# Politically-connected firms:

## Can they squeeze the State?

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For a sample of 42 countries, I examine firms whose controlling shareholders and top managers are members of national parliaments or governments. I find that this overlap is quite widespread, especially in highly corrupted countries. Connected companies enjoy easier access to debt financing, lower taxation, and stronger market power. These benefits increase when companies are connected through their owner, with a minister, or a seasoned politician. Furthermore, these benefits are generally larger when the firm operates in a country with high corruption, low protection of property rights, a highly interventionist government, or a non–democratic government. Even though these connections provide significant benefits, connected firms under–perform their peers on an exante basis. Therefore connections, by driving benefits to relatively poorly performing firms, distort the allocation of funds and investment decisions.

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## 1. Introduction.

Evidence on "crony capitalism" suggests that dominant political leaders use their power to the advantage of their families and friends, who benefit from government-created rents. As Shleifer and Vishny (1994) point out, many countries operate a form of capitalism in which politicians channel resources toward favored firms, distorting incentives, misallocating investments, and increasing the extent of corruption. Empirical studies on the US (i.e., Agrawal and Knoeber, 2001, Ang and Boyer, 2000, Krozner and Stratmann, 1998, Roberts, 1990) as well as abroad (Fisman, 2001, Hellman, Jones and Kaufmann, 2000, Johnson and Mitton, 2002) support the view that benefits extracted by connected-firms are significant. The financial press contains overwhelming evidence supporting this view. For example, in 1998, the International Monetary Fund forced Indonesian President Soeharto to sign an agreement that made companies controlled by his family give up lucrative government concessions, monopolies, licenses, government contracts, and tax breaks that protected them from competition in their domestic market (The New York Times, 1998). These benefits were often diverted to disastrous businesses, i.e., those resulting from the monopoly on the sale of cloves granted to the President's son, Hutomo "Tommy" Mandala Putra, as well as Tommy's car company, Timor. The government often ordered banks to provide start-up loans and credit to these companies; the government often intervened to bail out insolvent connected firms. In Malaysia, licenses that normally took months, or even could be refused, were processed within a few days, with clinical efficiency, if the company knew the right politician (Asiaweek.com, 2000). As discussed by Friedman (1999), Malay bankers were often compelled to extend loans for projects they forecasted to be unprofitable, feeling the minister or the President would find a way to rescue the company (and protect the bank) if its investment did not work out as planned. Similarly, significant critiques followed the re-appointment of Italian Prime Minister Silvio Berlusconi, who was accused of having financed his television empire through the "large helping hand [of] public-sector banks, which provided bigger loans than Fininvest's creditworthiness seemed to merit" (The Economist, 2001a).

This paper addresses the following questions. First, are "political connections" common across countries, or are they confined to a few? Second, in which countries are they more widespread? Furthermore, can and do connected firms extract significant benefits from their connections? Fourth, in which countries connections provide the largest benefits to related firms? Finally, I investigate whether connections distort decisions related to the allocation of capital across firms, i.e., by driving resources to relatively less profitable firms. This is clearly an issue that does not only have implications at the firm level, but also at the macro level.

My findings can be summarized as follows. First, connections are relatively widespread. Out of a sample of 42 countries, 532 firms have top directors or large shareholders who sit on the national parliament or government. These firms represent 2.68 percent of listed corporations, and 7.76 percent of the world's market capitalization. Connections are particularly widespread in countries with a high level of corruption, one notable exception to that being the UK. Connections provide significant benefits to firms in terms of easier access to debt financing (i.e., undue credit), lower income taxation, and stronger market power. These benefits are generally larger in countries where connections are relatively more widespread, especially countries with high corruption, low protection of property rights, a highly interventionist government, or a non-democratic government. Finally, although connections provide benefits to corporations, connected firms exhibit significantly lower performance than their non-connected counterparts. Rent-seeking by politicians appointed as directors alone cannot explain the poorer returns by connected firms. Connected firms, rather, are troubled, or simply badly managed firms. As such, benefits provided through connections distort the allocation of capital toward relatively inefficient firms, and raise concerns about the long-term growth of the financial systems. This last result complements the political-based explanation of financial development recent proposed by Rajan and Zingales (2001).

The rest of the paper is organized as follows. In section 2, I briefly discuss the related literature. In section 3, I define political connections, and discuss the extent of their diffusion. In section 4, I look at the characteristics of countries in which connections are more common. Section 5 presents evidence on the benefits firms extract out of connections. In section 6, I look at the cross–country variation in these benefits, and relate benefits to various indicators of "country quality." Section 7 analyzes the performance of connected firms. Finally, section 8 concludes the paper.

## 2. Literature review.

The empirical evidence on the benefits of political connections is mostly based on studies of the relatively "clean" US system, and yet, the results are consistent with the idea that connections provide significant benefits to firms. Krozner and Stratmann (1998) relate interest–group competition to the legislative organization. The idea behind their model is that legislators' primary goal is re–election, and that campaign contributions from interest groups play an important role in achieving that goal. Legislators could write contracts on a fee–for–service basis with their constituencies in order to maximize contributions; however, such contracts would be considered a form of bribery, and therefore could not be enforced. As a second best, legislators can create a system of standing committees aimed to facilitate repeated/long–term interactions with their contributors. In such an environment, the authors show that a reputational equilibrium *may* exist, in which high contributions are made, and significant legislative effort for the interest of the

constituencies takes place. Krozner and Stratmann find empirical support for their theory by analyzing the cross-section and time series patterns of political action committees (PAC) contributions by firms in the financial industry, over the period 1983–92.<sup>1</sup> First, PAC contributions go disproportionately to members of the House Banking Committee, which at the time was involved in deciding whether to allow banks to enter new businesses, i.e., investment banking and insurance. Second, contributions are high when there is low uncertainty concerning the termination of the ongoing relationship (and low when uncertainty is high). Roberts (1990) looks at stock returns, at the announcement of the sudden death of Senator Henry Jackson, for firms with PACs that made contributions to his campaign ("resource constituencies") in the two year before Jackson's death. He finds that the death of the Senator significantly (and negatively) affected the value of firms that contributed to his campaign. Conversely, firms related to his successor, Senator Nunn, experienced a significant positive abnormal return. Ang and Boyer (2000) present a clinical study which looks at the financial impact of politics during the nationalization and (subsequent) privatization of Conrail, the largest US privatization plan of the latest decades. In particular, their study focuses on the role of various interest groups during this process, and at the benefits they achieved. The study shows that private interest groups had a major role in influencing the government's and Congress's actions, which resulted in a net benefit of some \$7.4bn for Conrail's customers, \$2.8bn for claimholders of the initial six bankrupt railroads, and at least \$571m for the rail industry overall. Agrawal and Knoeber (2001) address the question of whether outside directors with a political background are valuable to firms in virtue of their better "knowledge of government procedures and their insight in predicting government actions" (p. 180). Based on a sample of 264 manufacturing firms from the 1987 "Forbes 800" list, they find that politically experienced directors are more important in firms where sales to the government, exports, and lobbying are greater; such directors are also more prevalent amongst larger firms.

Three recent papers investigate connections outside the US, and suggest that related benefits are enormous in less "clean" countries. Johnson and Mitton (2002) focus on Malaysian firms with connections to the Prime Minister Mahathir, the ruling Malay coalition (UMNO), and deputy Prime Ministers Daim and Anwar. Their study shows that capital controls were introduced to the benefit of politically connected firms after the Asian financial crisis hit. As a result, while the prices of politically connected firms fell disproportionately in the initial stages of the Asian financial crisis,

<sup>&</sup>lt;sup>1</sup> Concerns of possible political exploitation and manipulation coming from political donations were recently raised also in Australia (Ramsay, Stapledon and Vernon, 2001), where proposals requiring full disclosure of donations have recently been advanced. In the UK, following the recommendations of the Neill Report (Committee on Standards in Public Life, 1998), the government required that companies obtain a preventive shareholder approval before making any type of donation or providing financial benefit to a political party;

they rose substantially once capital controls where imposed in late 1998. Fisman (2001) looks at the role of political connections in driving investments in Indonesia. In particular, he runs an event study around rumors of President Soeharto's worsening health conditions during his final years in office (1995 to 1997), and compares returns across firms with differing degrees of political exposure. The study shows that, at around the time of the dissemination of this "bad news", stock prices of tightly connected firms dropped more than the prices of less connected firms. Second, for connected firms, the severity of the stock price reaction increases when the news is more negative. These results lead the author to conclude that a large percentage of well-connected firms' value may come from political connections. Finally, Hellman, Jones and Kaufmann (2000) examine the extent to which firms influence and collude with public officials in order to extract private benefits in 22 transition economies. They find that firms capable of shaping and affecting the formulation of laws and regulations through private payments to public officials and politicians ("captor firms") display higher growth rates, but only if they operate within large capture economies. Firms capable of "influencing" politicians without making recourse to private payments (these are generally large firms with historically established relationships with politicians) do enjoy superior performance. In contrast, no evidence of better performance or higher growth is found for firms engaged in "administrative corruption".

Another strand of the literature focuses explicitly on corruption. Treisman (2000a) defines <u>corruption</u> as the "misuse of public office for private gain". The author further characterizes corruption as related to illegal and "unobservable" practices, and lists the "risk of getting caught" and "[the risk of getting] punished" as two variables that are expected to explain the relative diffusion of corruption across countries. Shleifer and Vishny (1993) define corruption as "the sale by government officials of government property for personal gain. For example, government officials often collect bribes... for prohibiting the entry of competitors" (p. 599). In the same paper, they argue that "corruption is usually illegal and must be kept secret" (p. 612). Hellman, Jones and Kaufmann (2000) define (administrative) corruption as "the extent to which firms make illicit and non–transparent private payments to public officials in order to alter the prescribed implementation of administrative regulations placed by the State on the firm's activities."

My approach differs from corruption-based studies in several dimensions. First, I use <u>observable</u> measures of connections, which come from publicly available data-sources. Second, the connections I look at are perfectly <u>legal</u>. Third, and different from corruption, the implicit contracts behind these relationships are, to some extent, "<u>enforceable</u>" (for example, shareholders can fire a connected manager who is not providing the desired benefits to the corporation). Furthermore, since

furthermore, companies were required to disclose in their annual reports all forms of financial benefits provided to political parties.

political connections are observable at the company-level (while indexes of perceived corruption are observable at the country-level only), I am able to measure and provide direct empirical evidence on the extent of private benefits. My approach recognizes that there are limits on the extent to which political influence can be purchased in that the legislative process is, in most countries, majoritarian, and therefore looks at effects that do not necessarily represent the outcome of a legislative action (i.e., benefits in terms of better access to financing, rather than industry regulation).

#### 3. Diffusion of political connections.

I say a company is <u>connected</u> to a politician if (at least) one of the company's large shareholders (i.e., anybody directly or indirectly controlling at least 10% of votes<sup>2</sup>) or top directors (i.e., the CEO, president, vice–president or secretary) is a member of the parliament, a minister (including the Prime Minister), or the Chief of the State (i.e., dictator, president, King or Queen), or is "closely–related" to a top politician.

For example, Italy's Prime Minister Silvio Berlusconi is the controlling shareholder of four Italian listed firms: all these companies, therefore, are defined as politically connected (through their owner). Sergej Generalov, former Russian minister and current member of the Duma, figures as top director of three Russian listed firms which, again, are defined as "connected" (this time through a director). The cases of other "close relationships" are a bit more complex (and sometimes fun). These include (i) cases of friendship, (ii) relatives of the current or former Chiefs of State or Prime Ministers,<sup>3</sup> (iii) former Chiefs of State or Prime Ministers, (iv) directorships covered by current politicians in 1997, but who recently left the firm, (v) connections with foreign politicians, and (vi) well-known cases of relationships with political parties. In order to maintain objectivity, cases of friendship are included as long as they are covered in "The Economist", "Forbes", or "Fortune". Forbes World's People" For example, according to "2000 Richest (http://www.forbes.com/poeple/2001/06/21/billionairesindex.html), Mr François Pinault (the controlling shareholder of the Pinault-Printemps-Redoute group, as well as several other French companies) is a close friend of French President Jacques Chirac. This friendship is listed in Forbes as Mr. Pinault's "sole hobby".<sup>4</sup> I also include Indonesian President Soeharto's daughter, Siti Hardiyanti Rukmana, Malaysian Prime Minister Mahathir's son, Mirzan Bin Mahathir, as well as

<sup>&</sup>lt;sup>2</sup> In general, once I identify the overlap between a company's controlling shareholder and a top politician, I include in the sample all firms belonging to this shareholder's business group.

<sup>&</sup>lt;sup>3</sup> In particular I focus on the following relatives: spouse, sons, daughters, sisters, brothers, and parents.

<sup>&</sup>lt;sup>4</sup> These cases of friendship are, overall, just a few. Thus, their inclusion is not likely to induce any significant bias in the results. Results presented in the paper, in fact, hold if cases of friendship are excluded from the sample.

Silvio Berlusconi's daughter, Marina, all of whom are either controlling shareholders or top directors of several listed corporations. For all countries, family affiliation is first identified based on family names, and cross-checked with Lexis-Nexis. In order to keep the process manageable, cases of family affiliation are limited to relatives of each country's President or Prime Minister. Since in Asia family names may not coincide, to avoid understating family affiliations in Asian countries. I integrate my information with country-specific family affiliation data taken from sources listed in Appendix A, Panel F. "Close relationships" also include former Chiefs of State or Prime Ministers (identified, for all countries, based on sources listed in Appendix A, Panel G), as well as companies that used to be connected (in 1997) to current politicians (as identified based on Worldscope): for example, US Secretary of Defense Donald Rumsfeld used to be a top director of Gilead Sciences; similarly, former Russian Prime Minister Viktor Chernomyrdin is a large shareholder of Gazprom. I also include connections with foreign politicians. For example, my sample includes Emperor International Holdings Ltd (Hong Kong), since Bob Hawke —a former Australian Primer Minister— is a director of that company, as is Mark Thatcher, son of former UK Prime Minister Margaret Thatcher. Finally, I include close and well-known relationships with political parties (i.e., the UMNO in Malaysia --see also Johnson and Mitton, 2001, and Gomez and Jomo, 1997). This last inclusion criteria potentially introduces a bias in the country-level results, in particular for countries with better data sources (especially Indonesia, Malaysia, and the UK). For this reason, in section 4.2 I will discuss the results after excluding these three countries from my sample (as I will show, results are not affected by these countries).

