Politically Connected Firms

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The incentive for corporations to become politically connected has been recognized among economists for many years and has probably been recognized by citizens of affected countries for many more. As economists have noted, the source of such value can take various forms, including preferential treatment by government-owned enterprises (such as banks or raw material producers), lighter taxation, preferential treatment in competition for government contracts, relaxed regulatory oversight of the company in question, or stiffer regulatory oversight of its rivals, and many other forms.[1] However, as emphasized by Andrei Shleifer and Robert W. Vishny (1994), politicians themselves will extract at least some of the rents generated by connections, and corporate value will be enhanced only when the marginal benefits of the connections outweigh their marginal costs.

In this paper, I provide a comprehensive look at corporate political connections around the globe. I address two main questions: What common characteristics do countries with widespread political connections share? And, do connections add to company value?

To answer these questions, I assemble a database that includes 20,202 publicly traded firms in 47 countries. A company is identified as being connected with a politician if at least one of its large shareholders (anyone controlling at least 10 percent of voting shares) or one of its top officers (CEO, president, vice-president, chairman, or secretary) is a member of parliament, a minister, or is closely related to a top politician or party. I define close relationships in Section I. I do not include contributions to political campaigns or direct (undisclosed) payments to politicians in my analysis, but the connections I document are likely to be more durable than one-time campaign contributions or cash payments.

I find corporate political connections to be relatively widespread; they exist in 35 of the 47 countries in my sample. Generally speaking, connections are less common in the presence of more stringent regulation of political conflicts of interest. On the other hand, connections are particularly common in countries that are perceived as being highly corrupt, in countries that impose restrictions on foreign investments by their citizens, and in more transparent systems. Perhaps this last effect is simply due to greater access to information in such economies. The number of identifiable cases within any individual country is not necessarily large. A strict application of my criteria yields a subsample of connected firms of less than 3 percent (541) of the total sample. As might be expected, connections are more widespread among larger firms: connected firms represent 7.72 percent of the world's stock market capitalization. In some countries, political connections are quite common. In Russia, for example, connected firms represent 86.75 percent of the market capitalization. I caution the reader that my findings are descriptive in nature and do not imply any causality. The cross-country approach taken in this study differs from previous work, where the

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[1] Evidence of preferential treatment by government-controlled banks is provided by Michael Backman (1999) and I. Serdar Dinç (2005). Evidence of tax discounts is documented by Hernando De Soto (1989). The regulatory benefits enjoyed by politically connected firms are discussed by George J. Stigler (1971) and De Soto (1989).

focus has been on specific countries and specific types of connections that make cross-country comparison impossible.[2]

To examine the second question, whether connections add to company value, I perform an event study around the time of the announcements that officers or large shareholders are entering politics, or that politicians are joining boards. I find a significant increase in corporate value, but only when those involved in business enter politics. Furthermore, the stock price impact of a new connection is larger whenever a businessperson is elected as prime minister, rather than as a member of the parliament, and whenever a large shareholder, rather than an officer, enters politics. These results complement the work of Fisman (2001), who concludes that in Indonesia a considerable percentage of well-connected firms' value comes from political connections. In particular, he compares returns across firms with differing degrees of political exposure at the time of rumors of Indonesian President Suharto's worsening health. Around that time, stock prices of firms closely connected with Suharto dropped more than the prices of less well-connected firms, and the stock price reactions were more severe when the news was more negative.

I. Incidence of Political Connections

A. *Definition of Connections*

I say a company is connected with a politician if one of the company's large shareholders or top officers is: (a) a member of parliament (MP), (b) a minister or the head of state, or (c) closely related to a top official.

Connections with Members of Parliament.—Firms may be connected through an MP in two ways. First, at least one of their top officers may sit in the national parliament as of 2001.[3] As in Stijn Claessens et al. (2000) and Faccio and Larry H. P. Lang (2002), top officers are defined as a company's CEO, president, vice-president, chairman, or secretary. For example, Lord Browne of Maddingley, a member of the British House of Lords, is the CEO of British Petroleum. BP is therefore classified as connected with a member of parliament through an officer.

Second, companies are classified as connected when at least one large shareholder is a member of parliament. Large shareholders are defined as anyone directly or indirectly controlling at least 10 percent of shareholder votes. A good example of this is one of the most influential families in Italy, the Agnelli family. Giovanni Agnelli had a life term as senator. Through a complex ownership structure, the Agnelli family controls *directly* or *indirectly* more than 10 percent of the votes in 18 Italian listed firms. Those firms are all classified as connected with a member of parliament. A firm is not classified as connected if a family member of an MP is a large shareholder or a top officer of a firm. Thus, although Giovanni Agnelli's brother Umberto is a top officer of IFIL, this company is not considered to be connected through an officer (but it is included in the sample because of Giovanni Agnelli's ownership).

Connections with a Minister or Head of State.—There are three types of connections with a minister or head of state: as officer; as large shareholder; or through a relative. A relative may be a spouse, child, sibling, or parent. Ian MacFarlane, Australian Minister for Small Business, for example, is chairman of two Australian listed firms: Central Pacific Minerals and Southern Pacific Petroleum. These firms are therefore classified as connected with a minister (through an officer). Italy's Prime Minister Sil-

[2] In the United States, researchers have examined the role of connections created by contributions to electoral campaigns (e.g., Brian E. Roberts, 1990; Randall S. Kroszner and Thomas Stratmann, 1998; James Ang and Carol Marie Boyer, 2000). Anup Agrawal and Charles R. Knoeber (2001) focus on the political experience of outside directors. Non-U.S. studies generally look at connections generated by means other than campaign contributions. In a study of Canadian firms, Randall K. Morck et al. (2000) discuss the political influence of dominant business families. Raymond Fisman (2001) examines established friendships with top politicians in Indonesia. Simon Johnson and Todd Mitton (2003) analyze political connections in Malaysia and label connected firms as those whose officers or large shareholders are affiliated with top government officials. A few other studies rely on specific cases of corruption (e.g., Joel S. Hellman et al., 2003; Jakob Svensson, 2003). Pranab Bardhan (1997) and Susan Rose-Ackerman (1999) offer excellent analyses of the literature on corruption.

[3] For most countries, politicians are identified as of the first half of 2001 (data are generally not available before that date). For Colombia, Luxembourg, Sri Lanka, Taiwan, and Zimbabwe, politicians are identified as of June 2003.

vio Berlusconi is a large shareholder of four Italian listed firms: Arnoldo Mondadori Editore, Mediaset, Mediolanum, and Standa. All these companies are defined as politically connected with a minister (through a large shareholder). Finally, Malaysian Prime Minister Mohamad Mahathir's son, Mirzan, and Silvio Berlusconi's daughter, Marina, are either large shareholders or top officers of several listed corporations. All of these connections are included.

Companies Closely Related to a Top Official.— Close relationships are a bit more ambiguous. Since they lack the definitional objectivity of the first two connection types, I place them in a separate category. Connections of this type occur when a person who was a head of state or prime minister between 1997 and 2001 (or one of their relatives) was also a top executive or a large shareholder of the company during 1997 or 2001 (except for the cases that fall into the paragraph directly above); when a government minister or a member of parliament as of 2001 was a top executive or large shareholder of the company during 1997; when a large shareholder or a top officer is a friend of a minister or MP;[4] when a large shareholder or a top officer is a politician in another country; or when a large shareholder or a top officer is known to be associated with a political party. Well-known relationships with political parties are illustrated by members of the UMNO party in Malaysia (see Edmund Terence Gomez and K. S. Jomo, 1997; Johnson and Mitton, 2003). Notice that, in my definition, I include only those cases where the firm's officer or large shareholder served as a minister as of 1997 or after, since connections with politicians who served farther back in time are less likely to have a major impact on firm activities.

