

DIFFERENCES BETWEEN POLITICALLY CONNECTED AND NON-CONNECTED FIRMS:
A CROSS COUNTRY ANALYSIS

Mara Faccio
Krannert Graduate School of Management
Purdue University
403 W. State Street
West Lafayette, IN 47907
e-mail: mfaccio@purdue.edu

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Evidence from firms in 47 countries shows that companies with political connections have higher leverage and higher market shares, but they underperform compared to non-connected companies on an accounting basis. Differences between connected and unconnected firms are more pronounced when political links are stronger. Differences also vary depending on the level of corruption and the degree of economic development in individual countries.

I. Introduction

Despite the fact that corruption has a negative aggregate economic effect on a country's aggregate investment and growth, a growing body of literature has pointed out that political connections may be beneficial to specific firms. Academic studies reporting evidence on how connections provide sources of value have identified only a few differences between connected and non-connected firms, such as preferential access to credit (Chiu and Joh, 2004; Cull and Xu, 2005; Dinç, 2005; Johnson and Mitton, 2003; and Khwaja and Mian, 2005), government contracts (Goldman, Rocholl, and So, 2008), regulatory protection (Kroszner and Stratmann, 1998), and government aid for financially troubled firms (Faccio, Masulis, and McConnell, 2006). Additionally, most of these studies look at individual countries¹ and highly dissimilar types of connections, making cross-country comparison virtually impossible.

By contrast, the purpose of this paper is to analyze how connected firms differ from non-connected firms across a large number of countries. I have two main questions: First, are differences between connected and non-connected firms common across countries, or are they specific to a few countries and/or types of connections? Second, are these differences larger in countries with high corruption and/or in less developed countries?

To address these questions, I use a new database built in Faccio (2006) that includes several thousand firms in 47 countries. A company is defined as connected with a politician if “at least one of its large shareholders (anyone controlling at least 10 percent of voting shares) or one of its top officers (CEO, president, vice-president, chairman, or secretary) is a member of parliament, a minister, or is closely related to a top politician or party” (Faccio, p. 369). As recognized in Faccio (2006), relying on publicly available data sources yields an

¹ The lone exception is Faccio, Masulis and McConnell (2006).

incomplete picture of connections. However, it seems reasonable to believe that connections identified through public sources are more likely to represent durable ties (as opposed to those related to ephemeral campaign contributions).

I find that connected firms have higher leverage,² pay lower taxes, and have stronger market power; however, they have poorer accounting performance than non-connected firms. They differ more dramatically from their peers when their political links are stronger. Differences are greater, for example, when companies are connected through owners rather than directors. Similarly, they are greater when the connection is with a minister, rather than with a member of the parliament. I additionally find that the financial characteristics of connected firms differ more from those of their non-connected peers in countries characterized by high levels of corruption. Also, the differences between connected and non-connected firms vary across countries depending on economic development, e.g., the level of per-capita GDP. Results are robust to the exclusion of outliers and individual countries and industries, and to a number of other tests.

There are two possible interpretations of these results: a) it could be that political connections led to these differences or b) it could be that these types of firms are more likely to establish political connections. To the extent that the characteristics studied reflect benefits of connections across countries, these results indicate that the distortions in the allocation of public resources often claimed by practitioners are common in both emerging and developed countries. However, the magnitude of this phenomenon is much larger in more corrupt systems. This last result is consistent with Faccio (2006) who, for a large sample of connections across developed and emerging markets, documents that firm value increases when an entrepreneur is elected to a top political position, especially in highly corrupt countries. Overall, the evidence suggests caution in making inferences about the benefits of

² This may either proxy preferential access to the credit market or for the possibility that these firms have lower costs of default or lower probability of default due to their connections.

political ties because the magnitude of the benefits depends on the specific country of analysis.

This work complements a growing body of literature studying the net effect of political connections on the value of firms. This evidence has largely shown that, on average, the benefits of having political connections exceed the costs. For example, Fisman's (2001) study of connections to Indonesian President Suharto shows that rumors of Suharto's worsening health significantly (and negatively) affected the prices of companies related to the president. Studies by Roberts (1990) and Goldman, Rocholl and So (2009) provide evidence that connections through board members, on average, add to the value of US firms.³ Ramalho (2003) and Ferguson and Voth (2008) provide similar evidence for firms related to Brazilian President Collor de Mello and German firms affiliated with the Nazi party (during its rise to power), respectively. In related work, Aggarwal, Meschke, and Wang (2007) and Gulen, Cooper, and Ovtchinnikov (2009) look at the impact of political contributions on long-term stock returns.

The rest of the paper is organized as follows. In Section II, I define political connections and in Section III present evidence on the characteristics of connected firms. Section IV discusses the cross-country evidence. Section V provides a number of robustness tests. Section VI addresses reverse causality issues, and Section VII concludes the paper.

II. Definition of political connections

Data on political ties come from Faccio (2006), who analyzes political connections across 47 countries. In particular, a company is defined as politically connected if "at least one of its large shareholders (anyone controlling at least 10 percent of voting shares) or one

³ Fisman, Fisman, Galef, and Khurana (2006), however, report that the value of companies tightly connected to Vice President Cheney is not affected by major health events involving the Vice President, or major political news.

of its top officers (CEO, president, vice-president, chairman, or secretary) is a member of parliament, a minister, or is closely related to a top politician or party” (Faccio, p. 369).

Connections with government ministers include cases in which the politician himself is a director or a large shareholder, as well as cases where a politician’s close relative holds such a position.

Close relationships include (1) companies whose top executives or large shareholders have been described in the press as having a friendship with a head of state, government minister, or member of parliament; (2) connections with officials who had served as heads of state or prime ministers in the past; (3) companies whose former top executives or large shareholders entered politics; (4) connections with foreign politicians; and (5) other connections identified in prior studies (Gomez and Jomo, 1997; and Johnson and Mitton, 2003).

Finally, I include cases in which a member of parliament serves as a company’s CEO, president, vice president, or secretary, or controls at least 10 percent of shareholder votes. Because of data limitations, I record parliamentary connections only when the members of parliament themselves are shareholders or top directors, but do not consider cases when parliamentary positions are held by relatives.

To establish the presence of connections, I identify names of members of parliament or government using the *Chiefs of State* directory (CIA, 2001) and the official website of each country’s government and parliament. I take the names of top company directors from Worldscope, Extel, company websites, and Lexis-Nexis. I identify major shareholders from Claessens, Djankov, and Lang (2000), Faccio and Lang (2002), the web sites of the stock exchanges or their supervisory authorities, Worldscope, and Extel. *The Economist*, *Forbes*, and *Fortune* are the sources of information for well-known cases of friendships. Additionally, I use studies by Agrawal and Knoeber (2001), Backman (1999), Gomez and

Jomo (1997), Johnson and Mitton (2003), and Fisman (2001) to identify close relationships of the types listed above.

The dataset built in Faccio (2006) identifies 541 companies with political connections in 47 countries. To be included in my sample, financial information for these companies needs to be available in Worldscope for 1997. Because of financial data availability issues, this requirement reduces the sample to 458 connected firms and 15,733 non-connected peers. Overall, there are 514 connections, as some companies have multiple ties. Of these, 307 connections (60 percent) involve top directors, while 207 cases (40 percent) involve large shareholders. In the majority of cases (304, or 59 percent) connections are with members of parliament, followed by close relationships (132 cases, or 26 percent) and connections with government ministers or heads of state (78 cases, or 15 percent). Table 1 shows the country distribution of connections.