The data gathered comes from a multitude of sources. I start with all countries for which Worldscope provides a minimum coverage. For each country, I first gather the names of the members of the parliament The directory and government. CIA (2001)(http://www.cia.gov/cia/publications/chiefs/), well а variety as as of country links (http://www.gksoft.com/govt/en/world.html) are used to identify ministers (see Appendix A, Panel B). Moreover, the Inter-Parliamentary Council (2000) has encouraged countries to provide some minimum information on their parliaments, including the full list of members of parliament. As such, for many countries, I can successfully access their parliament's web pages (see Appendix A, Panel A, for country-specific web sites) to obtain the names of all their members. However, I could not find any parliamentary data source ---or lists of members of the parliament---- for Colombia, Ecuador, Egypt, Kenya, Nigeria, Pakistan, Sri Lanka, Taiwan, Uruguay and Zimbabwe. Therefore, I exclude these countries from my sample. I also must exclude Jordan, since I cannot identify any dataset providing the necessary information on the names of top directors or major shareholders of listed firms. Overall, the data sources mentioned above allow me to identify 17,033 politicians for

42 countries. This data refers to politicians in office during the first half of 2001.<sup>5</sup> Their names are cross–checked with those of top directors of 19,884 listed companies covered in Worldscope, as well as those of major shareholders contained in the country data sources listed in Appendix A (Panel C). They are then integrated with Worldscope, Extel, Claessens *et al.* (2000) for Eastern Asian countries, and Faccio and Lang (2002) for Western European countries.<sup>6</sup> Further information on political connections comes from Agrawal and Knoeber (2001) for the US, Backman (1999) for Asia, Fisman (2001) for Indonesia, Gomez and Jomo (1997) and Johnson and Mitton (2002) for Malaysia, and the Stationery Office (2001) for the United Kingdom. Worldscope generally contains only the family name and initials of top directors, so whenever I find overlapping names with members of parliaments or governments, I cross check the data with Extel, company web sites and biographical descriptions of US directors from the proxies statements (taken from LEXIS–NEXIS) to ensure that the full name coincides. Whenever I cannot find the full names of directors, I drop the observation from my sample.<sup>7</sup> Finally, I use the Economist, Forbes and Fortune (see Appendix A, Panel F) to gather information on well–known cases of close friendship between top politicians and entrepreneurs.

## [Table 1 goes about here]

Overall, I find 597 connections involving 532 firms (see Table 1). Some 59.8 percent of cases involve top directors, while 40.2 percent of cases involve large shareholders. In 37.7 percent of the cases, the connection is with the country's King, President, or a minister, while in 62.3 percent of the cases the connection is with a member of the parliament. There is a high correlation (r = 0.72) between being connected through the owner and being connected with the King, President, or with a minister.<sup>8</sup>

A non-trivial number of firms exhibit political connections: overall, 532 firms (2.68 percent of all listed corporations) are politically linked.<sup>9</sup> These firms represent 7.76 percent of the world's market capitalization. Larger firms exhibit a higher degree of connections, in line with the evidence provided in Agrawal and Knoeber (2001) and Johnson and Mitton (2002). The relationship, however, is not very strong: for example, the correlation coefficient between my connections

<sup>&</sup>lt;sup>5</sup> Data on previous legislatures is generally not available.

<sup>&</sup>lt;sup>6</sup> Most of this data on board membership and share ownership refers to periods between 1996 and 1999. Extel is used to update it with current information.

<sup>&</sup>lt;sup>7</sup> In most of cases for which I have the full names or directors, in fact, I discover that the overlap with the names of politicians based on the initials alone is very misleading. Only a very small proportion of cases for which initials coincide turn out to be real cases of "connections". Therefore, I prefer to take the risk of understating connections, rather than taking the risk of significantly overstating them.

<sup>&</sup>lt;sup>8</sup> In aggregate, connections are mostly diffused in the transportation industry (SIC 40–42, 44–45, 47) – accounting for 4.65% of firms– and least diffused in the capital goods industry (SIC 34–35, 38), where only 1.19% of firms are connected.

dummy and firm size (i.e., market capitalization) is only 0.06. Most of the countries in this study exhibit only a few cases of connections, or no connections at all (as is the case for 9 out of 42 countries). However, in Indonesia, Italy, Malaysia, Russia and Thailand, over 10 percent of listed corporations are politically connected. In Ireland, Malaysia, Russia, Thailand, and —surprisingly— the United Kingdom, connected–corporations represent more than 20 percent of the market capitalization. In Russia connected firms actually represent 86.75 percent of the market capitalization, and in the UK they represent 39.02 percent of the market capitalization. In the UK, there are 154 connected firms, the largest number of the 42 countries. Several cases of connections are also identified in Indonesia, Japan, Malaysia, and Thailand.

#### [Table 2 goes about here]

Table 2 looks at connected politicians. The overall number of connected politicians is 276, representing "only" 1.62 percent of all politicians. The UK, Japan, Germany, France and Malaysia have the largest number of connected politicians. In some countries there are several connected politicians, which overall account for a large number of connections; for example, in the UK, 125 politicians account for 207 connections. However, on average, each connected–politician is related only to a few firms. In some other countries, connections are much more concentrated within a few politicians. In Malaysia, for example, 10 politicians account for 35 connections; in Italy, 4 politicians account for 35 connections.

#### 4. Where are connections more common?

In section 4.1, I examine connections from a country-perspective. I identify a number of variables that are possibly associated with connections, and initially assess this association from a univariate perspective (note: in no way I am interested at making any assumptions on the direction of causality at this stage). This approach is motivated by the high correlation between different explanatory variables. The problem of multicollinearity and some robustness tests are discussed in section 4.2. In section 4.3 I deal with causality. In addition, I provide clear evidence that connections capture something other than corruption, even though they are highly correlated with it.

Before starting with the analysis, a few caveats are in order. I can think of three major concerns. First, my counting of connections (especially due to the narrow definition here adopted) may be far from being comprehensive. For many countries, the data on ownership structure is lacking, or families may control firms through nominee accounts or shell entities. Similarly, disclosure regulations differ significantly across countries. To limit the impact of these factors, I only look at large shareholders, i.e., those that control at least 10 percent of votes —a level of

<sup>&</sup>lt;sup>9</sup> In same cases, companies exhibit multiple connections. For example, the German company Heidelberger Zement AG counts three politicians on its board of directors, as well as one politician as controlling owner.

control that forces disclosure basically everywhere. Also, as mentioned earlier, I drop all cases where I could not identify and match the full names of directors. Though this approach causes my measures of connections to be downward biased, I believe there is no reason to think this bias may be something other than random. A second problem relates to the fact that, in some countries, connections with local politicians may be more important than connections with "central" politicians. This problem may be particularly pronounced in decentralized countries. Unfortunately, I do not have access to detailed information on the names of politicians involved at the different levels of local government. Even if that data were available, the process of matching names would probably be infeasible –within my lifetime. Finally, it may be the case that, across countries, different instruments are used to "approach" politicians. The choice of this paper is to focus on an objective measure of connections, and this is motivated by the fact that my measure of relationships can be observed for all countries. Also, the organization of "PACs" is likely to differ greatly across countries. While I recognize that my approach is a narrow one, it is objective.

## 4.1. Variable definitions and preliminary results.

#### A. Connections.

I use two variables to measure the diffusion of political connections at the country level. The first, *"% of politically connected listed firms*", is the ratio of connected firms over the total number of firms listed in a particular country.<sup>10</sup> In my sample, this ratio goes from a minimum of 0 (percent) in Argentina, Brazil, Czech Republic, New Zealand, Norway, Peru, Poland, South Africa and Venezuela, to a maximum of 22.08 percent in Indonesia.

The second measure, "*connected firms as % of market capitalization*", is the ratio of the market capitalization of connected firms over the overall capitalization of each country.<sup>11</sup> This ratio ranges from a minimum of 0 (percent) (in the countries with no connections listed above) to a maximum of 86.75 percent in Russia. (Appendix B provides a detailed description of all variables, as well as some descriptive statistics).

[Table 3 goes about here]

<sup>&</sup>lt;sup>10</sup> An obvious issue is that the likelihood of finding a connected firm increases with the number of politicians. Therefore, I replicate all the tests presented in this section after including the number of politicians as control variable. The results are qualitatively unchanged. An alternative approach would require adjusting the connections ratios by the number of politicians in each country. The problem with such an approach, however, is that it cannot recognize the differing influence of various politicians (i.e., connections with members of the government/controlling party may be worth more than connections with members of the parliament's minority party).

<sup>&</sup>lt;sup>11</sup> The market capitalization is computed based on firms covered in Worldscope, in order to avoid downward biasing the ratio whenever Worldscope provides relatively little coverage of a particular market.

#### B. Corruption.

I use four indexes already used in previous studies as proxies of perceived corruption. The use of different proxies is motivated by the fact that these indexes reflect perceived corruption (rather than effective corruption, which is not observable), and therefore may be biased. All corruption indexes are re–scaled from 0 to 10, so that lower scores correspond to lower levels of corruption.

*"Corruption (I)"*, is the Business International's (Economist Intelligence Unit) assessment of the "degree to which business transactions involve corruption and questionable payments". This assessment is compiled based upon questionnaires filled in by BI's network of correspondents and analysts based in the countries covered, and reflects their perception of corruption. This index was used, amongst others, in Mauro (1995).

"Corruption (II)" is the International Country Risk's assessment of the corruption in government. Higher scores indicate that "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" (see Appendix B, Panel A, for more details on all macro variables). This index was used, among others, in previous studies by La Porta *et al.* (1998) and Fisman and Gatti (2000).

"Corruption (III)" 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 non–governmental organizations, commercial risk rating agencies, and think–tanks during 1997 and 1998. This variable comes from Kaufmann *et al.* (1999a and 1999b).

Finally, the last proxy of corruption, "*Corruption (IV)*" is the *Transparency International* index of the "degree to which corruption is perceived to exist among public officials and politicians. The TI index is a composite index drawing on 14 different polls and surveys from seven independent institutions, carried out among business people and country analysts, including surveys of residents, both local and expatriate." Corruption represents "the abuse of public office for private gain."

In line with previous studies (i.e., Treisman, 2000a, Mauro, 1995, etc.), I find that the average correlation between peers of corruption indexes is as high as 0.875. As such, even though these indexes are "subjective", it seems they do not reflect the bias of a particular monitoring organization but rather are shared by all of the populations interviewed.

All four proxies of corruption are positively and significantly associated with the "% of *politically connected listed firms*". However, the relationship –still positive– is not significant when

I use the ratio of "*connected firms as % of market capitalization*" as measure of connections. Whichever dependent variable is used, the explanatory power of corruption is not high (see Table 3). The  $R^2$  of the regressions goes from a minimum of 0.4% up to a maximum of 31%, depending on the proxy for corruption and on the measure of connections used. However, as I will show later, corruption is the variable that has the highest power in "explaining" connections.

Still, this relatively low explanatory power suggests, as I was arguing earlier, that political connections represent something different than "traditional corruption". Yet, at this stage, it is not possible either to argue that the positive association between connections and corruption is somehow the result of the fact that we may be looking at the same issue, or that high corruption is (maybe just in part) the cause or the consequence. This issue will be addressed in Section 4.3.

#### C. Quality of the legal environment.

I employ three proxies to measure the quality of the country's legal environment. The "*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". The index scales from 0 to 10, with lower scores for lower efficiency levels. This index was used in several studies, starting from La Porta *et al.* (1998).

*"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. This index, too, scales from 0 to 10, with lower scores for lower efficiency levels.

Finally, "*Property rights*" measures the extent to which the government protects private property and how safe private property is from expropriation. This index comes from the Heritage Foundation's "1997 Index of Economic Freedom". The index is rescaled so that the less protection private property receives, the lower the score (scale 0 to 4).

Ex-ante, I expect countries with better legal systems to display a lower level of connections. In fact, good legal regimes should be associated with a higher transparency of regulation, a uniform application of the law, and a high enforcement of penalties associated with violations of the law. In line with this expectation, for all three proxies of quality of the legal environment, I find that countries with better legal systems exhibit a lower extent of connections. As is the case with corruption, the relationship is significant only when the "% of politically connected listed firms" is used as dependent variable. However, the sign of the relationship is consistent for the other measure of connections as well.

#### D. Economic development.

I use the (log of) "*GDP (per capita)*" (gross domestic product (in US\$) on a purchasing power parity basis divided by population; computed for 1999) as proxy for economic development. Previous evidence (i.e., Mauro, 1995, Treisman, 2000a) suggests that, for example, more developed countries have lower degrees of corruption. Results reported in Table 3 are in line with these expectations. More developed countries, in fact, also display a lower incidence of connections.

#### E. Bureaucracy.

I use two proxies for bureaucracy. "*Regulation of entry*" summarizes the number of procedures and the official time and cost for establishing a new firm, and is therefore intended to capture "barriers to entry" (Djankov *et al.*, 2002). In my sample the index ranges from 2 in Canada, the country with the weakest degree of regulation of entry, to 16 in France and Russia, the two countries with highest regulation. Barriers to entry can be expected to benefit existing firms, which may seek political connections to maintain protection against competition. On the other hand, newly established firms will, in a highly regulated environment, also seek connections in order to "elude" barriers and possibly shorten the entry time as well as reduce the associated costs. So, overall, countries with a high level of regulation of entry are expected to be particularly valuable, i.e., in providing private benefits to connected firms. These benefits are expected to arise especially in terms of monopolistic or quasi–monopolistic positions.

The second proxy, "business regulation index", is an index of regulation policies related to opening a business (on a scale from 1 to 5). A low score indicates that regulations are straightforward and applied uniformly to all businesses and that regulations are less of a burden to business. This index comes from the Heritage Foundation's "1997 Index of Economic Freedom".

Both proxies of bureaucracy are associated with a higher frequency of connections at the country-level. However, in no case is the relationship significant. Likely, factors other than pure bureaucracy influence the convenience of becoming connected as well as the "optimal" type of connections. For example, as soon as bureaucracy increases, we may expect connections at different levels of government, as well as corruption, to increase. Connections with top politicians may represent both a too expensive and a too slow way to circumvent bureaucracy. Bribing local politicians may instead turn out to be both cheaper and faster.

<sup>&</sup>lt;sup>12</sup> In line with this idea, Djankov *et al.* (2002) find that countries with high barriers to entry display sharply higher degrees of corruption.

## F. "Culture".

I use "% *protestant*", which measures protestants as fraction of the total population, as proxy for culture. This same variable was used in Treisman (2000a). A similar proxy was also used in Stulz and Williamson (2001).<sup>13</sup> Previous studies suggest that religious traditions condition cultural attitudes, citizens' attitude toward loyalty (especially when loyalty to their own family is opposed to loyalty to other citizens), and the relation between church and State. In line with La Porta *et al.* (1999) and Treisman (2000a), who find that countries with a protestant tradition are better governed, I find that the diffusion of connections is significantly lesser in protestant countries. This is true for both measures of connections used in the paper.

## G. Government structure.

I use two sets of proxies for government structure. The first two variables relate to the democratic tradition of the country and the stability of its government. The second two variables relate instead to "decentralization".

*"Democratic in all years since 1950"* is an indicator variable which takes value 1 if (1) the executive is elected, (2) the legislature (at least its lower house) is elected, (3) more than one party contests elections, and (4) during the last three elections of the executive there has been at least one turnover of power between parties. This variable comes from Treisman (2000a). Democratic systems might discourage connections, because political opponents have the incentive of discovering and publicizing abuses of office. Of course, connections might be less valuable if they can be voted out. Also, democracies do usually display a higher degree of literacy, which again increases the likelihood that citizens will notice and challenge political misconduct.<sup>14</sup> Results provide support to the view that democratic systems are associated with a better government, while non–democratic systems provide more incentive for accumulation of benefits by top politicians. In fact, democracies are associated with a lower incidence of connections —the relationship being significant for my first measure of connections.

"Number of government leaders per year in recent period" is the ratio of the number of government leaders in a recent period divided by length of the period in years; recent period for most countries is Jan 80 – Dec 93. I define as "leader" the Prime Minister in parliamentary systems

<sup>&</sup>lt;sup>13</sup> Stulz and Williamson (2001) find that protestant countries display a significantly higher degree of corruption.

