Political Connections and Corporate Bailouts

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Abstract

We analyze the likelihood of government bailouts of a sample of 450 politically-connected (but publicly-traded) firms from 35 countries over the period 1997 through 2002. We find that politically-connected firms are significantly more likely to be bailed out than similar non-connected firms. Additionally, politically-connected firms are disproportionately more likely to be bailed out when the IMF or World Bank provide financial assistance to the firm's home country. Further, among firms that are bailed out, those that are politically-connected exhibit significantly worse financial performance than their non-connected peers at the time of the bailout and over the following two years. This evidence suggests that, at least in some countries, political connections influence the allocation of capital through the mechanism of financial assistance when connected companies confront economic distress. It may also explain prior findings that politically-connected firms borrow more than their non-connected peers.

Political Connections and Corporate Bailouts

I. Introduction

Anecdotal evidence indicates that, at least in some countries, politically-connected firms have preferential access to debt financing.[1] Scientific evidence supports the anecdotal evidence: Chiu and Joh (2004), Cull and Xu (2005), Faccio (2003), Johnson and Mitton (2003), and Khwaja and Mian (2004) show that politically-connected (but publicly-traded) firms have higher leverage ratios than their non-connected peers. The question arises as to what it is about politically-connected firms that makes lenders more willing to extend credit to them. It could be that lenders receive direct economic support from the governments to which the firms are connected. Or, it could be that lenders are coerced into making economically questionable loans to politicians' friends. Or, lenders may rely upon an implicit government guarantee that politically-connected borrowers or lenders will be bailed out should they encounter financial difficulties. For example, Hutchcroft (1998, p. 138) describes how troubled banks that lent to Philippines President Marcos and his cronies enjoyed important privileges, including "emergency loans and generous equity infusions from state banks." Backman (1999) observes that one of the unfortunate by-products of international aid packages is that they facilitate such economic cronyism.

In this study, we undertake a systematic examination of the link between political connections and corporate bailouts. To do so, we study 450 politically-connected firms in 35 countries over the six-year period 1997-2002 along with a set of matching peer firms. We address such questions as: Do political connections lead to preferential corporate bailouts? Are bailouts of politically-connected firms more likely in countries receiving International Monetary Fund (IMF) or World Bank (WB) rescue packages? Is the financial performance of politically-connected bailed out firms different from that of non-connected bailed out firms?

The answer to the first question is yes. After controlling for other factors, politically-connected (but publicly-traded) firms are more likely to be bailed out than are their non-connected peers. As to the second

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[1] Backman (1999), Calvi and Meurice (1999), Gay and Monnot (1999), Gomez and Jomo (1997), *Financial Times*, "Fiat - The Lex Column," (June 26, 2003), *The New York Times*, "Indonesia's repo man: Eko Budianto has ordered corporate

question, both connected and non-connected firms are more likely to be bailed out when their home government receives an IMF or WB assistance package than when it does not. Additionally, and consistent with the accusations of some critics, when the IMF or WB provide aid, politically-connected firms are disproportionately more likely to be bailed out by their home countries in comparison with their non-connected peers. With regard to the question of whether politically-connected firms have different operating performance, the answer also is yes. Among bailed-out firms, those that are politically-connected exhibit significantly poorer operating performance than their non-connected peers at the time of the bailout and over the following two years. Furthermore, consistent with prior scientific and anecdotal evidence, these firms make greater use of debt financing than their non-connected peers.

The anecdotal and empirical evidence that politically-connected firms make greater use of leverage is subject to a number of possible interpretations. One possibility is that lenders are irrational. A second is that they are coerced into making poor loans to politically-connected enterprises. A third is that lenders receive offsetting government benefits for making such loans. Yet another possibility is that lenders factor into their lending decisions the likelihood that borrowers will be bailed out when they encounter economic distress and, thus, lend more to politically-connected firms who are, in turn, more likely to be bailed out than their non-connected peers.

The evidence that we present is consistent with the last interpretation: politically-connected firms do borrow more than non-connected firms, but they are also more likely to be bailed out by their home governments when they encounter economic turbulence.[2] Furthermore, lenders to connected firms appear to grant them greater leeway before taking action against such borrowers in that these firms have poorer operating performance just prior to the bailout than non-connected firms that are bailed out and they have significantly greater leverage after their bailouts. While our evidence indicates that lenders are willing to lend more to connected borrowers because they can reasonably anticipate a future bailout of troubled loans to these

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" (July 31, 1999).

[2] The study on bailouts closest to ours is probably Brown and Dinç (2004), who investigate whether, in emerging markets, governments are more likely to bail out banks after elections. Their evidence is consistent with the hypothesis that

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borrowers, our data do not rule out the possibilities that lenders may also sometimes be pressured into making weak loans and/or that lenders may receive benefits in other forms.

Tracing through to the ultimate beneficiaries of the bailout is difficult. At one level, creditors benefit because they are bailed out of troubled loans. But, if the bailout is priced ex ante, creditors will just be receiving a fair return on their capital (on average). At a deeper level, then, shareholders benefit because, if the bailout is priced ex ante, their firms are able to borrow at favorable terms, given their credit standing. Of course, it could be that the politicians are the ultimate net beneficiaries because they are able to extract most or all of the rents from borrowers, lenders and other stakeholders. In this study, we are not able to determine who the ultimate beneficiaries of this system of political connections and bailouts are.

One issue that this paper does illuminate is one channel through which political connections affect corporate value. In particular, papers by Roberts (1990), Fisman (2001) and Faccio (2004) show that the equity value of politically-connected firms can be affected by political events. This study shows that one channel through which political connections can influence firm value is corporate bailouts. For example, Fisman finds that share prices of Indonesian companies linked to President Suharto declined in response to bad news about the state of the president's health. It is possible that the fluctuations in share prices were due, at least in part, to decreases in the probability of future bailouts that Suharto's regime would have facilitated had the company experienced later financial difficulties.

The remainder of the paper is organized as follows. Section II presents the definitions and data sources used in assembling a sample of politically-connected companies and a set of non-connected matching firms. Section III describes the way in which corporate and country bailouts are identified. Section IV presents evidence on the determinants of corporate bailouts. Section V analyzes the operating performance and financial leverage of bailed out companies. Section VI presents various sensitivity analyses in which alternative specifications of the sample are used to evaluate the robustness of the results. Section VII provides commentary and conclusions.

