable government treatment. But as one moves away from the theoretical possibilities to empirical verification, considerably less is known about the specific determinants of firms' influence on governmental decision-making or the relative magnitude of their effects. In this regard, a number of questions remain empirically unexplored or under-explored. For instance, what role if any do economic, political or legal institutions play in affecting firms' influence on governments? How might variations in industrial organization affect firms' abilities to influence changes in laws, rules, and regulations? What roles might firm size or firm age play in influencing governmental decision-making outcomes? And finally, might country-, industry- or firm-level characteristics differentially affect firms' abilities to influence different government entities, such as the executive, legislative or judicial branches or regulatory agencies?

In this paper, we address these questions by drawing on a novel database of roughly 6,000 firms from 60 countries and empirically testing several determinants of firm influence. The volume and international scope of these data permit a broader and more detailed analysis of firms' influence on governmental decision-making than has heretofore been possible. These data also facilitate a multi-level investigation into the role of country-, industry- and firm-level factors that may affect the degree of firm influence on governmental decision-making entities. The empirical results not only validate and reinforce elements of existing theory, but also identify several novel empirical determinants that may serve as the impetus for additional theoretical inquiries into the nature of firms' influence on governmental decision-making.

## 2 MOTIVATION AND BACKGROUND

The subject of firms' influence on governments is a familiar, but poorly understood, topic. This dissonance stems mainly from the dual nature of the firm influence dialog. On the one hand, normative commentaries are commonly proffered regarding the idiosyncratic and deleterious consequences of certain

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<sup>1</sup> These include research in the economic theory of regulation (e.g., Stigler, 1971; Peltzman, 1976; Becker, 1983); political economy of international trade (e.g., Grossman and Helpman, 1994); political science (e.g., Salamon and Siegfried, 1977) and management (e.g., Lenway and Rehbein, 1991). Shleifer and Vishny (1994) examine the complementary issue of governmental influence on firms.

firms and their respective governmental influence. On the other hand, relatively less discussion occurs that considers the institutional and economic determinants of firms' abilities to influence governments. Absent a solid foundation of the positive determinants of firm influence, however, normative lessons are necessarily suspect. We seek therefore to enhance understanding of the positive determinants that affect firm influence on governmental decision-making.

Beginning with Olson (1965) and Stigler (1971), firms' political and regulatory outcomes are seen as complex manifestations of interactions between the supply of governmentally bestowed benefits and the demand for those benefits by firms and consumers.<sup>2</sup> Subsequent efforts to understand governmental policy choices toward firms have relied largely upon and/or enhanced Olson (1965) and Stigler (1971). A number of theoretical insights and empirical regularities have emerged that categorize roughly into three broad and largely autonomous research streams.

## **2.1 COUNTRY-LEVEL DETERMINANTS**

The first research stream examines the potentially profound effects of comparative economic and legal institutions in shaping firm-government interactions and outcomes (North, 1990). A particularly promising development in this stream has been the structure of countries' legal systems that shape institutional factors and subsequently affect economic outcomes. For example, La Porta et al. (1998) find that country legal origins create important and significant differences in shareholder and creditor rights, as well as the enforcement of laws affecting businesses. La Porta et al. (1999) similarly show that country legal system heritage serves as an important precursor for government performance. In the wake of La Porta et al. (1998, 1999), other scholars examine the fundamental role country legal systems play in economic system efficacy. Lerner and Schoar (2005) show that countries with more effective legal protection of "the contractual channel" and the enforcement of commercial laws create business environments that significantly alter the nature of private equity transactions. Gennaioli and Shleifer (2007: 44) advance the proposition that the "decentralized evolution of the law through apolitical judicial decisions is vastly superior to centralized yet arbitrary lawmaking by legislatures."

Country-level variation in legal heritage and resulting institutions arguably creates substantially different environments within which firms seek to influence governmental decision-making. La Porta et al. (1998: 228) suggest Common Law countries "resulted in a more limited government, greater political freedoms, and a more efficient bureaucracy." Rajan and Zingales (2003: 42) note that "Common

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<sup>2</sup> For a discussion of the subsequent evolution of and contributions to this literature, see e.g., Peltzman (1989) and Beard, Kaserman and Mayo (2003).

Law evolves at the periphery, and innovates around legislative or administrative roadblocks set up by the center.” Glaeser and Shleifer (2002) suggest conversely that Civil Law arose as a consequence of the enhanced ability of powerful litigants to sway the local French Judiciary, and thus necessitated a more centralized legal structure. Djankov et al. (2003: 605) indicate the development of “fact-finding by state-employed judges, automatic superior review of decisions, and later the reliance on procedural and substantive codes rather than judicial discretion,” resulted in the development of a Civil Law legal system that involves greater centralization and dictatorship in comparison to countries with a Common Law heritage. La Porta et al. (1998: 231-232) argue that Civil Law “has largely been an instrument of the State in expanding its power” and that such “a civil legal tradition...can be taken as a proxy for intent to build institutions to further the power of the State...” The former USSR constitution provides a poignant example of the lack of firm empowerment in countries with a Socialist Law origin. Article 4 embodied the “abolition of private ownership,” while Article 11 noted that economic life “shall be determined by the state-national plan” (Berman and Quigley, 1969). As observed by La Porta et al. (1999: 231), “Socialist Law is a clear manifestation of the State’s intent to create institutions to maintain its power to extract resources, without much regard for protecting the economic interests or liberties of the population.” In such an environment or its derivative, we expect firms to have relatively little influence over governmental decision-making. We also recognize the potential effects that current and/or former firm-government relationships and interactions might have on influence over governmental decision-making bodies, regardless of legal system origin. For instance, (even partial) government ownership fosters alignment and facilitates ongoing dialog between firms and government. Moreover, firms with public origins that have subsequently privatized may have greater influence levels in governmental decision-making than firms that have always been privately-owned. We control for both illustrations in our empirical estimation.

The extant research thus suggests, but has not formally or directly tested, a relationship between country legal system origin and the extent of firm influence over governmental decision-making. Firms operating in Common Law origin countries should have more governmental decision-making influence than their counterparts operating in Civil Law origin countries, while firms operating in Socialist Law countries operate in institutional environments that provides few if any formal channels of governmental influence. We therefore examine directly the prospect that firms operating in Common Law origin countries possess greater levels of influence over governmental decision-making entities than firms operating in countries with either Civil Law or (especially) Socialist Law heritages, *ceteris paribus*.

Another country-level institutional characteristic that likely affects firms' governmental decision-making influence is the degree of government decentralization. Hénisz (2000) notes that within the context of a spatial model of discretion and uniform preference distribution the expected difference between any two actors is expressed by  $1/(n+2)$ , where  $n$  is the number of actors. This premise is applied to a political party discretion model, which suggests more diverse country political institutions create larger numbers of "veto points" that may effectively block political discretion.

While political concentration may simplify matters for firms seeking to influence governmental decision-making bodies, the likelihood of interest alignment between those in political power (who have the ability to affect policy) and any particular firm is reduced. More diverse political institutions instead increase the number of "entry points" by which firms may find a sympathetic party or government official to champion their cause, with the end-result that firms consider themselves better able to affect policy outcomes. In light of these countervailing possibilities, we test empirically whether firms operating in countries with more diversified governments provide an environment for greater influence than firms operating in less diversified governmental regimes. In short, we examine the relative strength of veto points vis-à-vis entry points.