<sup>&</sup>lt;sup>14</sup> Within democratic systems, too, the legislative structure represents an important determinant of the way a group optimally allocates its resources in order to obtain the required support (see, among others, Baron, 1999, Groseclose and Snyder, 1996, and Stratmann, 1992). The legislative structure also influences the interest groups' incentives to lobby the legislature, both through campaign contributions (Baron, 1999, Persson and Helpman, 1998) and through the provision of valuable information (Bennedsen and Feldmann, 2002).

and the president or head of State in presidential or non-democratic systems. This index also comes from Treisman (2000a) and is integrated with the data available from http://www.rulers.org/. In my sample the index ranges from a minimum of 0.07 in Indonesia (the country with the longest "tenure" of the Chief of State) to a maximum of 1 in Switzerland (the country with the lowest "tenure"). This variable needs to be interpreted together with the previous one. In fact, within democratic systems, once politicians engaged in misconduct are caught, they will likely be removed from office. As such, they may not want to engage in activities that potentially put their career at risk. On the other hand, political stability gives politicians the time to build reputations and relationships, increasing the potential benefits of strict connections. The story is likely different in non-democratic systems, where political tenure may actually provide increasingly stronger power. Overall, the "Number of government leaders per year in recent period" is insignificantly related to connections. However, the relationship is positive (but, still, insignificant) for the sub-group of democratic systems —results are not reported due to space reasons—, providing support to the idea that frequent connections are associated with a higher turnover in government, in that "bad politicians" will be removed from office as soon as they are discovered. Within non-democratic systems, instead, the relationship is negative (and, once again, insignificant), confirming that political tenure or stability increases the incentive and benefits of being connected; as such, connections increase as soon as the political leadership becomes more stable.

*"Federation"* is a dummy = 1 if the government of the country is organized as a federation of States. This variable is compiled based on the Central Intelligence Agency's "World Factbook 2001," (<u>http://www.cia.gov/cia/publications/factbook/</u>). The drawback of using this proxy for decentralization is that, even amongst federal States, the local governments' autonomy in making decisions on taxation or expenditures varies considerably.

*"Decentralization"* is the ratio of total expenditure of sub–national (State and local) government over total spending by all levels (State, local and central) of government. The variable ranges, in my sample, from 4.7 (percent) in Malaysia to 48.6 (percent) in Canada. This variable, compiled in the "Government Finance Statistics Yearbook" by the International Monetary Fund, was previously used in Fisman and Gatti (2000).<sup>15 16</sup>

The relationship between connections and the degree of decentralization is not ex-ante clear. For example, if local governments have the power to regulate the same firms as the central government, and different levels of government are not subordinated to each other and do not

<sup>&</sup>lt;sup>15</sup> For decentralized systems, measuring political connections would actually require information on the relationship a firm has with numerous decision–making bodies.

<sup>&</sup>lt;sup>16</sup> Fisman and Gatti (2000) find that countries with a high decentralization of government expenditure have lower levels of perceived corruption, while Treisman (2000a, 2000b) –using a larger sample of countries, and a larger number of proxies for decentralization– finds the opposite.

collude, then we may expect decentralization to increase the bribe base (i.e., we expect connections to emerge for different levels of government), leading to a positive relationship between decentralization and the likelihood of being connected (Shleifer and Vishny, 1993). Along this line, Treisman (2000a) finds that corruption is higher in federal States. On the other hand, if there is high mobility of residents within different local jurisdictions, then we may expect competition amongst local governments to compete by deregulating businesses and, in general, by lowering costs for firms. If that's the case, then we would observe a negative correlation between decentralization and connections. Results show that there is no significant association between connections and decentralization. Such results, however, deserve some attention. In fact, it must be stressed that the measures of connection used here only look at the relationship between firms and central government (or federal parliament); as such, they do not include relationships with local politicians, which may well be more diffused in decentralized countries. At the very least, however, the evidence reported here shows that centralized governments do not exhibit a higher frequency of connections.

## H. Government intervention in the economy.

I use two proxies for government intervention in the economy (in forms other than regulation, which is already considered in point C). The first proxy, "*Expenditure, total (% of GDP)*", is the ratio of total government expenditures (including both current and capital expenditures) to GDP. This ratio (average 1987–1999) comes from the World Bank (<u>http://simaext.worldbank.org/query/</u>). Total expenditures are lowest in Argentina, where they represent 13.4 percent of GDP, and highest in Hungary, representing 50.7 percent of the GDP.

The second proxy, "*General government final consumption expenditure (% of GDP)*" measures the general government final consumption expenditure as a percentage of GDP in the years 1987–1999. This ratio, too, comes from the World Bank. Over this period, consumption expenditures are lowest in Indonesia, where they represent 8 percent of GDP, and highest in Israel, representing 29.7 percent of the GDP.

We may expect connections to be more important in countries where the government plays a major role in the economy. This should happen both because the public sector would be more likely to be a counterpart of the company in transactions (in particular, a client), and because in countries with high State intervention connections may be sought as a way to relieve State competition. In contrast with this expectation, I actually find that connections are negatively associated to the degree of government intervention in the economy. The relationship, however, is generally insignificant. In only one case, i.e. when looking at the relationship between the "% of politically connected listed firms" and the "general government's final consumption expenditure (% of GDP)",

are the results significant —although only marginally so. I am unable to provide any justification for such a relationship, although I suspect it may reflect some spurious correlation (this is confirmed by the results in Table 4).

## 4.2. Robustness checks.

The scope of this section is to assess the robustness of results presented in the previous section. In fact, since various explanatory variables may be related to each other, the previous results do not allow for saying whether, for example, corruption is really associated with connections or, rather, whether that relationship actually reflects some spurious correlation. This task is not easy, since several explanatory variables used in the previous section are highly correlated with each other. As such, it is difficult to disentangle their individual effects. For example, the average correlation coefficient between proxies for corruption and the (log of) GDP (per capita) is 0.87. Similarly, the average correlation coefficient between my corruption measures and "Rule of Law" is 0.80.<sup>17</sup> These very high correlations led me to start with the univariate approach.

First of all, in order to "minimize" the multicollinearity problem, for each category of explanatory factors (i.e., "quality of the legal environment") I pick up only one variable (i.e., "property rights"). As a principle, I pick out the variable that best explains connections. Second, I only include variables that were significant in the univariate tests.<sup>18</sup> Finally, I use two alternative estimation methodologies: ridge and stepwise regressions.<sup>19</sup> The ridge regression analysis is generally used when the independent variables are highly intercorrelated, so that stable estimates for the regression coefficients cannot be obtained via ordinary least square methods. Ridge regressions artificially decrease correlations, hence the variance of parameters estimates, so that more stable (yet biased) coefficient estimates can be computed.<sup>20</sup> Results reported in Table 4 show that only "corruption" remains significant in explaining connections, once controlled for other factors. This result is robust with respect to the inclusion of different sub–sets of control variables.

## [Table 4 goes about here]

As a further check, I use a stepwise approach: in this case, the independent variables are individually added to the model at each step of the regression until the "best" regression model is

<sup>&</sup>lt;sup>17</sup> The problem of multicollinearity is confirmed when looking at standard errors and t–stats, as suggested in Maddala (2001, pp. 267–291). Unfortunately, because of data unavailability, I cannot tackle it by increasing the number of observations.

<sup>&</sup>lt;sup>18</sup> Since only one variable is significant in explaining "connected firms as % of market capitalization", I present the robustness tests only for the first measure of connections.

<sup>&</sup>lt;sup>19</sup> The principal components analysis is not particularly useful in this context, since my interest is to evaluate the relative impact (and significance) of each explanatory variable.

<sup>&</sup>lt;sup>20</sup> Specifically, a constant (lambda) is added to the diagonal of the correlation matrix, which is then restandardized so that all diagonal elements are equal to 1.0 (and the off-diagonal elements are divided by the constant).

obtained. When I include all variables used in Table 4, only corruption is kept and turns out to be significant. If I exclude corruption from the set of regressors, only the economic development (log of "GDP (per capita)") is kept in the model. Since these results are identical to the univariate tests discussed in the previous section (Table 3), there is no reason for reporting them once again in this context.

Finally, as mentioned earlier, country–level measures of connections may be biased because my sample includes some cases of "close relationships," which are determined relying on a number country–specific datasets. In particular, a risk exists that countries with better data coverage (in particular, Malaysia, Indonesia, and the UK) may exhibit a higher incidence of connections just because I can rely on better sources that allow for ferreting out more cases of connections. To check for this possible bias, I run all regressions again after excluding these three countries. Results are qualitatively unchanged. In Table 4, regression (5), I present some summary results based on a ridge–regression simulation run including all countries but Malaysia, Indonesia, and the UK. Results are very similar to those reported for the whole sample. As such, there is no reason to believe that my results are driven by the data sources used to identify particular cases of connections.

To summarize, results presented in this section show that corruption is the variable that explains connections the most. The next paragraph addresses the question as to whether connections and corruption represent the same thing.

## 4.3.Is corruption really different from connections?

To conduct a more specific test as to whether connections reflect corruption, I distinguish between cases where the connection is through the owner and cases where the connection is through a director. I believe it is more likely to expect a company to "bribe" a politician by offering him a position as director rather than offering a majority stake in the firm. For example, it is known that in order to maintain protection of the industrial production for the domestic market, Malay companies developed the practice of lobbying influential politicians by offering them directorships on the boards of companies (Gomez and Jomo, 1997, p. 41). As I shall discuss in detail in section 7, in the press I could clearly identify 48 cases of politicians who were newly appointed as members of the board, but no case of politicians who were offered equity stakes. Also, most of cases of large shareholders involved in politics actually involve entrepreneurs who entered politics (i.e., Berlusconi and Agnelli in Italy) or politicians who exploited their position to start a business (i.e., Mahathir, Soeharto, etc.), rather than receive ownership stakes offered them by companies. Interestingly, results reported in Table 5 show that highly corrupted countries in no way have a higher likelihood of having politicians appointed as members of a company's board of directors.

Instead, highly corrupted countries have a much higher frequency of company's controlling shareholders covering core political positions. This result confirms that connections capture something other than corruption.

#### [Table 5 goes about here]

Yet, the circumstance that connections are positively related to corruption is quite intriguing, and points out two possible explanations. First, it may be that in some countries corruption is not enough to obtain significant benefits, so that businessmen need to become personally involved in politics in order to "squeeze the State" (in this sense, connections would emerge as a consequence of high corruption). However, it may also be the case that corruption emerges as a response to political connections, in that companies that are not politically connected need to bribe politicians in order to obtain some minimum benefits necessary to ensure the survival of the firm.

To distinguish between these two hypotheses, I use a two-stage approach. I use "Common law" to predict corruption in the first stage, and then use the predicted value of corruption to explain connections in the second stage. If connections were a response to a high level of corruption in the country, then the coefficient of predicted corruption should be significant. This is the case in the second simulation. However, in both simulations the sign of the relationship is the "wrong" one, and points out that high corruption causes a lesser diffusion of connections. Thus, the positive association between corruption and connections previously identified must reflect a dominant (and opposite) effect in the other direction of causality, i.e., connections causing higher corruption. Unfortunately, I cannot explicitly test for this direction of causality, in that I do not have any good instrument to predict connections.

[Table 6 goes about here]

### 5. What benefits do connections provide?

The next step is to assess whether, at the firm level, connected firms enjoy significant benefits. In this paper I look at three types of benefits: (i) ("easy") access to debt financing, (ii) tax benefits, and (iii) market power. A fourth type of benefits is represented by supply contracts with the government. Unfortunately, I cannot systematically access to this type of information for all my sample countries through Worldscope, Extel, or Datastream. For this reason, this variable is not analyzed in the paper. Agrawal and Knoeber (2001) have shown that US companies with political connections do actually report a higher fraction of sales to the government.

Three factors bias my analysis toward not finding evidence of benefits. First, benefits may be provided to unlisted firms connected to politicians. Since financial data is not widely available for unlisted firms, I cannot test for this hypothesis. However, I think it is reasonable to expect that politicians provide benefits mainly to unlisted firms they "control", in that they will not want (i) to share the benefits with other shareholders and (ii) may want to keep their activity relatively secret,

in order to avoid political consequences. Second, benefits may be granted "industry–wide", rather than to specific firms. This is particularly a problem in the case of barriers to entry and tax reliefs. Stigler (1971) discusses several of such cases in the US. Third, since several connected firms may operate as monopolies (or quasi–monopolies), their financial ratios will be exactly the same as their industry. For all these reasons, the measures reported below will <u>understate</u> the true level of benefits.

#### 5.1. Access to debt financing.

Anecdotal evidence suggests that connected firms enjoy an easier access to the debt (especially banking) market. For example, Backman (1999) describes how President Soeharto's son, Tommy, was able to obtain easy debt financing for his corporations, in virtue of his father's intervention: "...Tommy was is need of credit to finance the activities of BPPC. He turned to the central bank for a US\$600 million line of credit but was refused. He then wrote to the Sultan of Brunei to request a US\$650 million loan.... [but] the Sultan declined. Finally, Tommy asked his father, the president, to intervene, and the central bank was pressured to lend Tommy the money.... It isn't known if the loan was repaid" (pp. 266–268). In one other well known case, in 1982, a company owned by Daim Zainuddin (former Malay Deputy Prime Minister and close friend of Prime Minister Mahathir), Baktimu Sdn Bhd, acquired a 33 percent stake in Sime UEP, for RM 75m cash. "Part of the loan for the acquisition, amounting to RM 40m, was obtained from Singapore branch of the Union Bank of Switzerland; the loan was approved by the Union Bank only after the government-owned Bank Bimiputra issued a guarantee on Bakrimu's behalf as security for the credit" (Asian Wall Street Journal, Aug 24, 1984, Gomez and Jomo, 1997, pp. 54-55). The Economist (2001b) recently described how the German entrepreneur Leo Kirch, who has been close to Bavaria's ruling party, the Christian Social Union, for several decades, has long been supported by Bayerische Landesbank, which is half-owned by the Bavarian State. "It is his largest bank lender, with outstanding loans believed to be close to euro 2 bn". Finally, in 1986 François Pinault, the controlling shareholder of Pinault SA (France) obtained a 250 million FF grant from the French government (US\$40 million), via a cash contribution. In 1992, the French government further committed to Pinault by acquiring a 25 percent stake in Pinault through its controlled bank Crédit Lyonnais for an investment of 2 billion FF. By 1997, Crédit Lyonnais' credits and stakes in Pinault reached a value of 12 billion FF (US\$2.14 billion) (Gay and Monnot, 1999, and Calvi and Meurice, 1999).

As a proxy for access to debt financing, I focus on leverage. Again, high leverage is a benefit in that it reflects easier access to financing than similar corporations. The anecdotes above suggest that

connected firms get easy financing from State-controlled banks or with the support of the State, even though they are not worth this extra-credit.

"Leverage" is the ratio of long-term debt (excluding the current portion of long term debt; pensions; deferred taxes; minority interest) to total capital × 100. Total capital represents the total investment in the company. It is the sum of common equity, preferred stock, minority interest, long-term debt, non-equity reserves and deferred tax liability in untaxed reserves.

All regressions presented in the rest of the paper, unless differently specified, control for whether the company is dually–listed, recently privatized<sup>21</sup>, State–controlled<sup>22</sup>, as well as size (market capitalization), country, and industry (defined according to Campbell, 1996) —see Appendix B, Panel B, for a detailed description of these control variables.

Generally, a company is defined as "*connected*" if its controlling shareholder or (one of its) top directors sits on a national parliament, has been standing in the government, is King/President of the country, or is closely–related to a top politician/political party. One problem with this variable is that political connections may shift through time. This raises the need to distinguish between degrees of political exposure. As such, I further refine the connection variable in order to distinguish between types of connections.