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governments tend to minimize the costs of political intervention before elections and, therefore, intervene with bailouts

II. Identification of politically-connected firms

A. *Political connections defined*

To address the questions concerning corporate bailouts, we begin with the set of politically-connected firms described in Faccio (2004). From this database, we extract all firms identified as being politically-connected as of January 1, 1997. We require that the connection be in place prior to our period of analysis so as to avoid cases wherein the connection was established coincident with or following the point in time when the bailout occurred. Thus, a company is defined as politically-connected if at least one of its one of its top officers (defined as the company's chief executive officer (CEO), chairman of the board (COB), president, a vice-president, or secretary of the board) or a large shareholder (defined as anyone controlling at least 10 percent of the company's voting shares) was head of state (i.e., president, king, or prime minister), a government minister (as defined below), or a member of the national parliament as of the beginning of 1997. For example, Italian senator Giovanni Agnelli was COB of Instituto Finanziario Industriale (IFI), the holding company of the Fiat group. IFI is, therefore, classified as connected with a member of parliament through a top officer. Mr. Agnelli also held in excess of 10% of the voting stock of 17 Italian publicly traded companies, including IFI, IFIL, Fiat, and Toro Assicurazioni. Each of these companies is, therefore, defined as connected with a member of parliament through share ownership by a large shareholder. Likewise, as of 1997, Russia's Prime Minister Viktor Chernomyrdin held in excess of 10% of the outstanding voting stock of Gazprom RAO. Thus, this company is defined as connected with a head of state through his share ownership. These can be thought of as "direct" connections.

A second category of connections can be thought of as "indirect connections" or "close relationships." These can come about in one of three ways. (1) A company is considered to be connected through a close relationship if a relative with the same last name as a head of state or minister was a top officer or large shareholder, as defined above, as of 1997. For example, Malaysian Prime Minister Mahathir's middle son, Mokhzani Mahathir, is the COB of Konsortium Perkapalan Bhd so that Konsortium is classified as connected with a head of state through a top executive. (2) A company is considered to be connected through a close

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after elections. Their study does not investigate which specific companies are more likely to be bailed out.

relationship when a top executive or large shareholder has been described by *The Economist*, *Forbes*, or *Fortune* as having a "friendship" with a head of state, a government minister, or a member of parliament during 1997; or (3) A company is considered to be connected through a close relationship if such a relationship has been identified as having been in place prior to January 1, 1997 in prior a prior study. These include Agrawal and Knoeber (2001) for the U.S.; Backman (1999) for Asia; Gomez and Jomo (1997) and Johnson and Mitton (2002) for Malaysia; and Fisman (2001) for Indonesia. (94 politically-connected firms are identified from these prior studies.)

B.   *Data sources for political connections*

Data used to identify political connections were taken from a variety of publicly available sources. Names of heads of state, members of parliament, and government ministers were taken from the *Chiefs of State and Cabinet Members of Foreign Governments* (US Central Intelligence Agency, 1997) and the official website of each country's government and/or parliament (Appendix A, panels A and B). Names of these persons were cross-referenced with the names of the top executives (as defined above) of the 20,202 publicly-traded companies covered in *Worldscope* as of 1997. For companies covered by *Worldscope*, but where executives' names were missing, names were collected from *Extel*, the company's website or *Lexis-Nexis*.[3] The starting points for identifying the names of large shareholders were Claessens, Djankov, and Lang (2000) for East Asian countries and Faccio and Lang (2002) for Western European countries. These data were supplemented for countries or companies not covered by these sources with lists published by each country's stock exchange or supervisory authority as detailed in Appendix A panel C, and with data from *Worldscope* and *Extel*. To determine whether a top executive or large shareholder with the same last name as a head of state or minister was a relative, we searched *Lexis-Nexis* for evidence of a family relationship. If *Lexis-Nexis* identified the parties as related, the observation was included as a close relationship.

The search covered 47 countries and identified 458 politically-connected companies in 35 countries. From this sample, we excluded 8 companies whose connections were with foreign politicians (because we are

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[3] *Worldscope* does not provide executives' names for less than 10% of the firms in our sample.

interested in home country connections that are most likely to lead to home-country bailouts) leaving 450 politically-connected companies.

Undoubtedly, this search procedure will have overlooked some instances of politically powerful connections and in other cases it will give credit to political connections that are less powerful than they might appear. More importantly, we believe that, to the extent that this procedure leads to sample bias, the bias is likely to understate the importance of political connections.

C.   *Matching companies*

In much of our analysis, we compare the propensity of politically-connected firms to be bailed out relative to a set of matching non-connected peers. To identify a matching non-connected firm for each of our politically-connected firms, we employed the following algorithm. A potential match is identified as any company from the same country with the same 2-digit SIC code as the connected firm and that was not identified as politically-connected. From the set of potential matches, we select the one with equity market capitalization closest to that of the connected firm at year-end 1996 provided its equity market capitalization was within $\pm 40\%$ of the connected firm's market capitalization (282 companies were matched). If no company satisfies these criteria, the industry classification was broadened to Campbell's (1996) industry classification measure and the procedure was repeated (87 more companies were matched). If no match resulted for a connected firm, we selected the firm with the closest market capitalization to the connected company using Campbell's industry classification, but from any country (a further 81 companies were matched). Matching was done without replacement, so a matching firm can be used only once.

Connected firms come from a broad array of industries. These include petroleum (9), consumer durables (62), basic industry (43), food and tobacco (25), construction (37), capital goods (19), transportation (23), utilities (30), textile/trade (28), services (24), leisure (26), banks (47), miscellaneous financial firms (74), and other industries (3). Table 1 summarizes selected financial data for the connected and non-connected firms. The data are taken from the companies' financial statements that were closest in time to December 31, 1996, and no more than 6 months from that date. The table gives means and medians of equity market capitalization (calculated as number of shares outstanding times price per share at year-end 1996), return on assets (*ROA*)

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(calculated as annual earnings before interest and taxes divided by year-end total assets), standard deviation of stock return (calculated with 36 monthly returns prior to year-end 1996, if available, but no less than 12 months of returns), and total debt-to-total asset ratio (*Leverage*) (calculated as short-term debt plus the current portion of long-term debt plus long-term debt divided by total assets). Data for these calculations are from *Worldscope*.