The necessity of relying on publicly available sources for information on close relationships, such as friendship or well-known cases of relationships with political parties, produces an incomplete picture. For example, no political connections are identified in Argentina. To reduce any potential bias, these less objective connections are treated as a separate group in the country-level analysis, and separate regression estimates are made using two different dependent variables; *% of firms connected to a minister or MP* (which includes only connections with MPs, ministers, or heads of state) and *% of firms connected with a minister or MP, or a close relationship.* The first set of regressions relies only on objective connections and will thus provide objective results. As I will show, the results are qualitatively the same when the less objective relationships are included.

B. *Data and Descriptive Statistics*

I start with the countries for which the Worldscope database provides coverage. For each country, I gather names of members of parliament and government (as of 2001) using the *Chiefs of State* directory and the official Web site of each country's government and parliament. Overall, data sources allow me to identify politicians in 47 countries. Former heads of state or prime ministers are identified for all countries using sources listed in Appendix A, panel G.[5] Names of politicians are cross-checked with names of the top officers of 20,202 listed companies covered in Worldscope.[6] Worldscope generally includes only a company's CEO, president, vice-president, chairman, or secretary, and in some instances another officer, all of whom are identified by family name and initials. Names that match members of parliaments or governments are cross-checked using the Extel database, company Web sites, and extensive searches on Lexis-Nexis. Whenever I cannot find the *full* names of officers, I elimi-

[4] Cases of friendship represent just a few of the connections overall, as most of them are not reported in *Forbes.* For example, President George W. Bush and Vice-President Dick Cheney are friends of many chief executives, particularly in the energy sector, but I do not find this cited in *Forbes,* so it is not included in my connection variables.

[5] The Appendix is available from the author.

[6] Worldscope provides full coverage of developed markets. Coverage is limited for Argentina, Chile, Colombia, the Czech Republic, Hungary, India, Israel, New Zealand, Peru, Poland, Russia, Sri Lanka, Taiwan, Turkey, Venezuela, and Zimbabwe. For these markets, companies need to satisfy at least one of the following conditions in order to be included in Worldscope: (a) five or more broker estimates; (b) market capitalization equal to or greater than $100 million; (c) inclusion in the FTSE All-World, IFC Investible, Dow Jones Global, MSCI World, MSCI EMF, SSBMI, or S&P Global indexes; (d) listing of an ADR on the NYSE, ASE, Nasdaq, or OTC trading of a sponsored ADR; (e) inclusion in the EASDAQ or EURO.NM; (f) listing on the NYSE, ASE, or Nasdaq.

nate the observation. Much of the time, connections based on initials alone are misleading; think how many Kims and Parks there are in Korea. I prefer to understate rather than to considerably overstate connections. To avoid understating family affiliations in Asia, where family names may not be the same, I integrate country-specific family affiliation data taken from sources listed in Appendix A, panel F. If not covered in those sources, connections are excluded when the family name does not coincide. So, for example, Canadian Prime Minister Jean Chrétien is the father-in-law of Paul Desmarais, an important Canadian tycoon. This case does not show up in my data, because the two do not share the same family name.

The names of large shareholders come from a number of sources published by each country's stock exchange or supervisory authority. I also rely on Claessens et al. (2000) for shareholders in East Asian countries, and on Faccio et al. (2001) and Faccio and Lang (2002) for shareholders in West European countries. These authors have collected data from the various publications of the stock exchanges and supervisory authorities.[7] When ownership data cannot be found in those sources, the data are collected from Worldscope and Extel.

Further information on political connections comes from Agrawal and Knoeber (2001) for the U.S.; Backman (1999) for Asia; Gomez and Jomo (1997) and Johnson and Mitton (2003) for Malaysia; Fisman (2001) for Indonesia;[8] and the Stationery Office (2001) for the United Kingdom. *The Economist, Forbes,* and *Fortune* provide information on well-known cases of friendships between top politicians and entrepreneurs. State-owned firms are not included in my sample of political connections unless a member of parliament or of government sits on the board or is a large shareholder.

[7] Most of these data on board membership and share ownership are for the 1996–1999 period. Extel is used to update them.

[8] Fisman (2001) identifies connections based on the Suharto Dependency Index, developed by the Castle Group, a leading economic consultant in Indonesia. The index ranges from one (least dependent) to five (most dependent). In my definition of connections, I include only groups rated five.

Overall, I find 607 connections involving 541 firms. Table 1 shows that 59.5 percent of connections involve top officers, while 40.5 percent of cases involve large shareholders. In 15.5 percent of cases, the connection is with the country's leader or a minister; in 59.6 percent of cases the connection is with a member of parliament. Finally, in 24.9 percent of cases, mostly concentrated in Malaysia and Indonesia, the connection consists of a close relationship with a politician.

Table 2 shows that connected firms represent 2.68 percent of all listed corporations and 7.72 percent of the world's market capitalization. When I focus on the largest 50 firms in each market, I find that 6.92 percent of them have political connections. Thus, larger firms exhibit connections more often, consistent with evidence provided in Agrawal and Knoeber (2001) and Johnson and Mitton (2003). Some countries exhibit only a few cases of connections or no connections at all (12 of 47 countries). On the other hand, in Indonesia, Italy, Malaysia, Russia, and Thailand, over 10 percent of listed corporations are politically connected. In Ireland, Malaysia, Russia, Thailand, and the United Kingdom, connected corporations account for more than 20 percent of the market capitalization. In Russia, connected firms actually represent 86.75 percent of the market capitalization, and in the United Kingdom they represent 39.02 percent.

A few caveats are in order. First, the count of connections is far from comprehensive. For many countries, data on ownership are lacking, and families may control firms through nominee accounts or shell entities. Disclosure regulations also differ significantly across countries. To limit the impact of these factors, I investigate only large shareholders, i.e., those who control at least 10 percent of votes—a level of control that forces disclosure almost everywhere. Second, in some countries, connections with local officials may be more important than connections with central government officeholders. There is no comprehensive and accurate information on identifies of those local government officials. Finally, there are many ways to create a political connection. I focus on a direct measure of connections that is observable for all countries. Other instruments, such as campaign contributions, are not observable for most countries.

TABLE 1—CLASSIFICATION OF CONNECTIONS BY TYPE

	Connections through large shareholder	Connections through top officer	Total	(%)
Connections with MPs	45	317	362	*59.6*
Connections with ministers	64	30	94	*15.5*
Closely related firms	137	14	151	*24.9*
Of which:				
Cases of friendship	*10*	*1*	*11*	*1.8*
Former heads of state or prime ministers	*12*	*5*	*17*	*2.8*
Current politicians who have left the firm after 1997	*0*	*2*	*2*	*0.3*
Foreign politicians	*2*	*6*	*8*	*1.3*
Political parties	*113*	*0*	*113*	*18.6*
Total	246	361	607	
(%)	*40.5*	*59.5*		

Notes: Connections with MPs include firms whose large shareholder or top officer of the company sits in a national parliament. *Connections with ministers* include firms with a shareholder controlling at least 10 percent of the voting stock or a top officer who holds a government office, is king or president of the country. *Closely related firms* are those with a shareholder controlling at least 10 percent of the voting stock or a top officer who has a close relationship with at least one top politician. Close relationships include: (a) friends, (b) former heads of state or prime ministers (and their relatives), (c) current politicians who have left the firm after 1997, (d) foreign politicians, and (e) well-known cases of relationships with political parties. *Connections through large shareholder* include those cases in which a shareholder controlling at least 10 percent of the firm's voting stock sits in a national parliament, holds office in the government, is the head of state, or is closely related to a top politician or political party. *Connections through top officer* include those cases in which a company's top officer sits in a national parliament, holds office in the government, is the head of state, or is closely related to a top politician or political party.