## **2.2 INDUSTRY-LEVEL DETERMINANTS**

The second research stream examines the theoretical and empirical importance of industry structure as a determinant of firms' influence on governmental decision-making. Olson (1965) notes that a larger number of participants (firms) in a group (industry) may erode the effectiveness of individual members to successfully secure outcomes that are in their collective interest. Specifically, free rider problems grow as the number of industry participants increases. In the present context, the issue arises as to whether industries characterized by fewer competitors are better able to overcome free rider problems to achieve influence over governmental decision-making, *ceteris paribus*. The most obvious proxy for the propensity of free rider problems to beset an industry—the number of firms—is in many contexts thought to be isomorphic to the perceived extent of competition, however—similarly proxied by the number of firms. Any test of the free rider proposition based on firm number thereby confounds possibly with the potentially independent impact on firms' influence that may arise from competitive landscape changes. As the number of industry competitors grows, for example, it is possible that both the likelihood of political involvement and the likelihood of success in that domain vary separately from changes in influence that may arise from free riding.

Empirical examinations of the relationship of industry structure and firm influence yield mixed results. Potters and Sloof's (1996: 417) survey of empirical political influence studies indicates that "most scholars indeed find an increased scope for political influence with higher degrees of concentration, but there are many that find no effect or even a negative effect." Salamon and Siegfried (1977) find a negative relationship between industry concentration and firm influence (measured by the effective tax rate), while Pittman (1976) finds a positive relationship between industry concentration and campaign contributions. Grier et al. (1994) find some evidence that concentration positively affects political contribution levels and the probability of forming political action committees. Lenway and Rehbein (1991: 901-902) find that "firms in industries with a large number of firms are likely to choose a leader or a follower rather than a free-rider strategy." In light of these mixed results, Pecorino (1998) develops a theoretical model in which the industry equilibrium yields no necessary relationship between the number of firms, the degree of concentration, and the ability to overcome free-riding problems. This extant ambiguity underscores the benefits of further empirical examination.

### **2.3 FIRM-LEVEL DETERMINANTS**

A third research stream examines firm-level characteristics that act to either improve or dampen firms' abilities to influence governmental decision-making. Larger firms may wield more political influence than smaller firms (Salamon and Siegfried, 1977; Lenway and Rehbein, 1991), for at least three reasons. First, to the extent that establishing firm-level governmental decision-making infrastructure is characterized by fixed costs, larger firms possess sufficient scale to warrant such efforts. Second, larger firms offer more to governmental decision-makers in the way of votes, income or post-governmental service employment in comparison to their smaller counterparts. Third, if lobbying represents a pure private good with no free rider problems, larger firms are likely to engage in more intense influence-seeking activities because the productivity of such efforts are likely to be higher than those of smaller firms. If lobbying manifests itself as a pure public good, only the largest firm in the industry will partake (Olson, 1965). Stigler (1974) further suggests that larger firms are more likely to participate not only in lobbying activities independent of participation in trade associations, but also in trade associations that create political influence.

Age likely improves firms' abilities to influence governmental outcomes, for at least three reasons. First, firms become more adept via "learning curve" effects in influencing governmental decision-makers. Second, to the extent that governmental decisions affect the business environment within which firms operate, firms that are unsuccessful in influencing governments may fail. Third, as

older firms are more likely to survive than younger firms (Mata and Portugal, 1994), governmental decision-makers recognize that providing favorable decisions (conferring influence) to younger firms is less beneficial than providing such influence to older firms with whom they are more likely to have repeated and ongoing interactions. While we examine empirically whether larger firms or older firms possess greater abilities to influence governmental decision-making than their younger counterparts, we recognize and discuss below the potential reverse causality. Namely, firms with influence established via connections and relationships with particular governmental decision-making entities are more likely to grow and survive, respectively.

### 3 EMPIRICAL APPROACH

Having discussed the country-, industry- and firm-level determinants of influence that relate to governmental decision-making, we describe the data, provide variable definitions, and specify summary statistics below. The Appendix offers more detailed descriptions of the dependent, independent and control variables utilized in the empirical analyses.

#### 3.1 DATA

The World Bank collected firm and business environment survey information over 1998-2000 from more than 10,000 firms in 80 countries under its World Business Environment Study (WBES).<sup>3</sup> Firms were selected for the WBES based on several factors, including firm size, firm ownership, industry and location, geographical distribution of products or services offered, and adequate representation within a specific county's economy, among others.<sup>4</sup> A high survey

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<sup>3</sup> The survey was overseen by the World Bank but administered by Gallop, AC Nielsen, The Confederation of Indian Industries, The Harvard Center for International Development in Africa, The Egyptian Center for Economic Studies in Egypt, Lidee Khmer in Cambodia, The University Chamber of Commerce in Thailand, and The Bangladesh Export Development Project in Bangladesh. See Batra et al. (2002) for more discussion.

<sup>4</sup> Firms were chosen to comprise a representative sample that reflects the importance of manufacturing, services and commercial firms in particular countries. The guidelines were as follows (Batra et al., 2002):

**Sectoral Composition** – The number of manufacturing versus service companies were allocated according to their contribution to GDP, with a 15 percent minimum for each.

**Size** – At least 15 percent of the companies in the sample were in the small category (fewer than 50 employees) and at least 15 percent in the large category (more than 500 employees).

**Ownership** – At least 15 percent of the companies in the sample would be firms with foreign control (or where the law prohibits this, will have substantial foreign ownership).

**Exporters** – At least 15 percent of the companies in the sample would export at least 20 percent of their output.

response rate obtained, although missing values reduce slightly the number of observations for various measures.<sup>5</sup>

The WBES questions permit systematic analysis of the determinants of firm influence on governmental decision-making. One set of questions asked firms to indicate their extent of influence over the establishment of new national laws, rules, regulations and decrees. These influence measures were recorded separately for four governmental decision-making bodies (the executive, legislative, and ministerial branches and regulatory agencies). A second set of questions examined the influence of firms and their business associations, which allows for examination of whether smaller firms, who are less likely to have any significant direct influence on new legislation as measured by the first set of questions, have any differential influence as a consequence of business association participation.

The WBES data also include detailed industry- and firm-level information, which we describe below. We supplement these data with country-level (institutional and political) data from each surveyed respondent. The combined data permit a novel examination of the country-, industry- and firm-level determinants that are associated with influence over governmental decision-making. By contrast, prior empirical studies either measure influence based more simply on industry-level data or are derived from a single country (most often the U.S., given its governmental structure facilitates inter-state comparisons).

While the WBES data offer novelty relative to prior studies, they also present particular challenges. One such concern is whether firms' perceptions of influence represent accurate indicators of their actual abilities, as surveys are sometimes deemed poor predictive indicators relative to direct tests. We believe our application is credible, despite its reliance on survey data for several reasons. First, the survey questions and answers are not used to predict economic agents' behavioral responses to particular stimuli but are instead focused on perceptions. Second, there are no incentives to "game" answers, as there are no benefits to any particular answers. We therefore view the survey responses as unbiased, albeit

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**Location** – At least 15 percent of the companies in the sample would be located in small towns (with a working definition of a population of less than 50,000), or in the country side.