Despite matching the companies on stock market capitalization, connected firms are significantly larger than their non-connected peers. For example, the median market capitalization of connected firms is $520 million in comparison with a median market value of $407 million for their non-connected peers. As regards earnings, connected firms have a higher mean ROA than non-connected firms, but the median ROA is lower. In neither case is the difference statistically significant at the 0.10 level. Table 1 also shows that the mean and median standard deviations of equity returns for the two samples are not statistically different from each other.

Of course, part of the motivation for this study derives from previous studies that have documented greater usage of leverage by connected firms. The data in table 1 show that connected firms do make greater use of debt than their non-connected peers and the difference between them is statistically significant with a p-value for the mean difference of 0.01 and a p-value for the median difference of 0.04.

III. Corporate and country bailouts

A. *Corporate bailouts*

We are interested in financially troubled firms that receive a transfer payment or capital infusion from their home government so as to avoid failure or dissolution. To identify such firms, we conducted keyword searches of *Lexis-Nexis* and *Factiva* over the period January 1, 1997, through December 31, 2002 using the name of each of our connected companies and each matching firm along with the terms "bailout," "bail-out," "bailed out," "rescue," "rescue package," "injection," "restructur*" and "aid" and the words "government" or "state." To minimize the loss in sample size, we use *Lexis-Nexis*, *Extel Financial*, and *Worldscope* to track company name changes.

Given this set of bailout candidates, we verified from *Lexis-Nexis* and *Factiva* news articles that the deal in question involved a funds transfer (or capital infusion) to the company from its home government. Such

transfers include direct cash payments, purchases of newly issued debt or equity, government subsidized loans, government loan guarantees, tax relief tied directly to the bailout, and government purchases of company assets.[4]

One example of a bailout is the French company Groupe Bull SA. A news article[5] states that "The European Commission approved a 450 million euros French government bailout to technology company Groupe Bull SA. The commission said the French government had complied with all European Union rules on "rescue aid" for a company in difficulty since the French government granted the loan at market rates." The article uses the keywords *bailout* and *rescue aid*, which we employed in the search. Given that the article uses the term "rescue package" we assume that Groupe Bull is financially distressed. A second example is Russia's Norilsk Nickel. In this case, the title of the article[6] contains the keyword "aid": "Russian parliament approves Norilsk aid proposals" and the text states that "Russia's State Duma lower parliament house approved on Wednesday recommendations that the government support the financially-troubled Norilsk Nickel metals group and extend its control over shares." This case fits our criteria in that the article notes that the company is financially-troubled and cites forthcoming government assistance. Appendix B reports news accounts taken from *Lexis-Nexis* for 10 of our bailouts.

However, in some cases in which the words "injection," "restructur,*" and "aid" were the keyword hits, we could not establish from press reports whether the company mentioned in the article was in financial distress. For example, an article[7] published on December 1, 2001 stated that "The Irish government delivered a *grant aid package* to Volex Ltd. (Castlebar, Ireland), a subsidiary of Volex Group plc (England), to assist it in the funding of a fiber-optic development center in Castlebar. The development center will provide support to individual business units and regions of the company for the research and development of optical-fiber products and processes while delivering automated production systems and equipment for fiber-optic cable assemblies and

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[4] This definition captures most cases of aid to publicly-traded firms, as well as re-nationalizations of, former state-owned enterprises. Additional cases in which a government makes a primary or secondary purchase of equity, which are not associated with our keywords, are considered in Section VI.D.
[5] *The Wall Street Journal Europe*, "Companies: EU approves bailout of French firm Bull," (Nov. 14, 2002).
[6] *Reuters News*, (Feb. 19, 1997).
[7] *Lightwave*, "The Irish government delivered a grant aid package to Volex Ltd," (Dec. 1, 2001).

components." Because we could not ascertain that the "grant aid package" represented financial assistance to an ailing company, we did not treat this grant as a bailout in our primary analysis.

We recognize that connected firms may enjoy benefits other than those that we classify as bailouts. Furthermore, connected firms can be bailed out in ways that escape detection by our search algorithm. Nevertheless, we confine ourselves to the previously mentioned keywords as those most likely to capture the type of bailouts that we wish to study. One other potential shortcoming of our search is that we only examine articles written in English. Given that we are interested in whether connected companies are more likely to be bailed out than are non-connected matching companies, we believe that this procedure will be neutral with respect to the detection of bailouts in the two samples.

Because we are interested in whether a specific firm was bailed out, not in the total number of bailouts, and because some firms were bailed out more than once, the total number of bailouts exceeds the number of bailed out firms. The time series of bailouts is 7 in 1997, 23 in 1998, 17 in 1999, 19 in 2000, 14 in 2001 and 14 in 2002. There were 14 firms that were bailed out twice and 4 firms that were bailed out three or more times. In total, 71 different firms out of the 900 in our combined sample of politically-connected firms and their peers are classified as having been bailed out at least once during our sample period. Of these, 51 were politically-connected and 20 were not. Thus, politically-connected firms are more than twice as likely to be bailed out as their non-connected peers.

Table 2 reports firms by type of political connection and frequency of bailouts. Of the connected firms, 68% are connected by a "direct" connection. Of these, 80.4% involve a top officer who is a politician, 14.4% involve a large shareholder who is a politician, and 5.2% involve a large shareholder who also is a top officer and a politician. The other one-third of connected firms are connected by an indirect connection. Of these, the great majority, 64% were identified from prior studies. Finally, there are five firms connected by both a direct and an indirect connection.

With regard to bailouts of firms shown in table 2, one bailed out firm has both a direct and an indirect political connection. Of the remaining 50 bailed out firms, 22 have a direct connection and 28 an indirect connection. Thus, indirectly connected firms represent a disproportionate fraction of politically connected bailouts (7.52% of directly connected firms are bailed out in comparison with 19.46% of indirectly connected firms.)