II. Where Are Political Connections More Common?

To examine the incidence of connections in different countries, I identify a number of variables that are potentially associated with connectedness.

A. *Variable Definitions*

Connections.—I use two variables to measure the incidence of political connections at the country level. The first variable, *% of firms connected with a minister or MP,* is the number of firms connected with a minister or MP, excluding cases of close relationships, divided by the total number of firms listed in a country. This ratio ranges from a minimum of 0 percent for the countries listed above as having no connections to a maximum of 12 percent in Russia. This index relies only on connections that can be objectively established. The second variable, *% of firms connected with a minister or MP, or a close relationship,* is the number of all connected firms, including cases of close relationships, divided by the total number of firms listed in a country. This ratio ranges from a minimum of 0 percent in Argentina, Brazil, the Czech Republic, New Zealand, Norway, Peru, Poland, South Africa, Venezuela, and Zimbabwe to a maximum of 22.08 percent in Indonesia. This index includes less objective connections, as discussed earlier. Since ratios of connected firms are by construction constrained to between 0 and 100 percent, the regression analysis in Section IIB uses a two-boundary Tobit model (see Takeshi Amemiya, 1984, for a discussion).

Regulatory Environment.—A regulatory score is constructed based on regulations that prohibit or set limits on the business activities of public officials. The results are shown in Table 3. I start by looking at each country's constitutional law, and then I look at the rules of procedure for each chamber of the parliament. Third, I consult the regulations included in the Inter-Parliamentary Union's Web site (http://www.ipu.org/parline-e/parlinesearch.asp), under the field "code (rules) of conduct." Fourth, I conduct Internet searches using combinations of the following keywords: *country name* + "incompatibilities" + "member* parliament." For ministers, I use the keywords: *country name* + "conflict* of interest*" + "minister*" as well as *country name* + "code

TABLE 2—COUNTRY DISTRIBUTION OF FIRMS WITH POLITICAL CONNECTIONS

	No. of firms with available data	No. of firms connected with a minister or MP	% of firms connected with a minister or MP	No. of firms connected through close relationships	% of firms connected with a minister or MP, or a close relationship	% of top 50 firms connected with a minister or MP, or a close relationship	Connected firms as % of market capitalization
Argentina	38	0	0.00	0	0.00	0.00	0.00
Australia	287	2	0.70	0	0.70	0.00	0.32
Austria	110	1	0.91	0	0.91	2.00	0.25
Belgium	157	6	3.82	0	3.82	8.00	18.77
Brazil	167	0	0.00	0	0.00	0.00	0.00
Canada	534	7	1.31	0	1.31	2.00	2.53
Chile	89	2	2.25	0	2.25	4.00	1.43
Colombia	32	0	0.00	0	0.00	0.00	0.00
Czech Rep.	63	0	0.00	0	0.00	0.00	0.00
Denmark	228	7	3.07	0	3.07	6.00	2.52
Finland	132	2	1.52	0	1.52	0.00	0.14
France	914	16	1.75	4	2.19	10.00	8.03
Germany	840	11	1.31	2	1.55	2.00	1.20
Greece	153	1	0.65	0	0.65	0.00	0.09
Hong Kong	405	3	0.74	5	1.98	6.00	2.33
Hungary	27	1	3.70	0	3.70	3.85	2.81
India	323	9	2.79	0	2.79	2.00	1.83
Indonesia	154	12	7.79	22	22.08	24.00	12.76
Ireland	82	2	2.44	0	2.44	4.00	22.83
Israel	55	2	3.64	0	3.64	4.26	8.13
Italy	233	24	10.30	0	10.30	16.00	11.27
Japan	2,395	31	1.29	1	1.34	2.00	1.34
Luxembourg	23	1	4.35	0	4.35	4.55	10.48
Malaysia	445	23	5.17	65	19.78	44.00	28.24
Mexico	94	6	6.38	2	8.51	12.00	8.14
Netherlands	238	1	0.42	0	0.42	0.00	0.01
New Zealand	50	0	0.00	0	0.00	0.00	0.00
Norway	206	0	0.00	0	0.00	0.00	0.00
Peru	37	0	0.00	0	0.00	0.00	0.00
Philippines	114	1	0.88	4	4.39	8.00	16.16
Poland	57	0	0.00	0	0.00	0.00	0.00
Portugal	101	3	2.97	0	2.97	4.00	2.00
Russia	25	3	12.00	2	20.00	36.36	86.75
Singapore	229	18	7.86	0	7.86	4.00	2.59
South Africa	212	0	0.00	0	0.00	0.00	0.00
South Korea	313	7	2.24	1	2.56	4.00	8.95
Spain	200	3	1.50	0	1.50	0.00	0.82
Sri Lanka	18	0	0.00	0	0.00	0.00	0.00
Sweden	280	3	1.07	0	1.07	4.00	1.02
Switzerland	243	6	2.47	0	2.47	4.00	0.69
Taiwan	237	2	0.84	6	3.38	10.00	12.74
Thailand	279	23	8.24	19	15.05	34.00	41.62
Turkey	84	1	1.19	0	1.19	0.00	0.14
UK	2,149	154	7.17	0	7.17	46.00	39.02
US	7,124	6	0.08	8	0.20	6.00	4.94
Venezuela	18	0	0.00	0	0.00	0.00	0.00
Zimbabwe	8	0	0.00	0	0.00	0.00	0.00
All countries	20,202	400	1.98	141	2.68	6.92	7.72

	Total number of connections	Of which:			
		Ownership		Directorship	
		N	%	*N*	%
Argentina	0	.	.	.	.
Australia	2	0	0.0	2	100.0
Austria	1	0	0.0	1	100.0
Belgium	6	0	0.0	6	100.0
Brazil	0	.	.	.	.
Canada	7	0	0.0	7	100.0
Chile	2	0	0.0	2	100.0
Colombia	0	.	.	.	.
Czech Rep.	0	.	.	.	.

TABLE 2—*Continued.*

	Total number of connections	Of which:			
		Ownership		Directorship	
		N	%	*N*	%
Denmark	7	0	0.0	7	100.0
Finland	2	0	0.0	2	100.0
France	22	10	45.5	12	54.5
Germany	16	5	31.3	11	68.8
Greece	1	0	0.0	1	100.0
Hong Kong	8	5	62.5	3	37.5
Hungary	1	0	0.0	1	100.0
India	10	2	20.0	8	80.0
Indonesia	34	34	100.0	0	0.0
Ireland	3	0	0.0	3	100.0
Israel	2	0	0.0	2	100.0
Italy	29	21	72.4	8	27.6
Japan	35	4	11.4	31	88.6
Luxembourg	1	0	0.0	1	100.0
Malaysia	94	87	92.6	7	7.4
Mexico	8	2	25.0	6	75.0
Netherlands	1	0	0.0	1	100.0
New Zealand	0	·	·	·	·
Norway	0	·	·	·	·
Peru	0	·	·	·	·
Philippines	6	5	83.3	1	16.7
Poland	0	·	·	·	·
Portugal	3	1	33.3	2	66.7
Russia	7	2	28.6	5	71.4
Singapore	19	10	52.6	9	47.4
South Africa	0	·	·	·	·
South Korea	8	1	12.5	7	87.5
Spain	3	1	33.3	2	66.7
Sri Lanka	0	·	·	·	·
Sweden	3	0	0.0	3	100.0
Switzerland	7	0	0.0	7	100.0
Taiwan	9	6	66.7	3	33.3
Thailand	46	37	80.4	9	19.6
Turkey	1	0	0.0	1	100.0
UK	189	13	6.9	176	93.1
US	14	0	0.0	14	100.0
Venezuela	0	·	·	·	·
Zimbabwe	0	·	·	·	·
All countries	607	246	40.5	361	59.5