[Table 1 goes about here]

III. The differences between politically connected and non-connected firms

This section studies the differences between politically connected and non-connected firms, in terms of (i) leverage, (ii) taxation, (iii) market power, (iv) productivity, (v) accounting performance, and (vi) market-to-book ratio. Although, given the limitations of the data, I cannot infer causality from my results, in principle, I attempt to focus on characteristics that are more likely to reflect benefits of connections such as preferential access to credit, tax discounts, and market protection/monopolies.

Before proceeding with the analysis, it is important to point out that at least three factors work against finding any statistical differences between politically connected and non-connected firms. First, to the extent that high leverage or low taxation reflects a benefit, this benefit may accrue mostly to unlisted firms connected with politicians. Since financial data

are not widely available for unlisted firms, I cannot test this hypothesis. Second, benefits may be granted industry wide, rather than to specific firms. This is often true in the case of barriers to entry and tax relief. Stigler (1971) discusses several such cases in the U.S. Third, since many connected firms may operate as monopolies or quasi-monopolies, their industry-adjusted financial ratios will be exactly the same as those of their “peers.”

Table 2 provides preliminary univariate statistics for the sample of connected firms and their non-connected peers. (All variables are defined later in this section). It shows that the leverage of connected firms is significantly higher than that of their non-connected peers (28.14 percent vs. 24.19 percent). Connected firms also enjoy significantly lower tax rates (29.67 percent vs. 32.7 percent), have larger market shares (18.04 percent vs. 9.48 percent). The productivity of connected firms is significantly lower than the productivity of non-connected peers. However, on average, the accounting performance and market-to-book ratios are not different from a statistical standpoint. Connected firms are substantially larger (three times larger, on average, in terms of market value of equity), they have more government ownership, and are more likely to be former state-owned enterprises.

[Table 2 goes about here]

A. Leverage.

Leverage is a proxy for access to debt financing. *Leverage* is defined as the ratio of long-term debt (excluding the current portion of long-term debt, pensions, deferred taxes, and minority interest) to 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.

To investigate the relationship between connectedness and leverage, I initially pool all connections together (Table 3, Panel A); next, I categorize them as either (i) connections through the owner and connections through a director (Panel B), or (ii) connections with the

king, president, or minister, or connections with members of parliament and/or close relationships (Panel C).

Unless otherwise specified, all regressions control for whether the company is recently privatized, state-controlled, or dually listed, as well as size (market capitalization), country, and industry, defined according to Campbell (1996).⁴ I identify dual listings (e.g., whether a company is listed on at least two stock markets) from Worldscope. I obtain lists of privatized firms from SDC Platinum; Bortolotti, Fantini and Siniscalco (2001), Dewenter and Malatesta (1997), and Megginson, Nash, and Van Randenborgh (1994), and update these with data kindly provided by Professor Megginson. I use Extel, Worldscope, Claessens *et al.* (2000), Faccio and Lang (2002), and the 2000 “Fortune 500 Global List” to identify government ownership. The “typical base-line” (OLS) regression being performed is:

$$\begin{aligned} Leverage_i = & \alpha + \beta_1 Connected_i + \beta_2 Privatized_i + \beta_3 State-controlled_i + \\ & \beta_4 Dually\ listed_i + \beta_5 Size_i + \sum_1^C \delta_c Country_c + \sum_1^K \gamma_k Industry_k + u_i \end{aligned} \quad (1)$$

Each Panel in Table 3 refers to a different set of regressions, using different measures of connections. An alternative approach would be to look at changes in leverage ratios (as well as taxation and market share) before and after the initial date the connection was made. However, a precise event date can be identified for only a small proportion of firms.⁵

Connected firms have significantly higher leverage than non-connected ones. Furthermore, leverage is marginally higher when connections are stronger. For example, the excess leverage is marginally higher for firms connected through their owner, than for firms

⁴ 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).

⁵ For such a subsample, Boubakri, Cosset, and Saffar (2009) document that leverage increases significantly after the establishment of a new political connection.

connected through a director. Leverage is the highest in cases of close relationships (coeff. = 7.209); next highest for firms connected with the king, the president, or a minister (coeff. = 3.597); and lowest for connections with a member of parliament (coeff. = 1.035). Results are robust to the exclusion of financial companies (see Table 6, Panel B).

[Table 3 goes about here]

While connected firms are more levered than non-connected ones, they do not necessarily enjoy a benefit in the form of reduced costs of debt financing. For the whole sample, the average interest rate on debt (interest paid/total debt) is only marginally lower for connected firms (a difference of -0.07 percent) and far from significance (this result is not formally reported in a table). For companies connected with a minister, however, the average interest rate on debt is lower by 1.14 percentage points (p-value = 0.05), supporting the view that connections with more influential politicians are worth more.

B. Taxation.

The variable *tax* is defined as the ratio of Income Taxes/Pretax Income $\times 100$. In the calculation of the tax variable, I exclude companies with negative earnings and companies that display a tax rate above 100 percent.⁶

The results indicate that connected firms enjoy lower taxation than their non-connected peers. The difference between the tax rate of connected vs. unconnected firms, however, is not statistically significant. Results are significant only for the one subgroup of connected firms that displays relatively stronger connections: companies connected through their

⁶ Tax rates above 100 percent might simply reflect data errors. At the same time, it might indeed be the case that the estimated tax rates are above 100 percent. One possible reason for the estimated tax rates to exceed 100 percent relates to the difference between reported income and taxable income, which is the case in many countries. Consider a country with a marginal corporate income tax rate of 10 percent. If a firm with a reported profit of \$100 is reporting costs for \$1,000 that are not immediately tax deductible, its reported income (\$100) will be lower than its taxable income (\$1,100). This firm will pay taxes for 110 (10 percent of \$1,100), corresponding to a tax rate of 110 percent.

owners. Surprisingly, connections with the king, president, or a minister are associated with insignificantly higher taxation. It could be that connections to the king are obtained because a firm is willing to pay higher taxes, as paying higher taxes directly to the king gets the firm connections that lead to other private benefits.

One problem with analyzing taxation is that tax breaks may be granted industry-wide, rather than for one connected firm, leading to insignificant differences across firms. To assess this possibility, I rerun all tax regressions in Tables 3 through 6, eliminating industry dummies (results not reported for space reasons). Results are essentially unchanged after the exclusion of industry dummies. A second limitation is that, while my tax variable captures tax breaks in the form of special deductions, it does not reflect tax savings that occur when companies are allowed to under-report income. Third, if corporate tax rates are graduated in some countries, then tax rates could be low for connected firms not because they're getting favors from the government, but because their profitability is lower. Typically, firms in countries in which tax rates are graduated tend to depend on the *level* of pre-tax profits. Thus, a way to address this concern is to add a control for the firm's pre-tax income in the tax regressions. (These results are not formally reported in a table). Interestingly, pre-tax income turns out to be negatively correlated with tax rates. More importantly, the results on the connection variables maintain the same sign as those in Table 3, with only "connections to the owners" being associated with significantly lower tax rates.

C. Market share.

Market share may come either from a real monopolistic or quasi-monopolistic position, from some advantage in obtaining concessions or licenses, or from sizeable government contracts. Alternatively, large firms may find connections to be more valuable, and, therefore, be more likely to establish them. In other words, the stakes may be higher for firms

that have monopoly power; therefore, these firms may have more incentive to establish connections.