- *"Connected through a director"* is a dummy = 1 if a company's top director sits on a national parliament, has been standing in the government, is King/President of the country, or is closely–related to a top politician/political party
- *"Connected through the owner"* is a dummy = 1 if a company's controlling shareholder sits on a national parliament, has been standing in the government, is King/President of the country, or is closely-related to a top politician/political party.
- "*Connected to King, President or Minister*" is a dummy = 1 if a controlling shareholder or top director of the company sits on a government office, is King/President of the country, or is closely-related to a top politician/political party.
- *"Connected to MP"* is a dummy = 1 if a controlling shareholder or top director of the company sits on a national parliament or is closely related to a member of the parliament.

<sup>&</sup>lt;sup>21</sup> Lists of privatized firms are obtained from SDC Platinum, Bortolotti, Fantini and Siniscalco (2001), Dewenter and Malatesta (1997, appendix available at <u>www.afajof.irg/Pdf/supplements/ap5080.pdf</u>) and Megginson, Nash and Van Randenborgh (1994);

<sup>&</sup>lt;sup>22</sup> I use Extel, Worldscope, Claessens *et al.* (2000), Faccio and Lang (2002), and the 2000 "Fortune 500 global list" to identify government–ownership.

- "Connected to "seasoned" politician" is a dummy = 1 if the connected politician was first appointed as politician in or before  $1987^{23}$  (i.e., has at least ten years of tenure as politician in 1997).
- *"Connected to "unseasoned" politician*" is a dummy = 1 if the connected politician was first appointed as politician after 1987.

# [Table 7 goes about here]

Table 7 shows that connected firms have a significantly higher leverage than non-connected ones (each Panel refers to different sets of regressions, using different measures of connections).<sup>24</sup> Furthermore, leverage is higher when connections are stronger. For example, the excess leverage is +3.53 percent for firms connected through their owner, and "only" +1.42 percent for firms connected through a director. Leverage is also higher for firms connected to a top politician (i.e., the King, the President or a minister) (+5.53 percent), rather than a simple member of the parliament (+0.90 percent). The difference in the leverage ratio between these two groups is statistically significant, and only for the group of firms connected to the King, President, or a minister is leverage significantly higher than for non-connected companies. Being connected to a seasoned politician (rather than to an unseasoned politician) is associated with an only marginally higher leverage (+3.64 vs. +3.10 percent). For both types of connections, however, leverage is significantly higher than for non-connected firms. In Panel E, I look at combination of different connection types, especially between types of owners and types of politicians, since there is noticeable overlap between being connected through the owner and being connected to the King, President or a minister. Results point out that connections provide significantly higher benefits (in terms of leverage) when the owner is connected to the King, President, or a minister, rather than in the case of connections with members of the parliament. The magnitude of benefits is comparable when it is a director who is connected to the King, President or a minister, although in this case results lack significance. Being connected to a member of the parliament, instead, is associated to lower benefits, regardless of whether the connection is through the owner or through a director. Results are robust to the exclusion of financial companies.<sup>25</sup>

<sup>&</sup>lt;sup>23</sup> The date of initial appointment of each politician is determined based on the information contained in the sources listed in Appendix A, Panel G, and integrated with LEXIS–NEXIS. When I cannot identify the initial year of appointment, I classify the firm as being connected to an "unseasoned politician".

<sup>&</sup>lt;sup>24</sup> An alternative approach would be to look at the change in the leverage ratio (as well as taxation and market share) before and after the connection's initial date. Unfortunately, only for a small proportion of firms can I exactly identify a precise "event date" (firms would actually be lesser than those included in the event study in section 7), and also have access to historical data. As such, I am forced to adopt the approach of looking at "benefits" in the cross–section.

<sup>&</sup>lt;sup>25</sup> While connections ease debt financing (i.e., by reducing credit rationing constraints), connected companies do not enjoy a benefit in the form of lower cost of debt financing. For example, when I compute the average

## 5.2.Taxation.

The second type of benefits analyzed here is tax relief. The Pinault case discussed in the previous section also provides support for the tax relief hypothesis. In fact, when in 1996 Pinault SA obtained the cash contribution discussed above, it was also given a tax exemption of 250 million FF (Gay and Monnot, 1999). In 1996, Russian President Yeltsin signed a decree giving tax breaks and other aid potentially worth more than \$ 1 billion to Norilsk Nickel, one of the country's biggest and richest industrial giants. Norilsk was controlled by Uneximbank, of which Vladimir Potanin was president (shortly thereafter, Potanin was appointed deputy prime minister by Yeltsin) (The Moscow Times, 1996). Also, "Tommy" Soeharto's car company, Timor, received such generous tax breaks that allowed him to "undersell his foreign competitors" (The New York Times, 1998).

- "Tax" is defined as the ratio of Income Taxes / Pretax Income  $\times 100.^{26}$ 

Table 7, Panel A, indicates that connected firms enjoy a lower taxation. The difference between the tax rate of connected versus unconnected firms is -0.76 percent (a negative coefficient meaning lower taxation). This difference, however, is not statistically significant. Even so, results are significant for two sub–groups of firms that display "stronger" connections. In particular, the tax differential is -2.45 percent in the case of companies connected through their owner, and -2.78 percent in the case of firms connected to a seasoned politicians. Being connected to the King, President, or a minister is not associated with higher benefits. This evidence is further supported in Panel E. Taxation is significantly lower when the connected to the King, President or a minister (through a director) actually exhibit a significantly higher taxation. I do not have an explanation for this evidence.

As mentioned earlier, one problem with taxation is that tax relieves may be granted industrywide, rather than for one single connected firm. If that's the case, my results would be downwards biased. In order to assess this possibility, I run all simulations without including the industry dummies (results not reported for space reasons). Apparently, industry-level benefits do not seem to be common. In fact, results are essentially identical to those in Table 7, in which industry dummies are also excluded.

<sup>&</sup>quot;interest rate" on debt, I find that this is only marginally lower for connected firms (the difference being - 0.07%) and far from being significant.

<sup>&</sup>lt;sup>26</sup> I exclude companies with negative earnings, as well as companies that display a tax rate above 100 percent.

#### 5.3.Market power.

The last type of benefit I look at is market power. Anecdotes on this last variable are widespread. As described in Backman (1999, pp. 266–268), "money from the [Soeharto] family's start–up capital came from having themselves granted import monopolies. One of the earliest such monopolies was an exclusive license for the import of raw materials for plastic, granted in 1984". Similarly, Malay crony capitalists were rent–seeking "private sector businessmen who benefit enormously from close relations" with government leasers by obtaining "not only protection from foreign competition, but also concessions, licenses, monopoly rights, and government subsidies" (Yoshihara, 1988, pp. 3–4, 71). Relationships developed so massively that, by 1995, almost 20 percent of UMNO's division chairmen were millionaire businessmen (Gomez and Jomo, 1997, p. 26).

Market power may either be related to a real monopolistic position, or to some advantage in obtaining concessions or licenses. For this purpose, I look at industry concentration.

- "*Market share*" is measured as the firm's market capitalization over the total market capitalization of all firms in the same country and two-digit SIC industry (%).<sup>27</sup> I use market cap instead of sales because my sample includes also financial companies.<sup>28</sup>

This variable provides the strongest evidence showing the benefits arising from connections.<sup>29</sup> Connected firms enjoy a significantly larger market share of +6.63 percent. The market share is particularly larger when the connection is through the owner (+11.58 percent) rather than through a director (+2.42 percent), although in both cases the benefit is significant. Similarly, benefits are higher when the connection is with the King, President or a minister (+11.99 percent) rather than with a member of the parliament (+2.91 percent). In both cases, benefits are significant. Finally, firms connected to a seasoned politician do enjoy a higher market share (+9.60 percent) than firms connected to an unseasoned politician (+5.62 percent). Panel E shows that benefits are at their absolute largest when the connection is (i) through the owner and (ii) with the King, President or a minister (+12.03 percent). Benefits are lowest when a director sits as a member of the parliament (+1.39 percent); in this latter case, benefits are statistically not significant.

## **5.4.**Country–level results.

Table 8 provides some country-level evidence. Since in many countries there are just a handful of connected firms, I focus the analysis on those countries that are amongst the "top five" in terms

<sup>&</sup>lt;sup>27</sup> Since this variable is already defined at the country– and industry–level, in the regressions I do not control for country and industry effects.

<sup>&</sup>lt;sup>28</sup> Results are similar if I use sales instead of market capitalization, and exclude financial companies.

<sup>&</sup>lt;sup>29</sup> Similarly, connected firms experience a significantly higher growth of market power through time, especially if connected through their owner, to a minister, or to a seasoned politician.

of (i) number of connected firms, or (ii) "% of politically connected listed firms", or (iii) "connected firms as % of market capitalization". I exclude Ireland from the resulting set of countries, since it has only two connected firms. For all (7) remaining countries except Italy, connected firms display a higher leverage. Leverage is significantly higher than for non–connected firms in Malaysia, Russia, Thailand, and the United Kingdom. In Italy, leverage is not only lower, but significantly so.<sup>30</sup> Malay results are in line with the evidence reported in Johnson and Mitton (2002). In addition, in all countries connected firms' tax rate displays an amazing discount of –61.88 percent. Finally, for 5 out of 7 countries, connected firms display a higher market share. The relationship is significant only in the Russian sample and, once again, it is an astonishing one (+71.40 percent).

## [Table 8 goes about here]

As a final check I assess the robustness of the UK results, by splitting between connections with members of the "House of Lords" (HL) and connections with members of the "House of Commons" (HC).<sup>31</sup> Overall, 155 British connections (82.01 percent) involve members of the House of Lords, while only 34 connections involve members of the House of Commons. Connections with members of the House of Commons provide relatively higher benefits in terms of leverage (the coefficient of the connection dummy is +6.29 percent for members of the HC, and 2.82 percent for members of the HL), and in terms of market power (in this case, the coefficient is 2.52 percent for members of the HC, and 1.49 percent for members of the HL). However, connections with members of the HL do provide higher benefits in terms of tax discount: for this variable, the coefficient of the connection dummy is -0.35 percent for members of the HC, and -1.06 percent for members of the HL.

<sup>&</sup>lt;sup>30</sup> This result does not support the Economist's (2001a) accusation of Mr Berlusconi financing his television empire through underserved credit from public–sector banks. However, only 4 out of 24 Italian politically– connected Italian listed firms are actually controlled by Prime Minister Silvio Berlusconi; thus, it is difficult to draw any conclusive inference from the data. Yet, I cannot exclude that benefits are mainly granted to unlisted firms controlled by the Berlusconi and the Agnelli families. In fact, for example, the Agnelli family group includes over 800 firms, only 18 of which are listed. The data does not allow me to check for benefits enjoyed by unlisted firms. As I mentioned earlier, the measures of benefits estimated in the paper represent lower boundaries of benefits actually enjoyed by connected firms.

<sup>&</sup>lt;sup>31</sup> Members of the House of Lords are not elected. Originally, they were drawn from the various groups of senior and influential nobility in Britain, who advised the monarch throughout the country's early history. Following the House of Lords Act 1999 there are only 92 peers who sit by virtue of hereditary peerage. The majority of members are currently life peers. The House of Lords plays a key role in revising and initiating legislation, checking on the government by scrutinizing its activities, and also represents the highest Court of Appeal of the United Kingdom (<u>http://www.parliament.uk/parliament/guide/lords.htm</u>). Members of the House of Lords are not the only cases of non–elected politicians included in my sample. In other countries, in fact, I could identify some "life senators" who were appointed by the Chief of State. This is, for example, the case of Senator Agnelli, who is the controlling shareholder of 18 out of 24 Italian politically–connected firms. I could identify a few other cases in Canada.

## 6. Where are benefits of being connected larger?

In this section I look at whether <u>corner solutions</u> emerge from the cross–section of countries, i.e., whether connections are particularly beneficial in "bad" countries, with higher levels of corruption, worse legal systems, etc... To test for this hypothesis, I construct a number of interaction dummies between my "connected firm" dummy and the country–specific factors analyzed in section 4. I first look at the relevance of each single factor, and then assess their relative "strength". As shown in Table 9, connections are generally more beneficial to firms operating in highly corrupted systems. For 3 out of 4 proxies of corruption, leverage increases significantly with the degree of corruption. The tax discount for connected firms, too, increases in more corrupted countries, although this relationship is significant only for the last proxy of corruption. Finally, for all corruption measures used, the market power of connected firms significantly increases with the level of corruption.

High quality legal environments are related to lower benefits from connections. Connections in systems with a more efficient judicial system, a better rule of law, or a higher protection of property rights are associated with significantly lower benefits. This is true for all types of benefits analyzed in this paper: leverage, taxation, and market power. Benefits also decrease with economic development (i.e., per capita GDP).

Results are a bit more ambiguous with respect to the degree of regulation of entry. In particular, the market power of connected firms (but not higher leverage or lower taxation) increases with regulation of entry. The relatively higher impact of this type of bureaucracy on market power (rather than the other variables) is not surprising, since it strongly influences the facility of entering a business (i.e., in obtaining permissions, licenses, etc...). No relationship is found with high "business regulation index" provide connected firms with significantly lower benefits in terms of access to debt financing and taxation. I do not have an explanation for this result. In line with the results for the "regulation of entry" index, the market power of connected firms increases significantly with the "business regulation index".

Benefits of connected firms (in particular in terms of leverage and market power) decrease significantly in countries with a more "protestant" tradition.

All benefits are significantly lower when connected firms operate in democratic countries. Government instability does not have a clear impact on benefits: in fact, while the leverage of connected firms decreases in countries with a higher leadership turnover, tax benefits increase. The federal structure of the State is not correlated with the level of benefits. However, connected firms enjoy a significantly higher leverage and market share if they operate in highly centralized systems. Benefits of connections with "central" politicians instead decrease significantly in decentralized countries. Benefits are significantly lower in countries where the State heavily intervenes in the economy (in terms of expenditures/GDP). This result is certainly counterintuitive; however, it is in line with the results presented in Table 3, which pointed out that connections are less common in more interventionist countries. Again, I suspect this may reflect some spurious correlation. Finally, benefits are generally larger in countries where connections are more diffused, a fact that points out that the marginal benefit of being connected is not decreasing with the total number of connections in the country.

## [Table 9 goes about here]

As robustness check, I run ridge and stepwise regressions including different sets of interactive variables between connections and macro-factors. As earlier, in order to "minimize" the multicollinearity problem, for each category of explanatory factors I pick out only one variable i.e., the variable that best explains connections, as long as it is available for all countries. Once several interaction factors are included in the ridge regressions, none of them turn out to be significant in explaining leverage, taxation, or market power. I believe this result is still related to the multicollinearity problem. In fact, when I use the stepwise approach instead, "connected  $\times$ corruption (IV)" turns out to be significant in explaining leverage, while all other interaction factors are rejected by the procedure (Table 9, last Panel). The stepwise approach maintains the interaction variable between connections and "democratic in all years since 1950", as well as the interaction factor between connections and "general government final consumption expenditure (% of GDP)" in explaining taxation. The coefficient for the first factor is +4.35 percent, and it is significant at the 1 percent level. The coefficient for the second variable is equal to -0.15 percent and, again, significant at the 1 percent level. This latter negative coefficient is now consistent with expectations (i.e., benefits of being connected being larger in more interventionist countries), and confirms that the previous result was driven by some spurious correlation. Finally, when looking at market power, I find that four interaction variables are significant; the results point out that market power is higher when connected firms operate in highly corrupted countries, countries with low protection of property rights, non-democratic countries, and more interventionist countries.