Notes: No. of firms with available data is the number of firms included in Worldscope. *No. of firms connected with a minister or MP* is the number of firms with a shareholder controlling at least 10 percent of the voting stock or a top officer who is a member of parliament or government, excluding close relationships. *% of firms connected with a minister or MP* is the number of firms connected with a minister or MP as a proportion of the total number of firms in a given country. *No. of firms connected through close relationships* is the number of firms with a shareholder controlling at least 10 percent of the voting stock or a top officer who is a member of parliament or government, plus all identified cases of close relationships. *% of firms connected with a minister or MP, or a close relationship* is the number of all connected firms as proportion of the total number of firms in a particular country. *% of top 50 firms connected with a minister or MP, or a close relationship* is the number of connected firms as proportion of the largest 50 firms (based on end of 1997 market capitalization) in a particular country. For countries with fewer than 50 firms in the sample, this fraction is computed based on the available companies. *Total number of connections* is the overall number of connections identified in a given country. If two officers of the same company sit as ministers, the number of connections would be two, while the number of connected firms would be one. *Ownership* and *directorship* denote whether the company is connected through a large shareholder or through a top officer.

conduct" + "minister*." From the Web sites of each parliament and government, I gather contact information (generally e-mail addresses), which I use to send a questionnaire concerning the specific conflicts of interest described below. My questionnaire is sent to each chamber of the parliament and to at least three ministers, as well as to each country's securities regulatory authority. Information from these sources is used to construct six regulatory subscores (numbered 1–6 below), an aggregate regulatory score, and a disclosure score for each country. These scores are presented from left to right in Table 3. For the six regulatory subscores and for

TABLE 3—REGULATION INDEX

	Restrictions on ownership by MPs	Restr. on directorships by MPs	Restrictions on MPs in constitution	Restrictions on own. by ministers	Restrictions on directorships by ministers	Restrictions on ministers in constitution	Regulatory score	Mandatory disclosure of assets
Argentina	0	1^{CI}	0	0	1^{CI}	0	2	1
Australia	0	0	0	1^{CI}	1^{TOT}	0	2	1
Austria	1^{A}	1^{A}	0	0	0	0	2	1
Belgium	0	0^{GOV}	0	0	0	0	0	0
Brazil	1^{CI}	$1^{R,CI}$	1	0	1^{TOT}	0	4	1
Canada	0	0	0	$1^{CI,A}$	$1^{R,A}$	0	2	0
Chile	0	1^{TOT}	1	0	0	0	2	0
Colombia	0	1^{CI}	1	0	1^{CI}	1	4	0
Czech Rep.	0	0^{GOV}	0	0	0	0	0	1
Denmark	0	0	0	0	1^{TOT}	0	1	0
Finland	0	0	0	0	1^{CI}	0	1	0
France	0	$1^{GOV,CI}$	0	0	0	1	2	1
Germany	0	0	0	0	1^{A}	1	2	1
Greece	0	1^{CI}	1	0	1^{CI}	1	4	0
Hong Kong	0	0	0	0	1^{A}	0	1	1
Hungary	0	0	0	0	1^{CI}	0	1	1
India	0	0	0	0	0	0	0	0
Indonesia	0	0	0	0	0	0	0	1
Ireland	1^{CI}	$1^{R,CI}$	0	1^{CI}	$1^{R,CI}$	0	4	1
Israel	0	$1^{R,CI}$	1	0	$1^{R,CI}$	1	4	1
Italy	0	0^{GOV}	0	0	0	0	0	1
Japan	0	0	0	0	0	0	0	1
Luxembourg	0	0^{GOV}	0	0	0	0	0	0
Malaysia	0	0	0	0	0	0	0	0
Mexico	0	0	0	0	0	0	0	0
Netherlands	0	0	0	0^{GOV}	1^{TOT}	0	1	0
New Zealand	0	0	0	1^{CI}	1^{CI}	0	2	1
Norway	0	0	0	0	$1^{A,CI}$	0	1	0
Peru	1^{CI}	1^{CI}	1	1^{TOT}	1^{TOT}	1	6	0
Philippines	$1^{GOV,CI}$	$1^{GOV,CI}$	1	1^{CI}	$1^{GOV,CI}$	1	6	1
Poland	0^{GOV}	0^{GOV}	1	0	0	0	1	1
Portugal	1^{CI}	1^{TOT}	0	0	0	0	2	1
Russia	0	1^{R}	1	0	0	0	2	0
Singapore	0	0	0	1^{CI}	1^{A}	1	3	0
South Africa	0	0	0	1^{CI}	$1^{R,CI}$	1	3	1
South Korea	0	1^{TOT}	0	0	0	0	1	0
Spain	0	0	0	1^{TOT}	1^{TOT}	1	3	1
Sri Lanka	0	1	1	0	0	0	2	1
Sweden	0	0	0	0	1^{CI}	0	1	0
Switzerland	0	0^{GOV}	0	1	1	0	2	1
Taiwan	0	0^{GOV}	0	0	0	0	0	1
Thailand	0	0^{GOV}	0	1^{CI}	1^{TOT}	1	3	1
Turkey	0	1^{CI}	1	0	1^{CI}	1	4	1
UK	0	0	0	1^{CI}	1^{TOT}	0	2	1
US	1^{CI}	$1^{R,CI}$	0	$1^{CI,A}$	$1^{CI,A}$	0	4	1
Venezuela	0	0^{GOV}	0	0	0	0	0	1
Zimbabwe	0	0	0	0	1^{R}	1	2	0

^{A} indicates a restriction that can be waived by obtaining a special *authorization.*
^{CI} indicates a restriction applying to possible *conflicts of interest,* or where the firm obtains benefits from the government.
^{GOV} indicates some minor restrictions applying to *government-controlled* firms.
^{R} indicates major restrictions, although the politician may hold non-*remunerated* directorships.
^{TOT} indicates that MPs/ministers are *totally* forbidden to hold directorships. Regulation variables are defined in Section II.

the disclosure score, a value of one is assigned if the country has at least one restriction in that category, and zero otherwise.

1. *Restrictions on ownership by members of parliament.* Restrictions include both those that completely forbid MPs to hold stock and those that allow MPs to hold stock in some instances. For example, the Brazilian *Código de Ética* forbids senators to own companies that would benefit from a contract with the government. Similarly, in Ireland, office holders are not allowed to have any financial interests that might conflict or be seen to conflict with their position.

2. *Restrictions on board membership by MPs.* First, restrictions include those that completely forbid MPs to sit on a board. This is the case in Chile, Portugal, and South Korea. I also consider partial restrictions, which allow MPs to sit on boards as long as the position (a) is not remunerated; (b) does not represent a conflict of interest; or (c) a waiver is granted. Partial restrictions apply in 13 countries. For example, Rule XLVII of the U.S. House of Representatives stipulates that members shall not serve with compensation as an officer or member of the board of any association, corporation, or other entity. The French regulation prohibits MPs from sitting on the boards of companies that derive advantage from the state or from a public body. In Austria, the Incompatibility Act requires MPs holding a leading position in a joint-stock company to reveal their position to the president of the Chamber. The Incompatibility Committee decides on the acceptability of such a function.