<sup>5</sup> Survey methods inevitably encounter missing values, which have been linked to a variety of factors, including survey mode, interviewer training, and question topic, structure and difficulty (Groves et al., 2002). Approaches to dealing with missing data include developing models to generate values for the missing survey response items and invoking the assumption that missing data are independent of the survey response. This latter assumption allows us to discard the survey responses with a missing value for our influence measures. We also estimated a probit model of the likelihood of response, which reveals that some firm-level characteristics are associated with lower probabilities of completing a survey response. We know of no affirmative reason that this lower response probability is correlated with differences in survey responses, however, were they to have been observed.

imperfectly measured, indicators of actual levels of firm influence on governmental decision-making.<sup>6</sup> Third, in the absence of direct measurement of firm influence, the survey responses provide valuable insights that may subsequently be corroborated should direct measurement data become available.

### 3.2 VARIABLE DEFINITIONS

We account for countries' legal origins via indicator variables (*Common Law Origin*, *Civil Law Origin* and *Socialist Law Origin*, respectively) derived from La Porta et al. (1999).<sup>7</sup> To test the impact of political diversification, we account for the extent to which countries' political institutions are diversified (i.e., degree to which government branches are controlled by different parties). *Political Diversification* is from the Henisz (2000) POLCON database, and represents a measure of country political institution diversification. To test the relationship between industry structure and governmental decision-making influence, we measure the number of industry competitors. We account for whether firms face between one to three competitors (*1-3 Competitors*) or four or more competitors ( $\geq 4$  *Competitors*), in comparison to no competitors (*No Competitors*). To test the relationship between firm size and governmental decision-making influence, we account for whether firms have less than 50 employees (*Small-Sized Firm*) or 51-500 employees (*Medium-Sized Firm*), in comparison to more than 500 employees (*Large-Sized Firm*). The relationship between firm size and governmental decision-making influence is examined, using the logged age of the firm ( $LN(\text{Firm Age})$ ) since founding. The industry structure, firm size and firm age variables are self-reported measures directly from WBES.

We also include several control variables at the country-, industry- and firm-level. At the country-level, we include a democracy measure to better interpret the country legal origin effects. *Democracy* is drawn from the Polity IV database, and represents a widely-used measure of governing institution level of authority. It ranges from fully institutionalized autocracies to fully institutionalized democracies, taking into account executive authority constraints and political competition as well as changes in institutionalized qualities of governing authority. We also include a country-level measure of whether any extant governing coalition represents a "special interest" party. *Special Interest Party* controls for the possibility that special interest parties (e.g., nationalist,

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<sup>6</sup> Unbiased measurement of a dependent variable within the context of a regression-based model can readily be shown to be absorbed by the standard random error term within the regression model. See, e.g. Greene (2003).

<sup>7</sup> We use the Common Law system as the omitted base. We performed robustness tests to the exclusion of Germany and Sweden, whose legal systems (essentially based in Civil Law) are not so neatly categorized. The results are invariant to this alternative estimation.

rural, regional, or religious) might create more or less potent pathways for firms to influence governmental decision-making (Keefer, 2007).<sup>8</sup> La Porta et al. (1998) suggest that the level of national income may confound the interpretation of country legal origin. We accordingly include logged *GDP Per Capita* in the estimation. Rajan and Zingales (2003) similarly argue that the incumbent firm power may be affected by the degree of economic openness. We therefore include logged *Trade/GDP* (a standard measure of country openness) in the estimation. These variables are from the World Bank Development Indicators database.

Firms that operate in particular industries are likely to have different collective influence levels, relative to some baseline industry. Several industry-level indicator variables from the WBES account for specific industry sectors, including (1) *Agriculture*, (2) *Construction*, (3) *Manufacturing* and (4) *Other*, in comparison to the (5) *Services* sector baseline.

Different types of firms likely have different influence levels, in comparison to some baseline firm. Several indicator variables from the WBES account for particular firm-level characteristics, including: (1) foreign ownership (*Foreign-Owned Firm*); (2) government ownership (*Government-Owned Firm*); privatization (*Privatized Firm*); (4) multi-nationality (*Multinational Firm*); and (5) exportation (*Exporting Firm*).

### 3.3 SUMMARY STATISTICS

Table 1 provides summary statistics of the dependent, independent and control variables. Table 2 highlights the cross-sectional variation of the dependent variables, which are aggregated and converted to dichotomous measures to facilitate exposition. The Table 2 influence measures are based on firms that report being “influential,” “frequently influential” or “very influential,” whereas the business association influence measure is based on firms that report the government “frequently,” “mostly” or “always” takes into account concerns voiced by the firm or its business association. Several sample statistics are informative. Across all observations, roughly one-third of firms report having “influence” across each of the four governmental decision-making bodies, while roughly one-fifth of firms report having “influence” when operating within their respective business associations.

Firms report the most influence on regulatory agencies, relative to other governmental decision-making entities. These cross-sectional differences suggest that either regulatory agencies are more easily “captured” or greater firm influence over regulatory agencies provide greater efficiencies in the regulatory

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<sup>8</sup> The indicator for a special interest party is quite narrow in scope as it should not matter unless the firm in question also belongs to, or can gain influence through, the special interest party.

arena.<sup>9</sup> Firms report the least influence working with their respective business associations. The business association influence mean is significantly different from the influence mean of each governmental decision-making entity, and these results are robust across country legal origin, industry structure, and firm size, age, ownership and geographic scope categories.

Summary statistics suggest the potentially important role of country legal origin on the extent of firm influence over governmental decision-making. Table 2 indicates that between 58-60 percent of firms in *Common Law Origin* countries report being “influential” to “very influential” in affecting new national laws, rules or regulations across governmental decision-making entities, while between 40-45 percent of firms in *Civil Law Origin* countries and between 17-20 percent of firms in *Socialist Law Origin* countries report being “influential” to “very influential.” While these statistics do not validate the effects of country legal origin on the extent of firms’ governmental influence, they are nonetheless suggestive. Summary statistics also suggest industry- and firm-level characteristics affect firms’ abilities to influence governmental decision-making. In terms of industry-level characteristics, firms with fewer competitors report more governmental decision-making influence than firms with more competitors. While 57-62 percent of firms with 0 *Competitors* report being “influential” to “very influential” across governmental decision-making entities, 32-34 percent of firms with 1-3 *Competitors* and 30-43 percent of firms with  $\geq 4$  *Competitors* report such influence. In terms of firm-level characteristics, *Large-sized Firms* report higher levels of influence in changing national laws, rules or regulations with governmental decision-making entities and regulatory agencies (53-58 percent), in comparison to *Medium-sized Firms* (33-36 percent) and *Smaller-sized Firms* (22-25 percent). Older firms similarly report higher levels of influence (42-46 percent), in comparison to their younger (27-28 percent) and youngest (22-24 percent) counterparts.

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<sup>9</sup> This higher perceived firm influence on regulatory agencies evokes Stigler’s (1971:3) observation that “as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit.”