I measure *Market share* as the firm's market capitalization as a proportion of the total market capitalization of all firms in the same country and two-digit SIC industry (percent). I use market cap instead of sales because the sample includes financial companies. However, results are similar if I use sales instead of market capitalization and exclude financial companies.

The evidence on the market share variable is also strong. Connected firms enjoy a significantly higher market share than non-connected peers. In particular, market share is especially higher when the connection is through close relationships (coeff. = 5.766). These results confirm that stronger connections are associated with, at least at the margin, sharper differences between connected and non-connected firms.

D. Productivity.

Are connected firms more or less productive than non-connected companies? To estimate productivity, I assume a standard Cobb-Douglas production function:

$$Y_i = P_i K_i^\alpha L_i^\beta M_i^\gamma \quad (2)$$

where Y_i is firm i 's output, measured by its revenues (in US\$); K_i are inputs of capital, measured by total assets (in US\$); L_i are inputs of labor, measured by the number of employees; and M_i are inputs of materials, measured by the cost of goods sold (in US\$). P_i is firm i 's total-factor productivity. α , β , and γ are the output elasticities of capital, labor, and inputs, respectively. To estimate P_i , I first take natural logs of (2):

$$y_i = p_i + \alpha k_i + \beta l_i + \gamma m_i + \varepsilon_i \quad (3)$$

where p_i , k_i , l_i , and m_i are the natural logs of total-factor productivity and inputs of capital, labor and materials, respectively, and ε_i is an error term. I then use ordinary least squares to estimate (3), and solve it for p_i . Thus, the estimated *Productivity*, \hat{p}_i , is calculated as:

$$\hat{p}_i = y_i - \hat{\alpha}k_i - \hat{\beta}l_i - \hat{\gamma}m_i \quad (4)$$

In general, connected companies appear to be as productive as their non-connected counterparties. However, productivity is significantly lower when the connection is through a director. On the other hand, productivity is higher when the connection is with the king, the president, or a minister. However, these results are overall mixed, because in some instances stronger connections are associated with lower, and in other instances they are associated with higher productivity.

E. Accounting performance and market valuation.

Here, there are two measures of company performance/value of interest:

- *Return on assets* (ROA) is the ratio of a company's net income prior to financing costs to total assets ($\times 100$).
- *Market-to-book* is computed as 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.

One might expect connected firms to report better performance because of benefits obtained from connections. Furthermore, better performing firms may become connected to *maintain* their power and performance. Poorly performing companies may become connected for two reasons. First, they may seek connections as a way to obtain relief from some of their problems. Second, firms owned or managed by politicians may be poor performers because their managers lack the skills needed to run a successful company. In both cases, connected firms may underperform even though connections may be value-enhancing. Connected firms might also have to devote substantial resources to their rent-seeking activities, which may well eliminate any advantage from the connections they have (see Fisman, 2001; Johnson and Mitton, 2002). De Soto (1989) argues that, in Peru, bribes to curry favor replace the taxes that companies do not pay. Shleifer and Vishny (1994) note that

relationships between politicians and firms have a price. While politicians will be willing to provide subsidies to firms run by independent managers, they will want firms to pay them back by pursuing social policy goals.⁷

Results for my measure of company performance indicate that connected firms are poor performers. The ROA of connected firms is lower by 2.41 percentage points (p-value < 0.01), and their market-to-book ratio is lower by 0.48 (difference only marginally significant). It is not clear which type of connection is associated with lower profitability. All subgroups of connected firms exhibit significantly lower ROA than their non-connected peers. Companies connected through the weakest relationships (e.g., those connected through a director, and those connected with a member of parliament) have the lowest market valuation.

Given the existing evidence that connections add value,⁸ my interpretation is that the poor accounting performance of connected firms likely reflects ex-ante underperformance. In other words, the performance of these companies is low even though political connections, on average, add value to the sample firms. This interpretation is consistent with the evidence in Boubakri, Cosset, and Saffar (2009) who, for a sub-sample of politically-connected firms whose precise connection date could be identified, show that the performance of connected firms increases significantly subsequent to the establishment of a connection.

⁷ To test for the possible level of overemployment 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 is there a significant difference in the level of employment by connected vs. non-connected firms (results not reported to save space). The difference is generally very small in economic terms (the coefficient of the connection dummy is -0.001), far from significant, and generally has the wrong sign, i.e., connected firms employ fewer people. The data do not allow examination of other interesting sources of costs across countries, e.g., the remuneration of politicians who sit on boards of directors or payments made to politicians, whether legally (i.e., campaign contributions) or illegally.

⁸ See, for example, Aggarwal, Meschke, and Wang (2007); Faccio (2006); Ferguson and Voth (2008); Goldman, Rocholl, and So (2009); Gulen, Cooper, and Ovtchinnikov (2009); Ramalho (2003); and Roberts (1990).

IV. Cross country evidence

A. Country-level results.

Analysis of country-level results is important because the benefits of political connections may vary by country. In the British system, a member of Parliament has no unusual power because voting occurs by party, while representatives in the U.S. vote independently on many issues. Because there are just a handful of connected firms in many countries, I focus on the top countries in terms of (i) number of connected firms, (ii) proportion of politically connected listed firms, or (iii) connected firms as a proportion of the market capitalization (omitting Ireland because it has only two connected firms).

The results are in Table 4. For all except Italy, connected firms display higher leverage. Leverage is significantly higher for connected firms in Malaysia, Russia, Thailand, and the United Kingdom. In Italy, leverage is not only lower, but significantly so. In all seven countries, connected firms are subject to marginally lower rates of taxation, although the results always lack statistical significance at conventional levels.

For five of the seven countries, connected firms have higher market share. This relationship is statistically significant and economically large for the Russian sample. The productivity of connected firms is lower than the productivity of non-connected companies in four out of seven countries; however, this difference is statistically significant only in Russia. Connected firms exhibit lower ROA in all countries but Japan; the difference is significant in Indonesia, Italy, Russia, and Thailand. Firms in the U.K. exhibit significantly lower market-to-book ratio. Connected firms (insignificantly) out-perform non-connected peers (in market-to-book terms) in Japan, Malaysia, and Russia.

[Table 4 goes about here]

B. Where are differences greatest?

To test whether connections are more important in countries with higher levels of corruption, or in less developed ones, I analyze interaction dummies between connections and corruption, as well as interactions between connections and per-capita GDP.

As a proxy for corruption, I use the average of four indexes used elsewhere as measures of perceived corruption:⁹ the Business International index; the International Country Risk index; the Kaufmann, Kraay and Zoido-Lobaton index (<http://www.worldbank.org/wbi/governance/datasets.html#dataset>); and the Transparency International index (www.transparency.org). Corruption indexes are rescaled from 0 to 10, so that lower scores correspond to lower levels of corruption. The Business International's (Economist Intelligence Unit) index assesses 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. The International Country Risk index assessing the corruption in government indicates whether "high government officials are likely to demand special payments" and whether "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." The Kaufmann *et al.* Corruption index 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."

⁹ The same results obtain if the individual indexes are used.

Finally, Transparency International 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.” $\ln\{GDP\ (per\ capita)\}$ is the natural log of Gross Domestic Product (in US\$) on a purchasing power parity basis divided by population; computed for 1999 (Source: World Bank, <http://sima-ext.worldbank.org/query/>).