As regards the matching firms, several observations can be made. First, connected firms are significantly more likely to be bailed out than their non-connected peers. Second, just as with connected firms, peers of indirectly connected firms were disproportionately likely to be bailed out in comparison with the matching peers of firms connected by a direct political connection (6.04% of peers of indirectly connected firms were bailed out versus 3.59% of the peers of directly connected firms). This disproportionate representation may reflect a common country or industry effect in the determination of bailout recipients.

Table 3 gives the distribution of politically-connected companies by country along with the distribution of bailouts by country. Ten countries have at least 10 politically-connected firms. The most heavily represented countries, in alphabetical order, are France (16), Germany (10), Indonesia (27), Italy (21), Japan (30), Malaysia (81), Singapore (16), Thailand (32), the UK (118), and the US (10). This set includes both highly developed and less well developed countries, and countries with very different measured degrees of corruption. For example, as shown in the table, GDP per capita ranges from a high of $33,450 in Luxembourg to a low of $1,939 in India, while perceived corruption, as measured by the Kaufmann et al (2003) index, ranges from a minimum of 0.74 in Denmark to a maximum of 6.60 in Indonesia.[8]

One aspect that is immediately eye-catching is the large number of connected firm bailouts in Malaysia. This country has 17 of the total of 51 connected-firm bailouts. In comparison, only 3 of the 20 non-connected bailouts are from Malaysia. The percentage of connected firms that are bailed out is particularly high in Australia (100%), Russia (50%), Thailand (34.4%), and Portugal (33.3%). In 18 countries, we identified no bailouts. In Australia, Canada, Indonesia, Italy, Malaysia, Portugal, Russia, Thailand, the US, and the UK, there were more bailouts of politically-connected firms than of their non-connected peers. In India and Germany bailouts were actually more common among non-connected matching firms than among politically-connected firms.

On a univariate basis, according to our data, bailouts are more than twice as likely among politically-connected firms as among their matching peers (51 versus 20). If our matching procedure were perfect, we could conclude, with no further analysis, that connected firms are significantly more likely to be bailed out than non-connected firms. But, our matching procedure is unlikely to be perfect. For that reason, in Section IV, we

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[8] We describe the Kaufman Index in detail later.

undertake a multivariate analysis that controls for various factors that may influence the likelihood of a corporate bailout occurring.

B.   *Country bailouts*

As we noted at the outset, we are interested in whether IMF and WB aid packages play a role in corporate bailouts. This requires identifying instances wherein either of these agencies provided financial assistance to the countries covered in our study. Ideally we would require that the IMF or WB aid occur close in time to the company bailout. However, for companies that do not receive a bailout, such a demarcation is not possible because no aid package took place. For this reason, we include any assistance package that occurred over the interval 1996-2002 as an observation of country assistance. This broad categorization is likely to reduce the power of our tests to identify the effect of IMF/WB assistance on corporate bailouts.

For IMF loans, information is taken from the *IMF History of Lending Arrangements*.[9] According to this history, during 1996-2002, Hungary, Indonesia, Mexico, Philippines, Russian Federation, South Korea, Thailand and Turkey received one or more round of loans (either a Standby Arrangement or an Extended Fund Facility). WB loans are taken from the WB website.[10] According to this source, over the 1996-2002 interval, one or more WB loans were made to Chile, Hungary, India, Indonesia, Malaysia, Mexico, Philippines, Russian Federation, South Korea, Thailand and Turkey.

Panel A of table 4 documents two relationships between the presence of IMF/WB country loans and the frequency of firm bailouts. First, on a univariate basis, both connected and non-connected firms are more likely to be bailed out in countries that receive WB/IMF aid packages than in those that do not (IMF/WB countries: 21.1% and 7.4% vs. non-IMF/WB countries: 5.1% and 2.5%). Second, the data indicate that in countries receiving IMF/WB aid, connected firms are more likely to be bailed out than their non-connected peers (21.1% vs. 7.4%, p-value = 0.00).

Panel B documents the distribution over time of corporate bailouts relative to the occurrence of an IMF/WB loan. The vast majority (72.97%) of connected-firm bailouts occurred within the two years following

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[9] Available at http://www.imf.org/external/np/tre/tad/extarr1.cfm.
[10] Available at   http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,menuPK:34471~pagePK:34396~piPK:34442~theSitePK:4607,00.html.

an IMF/WB loan: 64.86% of bailouts took place within 12 months, and an additional 8.11% percent of bailouts took place between 13 and 24 months afterwards. A similar time-pattern shows up for non-connected firms: 76.92% of non-connected firm bailouts occurred in the year following an IMF/WB loan; 7.69% of bailouts occurred between 13 and 24 months afterward. Again, if our matching procedure were perfect, we could conclude that politically-connected firms are disproportionately favored when a country receives IMF or WB assistance. Because our matching procedure is not perfect, in section IV, we consider the effect of IMF/WB aid in a multivariate analysis.

IV.   Multivariate analysis of the determinants of corporate bailouts

In this section, we undertake a multivariate analysis where cross-sectional logit regressions are estimated to determine whether political connections are significant in explaining the likelihood of corporate bailouts. In each regression, the dependent variable is an indicator equal to one if a company was bailed out any time over the interval 1997-2002 and zero otherwise. To adjust for heteroskedasticity in the error term and clustering of observations at the country level, standard errors from the regression are adjusted using the procedure described in Wooldridge (2002, pp. 405-410).

A.   *Independent variables*

Independent variables are included to control for other factors that may influence corporate bailouts. For some of the independent variables, we do not have data for each of the connected firms and/or for their matching peers. We now describe the independent variables, indicate the motivation for including them in the regressions, and give the number of firms for which the requisite data are available.

Large firms are likely to play a greater role in a country's economic performance and may be more likely to receive political attention when confronted with financial distress. To capture firm size, we use *Log (mkcapUS$)*, the log of the company's equity market capitalization as of December 31, 1996 measured in US$. This variable is taken from *Worldscope* and is available for every firm in our sample.

Because politicians may perceive bailouts as a means to "buy" votes, companies with more employees may be more likely to receive bailouts. We use *Log (employees)* to control for the number of a company's

employees where number of employees is taken from *Worldscope*, the *Asian Company Handbook,* and *Mergent,* based on the company's financial report that occurs closest to calendar year-end 1996. We have data on this variable for 780 of the firms in the sample.