#### 7. The performance of connected firms.

I finally address the question whether connections distort the allocation of capital toward relatively less efficient firms. Previous studies, i.e., Shleifer and Vishny (1993), argue that corruption may distort investment decisions and discourage growth. At the country level, Mauro (1995) provides empirical evidence that corruption reduces economic growth.

I use the following three proxies for performance:

 ROE is the ratio of [(net income before preferred dividends – preferred dividend requirement) / Last year's common equity] × 100

- The *"market-to-book"* ratio is computed as the market value of (ordinary and preferred) equity plus the book value of debt, divided by the sum of book value of equity plus book value of debt.
- "Stock price return" is computed as [(market price year end + dividends per share + special dividend quarter 1 + special dividend quarter 2 + special dividend quarter 3 + special dividend quarter 4) / (Last year's year–end market price)– 1] × 100

Analyzing the impact of connections on profitability is not an easy task. In general, we may expect connected firms to report higher performance because of the benefits they obtain from connections. On the other hand, we may expect firms seeking for connections to be somehow troubled (i.e., have prior poor performance), and such firms may look at connections as a possible way to obtain relief to some of their problems. Also, firms owned and managed by politicians may simply be bad because their "entrepreneur" is not skilled enough. In these cases it may well be the case that connected firms actually report lower or (at best) the same performance as non-connected firms. In addition, it must be considered that connected firms may be required to devote (substantial) resources to their rent-seeking activities, which may well eliminate any advantage from the rents they receive (Fisman, 2001, Johnson and Mitton, 2002). In their model, Shleifer and Vishny (1994) in fact point out the costs of the relationship between politicians and firms. Namely, politicians will be willing to provide subsidies to firms run by independent managers, but not for free; for example, they will want firms to "pay them back" by pursuing some political goal (i.e., by employing too many people, who in turn will support the politician with their votes). In a similar vein, Bennedsen (2000) develops a model supporting the view that, in equilibrium, it may be optimal to firms to accept inefficient employment allocations in exchange for receiving subsidies. Costs may potentially be huge, even as to totally offset the amount of benefits. To test for the possible level of over-employment by connected firms, I compute the ratio of the number of employees over total assets. I regress this ratio against the connections proxies used above, as well as various control factors. In no case do I find a significant difference in the level of employment by connected vs. non-connected firms (results are not reported for the sake of brevity). The difference is generally very small in economic terms (the coefficient of the connection dummy is -0.0011), far from significance, and generally has the wrong sign -i.e., connected firms employ less people. Unfortunately, the data does not allow me to look at other interesting sources of costs across countries, i.e., the remuneration of politicians who sit on the boards of directors or payments made to politicians, either in an illegal form (bribes) or legally (i.e., campaign contributions).

## [Table 10 goes about here]

If we accept that (i) the benefits of connections are valuable to firms and (ii) that the marginal cost of activities related to rent seeking does not, on average, exceed related benefits (i.e., connections <u>do not cause</u> a lower profitability), then a relatively lower performance by connected

firms must reflect ex–ante inefficiency.<sup>32</sup> Generally, I find this to be the case. The ROE of connected firms is lower by -4.36% (p–value<0.01); their market–to–book ratio is lower by -0.13 (p–value<0.01), and their stock price performance is lower by -2.63% (although in this case the difference is not significant). There is not a clear picture as to which type of connections is associated with lower profitability. There is no significant difference in the performance depending on whether the company's owner or top director is the one connected. However, companies connected to a member of the parliament have a significantly higher ROE than companies connected to the King, President or a minister (but still lower than average), although they have a lower market–to–book ratio and stock price return (although the latter is only insignificantly so). Results for seasoned vs. unseasoned politicians point out that connected firms have lower ROE and stock price return when connected to a seasoned politician, but a higher market–to–book. The fact that being connected to a King, President, or a minister or to a seasoned politician provides higher benefits, therefore, is not reflected into higher performance (rather, the opposite is true).

## [Table 11 goes about here]

Two caveats to the analysis above are, however, necessary. First, it is possible that costs of having a political connection may be charged especially to listed firms, in order to share them with minority shareholders. If that's the case, then the low performance displayed by listed connected firms may really reflect the fact that politicians sometimes use connections to extract value, rather than demonstrating ex–ante under–performance (in line with some "expropriation view"). Second, it may be the case that, for some perverse reason, companies appoint politicians even though the net value of political connections is negative (i.e., because not appointing them could be even worse). To assess these possibilities, I run an event study around the two following events: (1) the announcement of the (last) appointment of a director/large shareholder as politician, and (2) the appointment of a politician on the board of directors.<sup>33</sup> The sample on which I can run this analysis is limited due to several factors. First, stock price series must be available in Datastream. Unfortunately, this is not the case for events that took place in the mid '80s or before, which are therefore excluded. This restriction leads to the exclusion of many very interesting cases, i.e., those involving several companies related to Soeharto (first in power in 1967), the King of Thailand (1946), Mahathir (1981), several Russian politicians, as well as all politicians who came to power

<sup>&</sup>lt;sup>32</sup> This is in line with the evidence provided by Roberts (1990) for the US, and Fisman (2001) for Indonesia.

 $<sup>^{33}</sup>$  I compute the abnormal returns using the market model, and estimate parameters using returns from day – 260 to day –40 prior to the announcement date. Stock prices and stock market indexes come from Datastream. The event window discussed here goes from day –2 to day +2. Results are similar over alternative event windows. The event date is defined as the election date (or the date of appointment of the politician, if different) in the case of directors/owners that are appointed as politicians, and as the first day the appointment of the politician as director was announced in the press, in the case of appointment of politicians on the board.

far back in time. Since benefits enjoyed by firms in these countries were found to be particularly large, the results of my test will further understate the "true" value of connections. Second, I must be able to identify the date of appointment as director or as politician with precision. Third, I further need to be able to verify whether a particular politician was already a director of the firm before being appointed as politician, and whether somebody that gets appointed as director was already a politician at that time. Although I use all international data–sources covered in LEXIS–NEXIS, the Financial Times, and the Economist, as well as those listed in Appendix A, Panel G, I am finally able to clearly identify 158 cases of businessmen who enter politics<sup>34</sup>, and 48 cases of politicians who enter business<sup>35</sup>. The discussion below focuses on these "reduced" samples.

In general, I expect the costs of having a connection to be higher for the group of firms that appoint politicians as directors, and therefore anticipate the market reaction to be lower for this subgroup of firms. In fact, I believe it is quite unnecessary for a company's owner to use her position as politician to bribe her own firm (cheaper and less visible ways are certainly available for that). More likely, a company's owner will want to enter politics to provide benefits to her firms. Instead, politicians that become appointed as directors may indeed be able to extract significant resources from the firms they manage. Consistent with the hypothesis of higher rent-seeking by politicians who get appointed as directors, I find that companies experience a negative average (median) CAR of -0.80% (-1.10%) around the announcement of the appointment of a politician on the board. The median CAR is significant at the 1% level. Meanwhile, the market welcomes the appointment of a company's owner or director as politician. The 5 days average (median) CAR is, in this case, +0.52% (+0.20%), and remains significant when I look at the median. This finding shows that the low performance of firms connected by way of their entrepreneur entering politics reflects ex-ante under-performance. In fact, the performance of these firms is low even though political connections add value to the firm. In the case of companies that become connected through hiring a politician, it might either be the case that the company experiences low performance because of a high level of rent-seeking by the politician (now director) or/and that the company is (ex-ante) a bad performer. To distinguish between these two possibilities, I compare the CAR around the announcement of the appointment of a politician on the board of directors to the annual company's stock price performance (of course, adjusted for market and sector factors). I find that the sub-sample of companies that appoint a politician to the board exhibits an average annual stock price underperformance of -8.30%, which is much higher than the stock price response to the appointment of

<sup>&</sup>lt;sup>34</sup> The country distribution of these cases is the following: 1 case (for each country) in Belgium, Canada, and Malaysia; 2 cases in Australia, Finland, the Philippines, and Portugal; 3 cases in Sweden; 4 cases in Germany, Mexico, and Thailand; 5 cases in Switzerland; 6 cases in Singapore; 7 cases in the US; 12 cases in France; 14 cases in Italy; 28 cases in Japan; 60 cases in the UK.

<sup>&</sup>lt;sup>35</sup> Chile and Portugal display 1 case each; Singapore has 2 cases; the remaining 44 cases are all in the UK.

the politician on the board. Thus, the impact of the appointment of a politician on the stock price (which, by the way, is reflected into prices immediately at the announcement) is by far too small to be the main determinant of the low performance of connected firms in the cross–section. Rather, it seems that these companies are extremely poorly performing on an ex–ante basis and this is likely the reason they seek political connections. Even so, the latter decision does not add value.

One last question needs to be addressed. Why do firms appoint politicians as directors if that action destroys value? The lower returns of this sub–group of connected firms are actually compatible with the firm's controlling shareholder charging all costs of connections to listed firms. I can test for this hypothesis by regressing the CARs on the presence of <u>pyramiding</u> in the ownership structure of the appointing firm. In fact, we may further expect the controlling shareholder to be more likely to charge all costs of connections on firms in which he is diluting his ownership stake through some control–enhancing devices, ending up having a small cash–flow commitment (thus bearing only a small proportion of the loss). I regress the announcement CARs against a "pyramiding" dummy (which takes value 1 if the controlling shareholder controls the firm indirectly, i.e., through another firm, and 0 otherwise). In support of my hypothesis, I find that in presence of pyramiding, announcement returns are significantly lower; the difference being -2.16 percent, with a t–stat of -2.01. Though this story applies only to firms that appoint politicians on the board (remember, these are some  $\frac{1}{4}$  of the sample), it helps in explaining the lower returns for a fraction of connected corporations.

## 8. Conclusion.

This paper establishes several findings on the relationship between politics and finance, by looking at "connected" corporations for a sample of 42 countries. First, even by taking a narrow approach to the concept of "political connections" (i.e., by looking at whether companies' top directors or controlling shareholders cover key political roles in some country), I report that these relationships are quite widespread. Overall, 532 firms are politically linked —these firms represent 2.68 percent of all listed corporations, and 7.76 percent of the world's market capitalization.

Second, I find that this overlap is particularly widespread in countries with high corruption. An important exception is represented by the United Kingdom.

Third, connected companies extract significant benefits in terms of higher leverage, lower taxation, and stronger market power. On average, leverage is 2.7 percentage points higher in the capital structure of connected corporations. Connected firms also enjoy a lower taxation by 0.76 percentage points. Finally, they display much greater market power, with a differential market share of 6.63 (percent) with respect to non–connected firms. These results are generally consistent across countries. Benefits are more important when political links are stronger. In particular, benefits are

higher when companies are connected through their owner (rather than a director), with a minister (rather than a member of the parliament), or with a "seasoned" politician.

Fourth, benefits are generally larger when the firm operates in "bad" countries, and in particular those with a high degree of corruption, low protection of property rights, a highly interventionist government, or a non-democratic government.

Finally, despite the fact that connections provide significant benefits to corporations, connected firms under-perform their peers. This poor performance occurs despite the fact that the appointment of a company's large shareholder or director is good news for the market, suggesting that benefits on average exceed costs. Although I report that the appointment of a politician as director actually destroys value to the firms, I show that the overall under-performance of politically connected firms is too large to be entirely due to rent-seeking activities by politicians. The underperformance of connected firms raises macro-level concerns as to distortions that connections introduce in the allocation of capital, investment decisions, and therefore the long-term growth of these economies.

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	Number of	Number of firms with	% of	Connected	Total	Of which		Of which:	
	connected	available data	connected	of market	connections	Own	ership	Direc	ctorship
	mms	uata	listed lillis	capitaliz.		Ν	%	Ν	%
Argentina	0	38	0.00	0.00	0				
Australia	2	287	0.00	0.32	2	0		2	100.0
Austria	1	110	0.91	0.25	1	Õ	0.0	1	100.0
Belgium	6	157	3.82	18 77	6	Õ	0.0	6	100.0
Brazil	Ő	167	0.00	0.00	ů 0				
Canada	7	534	1 31	2.53	7	0	0.0	7	100.0
Chile	2	89	2 25	1 43	2	Õ	0.0	2	100.0
Czech Rep.	0	63	0.00	0.00	0				
Denmark	7	228	3.07	2.52	7	0	0.0	7	100.0
Finland	2	132	1.52	0.14	2	Õ	0.0	2	100.0
France	20	914	2.19	8.03	22	10	45.5	12	54.5
Germany	13	840	1.55	1.20	16	5	31.3	11	68.8
Greece	1	153	0.65	0.09	1	0	0.0	1	100.0
Hong Kong	8	405	1.98	2.33	8	5	62.5	3	37.5
Hungary	1	27	3.70	2.81	1	0	0.0	1	100.0
India	9	323	2.79	1.83	10	2	20.0	8	80.0
Indonesia	34	154	22.08	12.76	34	34	100.0	0	0.0
Ireland	2	82	2.44	22.83	3	0	0.0	3	100.0
Israel	$\overline{2}$	55	3.64	8.13	2	Õ	0.0	2	100.0
Italy	24	233	10.30	11.27	29	21	72.4	8	27.6
Japan	32	2.395	1.34	1.34	35	4	11.4	31	88.6
Malavsia	88	445	19.78	28.24	94	87	92.6	7	7.4
Mexico	8	94	8 51	8 14	8	2	25.0	6	75.0
Netherlands	1	238	0.42	0.01	1	0	0.0	1	100.0
New Zealand	0	50	0.00	0.00	0				
Norway	0	206	0.00	0.00	0				
Peru	0	37	0.00	0.00	0				
Philippines	5	114	4.39	16.16	6	5	83.3	1	16.7
Poland	0	57	0.00	0.00	0				
Portugal	3	101	2.97	2.00	3	1	33.3	2	66.7
Russia	5	25	20.00	86.75	7	2	28.6	5	71.4
Singapore	18	229	7.86	2.59	19	10	52.6	9	47.4
South Africa	0	212	0.00	0.00	0				
South Korea	8	313	2.56	8.95	8	1	12.5	7	87.5
Spain	3	200	1.50	0.82	3	1	33.3	2	66.7
Sweden	3	280	1.07	1.02	3	0	0.0	3	100.0
Switzerland	6	243	2.47	0.69	7	0	0.0	7	100.0
Thailand	42	279	15.05	41.62	46	37	80.4	9	19.6
Turkey	1	84	1.19	0.14	1	0	0.0	1	100.0
UK	154	2,149	7.17	39.02	189	13	6.9	176	93.1
US	14	7,124	0.20	4.94	14	0	0.0	14	100.0
Venezuela	0	18	0.00	0.00	0				
All countries	532	19,884	2.68	7.76	597	240	40.2	357	59.8