**TABLE 1 – SAMPLE STATISTICS**

<b>VARIABLE</b>	<b>MEAN</b>	<b>ST. DEV.</b>	<b>MIN</b>	<b>MAX</b>
<b>DEPENDENT VARIABLES</b>				
<i>Executive Branch Influence</i>	2.427	1.025	1.000	5.000
<i>Legislature Branch Influence</i>	2.395	0.997	1.000	5.000
<i>Ministerial Branch Influence</i>	2.431	1.025	1.000	5.000
<i>Regulatory Agency Influence</i>	2.441	1.058	1.000	5.000
<i>Firm/Business Association Influence</i>	2.369	1.331	1.000	6.000
<b>INDEPENDENT VARIABLES</b>				
<i>Common Law Origin</i>	0.328	0.469	0.000	1.000
<i>Civil Law Origin</i>	0.441	0.496	0.000	1.000
<i>Socialist Law Origin</i>	0.218	0.413	0.000	1.000
<i>Political Diversification</i>	0.648	0.184	0.280	1.000
<i>0 Competitors</i>	0.015	0.123	0.000	1.000
<i>1–3 Competitors</i>	0.980	0.139	0.000	1.000
<i>≥4 Competitors</i>	0.004	0.065	0.000	1.000
<i>Small-sized Firm</i>	0.405	0.491	0.000	1.000
<i>Medium-sized Firm</i>	0.403	0.490	0.000	1.000
<i>Large-sized Firm</i>	0.192	0.394	0.000	1.000
<i>LN(Firm Age)</i>	2.674	0.853	1.099	6.400
<b>CONTROL VARIABLES</b>				
<i>Democracy</i>	5.637	4.686	-10.000	10.000
<i>Special Interest Party</i>	0.259	0.438	0.000	1.000
<i>LN(GDP/Capita)</i>	8.499	1.031	6.015	10.505
<i>LN(Trade/GDP)</i>	4.178	0.510	2.620	5.881
<i>Manufacturing Sector</i>	0.331	0.471	0.000	1.000
<i>Agriculture Sector</i>	0.064	0.245	0.000	1.000
<i>Construction Sector</i>	0.087	0.281	0.000	1.000
<i>Other Sector</i>	0.036	0.186	0.000	1.000
<i>Services Sector</i>	0.393	0.489	0.000	1.000
<i>Foreign-Owned Firm</i>	0.188	0.391	0.000	1.000
<i>Government-Owned Firm</i>	0.122	0.327	0.000	1.000
<i>Privatized Firm</i>	0.125	0.331	0.000	1.000
<i>Multinational Firm</i>	0.182	0.386	0.000	1.000
<i>Exporting Firm</i>	0.356	0.479	0.000	1.000

**TABLE 2 – FIRM INFLUENCE STATISTICS<sup>10</sup>**

VARIABLE	MEAN OF DICHOTOMOUS GOVERNMENTAL DECISION-MAKING INFLUENCE				MEAN OF DICHOTOMOUS BUSINESS ASSOCIATION INFLUENCE
	EXEC BRANCH	LEG BRANCH	MIN BRANCH	REG AGENCY	
<b>ALL FIRMS</b>					
	0.34	0.32	0.33	0.35	0.19
<b>LEGAL ORIGIN</b>					
<i>Common Law Origin</i>	0.60	0.58	0.58	0.60	0.38
<i>Civil Law Origin</i>	0.42	0.40	0.42	0.45	0.18
<i>Socialist Law Origin</i>	0.20	0.18	0.18	0.17	0.12
<b>NUMBER OF COMPETITORS</b>					
<i>0 Competitors</i>	0.60	0.57	0.61	0.62	0.29
<i>1–3 Competitors</i>	0.33	0.32	0.33	0.34	0.18
<i>≥4 Competitors</i>	0.37	0.30	0.43	0.38	0.31
<b>FIRM SIZE</b>					
<i>Small-sized Firm</i>	0.23	0.23	0.22	0.25	0.15
<i>Medium-sized Firm</i>	0.35	0.33	0.34	0.36	0.18
<i>Large-sized Firm</i>	0.56	0.53	0.58	0.56	0.29
<b>FIRM AGE</b>					
<i>0–5</i>	0.23	0.22	0.23	0.24	0.13
<i>6–15</i>	0.27	0.27	0.27	0.28	0.15
<i>&gt;15</i>	0.45	0.42	0.44	0.46	0.24
<b>FIRM OWNERSHIP AND SCOPE</b>					
<i>Foreign-Owned Firm</i>	0.46	0.43	0.47	0.50	0.28
<i>Government-Owned Firm</i>	0.40	0.38	0.42	0.38	0.22
<i>Privatized Firm</i>	0.30	0.28	0.29	0.28	0.11
<i>Multinational Firm</i>	0.52	0.49	0.54	0.53	0.30
<i>Exporting Firm</i>	0.42	0.40	0.44	0.42	0.24

#### 4 EMPIRICAL ESTIMATION

The descriptive statistics are suggestive, but neither dispositive as to the identity of specific influence determinants nor do they convey statistical or economic

<sup>10</sup> The firm influence percentages are based on firms that report being “influential,” “frequently influential” or “very influential.” The business association influence percentages are based on firms that report the government “frequently,” “mostly” or “always” takes into account concerns voiced by the firm or its business association.

importance. We therefore turn to a more systematic analysis of the country-, industry- and firm-level determinants of governmental decision-making influence.

#### 4.1 MODEL SPECIFICATION

Firms' influence on governmental decision-making is measured by their reported influence on new national laws, rules, regulations or decrees that could have a substantial impact on their business across four distinct government entities: the executive, legislative and ministerial branches and regulatory agencies. As influence is measured on a Likert scale ranging from 1 ("never influential") to 5 ("very influential"), we utilize ordered logit estimation. The general structure of the ordered logit estimation equation is (Greene, 2003):

$$y^* = \beta X + \mu \quad [1]$$

where  $y^*$  is an unobservable variable,  $\beta$  is a coefficient vector,  $X$  is a matrix of independent country-, industry and firm-level variables and  $\mu$  is a normally distributed and well-behaved (zero mean, constant variance) error term. Ordered logit estimation captures the ordinal nature of the observed dependent variables ( $y$ ) such that:

$$\begin{aligned} y &= 1 \text{ if } y^* \leq \omega_1 \\ y &= 2 \text{ if } \omega_1 < y^* \leq \omega_2 \\ y &= 3 \text{ if } \omega_2 < y^* \leq \omega_3 \\ y &= 4 \text{ if } \omega_3 < y^* \leq \omega_4 \\ y &= 5 \text{ if } \omega_4 < y^* \end{aligned} \quad [2]$$

where  $\omega_i$  represent unobserved threshold values (or limit points). The firm survey responses of influence over each governmental decision-making entity represent these observed dependent variables. Regressions for each dependent variable are identical in structure and independent variable loading, allowing for comparisons and robustness checks across the influence measures. The specific estimations comporting with the general structure in equations [1] and [2] take the form:

$$INFLUENCE_i = f(X_C, X_I, X_F, C, \mu) \quad [3]$$

where  $i$  indexes the alternative governmental decision-making entities and  $X$  and  $C$  vectors are as follows:<sup>11</sup>

- $X_C$  – Country-level determinants
- $X_I$  – Industry-level determinants
- $X_F$  – Firm-level determinants
- $C$  – Country-, industry- and firm-level controls

<sup>11</sup> We tested alternative models using both regional dummy variables and country fixed effects. These models yielded nearly identical conclusions regarding the key variables of interest to those reported here.