Because of a higher probability of default, firms operating in more risky industries may be more likely to receive a government bailout. To control for differences in business risk, we use *Stnd dev*, the standard deviation of the company's monthly stock returns over the period 1994-1996 as described in Section II.C. We have data on this variable for 806 firms. The variables *Log (employees)* and *Stnd dev* impose the greatest limitations on our sample size.

Firms that are suffering financial distress as of the start of the period of analysis may be more likely to be bailed out during the period. To control for differences in firms' financial standings as of the start of our period of analysis, we include three measures of financial condition. The first is *Collateral* calculated as the ratio of property, plant and equipment to total assets. The second and third measures are *ROA* and *Leverage* which are defined in Section II.C. All financial variables are taken from company financial reports occurring closest to calendar year-end 1996, as reported in *Worldscope*. We have data measuring *Collateral* for 891 firms; *ROA* for 868 firms; and *Leverage* for 814 firms.

To control for differences in economic development across countries, we include *log (GDP per capita)* taken from the World Bank website as of 1996 for all countries except Taiwan. Taiwan GDP is from the 1997 *World Fact Book of the United States Central Intelligence Agency*. To control for differences in perceived corruption across countries, we include *Corruption,* which is a country level index developed by Kaufmann et al (2003). This variable is defined as the exercise of public power for private gains, and measures various aspects of corruption, ranging from the frequency of "additional payments to get things done" to the effects of corruption on the business environment during 1997 and 1998. The original index was scaled from -2.5 to 2.5 with higher scores for lower corruption. For our purposes, we rescaled the index from 0 to 10, by adding 5 after multiplying the index for -2. Higher scores now represent higher corruption. This measure of corruption is available for all firms in the sample.

In some countries, governments own stakes in publicly-traded firms and may have a vested interest in the firm's survival. Likewise, in some countries, politicians may have an interest in the continuing survival of recently privatized firms. For this reason, such firms may be more likely to receive preferential treatment. To control for this possibility, we employ two variables. *GovStake* is the percentage voting shares held by a firm's home country national and local governments. *Privatized* is an indicator variable equal to 1 if the company was privatized prior to 1997. We use sources listed in panel C of Appendix A, *Extel*, *Worldscope*, Claessens *et al.* (2000), Faccio and Lang (2002), and the 2000 "Fortune 500 Global List" to identify government share ownership as of 1997. Privatized firms are identified from *SDC Platinum*; Bortolotti, Fantini and Siniscalco (2001), Dewenter and Malatesta (1997), and Megginson, Nash and Van Randenborgh (1994). We identify 31 firms as having been privatized prior to the beginning of 1997. Of these, according to our definition, 20 are politically-connected.

B. *Empirical results: Bailouts and political connections*

To test whether political connections increase the likelihood of a corporate bailout after controlling for the factors listed above, we estimate logit regressions where the dependent variable is an indicator equal to 1 when a company was bailed out and 0 otherwise. In our first regression, we include each of the connected and non-connected firms in the sample so that the sample size is 900. As previously noted, we do not have data for each of the independent variables for every firm. For that reason, in the first regression, an independent variable is included only if it is available for every firm. Thus, the independent variables in our first regression are *Log (mkcapUS$)*, *GovStake*, *Privatized*, *Corruption*, and *Log* (*GDP per capita*) along with an indicator variable, *Connected*, that is equal to 1 if a firm has been identified as being politically connected as of the beginning of 1997.

The results of the first regression are given in the first column of Table 5. The coefficients of *Log (mkcapUS$)* and *privatized* are both positive and statistically significant. Apparently, larger firms and privatized firms are more likely to be bailed out. Additionally, the privatized indicator appears to be more important than whether the state owned a major stake in the firm, as *GovStake* is not significant in this regression or any others, whereas *Privatized* is significant in this and each of our subsequent regressions. The

coefficient of *Log (GDP per capita)* is negative and significant indicating that firms are more likely to be bailed out in poorer countries. However, this variable later loses significance when we introduce an indicator for whether the IMF/WB provided an aid package to the country in question. The variable *Corruption* is not significant in this regression and does not become significant in any later regressions. Thus, after controlling for other factors, the level of corruption is not statistically significant in our estimates of the likelihood of a bailout.

Of course, for our purposes, the most important variable is *Connected*. *Connected* is highly significant (p-value < 0.01). Apparently, political connections increase the likelihood of a government bailout of a troubled firm. As we shall see, inclusion of additional control variables in later regressions does not diminish the empirical importance of *Connected* as an explanatory variable of whether a company is bailed out.

The second regression in table 5 includes all independent variables described above except *Log (employees)* and *Stnd dev*. This sample has 803 observations of which 43 are connected company bailouts and 17 are non-connected company bailouts. The new variables included are *Collateral*, *ROA*, and *Leverage*. These variables measure the financial position of the companies as of the beginning of the sample period. Each of these variables is statistically significant (all p-values ≤ 0.05). This result may not be surprising: companies that were financially weaker as of the start of the period are more likely to be bailed out during our observation period. Additionally, the variables that are significant in the first regression continue to be significant in the second. Nevertheless, politically-connected firms are still significantly more likely to be bailed out than their non-connected peers. To the extent that lenders factor political connections into their credit-granting decisions, the potential for future bailouts may explain the higher use of leverage by politically-connected firms.

The third regression includes all of the independent variables described above including *Log (employees)* and *Stnd dev*. This regression has 636 observations of which 35 are politically-connected bailouts and 16 are non-connected bailouts. As before, *Collateral*, *ROA*, *Leverage*, *Privatized*, and *Log (GDP per capita)* are statistically significant, while *GovStake* and *Corruption* are not. The coefficient of *Stnd dev* is positive and significant, suggesting that companies subject to greater "risk" are more likely to be bailed out. Both *Log (mkcapUS$)* and *Log (employees)* have positive signs, but neither enters the regression as statistically significant (p-values = 0.12 and 0.22). This outcome is apparently due to the high correlation between the two

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variables. When *Log (mkcapUS$)* is omitted, *Log (employees)* becomes statistically significant. Our results on this point are consistent with either of two arguments: that "the importance to the economy" or "vote buying" plays a role in determining which companies are likely to be bailed out (Dinç (2004), La Porta et al (2002), Sapienza (2004), Shleifer and Vishny (1998)).