It is particularly important to control for per-capita GDP to avoid spurious findings, as corruption is correlated with many other country-level variables. For example, the correlation between corruption and per-capita GDP is -0.77. At the same time, the inclusion of highly correlated variables may induce multicollinearity problems, so that the estimated coefficients for the variables of interest may be biased. To address multicollinearity issues, corruption and per-capita GDP are orthogonalized using a modified Gram-Schmidt procedure. As a result of this procedure, the corruption and per-capita GDP variables employed in the analysis are demeaned.

Table 5 shows that the earlier documented differences between connected and non-connected firms are particularly sharp in highly corrupt systems. The results are more mixed with respect to per-capita GDP, as, for some variables, lower per-capita GDP widens the differences, while for other variables, a lower per-capita GDP shrinks the differences between connected and non-connected firms.

In the leverage regression, the coefficient of the interaction between the general connection variable and corruption is 2.405 (significant at the 1 percent level). The tax rates of connected firms are also lower in more corrupt countries, although insignificantly so. The market share of connected firms increases insignificantly with corruption.

Interestingly, the productivity of connected firms decreases significantly with the level of corruption in the country. Similarly, the accounting performance of connected firms significantly deteriorates with the level of corruption in the country, while their market-to-book ratio does not change in a significant way. In countries with higher corruption, this may suggest that while connected firms are relatively inefficient, connections provide the benefits that allow them to more than compensate for any lack of management skills.

Table 5 also confirms that the type and strength of connections matters. For market share a connection through the owner, rather than through a director, has a greater marginal effect when corruption increases. (Curiously, the leverage regression shows lower leverage for companies connected through the owner). Firms connected through close relationships exhibit greater differences in their leverage, taxation, and market share as corruption increases.

[Table 5 goes about here]

V. Robustness tests.

A. Various empirical tests.

I perform a number of robustness tests on the results. First, I split the sample between countries with corruption above the sample median (Table 6, Panel A) and countries with corruption equal to or below the median (Panel B). The excess leverage of connected firms is significant in highly corrupt countries; however, market share is significant only in countries with relatively low corruption. As before, taxation and productivity are never significantly different between connected and non-connected firms. For both samples, the ROA of connected firms is significantly worse than the ROA of non-connected firms. However, this poorer accounting performance does not result in below-market valuation when the connected firm operates in a country with higher corruption.

Panel C of Table 6 excludes Malaysia and Indonesia, as Fisman (2001) and Johnson and Mitton (2003) have already documented substantial effects associated with connections in those countries. The basic results continue to hold after excluding these two countries. Exclusion of the UK and the US (with most firms) does not change the results, either.

Panel D excludes financial firms (SIC 6000-6999). Non-financial connected companies continue to exhibit significantly higher leverage than their peers and significantly greater market shares. Once again, they significantly underperform on an accounting basis.

Panel E excludes government-controlled and privatized firms, whose objectives may be other than to maximize shareholder value and which may exhibit abnormal ratios. Results are qualitatively unchanged after this exclusion. Results do not appear to be driven by outliers (Panel F). In fact, key results are robust to truncating the data at the 5th and 95th percentiles of observations for the dependent variable. Finally, the results do not appear to be driven by the inclusion of a few countries with no politically connected firms (Panel G).

[Table 6 goes about here]

B. Direction of causality: Anecdotal evidence.

As, because of data limitations, I employ OLS regressions throughout the analysis, it is not possible to infer any causality from the results reported. However, anecdotal evidence is more supportive of the idea that high leverage, low taxes, and larger market share reflect benefits (e.g., are the consequence) of connections, rather than being the cause. I report some of these interesting cases in this section.

Anecdotal evidence suggests that connected firms enjoy easier access to debt financing from state-controlled banks, even though they are not worth this extra credit. For example, 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 the 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). In the aftermath of the Asian financial crisis, when the Indonesian Bank Restructuring Agency published the names of Indonesia's main corporate borrowers, Suharto's children figured on the top of the list: "Second on the list, with 3.5 trillion rupiah in loans, is Timor Putra Nasional, the auto firm controlled by Tommy Suharto. Number five, with 2.9 trillion rupiah in debt, is a petrochemical company owned by the timber tycoon Prajogo Pangestu and Suharto's second son, Bambang Trihatmodjo."¹⁰ In 1986, François Pinault, the controlling shareholder of Pinault SA (France) obtained a 250 million FF grant from the government (US\$40 million). By 1997, Crédit Lyonnais' credits and stakes in Pinault had reached a value of 12 billion FF (US\$2.14 billion) (Calvi and Meurice, 1999; Gay and Monnot, 1999). Similarly, Italian Prime Minister Silvio Berlusconi was accused of financing 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).

Similarly, evidence suggests that connections lead to preferential tax treatment. In 1996, Russian President Boris Yeltsin signed a decree giving tax breaks and other aid potentially worth more than US\$1 billion to Norilsk Nickel, one of the country's richest and most influential industrial giants. Norilsk was controlled by Uneximbank, whose president, Vladimir Potanin, was shortly thereafter appointed deputy prime minister (The Moscow Times, 1996). Similarly, when in 1996 Pinault SA obtained the cash contribution from the French government, it was also given a tax exemption of 250 million FF (Gay and Monnot, 1999).

¹⁰ Arnold, Wayne, "Indonesia's repo man: Eko Budianto has ordered corporate cronies from the Suharto regime to pay back the billions they owe Indonesian banks or he'll seize their assets, even if it means enlisting the army to help him," The New York Times, 31 July 1999.

More generally, in Indonesia, a condition for IMF lending in the aftermath of the Asian financial crisis was that Suharto sign an agreement compelling companies controlled by his family to give up lucrative government concessions, monopolies, licenses, government contracts, and tax breaks that protected them from competition in their domestic market.¹¹ Such benefits were found to be huge.

Anecdotes on market power are legion. As described in Backman (1999, pp. 266-268), “money from the [Suharto] 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 are rent-seeking “private sector businessmen who benefit enormously from close relations” with government leaders by obtaining “not only protection from foreign competition, but also concessions, licenses, monopoly rights, and government subsidies” (Yoshihara, 1988, pp. 3-4, 71). Relationships became so widespread that by 1995 almost 20 percent of the Malay ruling party’s division chairmen were millionaire businessmen (Gomez and Jomo, 1997, p. 26). In the Philippines, connected firms could easily obtain licenses by paying a 10 percent fee (Hutchcroft, 1998, p.73).

VII. Conclusion.

Several findings on the relationship between politics and business are revealed in this examination of connected corporations across several countries. Connected companies differ sharply from those not connected. On average, leverage is higher in connected corporations. Connected firms also enjoy marginally lower taxation, and they display much greater market power. Connected firms display lower ROA and market valuation than their peers. These results are generally consistent across countries. This evidence is consistent with, and

¹¹ Rosenthal, A. M., “What Suharto Knew,” *The New York Times*, 10 March 1998. Pura, Raphael, “Rising Resentment: Scrutiny of Suharto Wealth Is Intensifying in Jakarta,” *The Asian Wall Street Journal*, 1 June 1998.

complements the results in previous studies of preferential access to credit by politically connected firms. For example, Kwaja and Mian (2004) show that connected firms in Pakistan enjoy greater access to debt financing and, although they exhibit significantly higher default rates, they pay no higher interest rates than their non-connected peers.¹² To the best of my knowledge, however, this is the first study to systematically document tax discounts or strong market positions among connected owners.