## 4.2 EMPIRICAL RESULTS

Table 3 reports the ordered logit estimation results for each firm influence measure, adjusting standard errors for robustness and within country clustering. Likelihood-ratio statistics reject zero slope coefficient hypotheses in all estimations (.01 *p*-values), and pseudo- $R^2$  are reasonable. Table 3 also reports the marginal effects (i.e., economic significance) of the independent variables. Given multiple dependent variable outcomes create interpretation difficulties, we instead use probit estimations of the Table 2 percentage influence measures to calculate marginal effects.<sup>12</sup> Marginal effects are identified by column heads ( $\Delta y/\Delta x$ ), and are interpreted as changes in firms' perceived governmental decision-making influence for infinitesimal changes in continuous independent variables or discrete changes in dummy independent variables.

The sign and statistical significance of several control variables indicates that their inclusion is warranted. Firms operating in countries with greater levels of *Democracy* report higher influence over the executive and legislative branches (0.10 *p*-values), while the degree of country openness via *LN(GDP/Capita)* tempers these effects for the executive and ministerial branches. Industry sector differences also determine firms' abilities to influence governments. Firms based in the *Manufacturing Sector*, *Agricultural Sector* and *Construction Sector* report lower governmental decision-making influence in comparison to firms in the baseline *Services Sector*. Several firm-level characteristics also affect firms' governmental decision-making influence. *Multinational Firms* (0.01 *p*-values in all estimations), *Exporting Firms* (0.10 *p*-values in most estimations), and *Government-Owned Firms* (0.01 *p*-values in all estimations) indicate higher governmental decision-making influence, while limited or no statistically significant effects from *Privatized* or *Foreign-Owned* firms obtain.

In terms of the independent variables, Table 3 indicates that country legal origin significantly affects firms' perceived abilities to influence governmental decision-making. Moreover, the coefficients demonstrate a consistent pattern. In comparison to firms operating in *Common Law Origin* countries, firms operating in *Civil Law Origin* countries report moderately lower influence (0.10 *p*-values for executive and ministerial branches) and firms operating in *Socialist Law Origin* countries report the least influence (0.01 *p*-value in all estimations). Marginal effects indicate firms in *Civil Law Origin* countries are between 8-11 percent less likely to perceive influence across the government branches in comparison to firms in *Common Law Origin* countries, while firms in *Socialist*

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<sup>12</sup> Our measure of marginal effects examines the impact on the likelihood of a firm becoming "influential" (i.e., the aggregation of the "influential," "frequently influential," and "very influential" categories) associated with a change in the independent variable of interest, while holding other independent variables at their mean values.

*Law Origin* countries are between 33-39 percent less likely to perceive influence across the various governmental branches.

Table 3 also indicates that firms operating in countries with more diversified governments perceive greater influence across all government branches, in comparison to firms in countries with less diversified governments. *Political Diversification* is positive and statistically significant (0.01 *p*-values in all estimations), which suggests that the political advantages firms gain from more concentrated political structures (i.e., governments with fewer entry points) are more than offset by the influence advantages they obtain from more diversified political structures (i.e., governments with more entry points).<sup>13</sup> The marginal effects indicate that the influence advantages from increases in *Political Diversification* are perceived substantial, ranging roughly between 17-29 percent.

Table 3 also indicates statistically significant and consistent pattern effects between industry structure and firm influence. In comparison to firms facing no competitors, firms facing between one to three competitors report lower influence (0.01 *p*-values in all estimations) and firms facing at least four competitors report the least influence (0.05 *p*-values in all estimations). The marginal effects corroborate the reduced firm influence levels from increased competition. In comparison to monopoly industry structures, the likelihood of firm influence reduces between 7-11 percent in oligopolies (*1-3 Competitors*) and between 14-21 percent in more fragmented industries ( $\geq 4$  *Competitors*) across the governmental branches. The results thus suggest a rather substantial perceived “influence penalty” for firms operating in more competitive industries.

Table 3 also indicates statistically significant relationships between the firm-level measures and governmental decision-making influence. *Medium-sized Firms* (0.01 *p*-values in all estimations) and *Small-sized Firms* (0.01 *p*-values in all estimations) perceive their abilities to influence governmental decision-making entities are reduced, in comparison to *Large-sized Firms*. The coefficient estimates and marginal effects demonstrate a consistent rank ordering of influence by firm size. *Medium-sized Firms* are between 11-14 percent less likely to report influence than *Large-sized Firms* across all governmental branches, while *Small-sized Firms* are between 16-21 percent less likely to perceive influence than *Large-sized Firms* across these same governmental branches. While the empirical results are suggestive of a firm size-influence relationship, we cannot eliminate the potential that (individual) connections between firms and governmental decision-making entities promote firm growth and facilitate influence, rather than firm size affecting influence.

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<sup>13</sup> These findings do not eliminate the prospect that firms with preferences aligned completely with government preferences might prefer more consolidated political structures in comparison to more diversified structures.