3. *Whether major restrictions against board membership or ownership of public companies by members of the parliament are expressed in the constitution.* Major restrictions include those forbidding (to some extent) MPs to sit as a company officer or to own a company, but they do not include generic provisions on conflicts of interest (as in the Hungarian Constitution), or ways to determine incompatibilities through law (as in the Portuguese Constitution). Furthermore, restrictions need to apply to all MPs, and not just to a few. I indicate, for example, that the Malaysian Constitution does not set major restrictions, since its provisions pertain only to the president of the Senate and the speaker of the House of Representatives.

4. *Restrictions on ownership by ministers, following the restrictions as for MPs.* These restrictions may come from any of the sources. Restrictions on ownership by ministers are identified in 14 countries.

5. *Restrictions on board membership by ministers.* In Australia, Brazil, Denmark, the Netherlands, Peru, Spain, Thailand, and the United Kingdom, ministers may not sit on a board. In some other countries, ministers are allowed to sit on boards as long as the position (a) is not remunerated; (b) does not represent a conflict of interest (e.g., the company either has a contract with the state or enjoys special privileges or concessions, or receives a regular state subsidy by virtue of a special law); or (c) a waiver is granted.

6. *Major restrictions on board membership or ownership by ministers expressed in the constitution.* Constitutional restrictions applying to ministers are more common than restrictions applying to MPs; they show up in 13 countries.

I add these six scores together to create an aggregate score (*regulatory score*), which ranges from 0 for Belgium, the Czech Republic, India, Indonesia, Italy, Luxembourg, Malaysia, Mexico, Taiwan, and Venezuela, to 6 for Peru and the Philippines.[9]

In addition to this restrictions-based variable, I include the dummy variable *mandatory disclosure of assets,* which takes the value of one if government officials are required to disclose personal assets, and zero otherwise. This variable is based on information from the Parline database and from the questionnaires sent to parliaments and governments.

I expect connections to be less common in countries with more stringent regulations (e.g., more widespread and stronger restrictions). The expected impact of disclosure rules is much less clear. On the one hand, disclosure may discourage connections, as it increases the likelihood that abuses are detected and punished. On the other hand, disclosure makes it more likely that connections are picked up in my sample. The correlation coefficient for restrictions and incidence of connections, reported in Table 4, shows that, as expected, restrictions are associated with a lower proportion of connections. Disclosure requirements are also associated with fewer connections, at least in the univariate analysis.

Corruption.—I employ three measures of perceived corruption. My first proxy for corruption, *Kaufmann et al. corruption,* is defined as the exercise of public power for private gains; it includes various measures ranging from the frequency of "additional payments to get things done" to the effects of corruption on the business environment. This variable comes from Daniel Kaufmann et al. (1999a and 1999b). It is an indicator variable that is based on a statistical compilation of perceptions regarding the quality

[9] Details on each country's regulations are available from the author.

TABLE 4—DETERMINANTS OF THE FREQUENCY OF CONNECTIONS (CORRELATION COEFFICIENTS)

	Kaufmann et al. corruption	German corruption	Corruption ICRG	Quality of legal environment	Cross-border restrictions	Democratic in all years since 1950
% of firms connected with a minister or MP	0.10	0.22	0.11	−0.06	0.25	0.00
% of firms connected with a minister or MP, or a close relationship	0.27	0.38	0.32	−0.23	0.41	−0.18
% of top 50 firms connected with a minister or MP, or a close relationship	0.14	0.22	0.12	−0.06	0.29	−0.05

	Press freedom index	Secondary school enrollment	Ln{GDP (per capita)}	Regulatory score	Mandatory disclosure of assets
% of firms connected with a minister or MP	0.28	0.04	−0.02	−0.22	−0.13
% of firms connected with a minister or MP, or a close relationship	0.42	−0.08	−0.23	−0.23	−0.09
% of top 50 firms connected with a minister or MP, or a close relationship	0.33	0.07	−0.10	−0.16	−0.01

Notes: % of firms connected with a minister or MP is the ratio of firms connected with a minister or MP as a proportion of the total number of firms in a given country. *% of firms connected with a minister or MP, or a close relationship* is the number of all connected firms as a proportion of the total number of firms in a particular country. *% of top 50 firms connected with a minister or MP, or a close relationship* is the number of connected firms as proportion of the largest 50 firms (based on end-of-1997 market capitalization) in a particular country. For countries with fewer than 50 firms in the sample, this fraction is computed based on the available companies. Kaufmann et al. (1999a, b) corruption is defined as the exercise of public power for private gains, and measures various aspects, ranging from the frequency of "additional payments to get things done" to the effects of corruption on the business environment. "The indicator reflects the statistical compilation of perceptions of the quality of governance of a large number of survey respondents in industrial and developing countries, as well as nongovernmental organizations, commercial risk rating agencies, and think tanks during 1997 and 1998." Originally scaled from about −2.5 to 2.5; rescaled from 0 to 10, with higher scores for higher corruption. Source: Kaufmann et al. (1999a, b), *http://www.worldbank.org/wbi/governance/datasets.html#dataset. German corruption* is the German exporters' corruption index developed by Neumann (1994). The index ranges from 0 to 5, with higher scores denoting higher levels of corruption. *Corruption ICRG* is the International Country Risk Guide's assessment of the corruption in government. Higher scores indicate "high government officials are likely to demand special payments" and "illegal payments are generally expected throughout lower levels of government" in the form of "bribes connected with import and export licenses, exchange controls, tax assessment, policy protection, or loans." Average of the months of April and October of the monthly index between 1982 and 1995. Scale from 0 to 10; the original scale is inverted so that lower scores correspond to lower levels of corruption (source: La Porta et al., 1998). *Quality of legal environment* is the average between *efficiency of the judicial system* and *rule of law. Efficiency of the judicial system* is an assessment of the "efficiency and integrity of the legal environment as it affects business, particularly foreign firms" produced by the country-risk rating agency Business International Corporation. It "may be taken to represent investors' assessments of conditions in the country in question." Average between 1980 and 1983. Scale from 0 to 10, with lower scores for lower efficiency levels (source: Mauro, 1995). *Rule of law* is an assessment of the law-and-order tradition in the country produced by the country-risk rating agency International Country Risk. Average of the months of April and October of the monthly index between 1982 and 1995. Scale from 0 to 10, with lower scores for lower efficiency levels (source: La Porta et al., 1998, and World Bank, *http://www.worldbank.org/wbi/governance/datasets.html#dataset*). *Cross-border restrictions* is a dummy variable that equals 1 if there is any restriction on the purchase of securities or outward direct investment in a specific country, and zero otherwise (source: IMF, "Exchange Arrangements and Exchange Restrictions"). *Democratic in all years since 1950* is dummy variable that equals 1 if (i) the executive is elected, (ii) the legislature (at least its lower house) is elected, (iii) more than one party contests elections, and (iv) during the last three elections of the executive there has been at least one turnover of power between parties (source: Treisman, 2000). *Press freedom index* measures the amount of freedom journalists and the media have in each country and the efforts made by governments to see that press freedom is respected. Reporters without Borders sent a questionnaire based on the main criteria for such freedom and asking for details of direct attacks on journalists (such as murders, imprisonment, physical assaults, and threats) and on the media (censorship, confiscation, searches, and pressure). It also asked about the degree of impunity enjoyed by those responsible for such violations. The index of press freedom is a portrait of the situation based on events between September 2001 and October 2002. Scale from 0 to 100, with lower scores for more freedom (source: Reporters without Borders, "Worldwide Press Freedom Index," *http://www.rsf.fr/article.php3?id_article=4118*). The original index is not available for Luxembourg (replaced in the sample with the average between France and Belgium), New Zealand (replaced in the sample with Australia, and Singapore). *Secondary school enrollment* is the ratio of the number of children of official school age (as defined by the national education system) who are enrolled in school to the population of the corresponding official school age. Secondary education completes the provision of basic education that began at the primary level and aims at laying the foundations for lifelong learning and human development by offering more subject- or skill-oriented instruction using more specialized teachers. Average 1987–1999 (source: World Bank, *http://sima-ext.worldbank.org/query/*). *Ln{GDP (per capita)}* is the natural log of gross domestic product (in US$) on a purchasing-power-parity basis divided by population; computed for 1999 (source: World Bank, *http://sima-ext.worldbank.org/query/*). *Regulatory score* is formed by adding: (i) restrictions on ownership by MPs, (ii) restrictions on directorships by MPs, (iii) restrictions on MPs in constitution, (iv) restrictions on ownership by ministers, (v) restrictions on directorships by ministers, (vi) restrictions on ministers in constitution. The index ranges from 0 to 6 (source: Table 3). *Mandatory disclosure of assets* is a dummy variable that takes the value of 1 if government officials are required to declare personal assets and zero otherwise (source: Table 3).