Most interestingly, for our analysis, the coefficient of political connections continues to be positive and statistically significant (p-value < 0.01). Thus, after including various firm-specific and country-level variables, politically-connected firms are more likely to be bailed out than their non-connected peers. The conclusion is that, at least in some countries, political connections influence the allocation of capital through implicit government guarantees of a bailout when politically-connected companies become financially distressed.

C.   *Empirical results: IMF/WB assistance, corporate bailouts, and political connections*

We now address the questions of whether IMF/WB aid packages increase the likelihood of corporate bailouts and, if so, do the funds flow disproportionately to politically connected firms. To address these questions, we include an indicator variable, *IMF/WB aid*, for each country that received an IMF/WB aid package and re-estimate the first three regressions of table 5. The resulting regressions are given in columns 4, 5 and 6. The first regression includes all firms in the sample. As before, the sample grows smaller as we include more control variables.

In the regressions of columns 4 and 5, the coefficient of *IMF/WB aid* is positive and statistically significant with a p-value < 0.01. In the sixth regression, the coefficient is positive with a p-value of 0.10. Of course, this regression has the fewest bailed out firms with a total of 51 of which 35 are connected firms and 16 are not. With the exception of *Log (GDP per capita)*, each of the other variables has the same sign and the same approximate p-value as in the corresponding regressions in columns 1 through 3. These results indicate that all firms in a country, both connected and non-connected, are more likely to be bailed out when the IMF or WB provides assistance to that country.

An interesting related question is whether politically-connected firms are disproportionately likely to benefit relative to non-connected firms when the IMF or WB provides loans to their home countries. The univariate tests in panel A of table 4 suggested that, before controlling for firm and country-specific attributes,

such is the case. We now assess the robustness of this result using multivariate analyses. If connected firms benefit disproportionately when IMF/WB loans are provided, the fraction of bailouts among connected firms should rise disproportionately relative to that of non-connected firms when a firm's home government receives IMF/WB aid. This effect cannot be inferred by simply looking at the signs of the coefficients of the connections or IMF/WB aid indicators (or a combination of these variables), since we are using a nonlinear logit regression technique. To examine this issue, we must compute the expected probability of a bailout for each of our four non-overlapping sub-groups that capture the presence of political connections and IMF/WB loans. The subgroups are identified by indicators variables assigned the values of zero or one.

The first indicator, IMF/WB aid × Connected, is set to one for the subset of connected firms incorporated in countries that received IMF/WB loans. The second indicator, (1- IMF/WB aid) × Connected, is set to one for the subset of connected firms incorporated in countries that did not receive IMF/WB assistance. The third indicator, IMF/WB aid × (1-Connected), is set to one for the subset of non-connected firms incorporated in countries that received IMF/WB aid. The fourth indicator, (1- IMF/WB aid) × (1-Connected), is set to one for the subset of non-connected firms incorporated in countries that did not receive IMF/WB loans.

Inserting the above four orthogonal indicators to our prior logit specification, we estimate the following model:

$$\text{Prob (Bailout)} = f[\beta_1 * (\text{IMF/WB aid} * \text{Connected}) + \beta_2 * ((1\text{- IMF/WB aid}) * \text{Connected}) + \beta_3 * (\text{IMF/WB aid} * (1\text{-Connected})) + \beta_4 * ((1\text{-IMF/WB aid}) * (1\text{-Connected})) + \beta_5 * \text{Log(MkcapUS\$)} + \beta_6 * \text{Collateral} \qquad (1)$$
$$+ \beta_7 * \text{ROA} + \beta_8 * \text{Leverage} + \beta_9 * \text{GovStake} + \beta_{10} * \text{Privatized} + \beta_{11} * \text{Corruption} + \beta_{12} * \text{Log(GDP per capita)}].$$

Our null hypothesis is that the difference between the likelihoods of a bailout of a connected firm and of a non-connected firm in absence of IMF/WB aid is equal to the difference between these likelihoods when IMF/WB aid is granted. The test statistic for the null hypothesis can be written in terms of the logit likelihood function as:

$$\left[\frac{\exp(\beta_1 + \sum_{i=5}^{12} \beta_i x_i)}{1 + \exp(\beta_1 + \sum_{i=5}^{12} \beta_i x_i)} - \frac{\exp(\beta_2 + \sum_{i=5}^{12} \beta_i x_i)}{1 + \exp(\beta_2 + \sum_{i=5}^{12} \beta_i x_i)}\right] - \left[\frac{\exp(\beta_3 + \sum_{i=5}^{12} \beta_i x_i)}{1 + \exp(\beta_3 + \sum_{i=5}^{12} \beta_i x_i)} - \frac{\exp(\beta_4 + \sum_{i=5}^{12} \beta_i x_i)}{1 + \exp(\beta_4 + \sum_{i=5}^{12} \beta_i x_i)}\right] \quad (2)$$

The null hypothesis that the difference of the differences in the probabilities of a bailout is zero can be tested using a Wald test, which is appropriate for testing nonlinear restrictions on the coefficients of the model. To perform this test, we set the other control variables x_5, …, x_{12} to their sample averages.[11] After controlling for firm- and country-specific factors, we find an economically and statistically significant increase in the difference between the likelihoods that connected and non-connected firms are bailed out when the firms' home governments receive IMF or WB loans.

In the absence of IMF/WB aid, our model predicts that 4.92% of connected and 2.23% of non-connected firms will be bailed out. Thus, after controlling for a variety of firm- and country-specific factors, the incremental likelihood of a bailout for a connected firm is 2.69% (i.e., 4.92%-2.23%). In the presence of IMF/WB aid, our model predicts that 18.79% of connected firms and 9.17% of their non-connected peers will be bailed out. Thus, after controlling for firm- and country-specific factors, in countries receiving IMF/WB aid, the incremental likelihood of a bailout for a connected firm is 9.62% (i.e., 18.79% - 9.17%). Thus, receipt of an IMF/WB loan for a country increases the net likelihood of a bailout for a connected firm relative to a non-connected firm of 6.93% (i.e., 9.62%-2.69%). Using the Wald test, this difference is statistically significant ($\chi^2 = 10.96$, p-value < 0.01). The incremental likelihood of a bailout for a connected firm in comparison with the likelihood of a bailout for a non-connected firm estimated with the multivariate analysis of 6.93% compares with the incremental likelihood of 11.1% estimated with the univariate analysis. The implication is some part of the disproportionality that we documented in table 4 is due to firm- or country-specific factors. Nevertheless, the data indicate that the granting of an IMF/WB loan to a country increases the likelihood of bailouts of politically-connected firms.