Table 1. Country distribution of firms with political connections

	Number of	Overall	% of	Total number	Average n. of	Of which:			
	politicians	number of	politicians	of	connections	K	ing,	Men	nber of
	connected	politicians	connected	connections	per involved	Presi	dent or	the pa	rliament
	to firms		to listed		politician	Mi	nister	-	
			firms			Ν	%	Ν	%
Argentina	0	340	0.00	0					
Australia	4	225	1.78	5	1.25	5	100.0	0	0.0
Austria	0	252	0.00	0					
Belgium	2	241	0.83	6	3.00	1	16.7	5	83.3
Brazil	0	615	0.00	0					
Canada	6	394	1.52	6	1.00	0	0.0	6	100.0
Chile	1	185	0.54	2	2.00	0	0.0	2	100.0
Czech Rep.	0	307	0.00	0					
Denmark	5	192	2.60	7	1.40	0	0.0	7	100.0
Finland	2	209	0.96	2	1.00	0	0.0	2	100.0
France	10	909	1.10	16	1.60	5	31.3	11	68.8
Germany	12	810	1.48	15	1.25	2	13.3	13	86.7
Greece	1	311	0.32	1	1.00	0	0.0	1	100.0
Hong Kong	1	61	1.64	1	1.00	0	0.0	1	100.0
Hungary	1	416	0.24	1	1.00	0	0.0	1	100.0
India	8	795	1.01	11	1.38	2	18.2	9	81.8
Indonesia	3	500	0.60	35	11.67	35	100.0	0	0.0
Ireland	0	226	0.00	0					
Israel	1	128	0.78	2	2.00	0	0.0	2	100.0
Italv	4	954	0.42	35	8.75	7	20.0	28	80.0
Japan	26	734	3.54	34	1.31	0	0.0	34	100.0
Malaysia	10	262	3.82	106	10.60	105	99.1	1	0.9
Mexico	5	224	2.23	8	1.60	5	62.5	3	37.5
Netherlands	1	237	0.42	1	1.00	1	100.0	0	0.0
New Zealand	0	119	0.00	0					
Norway	0	187	0.00	0					
Peru	0	137	0.00	0					
Philippines	2	258	0.78	6	3.00	4	66.7	2	33.3
Poland	0	562	0.00	0					
Portugal	2	249	0.80	2	1.00	0	0.0	2	100.0
Russia	5	659	0.76	7	1 40	6	85.7	1	14.3
Singapore	7	93	7.53	9	1.29	1	11.1	8	88.9
South Africa	0	502	0.00	0		-		-	
South Korea	6	429	1 40	7	1 17	0	0.0	7	100.0
Spain	Ő	613	0.00	0		Ũ	0.0		100.0
Sweden	1	374	0.27	3	3 00	0	0.0	3	100.0
Switzerland	4	257	1.56	5	1.25	Ő	0.0	5	100.0
Thailand	12	560	2.14	47	3.92	41	87.2	6	12.8
Turkey	1	538	0.19	1	1.00	0	0.0	1	100.0
UK	125	1341	9 32	207	1.66	1	0.5	206	99.5
US	8	556	1 44	9	1 13	4	44 4	-50	55.5
Venezuela	õ	185	0.00	0					
	-			÷	-	-	-	-	-
All countries	276	17,033	1.62	597	2.16	225	37.7	372	62.3

Table 2. Country distribution of connected politicians

## Table 3: Determinants of the frequency of connections: Univariate regressions

"% of politically connected listed firms" is the ratio of connected firms as proportion of the total number of firms listed in a particular country. "Connected firms as % of market capitalization" is the connected firms' market capitalization as proportion of the market capitalization of a particular country. Standard errors are computed using White (1980) correction for heteroskedasticity. a, b, c: Significantly different from zero at the 1%, 5% or 10% level, respectively. Horizontal lines separate different regressions.

Dependent variable:	% of politic connected liste		Connected f % of mark	firms as et cap.	
	Coeff. (s.e.)	R <sup>2</sup> adj.	Coeff. (s.e.)	R <sup>2</sup> adj.	N
	Corruption				
Corruption (I)	1.26 a (0.39)	0.31	1.44 (0.90)	0.08	38
Corruption (II)	0.98 b (0.48)	0.14	0.86 (0.67)	0.00	38
Corruption (III)	1.10 c (0.56)	0.10	2.47 (1.79)	0.06	42
Corruption (IV)	0.84 b (0.41)	0.12	1.85 (1.31)	0.06	42
Quality	of the legal environm	nent			
Efficiency of the Judicial System	-0.85 (0.52)	0.11	-0.85 (0.98)	0.00	38
Rule of law	-0.74 c (0.41)	0.07	-1.80 (1.38)	0.04	42
Property rights	-2.24 (1.35)	0.07	-3.67 (4.38)	0.01	42
Ec	onomic development				
Ln{GDP (per capita)}	-2.98 c (1.59)	0.11	-4.07 (3.40)	0.01	42
	Bureaucracy				
Regulation of entry	0.23 (0.21)	0.00	0.63 (0.82)	< 0	42
Business Regulation Index	1.55 (1.42)	0.02	3.21 (4.29)	< 0	42
	Culture				
% Protestant	-0.05 b (0.02)	0.05	-0.14 b (0.06)	0.03	42
G	overnment structure				
Democratic in all years since 1950	-2.64 c (1.56)	0.03	-2.90 (4.46)	< 0	42

Number of government leaders per year in recent period	1.40 (5.32)	< 0	14.41 (16.89)	0.00	42
Federation	1.35 (2.09)	< 0	5.41 (6.72)	0.00	42
Decentralization	-0.12 (0.09)	0.04	-0.09 (0.28)	< 0	35
Government intervent	tion in the e	conomy			
Expenditure, total (% of GDP)	-0.11 (0.08)	0.02	-0.13 (0.17)	< 0	41
General government final cons. expenditure (% of GDP)	-0.24 c (0.14)	0.04	-0.15 (0.24)	< 0	42

# Table 4: Ridge regressions

The dependent variable is the "% of politically connected listed firms". "% of politically connected listed firms" is the ratio of connected firms as proportion of the total number of firms listed in a particular country. Model (5) excludes Indonesia, Malaysia, and the UK. a, b, c: Significantly different from zero at the 1%, 5% or 10% level, respectively.

Model	(	(1)	(	(2)	(	(3)	(	4)	(.	5)
	Coeff.	(s.e.)	Coeff.	(s.e.)	Coeff.	(s.e.)	Coeff.	(s.e.)	Coeff.	(s.e.)
Corruption (I)	1.28 a	(0.37)	1.29 a	(0.43)			1.47 a	(0.49)	1.08 a	(0.33)
Property rights					-0.34	(1.62)	-1.31	(1.48)	-0.87	(0.96)
Ln{GDP (per capita)}			0.68	(1.43)	-2.16	(1.90)	-0.21	(1.82)	0.85	(1.20)
% Protestant	-0.02	(0.03)			-0.02	(0.03)	-0.02	(0.03)	-0.02	(0.02)
Democratic in all years since 1950	1.69	(1.82)			0.14	(2.36)	1.46	(2.16)	1.34	(1.40)
General government final cons. expenditure										
(% of GDP)					-0.05	(0.21)	0.02	(0.19)	0.01	(0.12)
Intercept	0.23	(1.72)	-5.78	(14.45)	25.98	(18.97)	3.90	(18.49)	-6.87	(12.15)
$R^2$ adj.	0	.25	0	.26	0	.01	0.	.21	0.	18
N		38		38		38	3	38	3	5

## Table 5: Frequency of connections through owners or directors, and corruption

"% of politically connected listed firms connected through the owner" is the ratio of firms connected through their owner as proportion of the total number of firms listed in a particular country. "% of politically connected listed firms connected through a director" is the ratio of firms connected through a director as proportion of the total number of firms listed in a particular country. Standard errors are computed using White (1980) correction for heteroskedasticity. a, b, c: Significantly different from zero at the 1%, 5% or 10% level, respectively. Horizontal lines separate different regressions.

	% of politically connected listed firms connected through the owner		% of politically confirms connected direct		
Dependent variable:	Coeff. (s.e.)	$R^2$ adj.	Coeff. (s.e.)	$R^2$ adj.	N
Corruption (I)	1.24 a (0.43)	0.34	0.02 (0.14)	<0	38
Corruption (II)	1.01 b (0.50)	0.17	-0.02 (0.12)	<0	38
Corruption (III)	0.93 c (0.48)	0.10	0.17 (0.30)	<0	42
Corruption (IV)	0.73 b (0.35)	0.12	0.13 (0.22)	<0	42

## Table 6: Two-stage least squares results

"% of politically connected listed firms" is the ratio of connected firms as proportion of the total number of firms listed in a particular country. "Connected firms as % of market capitalization" is the connected firms' market capitalization as proportion of the market capitalization of a particular country. The explanatory variable used in the first stage, "common law", is a dummy that takes value 1 if the legal origin of the country's company law or commercial code is the English common law, and 0 otherwise. The second stage's standard errors (reported in parentheses below the coefficients) are computed using the correction described in Maddala (2001, p. 363). a, b, c: Significantly different from zero at the 1%, 5% or 10% level, respectively.

	% of politically connected listed firms	Connected firms as % of market cap.	Ν
Corruption (I) fitted	-2.62 (2.12)	-11.42 b (4.95)	38

## Table 7: Benefits of connections

"Leverage" is defined as the ratio of long-term debt (excluding the current portion of long term debt; pensions; deferred taxes; minority interest) over total capital  $\times$  100. Total capital represents the total investment in the company. It is the sum of common equity, preferred stock, minority interest, long-term debt, non-equity reserves and deferred tax liability in untaxed reserves. "Tax" is the ratio of income taxes over pretax income  $\times$  100. "Market share" is the ratio of firm's market capitalization over the total market capitalization of all firms in the same country and two-digit SIC industry (%). All regressions control for whether the firm has recently been privatized, it is State-controlled, dually listed, as well as for firm size (ln{mkcap}). "Leverage" and "Tax" regressions include country and industry dummies. Industry is defined according to Cambpell (1996). Coefficients for these control variables are not reported for space reasons. Standard errors (reported in parentheses below the coefficients) are computed using White (1980) correction for heteroskedasticity. a, b, c: Significantly different from zero at the 1%, 5% or 10% level, respectively. <sup>O, O,</sup> <sup>o</sup>: Significantly different from the "Connected through the owner" coefficient at the 1%, 5%, or 10% level respectively. <sup>D</sup>, <sup>D</sup>, <sup>d</sup>: Significantly different from the "Connected through a director" coefficient at the 1%, 5%, or 10% level respectively. G. G. g. Significantly different from the "Connected to King, President or Minister" coefficient at the 1%, 5%, or 10% level respectively. P. P. P. Significantly different from the "Connected to MP" coefficient at the 1%, 5%, or 10% level respectively.  $\underline{S}, S, s$ : Significantly different from the "Connected to seasoned politician" coefficient at the 1%, 5%, or 10% level respectively. <sup>U, U, u</sup>: Significantly different from the "Connected to unseasoned politician" coefficient at the 1%, 5%, or 10% level respectively. Each Panel refers to separate regressions.

	Leverage	Tax	Market share				
Panel A: General results							
Connected	2.69 b (1.10)	-0.76 (0.82)	6.63 a (1.20)				
Panel B: Director- vs.	shareholder-con	nection					
Connected through the owner Connected through a director	3.53 b (1.65) 1.42	-2.45 b <sup>D</sup> (1.33) 0.22 <sup>O</sup>	11.58 a <sup>D</sup> (1.94) 2.42 c <sup>O</sup>				
	(1.39)	(0.97)	(1.42)				
Panel C: Connections with members of the	ne parliament vs. c	connections with	n ministers				
Connected to King, President or Minister	5.53 a <sup>P</sup> (1.82)	-0.22 (1.57)	11.99 a <sup><u>P</u></sup> (2.13)				
Connected to MP	0.90 <sup><u>G</u></sup> (1.36)	-0.98 (0.94)	2.91 b <sup>G</sup> (1.35)				
Panel D: Connections with "long term" v	vs. connections wit	th "short term"	politicians				
Connected to "seasoned" politician	3.64 b (1.76)	-2.78 с <sup><u>U</u></sup> (1.60)	9.60 a <sup>U</sup> (2.10)				
Connected with "unseasoned" politician	3.10 c (1.73)	0.98 <u>§</u> (1.12)	5.62 a <sup>s</sup> (1.86)				

Connected to King President or Minister ×			
Connected through the owner	4.68 b <sup>PO PD</sup>	$-2.70^{\frac{\text{GD}}{\text{GD}}}$	12.03 a <sup>PO</sup> GD PD
	(1.90)	(1.65)	(2.27)
Connected to MP $\times$ Connected through the			
owner	-0.91	-2.88 <sup>GD</sup>	7.58 b <sup>GD pd</sup>
	(3.05)	(1.85)	(3.29)
Connected to King, President or Minister ×			
Connected through a director	4.46	9.42 a <sup>GO PO PD</sup>	9.78 c <sup>PD</sup>
	(4.80)	(2.79)	(5.35)
Connected to MP $\times$ Connected through a			
director	$1.05^{\text{GO GD}}$	-0.80 <sup>go PO <u>GD</u></sup>	1.39 <u>GO PO GD</u>
	(1.43)	(1.00)	(1.42)
Men	no items:		
Average $R^2$ adj. Panels A–E	0.57	0.84	0.06
N. Obs. Panels A–E	15,865	12,176	15,872
Country dummies	Yes	Yes	No
Industry dummies	Yes	Yes	No

## Table 8: Country-level regressions

"Leverage" is defined as the ratio of long-term debt (excluding the current portion of long term debt; pensions; deferred taxes; minority interest) over total capital × 100. Total capital represents the total investment in the company. It is the sum of common equity, preferred stock, minority interest, long-term debt, non-equity reserves and deferred tax liability in untaxed reserves. "Tax" is the ratio of income taxes over pretax income × 100. "Market share" is the ratio of firm's market capitalization over the total market capitalization of all firms in the same country and two-digit SIC industry (%). All regressions control for whether the firm has recently been privatized, it is State-controlled, dually listed, it operates in the financial industry (SIC between 6000 and 6999), as well as for firm size (ln{mkcap}). Coefficients for these control variables are not reported for space reasons. Standard errors are computed using White (1980) correction for heteroskedasticity. a, b, c: Significantly different from zero at the 1%, 5% or 10% level, respectively. Horizontal lines separate different regressions.

	Leverage	Tax	Market share
	Indonesia		
R <sup>2</sup> adj.; N. Obs.	0.05; 116	0.01; 66	0.06; 116
Connected	2.17	-1.24	-3.46
	(5.58)	(5.48)	(6.31)
	Italy		
R <sup>2</sup> adj.; N. Obs.	0.21; 177	0.003; 149	0.07; 177
Connected	-11.60 b	-3.72	4.39
	(4.54)	(3.42)	(5.47)
	Japan		
R <sup>2</sup> adj.; N. Obs.	0.02; 2,322	0.01; 1,786	0.16; 2,322
Connected	0.29	-4.08	2.18
	(4.30)	(2.62)	(3.22)
	Malaysia		
R <sup>2</sup> adj.; N. Obs.	0.04; 418	0.06; 300	0.16; 418
Connected	10.50 a	-0.68	0.87
	(2.49)	(2.46)	(2.96)
	Russia		
R <sup>2</sup> adj.; N. Obs.	0.62; 11	0.47; 8	0.23; 11
Connected	8.90 a	-61.88 a	71.40 a
	(1.39)	(9.32)	(18.88)
	Thailand		
R <sup>2</sup> adj.; N. Obs.	0.08; 204	< 0; 119	0.31; 204
Connected	17.27 a	-3.02	-6.08
	(6.02)	(7.87)	(3.82)
	UK		
R <sup>2</sup> adj.; N. Obs.	0.05; 1,416	0.04; 1,199	0.23; 1,416
Connected	3.56 c	-1.18	2.75
	(2.03)	(1.11)	(1.71)

#### Table 9: Comparative benefits across countries

"Leverage" is defined as the ratio of long-term debt (excluding the current portion of long term debt; pensions; deferred taxes; minority interest) over total capital  $\times$  100. Total capital represents the total investment in the company. It is the sum of common equity, preferred stock, minority interest, long-term debt, non-equity reserves and deferred tax liability in untaxed reserves. "Tax" is the ratio of income taxes over pretax income  $\times$  100. "Market share" is the ratio of firm's market capitalization over the total market capitalization of all firms in the same country and two-digit SIC industry (%). All regressions control for

whether the firm is politically connected, has recently been privatized, it is State- controlled, dually listed, as well as for firm size (ln{mkcap}). "Leverage" and "Tax" regressions include country and industry dummies. Industry is defined according to Campbell (1996). Coefficients for these control variables are not reported for space reasons. Standard errors are computed using White (1980) correction for heteroskedasticity. a, b, c: Significantly different from zero at the 1%, 5% or 10% level, respectively. Horizontal lines separate different regressions.