**TABLE 3 – EMPIRICAL ESTIMATIONS (\* <0.10; \*\* <0.05; \*\*\* <0.01)**

DEP VARIABLE	EXEC BRANCH		LEGIS BRANCH		MINIST BRANCH		REG AGENCY	
	$\beta$ (s.e.)	$\Delta y/\Delta x$	$\beta$ (s.e.)	$\Delta y/\Delta x$	$\beta$ (s.e.)	$\Delta y/\Delta x$	$\beta$ (s.e.)	$\Delta y/\Delta x$
<i>Civil Law Origin</i>	-0.263* (0.147)	-0.110	-0.130 (0.164)	-0.081	-0.271* (0.146)	-0.107	-0.163 (0.148)	-0.093
<i>Socialist Law Origin</i>	-1.586*** (0.185)	-0.349	-1.467*** (0.196)	-0.331	-1.560*** (0.188)	-0.339	-1.598*** (0.197)	-0.385
<i>Political Diversification</i>	1.322*** (0.468)	0.215	1.381*** (0.482)	0.285	1.145** (0.472)	0.172	1.248*** (0.438)	0.210
<i>1–3 Competitors</i>	-0.315*** (0.107)	-0.087	-0.263** (0.117)	-0.074	-0.363*** (0.107)	-0.114	-0.316*** (0.111)	-0.097
<i>≥4 Competitors</i>	-0.582** (0.233)	-0.190	-0.601*** (0.188)	-0.207	-0.458** (0.228)	-0.141	-0.638*** (0.204)	-0.199
<i>Small-sized Firm</i>	-0.409*** (0.064)	-0.208	-0.343*** (0.056)	-0.164	-0.387*** (0.057)	-0.209	-0.371*** (0.060)	-0.198
<i>Medium-sized Firm</i>	-0.263*** (0.054)	-0.132	-0.237*** (0.050)	-0.110	-0.244*** (0.045)	-0.138	-0.206*** (0.048)	-0.123
<i>LN(Firm Age)</i>	0.059* (0.032)	0.031	0.058** (0.027)	0.026	0.049* (0.030)	0.026	0.040 (0.031)	0.020
<i>Democracy</i>	0.004* (0.002)	0.002	0.004* (0.002)	0.002	0.003 (0.003)	0.001	0.004 (0.002)	0.002
<i>Special Interest Party</i>	0.244 (0.160)	0.120	0.207* (0.164)	0.112	0.141 (0.150)	0.091	0.187 (0.167)	0.111
<i>LN(GDP/Capita)</i>	-0.144* (0.084)	-0.047	-0.052 (0.084)	-0.021	-0.163* (0.085)	-0.052	-0.118 (0.086)	-0.035
<i>LN(Trade/GDP)</i>	-0.038 (0.118)	0.052	-0.022 (0.123)	0.035	-0.031 (0.117)	0.051	-0.054 (0.113)	0.035
<i>Manufacturing Sector</i>	-0.204*** (0.047)	-0.086	-0.165*** (0.043)	-0.073	-0.210*** (0.052)	-0.087	-0.206*** (0.047)	-0.086
<i>Agriculture Sector</i>	-0.321*** (0.117)	-0.112	-0.222* (0.125)	-0.056	-0.234* (0.124)	-0.056	-0.274*** (0.106)	-0.097
<i>Construction Sector</i>	-0.091* (0.054)	-0.027	-0.147** (0.073)	-0.049	-0.115** (0.056)	-0.043	-0.081 (0.057)	-0.028
<i>Other Sector</i>	-0.085 (0.205)	-0.108	-0.309* (0.162)	-0.126	-0.123 (0.236)	-0.022	-0.127 (0.154)	0.001
<i>Foreign-Owned Firm</i>	-0.003 (0.053)	0.002	-0.035 (0.058)	-0.010	0.042 (0.057)	0.010	0.078 (0.063)	0.040
<i>Government-Owned Firm</i>	0.189*** (0.065)	0.104	0.149*** (0.050)	0.099	0.276*** (0.060)	0.135	0.150*** (0.053)	0.096
<i>Privatized Firm</i>	0.211* (0.120)	0.068	0.178 (0.123)	0.040	0.134 (0.120)	0.009	0.168 (0.108)	0.051
<i>Multinational Firm</i>	0.166*** (0.046)	0.079	0.166*** (0.048)	0.068	0.180*** (0.043)	0.088	0.135*** (0.047)	0.062
<i>Exporting Firm</i>	0.075** (0.039)	0.034	0.068* (0.041)	0.034	0.109** (0.049)	0.057	0.069 (0.045)	0.033
Limit point 1	-3.188 (0.766)		-2.047 (0.832)		-3.505 (0.767)		-3.039 (0.798)	
Limit point 2	-1.179 (0.756)		-0.005 (0.818)		-1.449 (0.763)		-1.043 (0.782)	
Limit point 3	-0.463 (0.760)		0.703 (0.820)		-0.773 (0.766)		-0.370 (0.779)	
Limit point 4	0.045 (0.759)		1.208 (0.818)		-0.234 (0.076)		0.186 (0.781)	
Observations	4588		4584		4553		4559	
LR Statistic (d.f.)	428.97*** (21)		348.79*** (21)		450.25*** (21)		318.75*** (21)	
Pseudo-R <sup>2</sup>	0.100		0.094		0.101		0.105	

A positive and moderately statistically significant (0.10  $p$ -values) relationship also emerges between  $LN(\text{Firm Age})$  and governmental decision-making influence. Older firms perceive that they are more effective in influencing governmental decision-making entities than their younger counterparts across the executive, legislative and ministerial branches but not in regulatory agencies.<sup>14</sup> While the potential role of firm size is controlled for and the marginal effects support the results, the economic impact of firm age on governmental decision-making influence is rather small. Moreover, and similar to firm size, the empirical results are only suggestive of a firm age-influence relationship. We cannot eliminate the potential that (individual) relationships between firms and governmental decision-making entities improve firm survival and facilitate influence, rather than firm age facilitating influence.

### 4.3 EMPIRICAL DISCUSSION

La Porta et al. (1999) suggest that Common Law legal systems improve government efficiency by decentralizing decision-making authority and shifting power from government to the governed. We find complementary support for this proposition, as firms operating in Common Law origin countries report greater influence over governmental decision-making entities than firms operating either in Civil Law or in Socialist Law origin countries. A tension nevertheless arises as the kinds of benefits sought (and realized) by more influential firms may not be those that are in society's best interest but instead those that enhance monopoly power, create subsidies, or erect trade barriers (Stigler, 1971; Posner, 1974; Grossman and Helpman, 1994; Beard, et al., 2003). The increased firm influence that obtains in Common Law origin systems is therefore two-sided: decentralized governance systems improve firms' efforts in facilitating good government and economic growth; but they also enhance firms' efforts in shaping political processes and policies that can lead to social welfare-reducing outcomes.<sup>15</sup>

The Table 3 results indicate clear associations between industry structure and governmental decision-making influence and between firm size and governmental decision-making influence. But because the dependent variables examine only whether individual firms acting alone can influence government

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<sup>14</sup> By slightly altering the basic regression, some support is found that the relationship between firm age and political influence is not strictly linear. The inclusion of "Firm Age Squared" improves model fit in some estimations. The results indicate a negative coefficient on the nonlinear term, and thus suggest firm age is initially conducive to influencing government but subsequently declines.

<sup>15</sup> In recognition of the tensions that arise in the politician-voter relationship, Aghion, Alesina and Trebbi (2004: 567) observe, "in a fragmented society, while it would be optimal to choose less insulation [of politicians] to guarantee a 'voice' to all groups, in practice an especially powerful group may take a hold of the constitutional process and impose its rule."

branches or regulatory agencies, these results provide only preliminary and somewhat tentative indications of whether free rider problems are present (which possibly reduce firms' governmental decision-making influence as the number of competitors grows). We therefore explore below whether firms that operate within business associations are able to alter these (tentative) results.

Our estimations provide a novel examination of firm age and governmental decision-making influence. The results are nominally consistent with the political economy literature that argues older (declining) industries are more successful than younger industries in securing favorable (protectionist) trade policies (Baldwin and Robert-Nicoud, 2007), but this literature is generally couched in terms of industry-level analysis and does not make propositions related to firm age apart from the "declining industry" argument. A more compelling explanation may emerge from our observation that older firms enjoy "learning curve" benefits by virtue of repeated government interactions. As suppliers of governmental policies, moreover, government agents are arguably more likely to favor long-term "customers" than relatively new petitioners. Our results therefore call for subsequent theoretical analysis and empirical verification regarding how age-related phenomena arise.

## **5 EMPIRICAL EXTENSIONS**

We extend the empirical analysis in two dimensions. We first examine firm influence over governmental decision-making via business association participation. We then examine the underlying mechanisms that shape the role of country legal origin as a determinant of governmental decision-making influence.

### **5.1 ROLE OF BUSINESS ASSOCIATIONS**

We test the robustness of the baseline model by changing the individual firm influence dependent variables to one that captures a broader measure of influence via business association affiliation. The *Business Association Influence* dependent variable is coded from one to six, with larger values representing greater perceived influence. The first model of Table 4 provides the estimation results and marginal effects, with standard errors adjusted for robustness and within-country clustering. These results not only corroborate several of our baseline model findings, but also offer additional insights. We continue to find that firms operating in *Common Law Origin* countries—either independently or through their business associations—have more influence than in either *Civil Law Origin* or *Socialistic Law Origin* countries, with the coefficients and marginal effects again indicating a country legal origin ordering. We also find evidence that *Large-sized Firms* are more influential than *Medium-sized Firms* and *Small-sized*

*Firms* when operating independently or through their business associations, and evidence that older firms are more influential than their younger counterparts when operating independently or through their business associations.