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[11] Greene (2003, p. 668) suggests using averages and/or other relevant data points. Thus, to assess the robustness of our result, we re-calculate the Wald statistic with the control variables at their sample medians. In this robustness test, the Wald statistic continues to be highly significant ($\chi^2 = 8.87$, p-value < 0.01).

V. Corporate bailouts and economic efficiency

A. *Overview*

In this section, we examine the operating performance and leverage of bailed out firms before and after their bailout dates. This analysis bears upon the question of economic efficiency. That is, bailouts transfer capital to firms to which the capital market is apparently unwilling to provide funds. Assuming that the capital market allocates funds to their highest value uses, then by definition bailouts are an inefficient use of capital. In considering the efficiency of bailouts, we ask whether bailouts of politically-connected firms are even less efficient than are bailouts of non-connected firms. In this regard, we examine the relative efficiency of corporate bailouts.

To address this question, we examine the operating performance and leverage of bailed out firms prior to and after their bailouts and we ask whether the performance and leverage of bailed out politically-connected firms is different from that of bailed out non-connected firms. For this comparison, we rely on the associated non-connected or connected peer firm.

B. *Pre- and post-bailout operating performance*

To study the operating performance of politically-connected firms that are bailed out and their non-connected matching firms, we calculate ROAs for each of the five years surrounding the bailouts (event years -2 through +2). By subtracting the ROA of its matching peer from the ROA of the bailed out firm, we obtain an industry-adjusted ROA. For 19 of the bailed out connected firms and for 1 of the bailed out non-connected firms, we do not have the requisite five years of ROA data for their matching peer. To minimize the loss of sample observations, for these firms, we use the median ROA of all firms from the same industry and the same country as the bailed out firm. In particular, using Campbell's classification of industries, we identify all firms in the firm's home country with the same industry classification on the *Worldscope* database for each event year -2 through +2. For each firm we calculate ROA as described in Section II.C. Our matching-industry median is the median of the individual firm ROAs from the same industry in the firm's home country. For bailed out non-connected firms, we also calculate ROAs. For these companies, we also calculate the ROA of their matching

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politically-connected firm (as before, if the data for the peer are not available, we use the home country industry median). Arguably, we should identify a non-connected peer for each of the non-connected bailouts so as to be extracting any "connected-firm" effect in ROA. We do not do so, but do not expect this omission to bias our tests. With this caveat, we calculate the mean and median ROA for each of the four sets. The results are presented in panel A of table 6. Notice that because a firm can be bailed out more than once during our period of analysis, the number of bailouts in table 6 exceeds the number of bailed out companies as reported in the earlier tables. For companies that received multiple bailouts, we include the first bailout. If a second bailout occurred more than three calendar years after the first bailout, we include that as well. This analysis includes four firms with two bailouts each. Because, for most companies, our accounting data end with 2003 and 10 of the bailouts in this analysis occurred in 2002, the number of observations declines in year +2.

Not surprisingly, bailed out firms, both those that are politically-connected and those that are not, underperform their non-bailed out matching firms prior to and immediately after their bailouts - - industry-adjusted mean and median ROAs (rows 3 and 8) are negative in each of the years -2 through +1. In year +2, performance of the politically-connected firms continues to be poor with an industry-adjusted mean ROA of -6.19% and a median of -3.84%. In comparison, the performance of non-connected bailed out firms improves, and, in year +2, these firms experience mean and median industry-adjusted ROAs of +0.43% and +0.74%, respectively.

The statistic of greatest interest to us is the difference in industry-adjusted performance between connected firms that are bailed out and non-connected firms that are bailed out. These differences are reported in row 11 with their p-values in row 12. In the two years prior to their bailouts, on an industry-adjusted basis, politically-connected bailouts have slightly worse performance than the non-connected bailouts. However, the performance advantage of non-connected bailed out firms becomes economically large and highly statistically significant in year 0 and continues to be large and statistically significant over the following two years. As we noted, non-connected bailed out firms actually experience above "normal" performance by year +2.

These data suggest that funds directed to bail out politically-connected firms do not lead to a resurgence in the economic performance of these companies. Assuming that bailouts, in general, represent an inefficient use of capital, bailouts of politically-connected firms are especially wasteful.

C.   *Pre- and post-bailout leverage*

Panel B of table 6 parallels panel A except that the variable of interest is financial leverage as defined above. By examining leverage ratios, we can evaluate whether lenders impose differential loan-granting standards on politically-connected firms. In each event year, whether considering means or medians, bailed out politically-connected firms have significantly higher leverage ratios than their non-connected matching peers. For example, in year -1 the bailed out connected firms' mean leverage ratio is 43.5% versus 28.7% for their non-connected peers. This spread in leverage ratios of 14.8% also shows up in the medians. Additionally, the spread between connected and non-connected firms' leverage shown in row 3 grows larger as we move through event time from year -2 to year +2. The mean leverage ratio for bailed out connected firms increases from 38.3% in year -2 to 52.1% in year +2 and the spread between the higher leverage ratios of bailed out connected firms and their non-connected peers grows from 11.6% in year -2 to 25.5% in year +2. In short, connected firms end up even more highly levered after their bailouts than before.

The leverage ratios of bailed out non-connected firms contrast with those of non-bailed out connected firms. First, not surprisingly, bailed out non-connected firms have higher leverage ratios than their non-bailed out connected peers (row 7). This is not surprising because these firms are bailed out. Presumably, higher leverage plays a role in a firm's request for government assistance. However, the yearly differences in mean and median leverage ratios between bailed out non-connected firms and their non-bailed out connected peers (shown in row 9) are never statistically significant, and are modest, hovering around 2% to 10% with p-values (shown in row 10) ranging from 0.22 to 0.84. Moreover, in contrast to bailed out connected firms, the leverage ratios of bailed out non-connected firms, measured with either means or medians, decline in the years following their bailouts.