I also show that differences between connected and non-connected firms are marginally more important when political links are stronger. Greater differences are found when companies are connected through owners (rather than directors), through close relationships, or through a minister (rather than a member of parliament). Differences are also greater when the firm operates in countries with higher degrees of corruption. This last result, in particular, complements the findings in Faccio (2006), who shows larger net benefits of connections in more corrupt countries. This paper indicates some of the channels through which such increase in value may be realized.

¹² Empirical evidence of higher borrowing by politically connected firms is also reported in Chiu and Joh (2004), Cull and Xu (2005), and Johnson and Mitton (2003).

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Table 1. Country Distribution of Firms with Political Connections.

No. of firms with available data is the number of firms with financial data available in Worldscope. *No. of connected firms* is the number of firms whose 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

Country	No. of firms with available data	No. of connected firms	Country	No. of firms with available data	No. of connected firms
Argentina	34	0	New Zealand	47	0
Australia	257	2	Norway	113	0
Austria	87	1	Peru	24	0
Belgium	104	5	Philippines	100	5
Brazil	127	0	Poland	32	0
Canada	438	6	Portugal	60	3
Chile	71	2	Russian Fed.	11	4
Czech Rep.	58	0	Singapore	215	16
Denmark	172	7	South Africa	188	0
Finland	91	2	South Korea	271	7
France	519	19	Spain	138	1
Germany	507	10	Sweden	172	3
Greece	90	1	Switzerland	180	4
Hong Kong	381	7	Thailand	204	32
Hungary	26	1	Turkey	78	1
India	257	8	U.K.	1,417	119
Indonesia	116	27	U.S.A.	6,007	13
Ireland	52	2	Venezuela	17	0
Israel	47	2	Colombia	32	0
Italy	178	21	Luxembourg	23	1
Japan	2,322	30	Sri Lanka	18	0
Malaysia	418	81	Taiwan	237	7
Mexico	68	7	Zimbabwe	8	0
Netherlands	179	1			
			All countries	16,191	458

Table 2: Descriptive statistics

Connected companies are those whose 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. *Leverage* is defined as long-term debt (excluding the current portion of long-term debt, pensions, deferred taxes, and minority interest) over total capital $\times 100$. Total capital represents the total investment in the company: the sum of common equity, preferred stock, minority interest, long-term debt, non-equity reserves, and deferred tax liability in untaxed reserves. *Tax* is income taxes over pretax income $\times 100$. *Market share* is firm's market capitalization over the total market capitalization of all firms in the same country and two-digit SIC industry (%). *Productivity* is the natural log of total-factor productivity estimated assuming a Cobb-Douglas production function. *ROA* is the ratio of a company's net income prior to financing costs to total assets ($\times 100$). *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. *Mkcap* is the company's market capitalization, defined as market price as of year end \times common shares outstanding (in millions of US\$). *State* represents the voting stake held by the central and local government. It is 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. *Privatized* is a dummy that equals 1 if the company is a privatized firm, and 0 otherwise. *Dually listed* is a dummy that equals 1 if the company is listed on at least two stock markets, and 0 otherwise.

	Connected		Non-connected		T-test	Kruskal-Wallis test	Test of proportion
	Mean	Median	Mean	Median			
Leverage	28.14	22.67	24.19	18.62	0.00	0.00	
Tax	29.67	30.00	32.70	34.43	0.00	0.00	
Market share	18.04	5.26	9.48	0.61	0.00	0.00	
Productivity	0.74	0.73	0.80	0.79	0.05	0.00	
ROA	2.91	3.41	3.30	3.94	0.67	0.06	
Market-to-book	2.09	1.29	2.77	1.46	0.66	0.00	
Mkcap (\$M)	3,634.65	309.41	1,265.04	166.85	0.00	0.00	
State (%)	1.79	0.00	0.88	0.00	0.00	0.04	
Privatized (%)	4.37		1.33				0.00
Dually listed (%)	21.40		20.78				0.75

Table 3: Characteristics of Connected Firms.

All (OLS) regressions control for whether the firm has recently been privatized, or is state-controlled, or is dually listed, as well as for firm size ($\ln\{\text{mkcap}\}$), country and industry dummies. Industry is defined according to Campbell (1996). *Leverage* is defined as long-term debt (excluding the current portion of long-term debt, pensions, deferred taxes, and minority interest) over total capital $\times 100$. Total capital represents the total investment in the company: the sum of common equity, preferred stock, minority interest, long-term debt, non-equity reserves, and deferred tax liability in untaxed reserves. *Tax* is income taxes over pretax income $\times 100$. *Market share* is firm's market capitalization over the total market capitalization of all firms in the same country and two-digit SIC industry (%). *Productivity* is the natural log of total-factor productivity estimated assuming a Cobb-Douglas production function. *ROA* is the ratio of a company's net income prior to financing costs to total assets ($\times 100$). *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. *Connected* is a dummy that equals 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, and 0 otherwise. *Connected through the owner* is a dummy that equals 1 if the company's controlling shareholder sits in a national parliament, holds office in the government, is the head of state, or is closely related to a top politician/political party, and 0 otherwise. *Connected through a director* is a dummy that equals 1 if a company's top director sits in a national parliament, holds office in the government, is the head of state, or is closely related to a top politician/political party, and 0 otherwise. *Connected with king, president or minister* is a dummy that equals 1 if a controlling shareholder or top director of the company holds a government office, or is king/president of the country, and 0 otherwise. *Connected with MP* is a dummy that equals 1 if a controlling shareholder or top director of the company sits in a national parliament, and 0 otherwise. *Close relationships* is a dummy that equals 1 if a controlling shareholder or top director of a company is closely related to at least one top politician, and 0 otherwise. Close relationships include (1) companies whose top executives or large shareholders have been described in the press as having a friendship with a head of state, government minister, or member of parliament; (2) connections with officials who had served as heads of state or prime ministers in the past; (3) companies whose former top executives or large shareholders entered politics; (4) connections with foreign politicians; and (5) other connections identified in prior studies (Gomez and Jomo, 1997; and Johnson and Mitton, 2003). Standard errors (reported in parentheses below the coefficients) are computed using Huber/White correction for heteroskedasticity (see White, 1980). ^a, ^b, ^c: Significantly different from zero at the 1%, 5%, or 10% level. Each panel refers to separate regressions, and each column to a different regression.

	Leverage	Tax	Market share	Productivity	ROA	Market-to-book
Panel A: General results						
Connected	3.014 ^a (1.146)	-0.715 (0.859)	2.198 ^b (1.104)	-0.021 (0.021)	-2.410 ^a (0.517)	-0.482 ^c (0.286)
Privatized	3.719 ^b (1.705)	-1.735 (1.109)	12.806 ^a (2.117)	-0.009 (0.023)	-3.847 ^a (0.633)	-1.589 (0.987)
State-controlled	1.097 (3.922)	0.457 (2.272)	8.228 ^b (3.739)	-0.027 (0.080)	-1.666 (1.154)	-2.605 (1.720)
Dually listed	3.798 ^a (0.527)	-0.981 ^b (0.405)	-0.382 (0.388)	-0.021 ^b (0.008)	0.221 (0.425)	0.423 (1.068)
Size	0.711 ^a (0.114)	0.674 ^a (0.086)	2.917 ^a (0.094)	0.023 ^a (0.002)	1.581 ^a (0.111)	0.366 ^b (0.183)
Intercept	4.176 (3.847)	32.624 ^a (8.883)	-16.189 ^a (2.268)	0.060 (0.072)	-16.576 ^a (1.780)	-3.994 (2.476)
Country dummies	Y	Y	Y	Y	Y	Y
Industry dummies	Y	Y	Y	Y	Y	Y
R ² adj.	11.51%	27.71%	37.40%	8.81%	6.34%	1.86%
N. Obs.	16,138	12,304	16,147	11,551	15,687	16,143

Table 3: Characteristics of Connected Firms (Cont'd).