	Leverage	Tax	Market share
Corrupt	ion		
Connected × Corruption (I)	1.22 a	-0.54 c	1.80 a
	(0.34)	(0.28)	(0.33)
Connected × Corruption (II)	0.57	-0.36	2.62 a
	(0.39)	(0.33)	(0.41)
Connected × Corruption (III)	1.08 a	-0.34	3.05 a
	(0.28)	(0.28)	(0.36)
Connected $\times$ Corruption (IV)	0.61 a	-0.34	2.31 a
	(0.23)	(0.23)	(0.29)
Quality of the lega	l environment		
Connected × Efficiency of the Judicial System	–0.79 a	0.20 b	-2.69 a
	(0.12)	(0.09)	(0.13)
Connected $\times$ Rule of law	-1.38 a	0.50 a	-3.27 a
	(0.14)	(0.10)	(0.14)
Connected × Property rights	-1.84 a	1.24 a	-9.26 a
1 5 6	(0.31)	(0.23)	(0.32)
Economic dev	relopment		
Connected $\times$ Ln{GDP (per capita)}	-3.99 a	0.89 a	-6.55 a
	(0.11)	(0.08)	(0.12)
Bureauc	racy		
Connected × Regulation of entry	0.12	0.06	1.15 a
	(0.12)	(0.09)	(0.14)
Connected × Business Regulation Index	-0.78 c	1.37 a	5.49 a
	(0.46)	(0.37)	(0.50)
Cultur	re		,/
Connected $\times$ % Protestant	-0.12 b	0.02	-0.18 a

	(0.05)	(0.04)	(0.05)					
Government structure								
Connected × Democratic in all years since 1950	-4.70 a	2.95 a	-7.44 a					
	(1.46)	(1.02)	(1.53)					
Connected × Number of gov. leaders per vear in recent period	-9.04 a	-6.48 a	4.83					
	(3.25)	(2.28)	(3.37)					
Connected × Federation	-0.48	0.98	0.73					
	(1.84)	(1.93)	(2.14)					
Connected × Decentralization	-0.37 a	0.03	-0.29 a					
	(0.05)	(0.04)	(0.06)					
Government intervention in the	ne economy							
Connected $\times$ Expenditure, total (% of GDP)	-0.11 a	0.08 a	–0.11 a					
	(0.03)	(0.02)	(0.04)					
Connected $\times$ General gov. final cons. expenditure (% of GDP)	-0.23 a	0.21 a	-0.35 a					
	(0.07)	(0.05)	(0.07)					
Diffusion of connecti	Diffusion of connections							
Connected $\times$ % of politically connected listed firms	0.44 a	-0.18 b	0.58 a					
	(0.09)	(0.08)	(0.11)					
Stepwise regression	15							
Connected × Corruption (IV)	0.61 a		1.27 a					
	(0.23)		(0.29)					
Connected $\times$ Property rights			-5.64 a					
			(0.32)					
Connected $\times$ Democratic in all years since 1950		4.35 a	−13.58 a					
		(1.02)	(1.48)					
Connected × General government final consumption								
expenditure (% of GDP)		–0.15 a	1.50 a					
		(0.05)	(0.07)					
Memo items:								
$\mathbf{R}^2$ adj.	0.56-0.63	0.83-0.85	0.06-0.07					
N. Obs.	12,492–15,865	9,629–12,176	12,498–15,872					
Country dummies	Yes	Yes	No					
Industry dummies	Yes	Yes	No					

#### Table 10: Performance of connected firms

"ROE" is computed as [(Net income before preferred dividends – preferred dividend requirement) / last year's common equity] × 100. "Market–to–book" is the ratio of market value of (ordinary and preferred) equity plus the book value of debt, divided by the sum of book value of equity plus book value of debt. "Stock price return" is computed as [(Market price year end + dividends per share + special dividend quarter 1 + special dividend quarter 2 + special dividend quarter 3 + special dividend quarter 4) / Last year's year–end market price)– 1] × 100. All regressions control for whether the firm has recently been privatized, if it is State–controlled, dually listed, as well as size (ln{mkcap}), industry (defined according to Cambpell, 1996), and country effects. Coefficients for these control variables are not reported for space reasons. Standard errors are computed using White (1980) correction for heteroskedasticity. a, b, c: Significantly different from zero at the 1%, 5% or 10% level, respectively. <sup>D, D, d</sup>: Significantly different from the "Connected through the owner" coefficient at the 1%, 5%, or 10% level respectively. <sup>D, D, d</sup>: Significantly different from the "Connected through a director" coefficient at the 1%, 5%, or 10% level respectively. <sup>S, S, s</sup>. Significantly different from the "Connected to King, President or Minister" coefficient at the 1%, 5%, or 10% level respectively. <sup>S, S, s</sup>. Significantly different from the "Connected to MP" coefficient at the 1%, 5%, or 10% level respectively. <sup>L, U, u</sup>: Significantly different from the "Connected to unseasoned politician" coefficient at the 1%, 5%, or 10% level respectively. <sup>L, U, u</sup>: Significantly different from the "Connected to unseasoned politician" coefficient at the 1%, 5%, or 10% level respectively. <sup>E, S, s</sup>. Significantly different from the "Connected to unseasoned politician" coefficient at the 1%, 5%, or 10% level respectively. <sup>E, D, d</sup>: Significantly different from the "Connected to unseasoned politician" coefficient at the 1%, 5%, or

	ROE	Market–to– book	Stock price return				
Panel A: General results							
Connected	-4.36 a	-0.13 a	-2.63				
	(1.37)	(0.05)	(2.69)				
Panel B: Director- vs.	shareholder-cor	inection					
Connected through the owner	-5.43 b	-0.07	-5.14				
	(2.31)	(0.06)	(3.36)				
Connected through a director	-2.43	-0.15 b	-0.33				
	(1.55)	(0.06)	(3.70)				
Panel C: Connections with members of th	e parliament vs.	connections with	ministers				
Connected to King, President or Minister	Connected to King, President or Minister $-6.68 \text{ a}$ $-0.04$ $-0.29$ $(2.52)$ $(0.07)$ $(5.93)$						
Connected to MP	-2.95 c <sup>g</sup>	-0.19 a <sup>g</sup>	-3.94				
	(1.51)	(0.06)	(2.61)				
Panel D: Connections with "long term" v	s. connections w	ith "short term" p	ooliticians				
Connected to "seasoned" politician	-7.56 a <sup>u</sup>	-0.13	-5.87 c				
	(2.66)	(0.08)	(3.53)				
Connected with "unseasoned" politician	-2.97 <sup>s</sup>	-0.22 a	-3.57				
	(2.01)	(0.07)	(4.82)				
Mem	o items						
Average R <sup>2</sup> adj. Panels A–D	0.13	0.59	0.30				
N. Obs. Panels A–D	15,151	15,870	14,786				

## Table 11: Event study

Abnormal (%) returns are computed using the market model. Parameters are estimated using daily returns from day -260 to day -40 relative to the announcement date. The event window goes from day -2 to day +2. The event date is defined as the election date (or the date of appointment of the politician, if different) in the case of directors/owners that are appointed as politicians, and as the first day the appointment of the politician as director was announced in the press, in the case of appointment of politicians on the board. The table also reports the "market– and industry–adjusted" stock price return for the two groups of firms. This variable is the coefficient of the "company's director/owner appointed as politician" and "politician appointed as director" dummies, estimated by running two (separate) regressions similar to those reported in table 10 (thus controlling for industry, country, size, etc...). a, b, c: Significantly different from zero at the 1%, 5% or 10% level, respectively.

	N. Obs.	Mean (%) CAR (t-stat)	Median (%) CAR (z-stat)	Annual market– and industry–adjusted stock price return (%)
Company's director/owner				
appointed as politician	158	0.52	0.20 a	-1.27
		(1.42)	(9.06)	
Politician appointed as director	48	-0.80	-1.10 a	-8.30
		(-1.56)	(3.47)	
p-value of the difference		0.07	0.02	

		Panel A: Data sources for parliaments	Panel B: Data sources for governments
Gei	neral sources	http://www.ipu.org/english/parlweb.htm#t	http://www.gksoft.com/govt/en/world.html
			CIA, 2001, "Chiefs of State" (available at: <u>http://www.cia.gov/cia/publications/chiefs/</u> )
1.	Argentina	http://www.congreso.gov.ar http://www.senado.gov.ar http://www.diputados.gov.ar/ http://www.hcdn.gov.ar/Principal.html	http://www.gksoft.com/govt/en/ar.html
2.	Australia	http://www.aph.gov.au/house/ http://www.aph.gov.au/senate/	http://www.gksoft.com/govt/en/au.html
3.	Austria	http://www.parlinkom.gv.at	http://www.gksoft.com/govt/en/at.html
4.	Belgium	http://www.fed-parl.be http://www.parl-fed.be http://www.dekamer.be/ http://www.lachambre.be/ http://www.senate.be/	http://www.gksoft.com/govt/en/be.html
5.	Brazil	http://www.camara.gov.br http://www.senado.gov.br http://www.interlegis.gov.br/	http://www.gksoft.com/govt/en/br.html
6.	Canada	http://www.parl.gc.ca	http://www.gksoft.com/govt/en/ca.html
7.	Chile	http://www.congreso.cl http://www.camara.cl/ http://www.senado.cl/	http://www.gksoft.com/govt/en/cl.html
8.	Czech Republic	http://www.psp.cz	http://www.cia.gov/cia/publications/chiefs/chiefs49.h
9.	Denmark	http://www.senat.cz http://www.folketinget.dk http://www.ft.dk/	<u>tml</u> http://www.gksoft.com/govt/en/dk.html
10.	Finland	http://www.eduskunta.fi	http://www.gksoft.com/govt/en/fi.html
11.	France	http://www.assemblee-nationale.fr/ http://www.senat.fr	http://www.gksoft.com/govt/en/fr.html
12.	Germany	http://www.bundestag.de http://www.bundesrat.de	http://www.gksoft.com/govt/en/fr.html
13.	Greece	http://www.parliament.gr	http://www.gksoft.com/govt/en/gr.html
14.	Hong Kong	http://www.chinabusiness.com/govern/npc.htm	http://www.gksoft.com/govt/en/cn.html http://www.gksoft.com/govt/en/hk.html
15.	Hungary	http://www.mkogy.hu	http://www.cia.gov/cia/publications/chiefs/chiefs78.h
16.	India	<u>http://alfa.nic.in</u> <u>http://parliamentofindia.nic.in/</u>	<u>tml</u> http://www.gksoft.com/govt/en/in.html
17.	Indonesia	http://www.dpr.go.id/	http://www.gksoft.com/govt/en/id.html
18.	Ireland	http://www.irlgov.ie/oireachtas/	http://www.gksoft.com/govt/en/ie.html
19.	Israel	http://www.knesset.gov.il http://www.israel-mfa.gov.il/gov/knesset.html	http://www.gksoft.com/govt/en/il.html
20.	Italy	http://www.parlamento.it http://www.camera.it/ http://www.senato.it/senato.htm	http://www.gksoft.com/govt/en/it.html
21.	Japan	http://www.shugiin.go.jp	http://www.gksoft.com/govt/en/jp.html

# Appendix A. Data sources

		http://www.sangiin.go.jp	
22.	Malaysia	http://www.parlimen.gov.my	http://www.gksoft.com/govt/en/my.html
23.	Mexico	http://www.camaradediputados.gob.mx http://www.senado.gob.mx	http://www.gksoft.com/govt/en/mx.html
24.	Netherlands	http://www.parlement.nl http://www.dds.nl/overheid/pdc/ http://www.eerstekamer.nl/	http://www.gksoft.com/govt/en/nl.html
25.	New Zealand	http://www.parliament.govt.nz	http://www.gksoft.com/govt/en/nz.html
26.	Norway	http://www.stortinget.no	http://www.gksoft.com/govt/en/no.html
27.	Peru	http://www.congreso.gob.pe/index.htm	http://www.gksoft.com/govt/en/pe.html
28.	Philippines	http://www.congress.gov.ph/	http://www.da.gov.ph/
		http://www.dbm.gov.ph/gov_dir/senate_dir.htm	
29.	Poland	http://www.sejm.gov.pl	http://www.cia.gov/cia/publications/chiefs/chiefs141.
		http://www.senat.gov.pl	<u>html</u>
30.	Portugal	http://www.parlamento.pt	http://www.gksoft.com/govt/en/pt.html
31.	Russia (1)	http://www.duma.ru/deputats/list/frmlist.htm	http://www.cia.gov/cia/publications/chiefs/chiefs145.
		http://www.council.gov.ru/sostav/members/spisok.htm	html
32.	Singapore	http://www.gov.sg/parliament/	http://www.gksoft.com/govt/en/sg.html
33.	South Africa	http://www.parliament.gov.za	http://www.gksoft.com/govt/en/za.html
34.	South Korea	http://www.assembly.go.kr	http://www.gksoft.com/govt/en/kr.html http://www.gksoft.com/govt/en/kp.html
35.	Spain	http://www.congreso.es http://www.senado.es	http://www.gksoft.com/govt/en/es.html
36.	Sweden	http://www.riksdagen.se	http://www.gksoft.com/govt/en/se.html
37.	Switzerland	http://www.parliament.ch	http://www.gksoft.com/govt/en/ch.html
38.	Thailand	http://www.parliament.go.th	http://www.gksoft.com/govt/en/th.html
39.	Turkey	http://www.tbmm.gov.tr	http://www.gksoft.com/govt/en/tr.html
40.	UK	http://www.parliament.uk	http://www.gksoft.com/govt/en/fr.html
41.	US	http://www.congress.gov http://www.senate.gov http://www.house.gov	http://www.gksoft.com/govt/en/us.html
42.	Venezuela	http://www.asambleanacional.gov.ve/ns/integra.asp	http://www.cia.gov/cia/publications/chiefs/chiefs189. html

## (1) Transliteration from Cyrillic made through the web site http://www.cifirica.ru/

## Panel C: Data sources for ownership structures

General data	Ownership data is gathered from the countries sources listed below, and integrated with Extel, Worldscope,
	Claessens et al. (2000) for Asian countries, Faccio and Lang (2001) for Western European countries;
	These same sources as well as the 2000 "Fortune 500 global list" are used to identify government-ownership;
	Lists of privatized firms are obtained from SDC Platinum, Bortolotti, Fantini and Siniscalco (2001), Dewenter
	and Malatesta (1997, appendix available at www.afajof.irg/Pdf/supplements/ap5080.pdf) and Megginson, Nash
	and Van Randenborgh (1994);
	Group-affiliation data is taken from Extel, Worldscope, Claessens et al. (2000) and Faccio and Lang (2001).
Australia	Australian Stock Exchange, 1997, "ASX all Ordinary Index. Company Handbook", Sydney, N.S.W.
	http://www.companies.govt.nz/search/cad/dbssiten.main
Austria	Wiener Börse, 2001, "Yearbook 2000", Österreichische Vereinigung für Finanzanalyse, Wien