of governance in industrial and developing countries, collected in a survey of a large number of respondents, as well as the opinion of nongovernmental organizations, commercial risk rating agencies, and think tanks (during 1997 and 1998). The second measure of corruption that I employ, *German corruption,* was developed in Peter Neumann (1994). This index is compiled from interviews with German exporters, and it indicates the proportion of transactions involving bribes. To put together this index, Neumann interviewed on average ten individuals per foreign importing country, with a guarantee of strict confidentiality. This proxy of corruption has been used by other researchers, such as Alberto Ades and Rafael Di Tella (1997) and Shang-Jin Wei (2000), and has the benefit of being relatively "objective," since bribing foreign government officials was not a crime in Germany when the survey was done.[10] The third measure of corruption in the table,

[10] I thank a referee for suggesting this proxy for corruption. I also thank Rafael Di Tella for providing me with a copy of Neumann's (1994) article.

corruption ICRG, is the International Country Risk Guide's assessment of corruption in governments. Ex ante, it is not clear whether corruption and connections should be complements or substitutes. The correlation coefficients in Table 4 show, however, that connections are positively related to corruption.

Quality of the Legal Environment.—Quality of legal environment is the average of efficiency of the *judicial system* and *rule of law.* The first is an assessment of the efficiency and integrity of the legal environment as it affects business, particularly foreign firms, produced by the country-risk rating agency, Business International Corporation. It may be taken to represent investors' assessments of conditions in the country in question. The index is scaled from 0 to 10; lower scores represent lower efficiency levels (see Paolo Mauro, 1995). The *rule of law* is an assessment of the law and order tradition in the country produced by the country-risk rating agency, International Country Risk. It also is scaled from 0 to 10, with lower scores for lower efficiency levels.[11] Ex ante, one would expect countries with better legal systems to display a lower incidence of connections. A good legal regime should exhibit more transparency of regulation, uniform application of the law, and rigorous enforcement of penalties associated with violations of the law. This hypothesis is supported by the negative correlations in Table 4.

Openness.—Cross-border restrictions are used as proxy for openness in the economy. They take the value of one if there is any restriction on the purchase of foreign securities or outward direct investment by citizens, and zero otherwise. Measures of this variable come from the International Monetary Fund's "Exchange Arrangements and Exchange Restrictions." Capital restrictions allow politicians to insulate the country from international capital flows, ensuring connected corporations' access to capital, both from domestic private investors and banks (Johnson and Mitton, 2003; Raghuram G. Rajan and Luigi Zingales, 2003). Thus, I expect connections to be more prevalent in countries with capital restrictions. The relevant coefficients in Table 4 confirm that connections are more common in countries that restrict capital outflows.

Democracy, Freedom of Press, Education, and Economic Development.—As a proxy for democracy, I use *democratic in all years since 1950,* an indicator variable that takes the value of one if (a) the executive is elected; (b) the legislature (or at least its lower house) is elected; (c) more than one party contests elections; and (d) during the last three elections of the executive there has been at least one turnover of power between parties. This variable is taken from Daniel Treisman (2000). Democratic systems might serve to discourage connections, because political opponents have an incentive to discover and publicize abuses of office. Further, connections may be seen as less valuable if officials can be voted out.

The *press freedom index* measures the extent of freedom journalists and the media have in each country and of the efforts made by governments to see that press freedom is respected, as measured by Reporters without Borders. Increased freedom of press should discourage connections since it encourages the detection and punishment of abuses. As with any other transparency variable, however, we may uncover a positive association between the freedom of the press and connections if more transparent systems are, in general, better able to tolerate connections because a misuse would be more likely to be punished. Furthermore, a positive mechanical association would result if connections are easier to detect in more transparent economies.

A similar effect may show up for education-related variables. A proxy for education, *secondary school enrollment,* is the proportion of children of official secondary school age (as defined by the country) enrolled in school to the population of that age.

I also use the natural log of per capita GDP, *Ln{GDP (per capita)}*, as a proxy for economic development (see Mauro, 1995; Treisman, 2000). We may see fewer connections in more developed countries, as the benefits of being close to politicians may be smaller there. On the other hand, more developed countries may be more transparent, so that a higher proportion of

[11] I also use a number of proxies for the regulation of entry developed by Simeon Djankov et al. (2002), such as their "number of procedures," "time," and "cost" variables, but none of them is significant in explaining the incidence of connections.

connections that exist are included in the sample because they are easier to detect in more transparent economies.

B. *Regression Results*

Using regressions based on a two-boundary Tobit specification, I test the significance of the relations between the connections variables and the independent variables. All regressions include the natural log of per capita GDP as a control variable. I start by using the objective measure of connections, *% of firms connected with a minister or MP,* as dependent variable. In Table 5, models (1), (2), and (8) to (10) show that two of the three proxies for perceived corruption are positively and significantly associated with the connection index. This finding is intriguing and indicates three possible explanations. First, it may be that in some countries corruption is not helpful enough to obtain significant benefits, so businessmen need to become personally involved in politics in order to "squeeze the state." Alternatively, it may be the case that corruption emerges as a response to political connections if companies without political connections need to bribe politicians in order to obtain the minimum benefits necessary to ensure the survival of the firm. Third, it may be that my measure of connections is a proxy for corruption, which is observable at the firm level. Of course, these results need to be interpreted with the following caveat: my measure of political connections includes only cases that are readily observable, and overt connections might be more common in countries in which corruption is more widely accepted. Model (3) shows that connections are less common in countries with better legal environments. This result is statistically significant in regressions (9) and (10).

Model (4) shows that countries that restrict foreign financial investment by residents have a significantly higher incidence of political connections. Democratic governments are associated with a higher incidence of connections, but the relationship is not statistically significant (model 5). Similarly, less freedom of press is associated with a higher incidence of connections. Model (6) shows that better education is associated with more connections. This result may be due to the fact that democracies and systems with better education are in general better able to tolerate connections because a misuse would be more likely to be punished. Finally, Model (7) indicates that restrictions on connections are, as one would expect, associated with fewer connections. The mandatory disclosure of assets is also associated with fewer connections.