	Leverage	Tax	Market share	Productivity	ROA	Market-to-book
Panel B: Director vs. shareholder connection						
Connected through the owner	3.475 ^b (1.742)	-2.457 ^c (1.419)	2.825 (1.914)	0.051 (0.049)	-2.994 ^a (0.888)	-0.111 (0.337)
Connected through a director	1.948 (1.438)	0.272 (1.005)	1.875 (1.274)	-0.051 ^b (0.022)	-1.485 ^b (0.587)	-0.659 ^b (0.337)
Privatized	3.771 ^b (1.705)	-1.799 (1.111)	12.838 ^a (2.117)	-0.008 (0.023)	-3.894 ^a (0.633)	-1.578 (0.987)
State-controlled	1.134 (3.921)	0.361 (2.274)	8.268 ^b (3.742)	-0.024 (0.080)	-1.708 (1.153)	-2.591 (1.720)
Dually listed	3.794 ^a (0.527)	-0.974 ^b (0.405)	-0.386 (0.387)	-0.021 ^a (0.008)	0.225 (0.425)	0.422 (1.068)
Size	0.715 ^a (0.114)	0.674 ^a (0.086)	2.916 ^a (0.094)	0.024 ^a (0.002)	1.578 ^a (0.111)	0.367 ^b (0.183)
Intercept	4.154 (3.845)	32.737 ^a (8.893)	-16.167 ^a (2.268)	0.060 (0.072)	-16.494 ^a (1.887)	-3.973 (2.472)
Country dummies	Y	Y	Y	Y	Y	Y
Industry dummies	Y	Y	Y	Y	Y	Y
R ² adj.	11.51%	27.73%	37.41%	8.83%	6.34%	1.86%
N. Obs.	16,138	12,304	16,147	11,551	15,687	16,143
Panel C: Connections with members of parliament vs. connections with ministers						
Connected with king, president, or minister	3.597 (3.402)	0.955 (2.376)	-3.247 (2.930)	0.171 ^c (0.091)	-3.044 ^c (1.671)	0.362 (0.606)
Connected with MP	1.035 (1.441)	-1.021 (0.997)	1.882 (1.252)	-0.028 (0.022)	-1.469 ^b (0.575)	-0.753 ^b (0.361)
Close relationships	7.209 ^a (2.088)	-0.734 (2.014)	5.766 ^b (2.512)	-0.030 (0.071)	-4.281 ^a (1.074)	-0.304 (0.395)
Privatized	3.796 ^b (1.704)	-1.730 (1.109)	12.835 ^a (2.114)	-0.008 (0.023)	-3.886 ^a (0.631)	-1.580 (0.986)
State-controlled	1.162 (3.916)	0.470 (2.272)	8.220 ^b (3.736)	-0.026 (0.080)	-1.704 (1.153)	-2.594 (1.720)
Dually listed	3.788 ^a (0.527)	-0.985 ^b (0.405)	-0.385 (0.388)	-0.021 ^b (0.008)	0.225 (0.425)	0.422 (1.068)
Size	0.708 ^a (0.114)	0.675 ^a (0.087)	2.912 ^a (0.094)	0.023 ^a (0.002)	1.582 ^a (0.111)	0.367 ^b (0.183)
Intercept	4.203 (3.842)	32.613 ^a (8.926)	-16.145 ^a (2.267)	0.060 (0.072)	-15.854 ^a (1.817)	-4.124 ^c (2.473)
Country dummies	Y	Y	Y	Y	Y	Y
Industry dummies	Y	Y	Y	Y	Y	Y
R ² adj.	11.54%	27.71%	37.44%	8.82%	6.36%	1.86%
N. Obs.	16,138	12,304	16,147	11,551	15,687	16,143

Table 4: Country-Level Regressions.

All (OLS) regressions control for whether the firm has recently been privatized, and whether it is state-controlled, dually listed, operates in the financial industry (SIC between 6000 and 6999), as well as for firm size ($\ln\{\text{mkcap}\}$). All regressions include an intercept. Coefficients for these control variables are not reported save space. *Leverage* is defined as long-term debt (excluding the current portion of long-term debt, pensions, deferred taxes, and minority interest) over total capital $\times 100$. Total capital represents the total investment in the company: the sum of common equity, preferred stock, minority interest, long-term debt, non-equity reserves, and deferred tax liability in untaxed reserves. *Tax* is income taxes over pretax income $\times 100$. *Market share* is firm's market capitalization over the total market capitalization of all firms in the same country and two-digit SIC industry (%). *Productivity* is the natural log of total-factor productivity estimated assuming a Cobb-Douglas production function. *ROA* is the ratio of a company's net income prior to financing costs to total assets ($\times 100$). *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. *Connected* is a dummy that equals 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, and 0 otherwise. Standard errors (reported in parentheses below the coefficients) are computed using Huber/White correction for heteroskedasticity (see White, 1980). ^{a, b, c}: Significantly different from zero at the 1%, 5%, or 10% level. Horizontal lines separate different regressions, and each column refers to a different regression.

	Leverage	Tax	Market share	Productivity	ROA	Market-to-book
Indonesia						
Connected	2.273 (5.868)	-0.516 (5.854)	-3.433 (6.713)	0.034 (0.099)	-6.117 ^c (3.511)	-0.178 (0.142)
R ² adj.	13.09%	6.52%	10.61%	34.91%	14.17%	31.37%
N. Obs.	116	66	116	34	115	116
Italy						
Connected	-10.726 ^b (5.089)	-3.927 (3.599)	0.350 (5.411)	0.028 (0.160)	-1.222 ^c (0.707)	-0.525 (0.433)
R ² adj.	25.85%	4.49%	23.15%	12.26%	31.22%	18.96%
N. Obs.	178	149	178	128	176	178
Japan						
Connected	0.304 (4.310)	-4.079 (2.629)	2.054 (3.203)	-0.031 (0.033)	0.444 (0.689)	0.241 (0.149)
R ² adj.	2.80%	1.60%	15.84%	3.66%	9.16%	9.99%
N. Obs.	2,322	1,786	2,322	2,156	2,322	2,322
Malaysia						
Connected	10.708 ^a (2.546)	-0.792 (2.581)	0.967 (3.109)	0.029 (0.135)	-0.956 (1.575)	0.189 (0.768)
R ² adj.	6.54%	8.01%	17.30%	19.30%	2.08%	5.39%
N. Obs.	418	300	418	41	398	418
Russia						
Connected	9.233 ^a (2.457)	-73.266 (44.209)	67.662 ^b (20.245)	-0.445 ^b (0.102)	-6.129 ^b (1.348)	0.612 (1.185)
R ² adj.	73.73%	64.91%	55.55%	51.45%	89.68%	54.33%
N. Obs.	11	8	11	8	6	11
Thailand						
Connected	17.266 ^b (6.785)	-3.020 (4.724)	-6.081 (4.452)	-0.226 (0.374)	-7.018 ^b (2.846)	-0.059 (0.243)
R ² adj.	10.46%	4.24%	32.58%	24.78%	5.05%	5.61%
N. Obs.	204	119	204	24	204	204
U.K.						
Connected	3.566 ^c (2.094)	-1.478 (1.161)	2.819 (1.735)	-0.018 (0.030)	-1.451 (1.030)	-0.704 ^b (0.341)
R ² adj.	5.58%	4.91%	23.21%	0.65%	2.75%	4.57%
N. Obs.	1,417	1,200	1,417	1,155	1,405	1,417

Table 5: Differences Across Countries.