Belgium	Banque Bruxelles Lambert, 2000, "Actionnariat des Sociétés Belges cotées à Bruxelles", Department Etudes et Stratégie.
	http://www.stockexchange.be/enindex.htm
Brazil	Sao Paulo Stock Exchange, "Brazil company handbook", edition 2000/2001
Czech Republic	Securities Center of the Czech Republic, 2001, Data on significant shareholdings.
Denmark	Hugin, Annual Report CD (1998) (http://www.huginonline.com)
Finland	Helsinki Media Blue Book "Major Finnish Companies Internet Database"
	( <u>http://www.bluebook.fi/en/tuotteet/haku/majorfinnishcompanies.html</u> )
	http://www.huginonline.com
France	http://www.bourse-de-paris.fr/fr/index_fs.htm?nc=2∋=6&nom=marche
	The Herald Tribune (1997), "French Company Handbook 1997," SFB–Paris Bourse
Germany	Commerzbank (1997), "Wer gehört zu wem" (http://www.commerzbank.com/navigate/date frm.htm)
-	Bundesaufsichtsamt für den Wertpapierhandel, "Major Holdings of Voting Rights in Officially Listed
	Companies," December 2000
Greece	http://www.ase.gr/
Hong Kong	Asian Company Handbook (1008)
Indonasia	Asian Company Handbook (1998)
Indonesia	http://www.hemscott.com/equities/company/
Itoly	http://www.nemscou.com/equities/company/
Ianan	Toyo Kaizai Shannocha, 2001. "Janan Company Handbook" Tokyo Janan Summer Edition
Malaysia	Asian Company Handbook (1998)
Mexico	"Mexico Company Handbook (1996)"
New Zealand	Dates 2001 "New Zealand Directory of Shareholders"
Norway	http://www.huginonline.com
Norway	Company web sites from: http://www.ose.no/english/
Philippines	Asian Company Handbook (1998)
Poland	Polish SEC, http://www.kpwig.gov.pl/rr_ang.htm 2001 Data on significant shareholdings
Portugal	Bolsa de Valores de Lisboa e Porto 2000 "Sociedades Cotadas 1999" CD–rom
Singapore	Asian Company Handbook (1998)
South Korea	Asian Company Handbook (1998)
Spain	http://www.cnmv.es/english/cnmve.htm
Sweden	http://www.huginonline.com
Switzerland	Union Bank of Switzerland (1998), "Swiss Stock Guide 96/97," Zurich
Thailand	Asian Company Handbook (1998)
Turkey	The Istanbul Stock Exchange, 2001, "Yearbook of Companies", available at: http://www.ise.org
UK	Http://www.hemscott.com/equities/company/
US	http://www.sec.gov/

## Panel D: Data sources for board composition:

Extel, LEXIS-NEXIS proxy statements (US corporations), and Worldscope

## Panel E: Data sources on political corruption, financial scandals, political connections, etc.:

Forbes, 2000 and 2001, "World's Richest People"

The Economist, various issues.

#### Panel F: Data sources on family affiliation:

Agrawal, Anup and Charles R. Knoeber, 2001, "Do some outside directors play a political role?" Journal of Law and Economics, 44: 179–198.

Backman, Michael, 1999, "Asian eclipse: Exposing the dark size of business in Asia," Wiley & Sons (Asia)

Fisman, Raymond, 2001, "Estimating the value of political connections," American Economic Review, 91:1095–1102.

Forbes, 2000 and 2001, "World's Richest People" (available at http://www.forbes.com/poeple/2001/06/21/billionairesindex.html ).

Forbes, 2001, "The Forbes Four Hundred" (Richest Americans) (available at http://www.forbes.com/2001/09/27/400.html).

Fortune, 2001, Fortune's 50 most powerful women in American business, October 15 2001.

Fortune, 2001, The global power 50, October 15 2001.

- Gomez, Edmund Terence, and K.S. Jomo, 1997, "Malaysia's political economy: Politics, patronage and profits," Cambridge University Press.
- Johnson, Simon, and Todd Mitton, 2002, "Cronyism and capital controls: Evidence from Malaysia," *Journal of Financial Economics*, forthcoming.

The Stationery Office, 2001, Register of Members' Interests, downloadable from http://www.publications.parliament.uk/pa/cm200001/cmregmem/memi02.htm

#### **Panel G: Election dates**

Central Intelligence Agency, 2001, "The World Factbook 2001," available at http://www.cia.gov/cia/publications/factbook/

"Elections around the world," available at http://www.electionworld.org/

House of Lords, 2001, "New members announced since 24 October 2000," available at <a href="http://www.publications.parliament.uk/pa/ld/ldinfo/meminf.htm">http://www.publications.parliament.uk/pa/ld/ldinfo/meminf.htm</a>

House of Lords, 2001, "Peer, party & date they became."

http://www.polisci.com/world/nation/

http://www.rulers.org/

LEXIS-NEXIS

The Economist, various issues.

"World Political Leaders 1945-2001," available at http://www.terra.es/personal2/monolith/00index.htm

Sources listed in Panel A.

Variable	Description		Summary statistics		
	Panel A: Macro-variables	Mean	Min	Max	
% of politically connected listed firms	Connected firms as proportion of the total number of firms listed in a particular country.	3.8	0.0	22.1	
% Protestant	Protestants as fraction of the total population. Source: Treisman, 2000 and Central Intelligence Agency, 2001, "The World Factbook 2001," http://www.cia.gov/cia/publications/factbook/	18.2	0.0	97.8	
Business Regulation Index	An index of regulation policies related to opening a business (on a scale from 1 to 5). Rescaled so that a low score indicates that regulations are straightforward and applied uniformly to all businesses and that regulations are less of a burden to business. The score refers to the index in 1997. Source: 1997 Index of Economic Freedom (http://www.heritage.org/index/).	2.7	1.0	4.0	
Common law	Dummy=1 if the legal origin of the country's company law or commercial code is the English common law, and 0 otherwise. Source: La Porta <i>et al.</i> , 1998, and Central Intelligence Agency, 2001, "The World Factbook 2001," <u>http://www.cia.gov/cia/publications/factbook/</u>	0.31	0.0	1.0	
Connected firms as % of market capitalization	Connected firms' market capitalization as proportion of the market capitalization of a particular country.	8 1	0.0	86.8	
Corruption (I)	Business International's (Economist Intelligence Unit) assessment of the "degree to which business transactions involve corruption and questionable payments". This assessment is compiled based upon questionnaires filled in by BI's network of correspondents and analysts based in the countries covered, and reflect their perception of corruption. Scale from 0 to 10; the original scale is inverted so that lower scores correspond to lower levels of corruption. Source: Mauro, 1995.	2.2	0.0	8.5	
Corruption (II)	International Country Risk'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 <i>et al.</i> , 1998.	2.5	0.0	7.9	
Corruption (III)	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 non–governmental 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 <i>et al.</i> (1999a and 1999b), available at: <a href="http://www.worldbank.org/wbi/governance/datasets.html#dataset">http://www.worldbank.org/wbi/governance/datasets.html#dataset</a>	3.3	0.7	6.6	
Corruption (IV)	Corruption index from Transparency International. The TI index measures the "degree to which corruption is perceived to exist among public officials and politicians. It is a composite index, drawing on 14 different polls and surveys from seven independent institutions, carried out among business people and country analysts, including surveys of residents, both local and expatriate." Corruption represents "the abuse of public office for private gain." The index scales from 0 to 10, higher value for higher corruption. Source: Transparency International, www.transparency.org	3.0	0.0	8.0	
Decentralization	Total expenditure of sub–national (State and local) government over total spending by all levels (State, local and central) of government. Source: "Government Finance Statistics Yearbook", International Monetary Fund; average between 1990 and 1995 (or latest year available)	23.2	<u> </u>	<u> </u>	
Democratic in all years since 1950	Democratic if (1) the executive is elected, (2) the legislature (at least its lower house) is elected, (3) more than one party contests elections, and (4) during the last three elections of	0.5	0.0	1.0	

# Appendix B: Definition of variables

	the executive there has been at least one turnover of power between parties. Source: Treisman, 2000a			
Domestic credit provided by banking sector (% of GDP)	Domestic credit provided by the banking sector includes all credit to various sectors on a gross basis, with the exception of credit to the central government, which is net. The banking sector includes monetary authorities and deposit money banks, as well as other banking institutions where data are available (including institutions that do not accept transferable deposits but do incur such liabilities as time and savings deposits). Examples of other banking institutions are savings and mortgage loan institutions and building and loan associations. Average 1987–1999. Source: World Bank, <u>http://sima-ext.worldbank.org/query/</u>	88.2	18.5	253.9
Efficiency of the Judicial System	Assessment of the "efficiency and integrity of the legal environment as it affects business, particularly foreign firms" produced by the country 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 1980–1983. Scale from 0 to 10, with lower scores for lower efficiency levels. Source: La Porta <i>et al.</i> , 1998	7.9	2.5	10.0
Expenditure, total (% of GDP)	Total expenditure includes both current and capital expenditures. It does not include government lending or repayments to the government or government acquisition of equity for public purposes. Data are shown for central government only. Average 1987–1999. Source: World Bank, <u>http://sima-ext.worldbank.org/query/</u>	30.9	13.4	50.7
Federation	Dummy = 1 if the government of the country is organized as a federation of States. Source: Central Intelligence Agency, 2001, "The World Factbook 2001," <u>http://www.cia.gov/cia/publications/factbook/</u>	0.3	0.0	1.0
General government final consumption expenditure (% of	General government final consumption expenditure as a percentage of GDP in the years 1987–1999. Source: World Bank, <u>http://sima–ext.worldbank.org/query/</u>			
GDP)	(Natural log of) Gross domestic product (in US\$) on a purchasing power parity basis divided	16.1	8.0	29.7
	by population; computed for 1999. Source: World Bank, <u>http://sima-</u> <u>ext.worldbank.org/query/</u>	9.5	7.7	10.4
Market capitalization of listed companies (%	Market capitalization of listed companies as percentage of GDP. Average 1987–1999. Source: World Bank, <u>http://sima-ext.worldbank.org/query/</u>			
Number of	Number of government leaders in recent period divided by length of period in years; recent	55.3	6.4	212.7
government leaders per year in recent period	period is for most countries Jan 80 – Dec 93. Leader is the Prime Minister in parliamentary systems, president or head of State in presidential or non–democracy. Source: Treisman, 2000a and <u>http://www.rulers.org/</u>	0.3	0.1	1.0
Property rights	Measures the ability to accumulate private property is the main motivating force in a market economy, and the rule of law is vital to a fully functioning free–market economy. This factor examines the extent to which the government protects private property and how safe private property is from expropriation. The index is rescaled so that less protection private property receives, the lower the score (scale 0 to 4). The score refers to the index in 1997. Source: 1997 Index of Economic Freedom ( <u>http://www.heritage.org/index/</u> ).	3.26	2.0	4.0
Regulation of entry	Number of different steps that a start–up has to comply with in order to obtain a legal status, i.e., to start operating as a legal entity. Source: Djankov <i>et al.</i> , 2002.	9.4	2.0	16.0
Rule of law	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 <i>et al.</i> , 1998, and World Bank, <a href="http://www.worldbank.org/wbi/governance/datasets.html#dataset">http://www.worldbank.org/wbi/governance/datasets.html#dataset</a>	7.4	2.5	10.0
	Panel B: Micro–variables			
Connected	Dummy = 1 if the a company's controlling shareholder or top director sits on a national parliament, government, is King/President of the country, or is closely–related to a top politician/political party; 0 otherwise	0.03	0	1
Connected through a director	Dummy = 1 if a company's top director sits on a national parliament, has been standing in the government, is King/President of the country, or is closely–related to a top	0.02	0	1

	politician/political party; 0 otherwise			
Connected through the owner	Dummy = 1 if the company's controlling shareholder sits on a national parliament, has been standing in the government, is King/President of the country, or is closely–related to a top politician/political party; 0 otherwise	0.01	0	1
Connected to "seasoned" politician	Dummy = 1 if the connected politician was first appointed as politician in or before 1987; 0 otherwise.	0.01	0	1
Connected to "unseasoned" politician	Dummy = 1 if the connected politician was first appointed as politician after 1987; 0 otherwise.	0.01	0	1
Connected to King, President or Minister	Dummy = 1 if a controlling shareholder or top director of the company sits on a government office, is King/President of the country, or is closely–related to a top politician/political party.; 0 otherwise	0.01	0	1
Connected to MP	Dummy = 1 if a controlling shareholder or top director of the company sits on a national parliament or is closely related to a member of the parliament; 0 otherwise	0.02	0	1
Dually-listed	Dummy = 1 if the company is listed in more than one stock market, 0 otherwise	0.21	0	1
Employees/TA	Number of employees / Total assets.	0.01	0.00	3.54
Industry	The industrial classification is based on Campbell (1996). Industries are defined as follows: petroleum (SIC 13, 29), consumer durables (SIC 25, 30, 36–37, 50, 55, 57), basic industry (SIC 10, 12, 14, 24, 26, 28, 33), food and tobacco (SIC 1–2, 9, 20–21, 54), construction (SIC 15–17, 32, 52), capital goods (SIC 34–35, 38), transportation (SIC 40–42, 44–45, 47), utilities (SIC 46, 48–49), textiles and trade (SIC 22–23, 31, 51, 53, 56, 59), services (SIC 72–73, 75–76, 80, 82, 87, 89), leisure (SIC 27, 58, 70, 78–79), and financial companies (SIC 60–69).			
Interest rate	Interest expense on debt t / [(Short term debt and current portion of long term debt + Long term debt + Short term debt and current portion of long term debt + Long term debt	8.33	0.00	139.6
Leverage	Long term debt (excluding the current portion of long term debt; pensions; deferred taxes; minority interest) / Total capital × 100. Total capital represents the total investment in the company. It is the sum of common equity, preferred stock, minority interest, long-term debt, non-equity reserves and deferred tax liability in untaxed reserves.	24.43	0.00	99.92
Ln{MkCap}	Natural log of market capitalization (defined as Market Price–Year End $\times$ Common Shares Outstanding)	12.15	3.69	19.29
Market share	Firm's market capitalization over the total market capitalization of all firms in the same country and two-digit SIC industry (%)	9.39	0.00	100.0
Market-to-book	The market value of (ordinary and preferred) equity plus the book value of debt, divided by the sum of book value of equity plus book value of debt.	1.62	0.18	14.87
Privatized	Dummy = 1 if the company is a privatized firm, 0 otherwise	0.01	0	1
ROE	[(Net income before preferred dividends – preferred dividend requirement) / Last year's common equity] $\times$ 100	6.75	-461	484
State	Voting stake held by the central and local government. Calculated by identifying the weakest link in each control chain linking the corporation to the controlling shareholder, then summing the percentage control rights across these links.	0.01	0	1
Stock price return	Total stock price return = [(Market price year end + dividends per share + special dividend quarter 1 + special dividend quarter 2 + special dividend quarter 3 + special dividend quarter 4) / (Last year's year–end market price)–1] × 100	11.67		923.6
Tax	Income Taxes / Pretax Income × 100	32.76	0.00	99.54