Several of the explanatory variables are highly correlated with one another and it would be difficult to disentangle their individual effects. Thus, I further assess the validity of the results using a stepwise procedure, adding independent variables one at a time until the best regression model is obtained. Most of the results continue to hold for models (8) to (10). Corruption, for example, continues to be positively associated with connections for two of the three measures. Similarly, connections remain more common in countries that restrict foreign investment by residents. Connections are less common in the presence of more restrictive regulations. They remain more common in more transparent systems, such as democracies, and in countries with higher secondary school enrollment.

Models (11) to (13) show that these results are generally robust to changes in the incidence of connections variable; these models use *% of firms connected with a minister or MP, or a close relationship,* the less objective measure of connections. One difference between models (11) to (13) and models (8) to (10) is that when using the less objective measure of connections the relationship between connections and corruption is weakened. Additionally, although I find a positive association between the democratic structure of the country and the incidence of connections, this association is no longer significant at conventional levels.

The coverage of the Worldscope dataset is such that more firms are included for some countries than for others. A way to minimize Worldscope sampling issues is to focus on the largest firms in each country. I therefore use the variable *% of top 50 firms connected with a minister or MP, or a close relationship,* which is the incidence of connections among the largest 50 firms in each country. For countries with fewer than 50 firms in the sample, this fraction is computed based on the available companies. In models (14) to (16), countries that restrict foreign financial investment by residents continue to display a significantly higher incidence

TABLE 5—DETERMINANTS OF THE FREQUENCY OF CONNECTIONS: TWO-BOUNDARY TOBIT REGRESSION ESTIMATES

	Dep. var.: % of firms connected with a minister or MP						
Indep. variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Kaufmann et al. corruption	0.41						
	(0.53)						
German corruption		0.95					
		(0.11)					
Quality of legal environment			−0.31				
			(0.53)				
Cross-border restrictions				3.73			
				(0.02)			
Democratic in all years since 1950					1.14		
					(0.21)		
Press freedom index					0.14		
					(0.08)		
Secondary school enrollment						0.12	
						(0.19)	
Regulatory score							−0.49
							(0.16)
Mandatory disclosure of assets							−0.71
							(0.55)
Ln{GDP (per capita)}	1.34	2.00	1.24	2.09	1.58	−3.67	0.34
	(0.35)	(0.14)	(0.38)	(0.02)	(0.22)	(0.18)	(0.67)
Intercept	−12.25	−18.67	−7.66	−19.20	−15.56	28.09	0.00
	(0.42)	(0.17)	(0.48)	(0.03)	(0.23)	(0.19)	(1.00)
N obs.	47	45	42	46	46	43	47
R^2 adj. (%)	<0	0.27	<0	1.31	5.22	1.77	<0

	Dep. var.: % of firms connected with a minister or MP			Dep. var.: % of firms connected with a minister or MP, or a close relationship		
Indep. variables	(8)	(9)	(10)	(11)	(12)	(13)
Kaufmann et al. corruption	0.36			−0.23		
	(0.53)			(0.97)		
German corruption		1.00			1.20	
		(0.08)			(0.18)	
Corruption ICRG			1.50			2.20
			(0.00)			(0.01)
Cross-border restrictions	2.70	1.94	2.28	5.73	4.51	4.74
	(0.03)	(0.13)	(0.07)	(0.02)	(0.07)	(0.06)
Democratic in all years since 1950	1.63	1.88	2.35	0.88	1.71	2.42
	(0.16)	(0.07)	(0.00)	(0.66)	(0.39)	(0.19)
Secondary school enrollment	0.03	0.03	0.04	0.09	0.11	0.13
	(0.39)	(0.43)	(0.12)	(0.16)	(0.16)	(0.08)
Regulatory score	−0.58	−0.62	−0.73	−1.11	−1.08	−1.33
	(0.02)	(0.01)	(0.00)	(0.05)	(0.04)	(0.00)
Ln{GDP (per capita)}	0.66	1.31	2.74	−1.54	−0.72	1.93
	(0.57)	(0.38)	(0.02)	(0.56)	(0.82)	(0.50)
Intercept	−8.35	−14.74	−31.64	10.25	−1.24	−31.00
	(0.49)	(0.27)	(0.01)	(0.69)	(0.96)	(0.26)
N obs.	43	42	42	43	42	42
R^2 adj. (%)	10.40	24.81	32.12	16.40	23.67	29.13

TABLE 5—*Continued.*

	Dep. var.: % of top 50 firms connected with a minister or MP, or a close relationship			Dep. var.: % of firms connected with a minister or MP. Robustness test: Addition of regional dummies		
Indep. variables	(14)	(15)	(16)	(17)	(18)	(19)
Kaufmann et al. corruption	−0.71			0.13		
	(0.76)			(0.83)		
German corruption		0.76			0.70	
		(0.78)			(0.39)	
Corruption ICRG			3.97			1.32
			(0.03)			(0.01)
Cross-border restrictions	16.62	15.33	13.90	2.47	1.56	1.91
	(0.02)	(0.03)	(0.04)	(0.01)	(0.22)	(0.05)
Democratic in all years since 1950	4.36	5.54	7.60	0.84	1.28	1.58
	(0.44)	(0.31)	(0.17)	(0.51)	(0.32)	(0.06)
Secondary school enrollment	0.25	0.29	0.33	−0.03	−0.03	−0.01
	(0.14)	(0.17)	(0.09)	(0.26)	(0.43)	(0.76)
Regulatory score	−2.24	−2.10	−2.54	−0.45	−0.52	−0.62
	(0.07)	(0.07)	(0.02)	(0.02)	(0.03)	(0.00)
Ln{GDP (per capita)}	−1.74	−0.99	4.99	0.80	1.56	2.65
	(0.77)	(0.90)	(0.45)	(0.53)	(0.43)	(0.05)
Europe				−3.24	−11.42	−25.15
				(0.81)	(0.53)	(0.08)
North America				−3.68	−11.52	−26.20
				(0.79)	(0.53)	(0.07)
South America				−7.97	−15.69	−29.97
				(0.58)	(0.41)	(0.03)
Asia				−3.28	−10.88	−25.87
				(0.81)	(0.54)	(0.07)
Austral. & New Zealand				−6.14	−14.05	−28.08
				(0.64)	(0.44)	(0.05)
Africa				−27.03	−32.91	−44.76
				(0.05)	(0.05)	(0.00)
Intercept	−1.13	−15.42	−83.76			
	(0.98)	(0.82)	(0.19)			
N obs.	43	42	42	43	42	42
R^2 adj. (%)	<0	<0	<0	41.27	47.56	54.60

Notes: All variables are defined in Table 4. The *p*-values, reported in parentheses below the coefficients, are computed using Huber/White correction for heteroskedasticity (see White, 1980).

of connections. Similarly, restrictions on political connections are associated with a significantly lower proportion of connections. Finally, although the ICRG measure of perceived corruption is positively and significantly associated with the incidence of connections, the associations with the German corruption index and the Kaufmann et al. proxy are not significant.

To check the robustness of my results, I exclude countries with limited data coverage in Worldscope (see footnote 6). All variables maintain the signs displayed in models (8) to (10), although only corruption and the regulatory score remain significant at conventional levels. As a second check, to verify that the results are not driven by a regional factor, I add regional dummies to the regressions (models (17) to (19)). In all regressions, the regulation variable remains significantly associated with the incidence of connections. Moreover, in at least some of the regressions, the coefficients on the cross-border restrictions indicator, democracy, and on the ICRG's measure of corruption remain significantly associated with the incidence of connections.