While this alternative specification yields mostly consistent results with our baseline model, statistical significance for *Political Diversification* and *1–3 Competitors* and  $\geq 4$  *Competitors* is lost. These results suggest that business association participation mitigates the otherwise influence-reducing tendencies of more concentrated political systems and more competitive market structures, respectively. In particular, once the role of firms' business association participation is accounted for, the "influence penalty" in affecting governmental decision-making associated with political concentration dissipates. Similarly, monopolists are no more influential than firms operating in more competitive industries, once business association participation is accounted for.

## 5.2 UNDERLYING LEGAL ORIGIN MECHANISMS

Our empirical results indicate a statistically and economically significant role for country legal system origin on firms' influence over governmental decision-making bodies. This finding naturally raises the question as to the precise mechanisms by which firms feel more empowered. We offer an initial and preliminary examination here of the rules, regulations and laws that are developed, as well as the legal system that enforces them using WBES data.

Three fundamental characteristics of the development and enforcement of governmental policies appear important. The first is whether differences in legal origin create differences in firm notifications regarding impending changes in rules, regulations or policies that may affect them. Advance notices suggest greater firm influence, as forewarnings of impending policy changes create potential influence opportunities before such policies are implemented. The second is whether firms in different legal origin systems perceive their respective courts as "fair and impartial" in resolving business disputes. Perceptions of fairness and impartiality may provide firms a bedrock upon which they can "make their case" in business dispute resolutions, and subsequently facilitates a sense of influence. The third is whether firms in different legal systems perceive judicial systems as more honest and uncorrupt in the resolution of business disputes. Honest and uncorrupt judicial systems provide a forum to adjudicate business disputes on their merits, which again suggests greater influence for firms in such matters.

**TABLE 4 – EMPIRICAL EXTENSIONS (\* <0.10; \*\* <0.05; \*\*\* <0.01)**

DEP VARIABLE	BUS ASSOC		ADVANCE NOTICE		FAIR-IMPARTIAL		HONEST-UNCORR	
	$\beta$ (s.e.)	$\Delta y/\Delta x$	$\beta$ (s.e.)	$\Delta y/\Delta x$	$\beta$ (s.e.)	$\Delta y/\Delta x$	$\beta$ (s.e.)	$\Delta y/\Delta x$
<i>Civil Law Origin</i>	-0.547*** (0.100)	-0.137	-0.397*** (0.095)	-0.154	-0.797*** (0.116)	-0.331	-0.717*** (0.114)	-0.300
<i>Socialist Law Origin</i>	-0.994*** (0.162)	-0.182	-0.898*** (0.142)	-0.065	-0.676*** (0.176)	-0.219	-0.470** (0.197)	-0.143
<i>Political Diversification</i>	0.104 (0.500)	0.049	0.544 (0.445)	-0.031	-0.296 (0.615)	-0.197	-0.652 (0.647)	-0.338
<i>1–3 Competitors</i>	0.012 (0.121)	-0.017	0.049 (0.120)	-0.083	-0.017 (0.137)	-0.014	0.078 (0.113)	-0.028
<i>≥4 Competitors</i>	0.084 (0.258)	0.038	0.490** (0.231)	0.121	0.177 (0.258)	0.098	0.044 (0.286)	0.007
<i>Small-sized Firm</i>	-0.243*** (0.059)	-0.047	-0.202*** (0.054)	-0.030	-0.135** (0.056)	-0.042	-0.078 (0.054)	-0.005
<i>Medium-sized Firm</i>	-0.123*** (0.037)	-0.042	-0.098** (0.042)	-0.037	-0.058 (0.052)	-0.016	-0.022 (0.044)	0.019
<i>LN(Firm Age)</i>	0.134*** (0.024)	0.025	0.076*** (0.022)	0.044	0.044 (0.029)	0.025	0.068*** (0.026)	0.040
<i>Democracy</i>	0.006*** (0.002)	0.002	0.002 (0.002)	0.001	0.003 (0.002)	0.000	0.003 (0.002)	-0.001
<i>Special Interest Party</i>	0.032 (0.115)	-0.015	0.071 (0.128)	-0.063	0.124 (0.116)	0.041	0.125 (0.138)	0.078
<i>LN(GDP/Capita)</i>	-0.165** (0.079)	-0.029	0.130** (0.061)	-0.079	0.116** (0.052)	0.058	0.224*** (0.055)	0.100
<i>LN(Trade/GDP)</i>	0.186* (0.097)	0.057	0.156* (0.085)	0.124	0.201 (0.128)	0.085	0.214 (0.132)	0.081
<i>Manufacturing</i>	-0.048 (0.049)	0.006	-0.058 (0.046)	-0.008	-0.032 (0.042)	0.008	-0.050 (0.040)	0.008
<i>Agriculture</i>	-0.284*** (0.106)	-0.047	-0.372*** (0.130)	-0.078	-0.086 (0.097)	0.006	-0.176 (0.113)	-0.043
<i>Construction</i>	-0.030 (0.078)	0.003	-0.081 (0.054)	-0.014	0.026 (0.072)	-0.020	0.005 (0.069)	-0.038
<i>Other</i>	0.031 (0.178)	0.003	0.250* (0.140)	-0.074	0.443*** (0.137)	0.181	0.512*** (0.171)	0.221
<i>Foreign-Owned</i>	0.065 (0.048)	0.027	0.048 (0.053)	0.026	0.023 (0.046)	0.021	0.006 (0.051)	0.031
<i>Government-Owned</i>	0.282*** (0.071)	0.083	0.314*** (0.061)	0.073	0.231*** (0.075)	0.103	0.134* (0.076)	0.046
<i>Privatized</i>	-0.082 (0.074)	-0.019	-0.025 (0.105)	-0.045	-0.011 (0.078)	-0.019	-0.003 (0.075)	0.004
<i>Multinational</i>	0.160*** (0.057)	0.063	0.065 (0.053)	0.092	0.013 (0.042)	0.008	0.081 (0.054)	0.031
<i>Exporting</i>	0.131*** (0.046)	0.038	0.016 (0.046)	-0.027	0.103** (0.045)	0.038	0.119*** (0.042)	0.046
Limit point 1	-1.374 (0.740)		1.238 (0.490)		-0.182 (0.886)		1.003 (0.923)	
Limit point 2	-0.680 (0.731)		1.923 (0.485)		0.587 (0.881)		1.796 (0.916)	
Limit point 3	0.124 (0.741)		2.615 (0.489)		1.472 (0.885)		2.531 (0.915)	
Limit point 4	0.703 (0.744)		3.065 (0.503)		1.911 (0.887)		2.977 (0.914)	
Limit point 5	1.320 (0.778)		3.828 (0.521)		2.866 (0.891)		3.796 (0.913)	
Observations	5388		5212		5261		5150	
LR Statistic (d.f.)	523.38*** (21)		485.92*** (21)		419.58*** (21)		469.77*** (21)	
Pseudo-R <sup>2</sup>	0.058		0.043		0.051		0.055	

To estimate the potential mechanisms by which firms perceive themselves to be more influential in governmental decision-making, we construct dependent variables representing increases in the above characteristics. *Advance Notice*, *Fair-Impartial Judiciary* and *Honest-Uncorrupt Judiciary* are each coded from one to six, with larger values representing increases in each measure. The specific WBES questions are provided in the Appendix.