Panels report different (OLS) regressions, and each column refers to a different regression. *Leverage* is defined as long-term debt (excluding the current portion of long-term debt, pensions, deferred taxes, and minority interest) over total capital $\times 100$. Total capital represents the total investment in the company: the sum of common equity, preferred stock, minority interest, long-term debt, non-equity reserves, and deferred tax liability in untaxed reserves. *Tax* is income taxes over pretax income $\times 100$. *Market share* is firm's market capitalization over the total market capitalization of all firms in the same country and two-digit SIC industry (%). *Productivity* is the natural log of total-factor productivity estimated assuming a Cobb-Douglas production function. *ROA* is the ratio of a company's net income prior to financing costs to total assets ($\times 100$). *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. *Connected* is a dummy that equals 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, and 0 otherwise. *Connected through the owner* is a dummy that equals 1 if the company's controlling shareholder sits in a national parliament, holds office in the government, is the head of state, or is closely related to a top politician/political party, and 0 otherwise. *Connected through a director* is a dummy that equals 1 if a company's top director sits in a national parliament, holds office in the government, is the head of state, or is closely related to a top politician/political party, and 0 otherwise. *Connected with king, president or minister* is a dummy that equals 1 if a controlling shareholder or top director of the company holds a government office, or is king/president of the country, and 0 otherwise. *Connected with MP* is a dummy that equals 1 if a controlling shareholder or top director of the company sits in a national parliament, and 0 otherwise. *Close relationships* is a dummy that equals 1 if a controlling shareholder or top director of a company is closely related to at least one top politician, and 0 otherwise. Close relationships include (1) companies whose top executives or large shareholders have been described in the press as having a friendship with a head of state, government minister, or member of parliament; (2) connections with officials who had served as heads of state or prime ministers in the past; (3) companies whose former top executives or large shareholders entered politics; (4) connections with foreign politicians; and (5) other connections identified in prior studies (Gomez and Jomo, 1997; and Johnson and Mitton, 2003). *Ave. Corruption* is the average of four indexes used elsewhere as measures of perceived corruption: the Business International index, the International Country Risk index, the Kaufmann, Kraay and Zoido-Lobaton index (<http://www.worldbank.org/wbi/governance/datasets.html#dataset>), and Transparency International index (www.transparency.org). Corruption indexes are rescaled from 0 to 10, so that lower scores correspond to lower levels of corruption. *Ln{GDP (per capita)}* is the natural log of Gross Domestic Product (in US\$) on a purchasing power parity basis divided by population; computed for 1999 (Source: World Bank, <http://simext.worldbank.org/query/>). Because of multicollinearity issues, the corruption and per-capita GDP employed have been orthogonalized using a modified Gram-Schmidt procedure. Standard errors (reported in parentheses below the coefficients) are computed using Huber/White correction for heteroskedasticity (see White, 1980). ^a, ^b, ^c: Significantly different from zero at the 1%, 5%, or 10% level.

	Leverage	Tax	Market share	Productivity	ROA	Market-to-book
Panel A: General results						
Connected	-0.192 (1.439)	-0.177 (1.057)	3.671 ^a (1.295)	-0.013 (0.025)	-1.749 ^a (0.499)	-1.033 ^b (0.436)
Connected \times Ave. Corruption	2.405 ^a (0.846)	-0.849 (0.675)	0.077 (0.824)	-0.030 ^c (0.018)	-1.614 ^a (0.422)	-0.545 (0.529)
Connected \times Ln{GDP (per capita)}	-2.109 ^c (1.108)	-1.323 (0.900)	6.201 ^a (1.043)	0.018 (0.025)	1.555 ^a (0.439)	0.063 (0.214)
Ave. Corruption	1.311 ^a (0.210)	-0.296 ^c (0.162)	3.916 ^a (0.256)	-0.057 ^a (0.005)	0.777 ^a (0.141)	0.533 (0.585)
Ln{GDP (per capita)}	1.681 ^a (0.193)	4.966 ^a (0.143)	-6.202 ^a (0.215)	0.054 ^a (0.004)	-2.196 ^a (0.135)	-0.364 (0.229)
Additional controls: Recently privatized, state-controlled, dually listed, size and industry dummies.						
R ² adj.	6.42%	13.07%	20.57%	5.81%	4.29%	0.15%
N. Obs.	16,138	12,304	16,147	11,551	15,687	16,143

Table 5: Differences Across Countries (Cont'd).

	Leverage	Tax	Market share	Productivity	ROA	Market-to-book
Panel B: Director vs. shareholder connection						
Connected through the owner	-7.584 ^a (2.211)	-1.409 (1.844)	7.505 ^a (2.843)	0.011 (0.058)	-1.637 (1.050)	-0.831 (0.567)
Connected through a director	1.998 (1.763)	1.005 (1.367)	0.815 (1.407)	-0.039 (0.024)	-1.294 ^b (0.560)	-0.872 ^b (0.346)
Connected through the owner × Ave. Corruption	4.368 ^a (1.278)	-0.810 (1.096)	0.167 (1.332)	-0.014 (0.026)	-1.719 ^b (0.727)	-0.584 (0.510)
Connected through a director × Ave. Corruption	0.824 (1.437)	-0.648 (1.182)	-0.270 (1.352)	-0.051 ^c (0.029)	0.133 (0.628)	-0.468 (0.466)
Connected through the owner × Ln{GDP (per capita)}	-4.574 ^a (1.402)	-2.417 ^b (1.136)	8.621 ^a (1.768)	0.059 (0.052)	2.426 ^a (0.524)	0.025 (0.289)
Connected through a director × Ln{GDP (per capita)}	-0.163 (1.457)	0.112 (1.342)	3.734 ^a (1.307)	0.001 (0.026)	-0.040 (0.542)	0.222 (0.223)
Ave. Corruption	1.329 ^a (0.209)	-0.302 ^c (0.162)	3.897 ^a (0.256)	-0.057 ^a (0.005)	0.772 ^a (0.141)	0.531 (0.583)
Ln{GDP (per capita)}	1.681 ^a (0.193)	4.958 ^a (0.143)	-6.192 ^a (0.214)	0.054 ^a (0.004)	-2.193 ^a (0.135)	-0.365 (0.229)
Additional controls: Recently privatized, state-controlled, dually listed, size and industry dummies.						
R ² adj.	6.47%	13.08%	20.61%	5.85%	4.31%	0.15%
N. Obs.	16,138	12,304	16,147	11,551	15,687	16,143

Table 5: Differences Across Countries (Cont'd).