III. The Value of Connections

To see whether connections add value, I run an event study around announcements of (a) officers or large shareholders entering politics and (b) politicians joining boards. If connec-

tions add value, announcements should be associated with a positive cumulative abnormal return (CAR).

Several factors limit the sample size. First, the dates of appointments *and* elections must be identifiable. I am able to identify the election dates in 572 cases. All international data sources covered in Lexis-Nexis, Reuters, *The Financial Times,* and *The Economist* allow identification of the dates of board appointments or of acquisition of ownership for only 328 cases. The lack of data forces exclusion of many interesting connections, such as those involving several companies related to Suharto (who came to power in 1967), the King of Thailand, Mahathir, several Russian politicians, and anyone who came to power before press releases are available. Second, it must be possible to verify whether a particular politician was an officer before the election or appointment to office, as well as whether someone later appointed an officer was already a politician at that time. Application of this requirement reduces the sample to 296 observations. Third, stock price series must be available from Datastream or Bloomberg LP, which reduces the sample to 245 observations.

There will be a stock price reaction to an election only if the outcome is a surprise. In a number of cases, the outcome of an election was easy to call in advance. To deal with anticipation, I conduct keyword searches in *Factiva* using the terms "surprise*," "unexpect*," or "unpredict*," and include only those elections reported as being surprising. I consider all appointments of politicians to corporate boards as surprises, unless the press mentions the name of the politician as a potential candidate in advance. I follow a similar procedure for appointments to political positions. I am left with a final sample of 157 announcements, of which 48 are appointments of politicians to a board and 109 are "elections." While appointments are generally not clustered on a particular day, some of the connections created by elections are clustered. Overall, the 109 elections and appointments are spread over 48 different days or countries. Since in the presence of clustering, observations may not be independent, the standard errors reported in Table 6 and in footnotes 12 and 13 are corrected using the procedure described in Jeffry Wooldridge (2002, pp. 405–10).

I use the Stephen J. Brown and Jerold B. Warner (1985) standard event study methodology to calculate the market-adjusted CARs for the five-day period around the announcement dates (days −2 to +2). The event date is defined as the election date for officers and large shareholders entering politics, and as the day of appointment to the board for politician appointment. The results for the whole sample, reported in Table 6, panel A, indicate that the announcement of a new connection results in an abnormal return of 1.43 percent (p-value = 0.09). In panel B, an event study centered on elections reveals an average excess return of 2.29 percent (p-value = 0.05) whenever a businessperson enters politics, which suggests that, for this subsample, benefits outweigh the costs of connections. For the 48 announcements of appointments of a politician to a board, I find that companies experience an insignificant average CAR of −0.53 percent (p-value = 0.27). This suggests that, for this subsample of announcements, the benefits of connections do not exceed the costs.[12]

Furthermore, for the elections subsample, I find that connections with more powerful politicians and with businesspeople with more vested interests in the company result in larger announcement returns: for example, a connection through a large shareholder results in a five-day CAR of 4.47 percent, while a connection through an officer results in a CAR of only 1.94 percent (see panel C). Similarly, while a connection through a member of the parliament results in a value increase of "only" 1.28 percent, a connection with a minister or a close relationship results in an average value increase of 12.31 percent (panel D). Finally, panel E shows that connections create more value in

[12] It would be rational for controlling shareholders to charge the costs of connections to firms in which she is diluting her ownership stake through some control-enhancing devices (see, for example, Marianne Bertrand et al., 2002). I test for this possibility by comparing the announcement returns, around appointments of politicians to boards, of companies controlled through a pyramid to those of companies directly controlled by their largest shareholder. In support of the expropriation hypothesis, I find an average announcement return of −2.05 percent (p-value = 0.06) for companies controlled through a pyramid and of 0.03 percent (p-value = 0.97) for companies directly controlled by their largest shareholder. The difference between the two is statistically significant with a p-value of 0.06.

TABLE 6—THE VALUE OF CONNECTIONS

	N. Obs.	Average CAR (%)	(*p*-value)
Panel A: Overall results			
Full sample	157	1.43	(0.09)
Panel B: Results by the way the connection is established			
Appointments of politicians on corporate boards	48	−0.53	(0.27)
Company large shareholders and officers entering politics	109	2.29	(0.05)
Panel C: Officers versus large shareholders entering politics			
Large shareholders entering politics	15	4.47	(0.02)
Officers entering politics	94	1.94	(0.15)
Panel D: Officers and large shareholders taking on higher versus lower political office			
Appointment or election as a minister (either directly or through a close relationship)	10	12.31	(0.32)
Appointment or election as an MP	99	1.28	(0.02)
Panel E: Results by level of corruption (Kaufmann et al. corruption measure)			
Countries with corruption ≥ sample median	58	4.32	(0.08)
Countries with corruption < sample median	51	−0.02	(0.97)

Notes: Abnormal (%) returns are computed using a standard market-adjusted approach. The event window goes from day −2 to day +2. The event date is defined as the election date (or date of appointment of the politician, if different) in the case of officers/large shareholders elected as politicians, and as the date the appointment was announced, in the case of appointment of politicians to the board. Datastream's index for the connected company's home country is used as the measure of market returns. Panels C through E focus on the subsample of 109 elections (of large shareholders and/or officers to political office). Standard errors are corrected for clustering in the election dates.

countries with high corruption (i.e., those with a Kaufmann et al. corruption index greater than or equal to the sample median) than in countries with low corruption; the average CARs for these two subsamples are of 4.32 percent and −0.02 percent, respectively.[13]

[13] Because Rita Ramalho (2003) documents a long-term drift in performance in the year following the collapse of connections (with Brazilian President Collor de Mello), I test whether my sample firms exhibit abnormal performance in the year following the establishment of a connection. For this purpose, I measure one-year buy-and-hold abnormal returns (Brad Barber and John Lyon, 1997), starting on the second day after the announcement of the establishment of a connection (e.g., the last day of my event study window) and ending 262 trading days (approximately one year) after the establishment of the connection. To measure abnormal buy and hold returns, I assume that the expected return for company *j* is equal to its home country's stock market index return. Data are available to compute the abnormal return for 149 out of the 157 firms included in Table 6. For this sample, the average abnormal one-year return is 4.85 percent, with a *p*-value of 0.17. Thus, my results do not support Ramalho's findings.

IV. Conclusion

In this paper, I build a completely new measure of political connections for over 20,000 listed companies from 47 countries. I define a company as politically connected if one of its large shareholders or top officers is a member of parliament, a minister, or is closely related to a top politician or party. Overall, 541 firms are politically connected, representing almost 8 percent of the world's market capitalization. I find that political relationships are not equally common across countries. Connections are particularly common in countries with higher levels of corruption, countries imposing restrictions on foreign investments by their residents, and countries with more transparent systems. Connections are less common in countries with regulations that set more rigorous limits on political conflicts of interest.

I also find that different relationships between business people and politicians have different value. No significant price effect is detected for appointments of politicians to cor-

porate boards. This result is consistent with the hypothesis that politicians extract rents from companies they manage (De Soto, 1989; Shleifer and Vishny, 1994), and that in equilibrium the costs of connections may offset their benefits. Stock prices increase significantly, however, when a businessperson enters politics, suggesting that rent seeking is, as one might expect, much less of a problem in this case. Additionally, firm value increases more when a businessperson is elected prime minister, rather than as a member of the parliament. Because the number of prime minister positions is quite limited, only a few businesspeople can succeed in becoming prime minister.

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