The ordered logit estimation results and marginal effects of these dependent variables are reported in the second through fourth models of Table 4, respectively, with standard errors adjusted for robustness and within-country clustering. Firms operating in *Common Law Origin* countries report more advanced notice related to changes in rules, regulations or policies, in comparison to their counterparts in *Civil Law Origin* or *Socialist Law Origin* countries. Firms operating in *Common Law Origin* countries similarly perceive business dispute resolutions conducted by their courts to be both more “fair and impartial” and more “honest and uncorrupt,” in comparison to firms operating in *Civil Law Origin* and *Socialist Law Origin* countries. The results are statistically and economically significant in all estimations, and provide collectively an initial understanding of the underpinnings of why firms in Common Law origin countries attain greater influence over governmental decision-making entities than firms in other legal origin countries.

## 6 CONCLUSION

That firms seek to influence governmental decision-making is incontrovertible. A growing literature links this influence not only to wealth redistributions and microeconomic efficiency issues, but also to larger macroeconomic and financial development issues. Accordingly, deepened insight into the interplay between business and government institutions is an important stepping-stone to improved understanding of the interplay between microeconomic and macroeconomic systems.

Toward this goal, we construct a large firm-level and cross-country dataset to empirically examine the country-, industry- and firm-level determinants of firms’ abilities to influence governmental decision-making entities. The results are encouraging not only because they reinforce and hone insights from previous literature (though in a considerably broader setting), but also because they extend understanding of the specific factors that affect firms’ influence over governments. We find that countries’ legal system heritage and institutions have pronounced effects on the degree of influence that firms perceive they have over governmental decision-making entities regarding the establishment of new rules, regulations and laws. We also find that more diverse political institutions afford more entry points for firms to influence governmental decision-making bodies,

and thereby create a corresponding sense of empowerment. Our results also reveal that both industry- and firm-level characteristics significantly affect firms' influence over their governments. Firms facing fewer competitors perceive themselves to have more influence than firms facing many competitors. Larger firms consistently perceive that they possess more influence over governments than their smaller counterparts, whereas older firms perceive themselves to be more influential than younger firms do.

Our results not only add insight into the determinants of firms' influence over governmental decision-making entities, but also raise several important issues for subsequent research. For instance, the statistically and economically significant effects of the legal origin of the country within which a firm operates point toward more research on the specific pathways by which different legal and institutional structures lead to different degrees of firm influence over governmental decision-making. Our preliminary results indicate that firms' perceptions of advanced notice, fair and impartial courts, and honest and uncorrupt legal systems vary significantly and depend in part on country legal system origin. It is plausible that these and other micro-transmission pathways can be more systematically teased out in future research as endogenous products of country legal origin. Such efforts hold the promise of generating more granular insights into the pathways by which firms are more influential and providing more specificity to how exactly Common Law, Civil Law and Socialist Law origins have become manifest in modern practices and governance structures.

Our empirical examination relies on data that account for firms' industry designation at an aggregated level (e.g., Manufacturing, Agriculture, Construction, Other and Services sectors). It is plausible that subsequent research can develop and unpack further cross-industry differences. For example, the availability of more disaggregated industry data may permit the development of influence measures across industries, either within or across countries. The similarity of such measures across political and geographical borders advances considerably a technological theory of influence. Moreover and relatedly, as both firm size and firm age are relatively consistent determinants of governmental decision-making influence, other investigations regarding the specific mechanisms by which firm size and firm age actually operate are warranted. Finally, our analysis provides a natural platform from which to expand the exploration into informal channels of influence that arises from bribes made to government officials.

**APPENDIX – VARIABLE DEFINITIONS**

<b>DEPENDENT VARIABLES</b>	<b>DESCRIPTION AND SOURCE</b>
<i>Firm Influence</i>	“When a new law, rule, regulation, or decree is being discussed that could have a substantial impact on your business, how much influence does your firm typically have at the national level of government on the content of that law, rule, regulation or decree?” Asked separately for four levels of government: a) executive b) legislature c) ministry d) regulatory agency. Source: WBES Survey. Scale: 1:never influential...5:very influential.
<i>Business Association Influence</i>	“In case of important changes in laws or policies affecting my business operation the government takes into account concerns voiced either by me or by my business association.” Source: WBES Survey. Scale: 1: never...6: always.
<i>Advance Notice</i>	“The process of developing new rules, regulations or policies is usually such that businesses are informed in advance of changes affecting them.” Source: WBES Survey. Scale: 1:never...6:always.
<i>Fair-Impartial Judiciary</i>	“In resolving business disputes, do you believe your country’s court system to be: fair and impartial.” Source: WBES Survey. Scale: 1:never...6:always.
<i>Honest-Uncorrupt Judiciary</i>	“In resolving business disputes, do you believe your country’s court system to be: honest/uncorrupt.” Source: WBES Survey. Scale: 1:never...6:always.
<b>INDEPENDENT VARIABLES</b>	<b>DESCRIPTION AND SOURCE</b>
<i>Legal Origin</i>	Country Legal Origin: (1) English Common Law; (2) French Commercial Code; (3) German Commercial Law; (4) Scandinavian Commercial Law; (5) Socialist/Communist Law. Germany and Sweden included in Civil Law (rather than Common Law) category. Source: La Porta et al. (1999, p. 238).
<i>Political Diversification</i>	Number of institutional players (e.g., executive, upper and lower legislative bodies) and partisan alignment across political institutions. Higher values imply greater diversity of partisan alignments. Source: POLCON dataset, Henisz (2000).
<i>Number of Competitors</i>	“Regarding your firm’s major product line, how many competitors do you face in your markets?” a) none b) 3 or fewer c) many (more than 3). Source: WBES Survey.
<i>Firm Size</i>	Size of firm. (1) Small-sized: 5–50 full-time employees; (2) Medium-sized: 51–500 employees; (3) Large-sized: more than 500 employees. Source: WBES Survey.
<i>Firm Age</i>	Year of start-up. Source: WBES Survey.
<i>Democracy</i>	Measure of concomitant qualities of democratic and autocratic authority in governing institutions. Source: Polity IV Project, Center for Systemic Peace. Scale -10 (hereditary monarchy) to +10 (consolidated democracy).
<i>Special Interest Party</i>	Indicator of whether 2 <sup>nd</sup> or 3 <sup>rd</sup> government parties (coalition parties) represent any special interests in one of the following areas: nationalist, rural, regional, or religious. Source: Political Institutions Database, Keefer (2002).
<i>GDP per Capita</i>	GDP and Population for 1999 (current USD). Source: World Development Indicators, World Bank
<i>Trade/GDP</i>	Trade and GDP for 1999 (current USD). Source: World Development Indicators, World Bank
<i>Industry Sectors</i>	Industry Indicators: a) Services; b) Manufacturing; c) Agriculture; d) Construction; e) Other. Source: WBES Survey.
<i>Foreign-Owned Firm</i>	“Share of Foreign Ownership?” Source: WBES Survey.
<i>Government-Owned Firm</i>	“Share of State Ownership?” Source: WBES Survey.
<i>Privatized Firm</i>	“How was your firm established?” Source: WBES Survey.
<i>Multinational Firm</i>	“Does your firm have holdings or operations in other countries?” Source: WBES Survey.
<i>Exporting Firm</i>	“Does your firm export?” Source: WBES Survey.

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