	Leverage	Tax	Market share	Productivity	ROA	Market-to-book
Panel C: Connections with members of parliament vs. connections with ministers						
Connected with king, president, or minister	-0.991 (7.075)	2.520 (3.715)	3.322 (3.938)	0.128 (0.126)	-4.422 ^b (2.009)	-0.138 (0.687)
Connected with MP	-0.256 (1.623)	-0.624 (1.207)	2.058 (1.406)	-0.010 (0.027)	-0.855 ^c (0.518)	-1.092 ^a (0.411)
Close relationships	-0.187 (3.387)	0.092 (2.857)	10.114 ^a (3.850)	-0.106 (0.081)	-5.663 ^a (1.350)	-2.143 (1.459)
Connected with king, president, or minister \times Ave. Corruption	1.967 (2.057)	-1.220 (1.575)	-2.980 (1.969)	0.000 (0.045)	-0.539 (1.155)	-0.991 (0.815)
Connected with MP \times Ave. Corruption	0.932 (1.560)	-1.596 (1.362)	-1.347 (1.076)	-0.009 (0.015)	0.045 (0.680)	-0.480 (0.509)
Close relationships \times Ave. Corruption	2.062 ^a (0.165)	-0.735 ^a (0.147)	1.347 ^a (0.212)	0.004 (0.003)	-0.025 (0.115)	0.192 (0.170)
Connected with king, president, or minister \times Ln{GDP (per capita)}	0.397 (4.657)	0.844 (1.786)	3.610 ^c (2.131)	0.096 (0.084)	1.340 (1.141)	-0.018 (0.604)
Connected with MP \times Ln{GDP (per capita)}	-2.362 ^c (1.330)	-0.720 (1.340)	6.484 ^a (1.112)	-0.005 (0.021)	0.297 (0.551)	0.059 (0.227)
Close relationships \times Ln{GDP (per capita)}	-5.536 ^b (2.371)	-1.512 (2.250)	8.755 ^a (2.860)	0.054 (0.073)	2.079 ^b (1.003)	-0.145 (0.448)
Ave. Corruption	-1.536 ^a (0.278)	0.652 ^a (0.227)	2.028 ^a (0.373)	-0.063 ^a (0.006)	0.793 ^a (0.232)	0.256 (0.401)
Ln{GDP (per capita)}	3.501 ^a (0.237)	4.323 ^a (0.189)	-5.013 ^a (0.286)	0.058 ^a (0.005)	-2.220 ^a (0.174)	-0.196 (0.187)
Additional controls: Recently privatized, state-controlled, dually listed, size and industry dummies.						
R ² adj.	7.46%	13.33%	21.13%	5.85%	4.32%	0.16%
N. Obs.	16,138	12,304	16,147	11,551	15,687	16,143

Table 6: Robustness Tests.

Panels report different (OLS) regressions, and each column refers to a different regression. With the exception of Panel E, all regressions control for whether the firm is politically connected, has recently been privatized, is state-controlled, dually listed, as well as for firm size ($\ln\{mkcap\}$), country and industry dummies. Regressions in Panel E, however, do not control for whether the firm has recently been privatized or is state-controlled. Leverage, Tax, ROE, and Stock return regressions include country and industry dummies. Industry is defined according to Campbell (1996). Coefficients for these control variables are not reported to save space. *Leverage* is defined as long-term debt (excluding the current portion of long-term debt, pensions, deferred taxes, and minority interest) over total capital $\times 100$. Total capital represents the total investment in the company: the sum of common equity, preferred stock, minority interest, long-term debt, non-equity reserves, and deferred tax liability in untaxed reserves. *Tax* is income taxes over pretax income $\times 100$. *Market share* is firm's market capitalization over the total market capitalization of all firms in the same country and two-digit SIC industry (%). *Productivity* is the natural log of total-factor productivity estimated assuming a Cobb-Douglas production function. *ROA* is the ratio of a company's net income prior to financing costs to total assets ($\times 100$). *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. *Connected* is a dummy that equals 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, and 0 otherwise. Standard errors (reported in parentheses below the coefficients) are computed using Huber/White correction for heteroskedasticity (see White, 1980). a, b, c: Significantly different from zero at the 1%, 5%, or 10% level.

	Leverage	Tax	Market share	Productivity	ROA	Market-to-book
Panel A: Countries with corruption above the sample median						
Connected	4.530 ^a (1.715)	-2.313 (1.468)	0.280 (1.615)	-0.027 (0.037)	-2.023 ^a (0.729)	-0.666 (0.630)
R ² adj.	15.01%	39.42%	39.26%	24.06%	23.63%	2.72%
N. Obs.	5,241	3,927	5,244	3,459	5,141	5,242
Panel B: Countries with corruption equal or below the sample median						
Connected	1.563 (1.499)	0.661 (0.974)	3.801 ^a (1.469)	-0.010 (0.025)	-2.438 ^a (0.746)	-0.467 ^b (0.200)
R ² adj.	10.36%	14.89%	35.62%	6.12%	4.92%	0.30%
N. Obs.	10,897	8,377	10,903	8,092	10,546	10,901
Panel C: All countries except Malaysia and Indonesia						
Connected	2.345 ^c (1.304)	-0.138 (0.901)	2.349 ^b (1.195)	-0.021 (0.022)	-2.095 ^a (0.532)	-0.638 ^b (0.304)
R ² adj.	11.50%	28.78%	38.22%	8.31%	6.45%	1.86%
N. Obs.	15,604	11,938	15,613	11,476	15,174	15,609
Panel D: All industries except financial services (SIC: 6000-6999)						
Connected	2.498 ^b (1.238)	-1.192 (1.017)	3.028 ^b (1.431)	-0.018 (0.021)	-2.356 ^a (0.648)	-0.552 (0.433)
R ² adj.	13.25%	28.66%	40.05%	9.33%	8.13%	3.25%
N. Obs.	12,887	9,548	12,893	10,996	12,538	12,891
Panel E: All companies except government-controlled and privatized firms						
Connected	3.061 ^b (1.202)	-0.397 (0.914)	2.087 ^c (1.107)	-0.025 (0.023)	-2.466 ^a (0.561)	-0.567 (0.345)
R ² adj.	11.00%	28.25%	36.22%	8.81%	6.26%	1.97%
N. Obs.	15,395	11,692	15,404	11,102	14,952	15,400
Panel F: Dependent variable truncated at the 5th and 95th percentiles						
Connected	1.655 ^c (0.974)	-0.325 (0.647)	1.993 ^a (0.628)	-0.024 ^c (0.013)	-1.165 ^a (0.304)	-0.106 ^b (0.048)
R ² adj.	10.88%	30.76%	37.11%	19.21%	15.38%	26.25%
N. Obs.	15,331	11,075	14,573	10,399	14,116	14,529

Table 6: Robustness Tests (Cont'd).

	Leverage	Tax	Market share	Productivity	ROA	Market-to-book
Panel G: All countries with at least one connected firm						
Connected	2.930 ^b (1.146)	-0.726 (0.858)	2.195 ^b (1.105)	-0.020 (0.021)	-2.433 ^a (0.518)	-0.473 (0.289)
R ² adj.	11.14%	27.32%	34.37%	8.12%	6.17%	1.88%
N. Obs.	15,458	11,759	15,465	11,162	15,019	15,463