Again, the key statistic in our analysis is the difference in the industry-adjusted leverage of bailed out politically-connected firms in comparison with that of bailed out non-connected firms. The differences are

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large, with means ranging from 1.4% to 23.5%, and statistically significant in years 0 through year +2 with p-values ranging from 0.04 to 0.09.

These results suggest that lenders impose relatively weaker credit standards on loans to companies directly or indirectly connected to politicians. One possible explanation for different loan standards is that lenders are relatively confident that the government will intervene to rescue connected companies when financial difficulties arise. Lenders' apparent greater willingness to make loans to connected firms after bailouts is consistent with the bailout acting as further proof of the strength of a political connection. Thus, our evidence is consistent with lenders imposing less demanding origination standards on politically-connected firms both before and after a bailout.

VI.   Tests of robustness

In this section, we consider variations of the tests conducted in Section IV. This analysis is aimed at determining the sensitivity of our results to the exclusion or inclusion of certain variables and to alternative specification of certain of our tests. In conducting our tests, we replicate regressions (4) and (5) of table 5. Regression (4) includes all of the bailouts, but only some of the independent variables. Regression (5) includes most of the bailouts and most of the independent variables. The two variables of greatest interest to us are *Connected* and *IMF/WB* aid. In most cases, the p-values for these variables are less than 0.05 and in all cases the p-values are less than 0.10.

A.   *Exclusion of Malaysia*

As we noted, a disproportionate number of the bailouts in our sample occurs in Malaysia. A concern that immediately arises is that our results are due primarily or completely to bailouts in this country. However, when we omit observations from Malaysia and re-estimate regressions (4) and (5), the p-values of the coefficients of *Connected* are 0.01 and 0.09, respectively, and the p-values of the coefficients of *IMF/WB aid* are both less than 0.01. Thus, although political connections have been important in determining bailouts in Malaysia, our results are not due just to Malaysia.

B.   *Matching procedure*

For 81 of the politically-connected firms, a matching peer was taken from a different country. These account for 19 bailouts. To assess whether our results are due to having a poor match for these firms, we omitted these 81 observations and re-estimated the regressions. In both regression (4) and (5), the coefficient of *Connected* continues to be significant with p-values less than 0.01. The coefficients of *IMF/WB aid* have p-values of 0.07 and less than 0.01, respectively. Thus, our results are not due to those cases in which we use our "third best" matching criteria to find a peer company.

C.   *Direct vs. indirect political connections*

As we noted in table 2, bailouts occurred disproportionately among firms connected by means of indirect connections. Among these are firms connected by close relationships. Because identification of connections through close relationships involves a certain level of subjectivity, we replaced *Connected* with two indicators, one for direct connections and one for indirect connections, and re-estimated the regressions. In regression (4), both the direct and the indirect connection indicators have p-values less than 0.01, as does the *IMF/WB aid* indicator. In regression (5), the p-values of the two connection indicators and the IMF/WB indicator are 0.04, 0.06, and 0.01. In sum, both direct and indirect connections appear to be important determinants of which firms are bailed out. Moreover, we conclude that our results are not just due to a subjective identification of politically-connected firms.

D.   *Alternative definitions of bailouts*

Our identification of capital infusions is based upon our search of news wire services. These searches identified cases in which a government provided capital in various forms including purchases of equity. We expanded our sources of equity infusions through a search of *Thomson Financial Securities Data SDC, Worldwide Mergers & Acquisitions Database*. This database identifies purchasers of equity blocks, but it does not indicate whether the shares were purchased directly from the company or in the secondary market. For instances where this database identifies a transaction in which a company's home country government purchased at least 5% of the company's shares over the period 1996-2002, we add this company to our sample of bailouts. There are 31 such instances giving us a sample of 102 bailouts, 69 of which involved connected firms, and 33 of which

involved non-connected firms. Additionally, we cannot make a determination of whether the company was distressed because we found no newswire story around the time of the share purchase indicating that the company was having financial difficulty. With these bailouts included, we re-estimated regressions (4) and (5). The p-values of the coefficients of *Connected* are less than 0.01 and 0.09, respectively. The p-values for the coefficients of IMF/WB aid are 0.01 and less than 0.01.

As another way to construct our sample of bailouts, we add to our original sample seven cases where the press reports the terms "injection," "restructure*," and "aid", but we could not determine from the press reports whether the company was in financial distress. This leads to a sample of 78 bailouts, of which 55 involve connected firms and 23 involve non-connected firms. We re-estimated the regressions. The p-values of the coefficients of *Connected* are less than 0.01 and 0.02, respectively. The p-values for the coefficients of *IMFWB aid* both less than 0.01.

In a third set of regressions, we include the equity purchases identified from the *SDC* database along with the infusions in which we cannot determine whether the firm was distressed, giving us a sample of 73 connected bailouts and 36 non-connected bailouts, and re-estimate the regressions. The p-values of the coefficients of *Connected* are less than 0.01 and 0.07, respectively. The p-values for the coefficients of *IMF/WB aid* are both less than 0.01 and 0.02.

In sum, our conservative procedure for identifying bailouts - - requiring that we be certain that a firm received a direct capital infusion and that it be in financial distress - - did not give rise to our results. The results are robust to broader definitions of bailouts.

E.   *Non-bank bailouts*

In some cases, banks could be more likely to be bailed out than a non-bank firm due to concerns about the potentially broader economic impact of a large bank's insolvency. If so, bank bailouts may be influenced by factors different from those that influence bailouts of non-bank firms. To assess whether our results are in someway due to mixing of bank bailouts with other bailouts, we excludes banks and re-estimated the regressions. The relationship between political connections and bailouts is strengthened after excluding banks.

In both regressions (4) and (5), the coefficient of *Connected* becomes more positive, and more highly significant. The coefficients of *IMF/WB aid* continue to be significant with p-values less than 0.01.

F.   *Does the prospect of an immediate bailout "cause" political connections?*

A further concern that may arise is whether the political connections we observe for bailed out firms come about because the firm is in need of an immediate bailout. That is, we may be observing "marriages of convenience" in which a major shareholder or corporate officer of a struggling firm establishes a political connections for the specific purpose of seeking a government assisted bailout. If that were the case, then arguably, it is the bailout that "causes" the political connection rather than the other way around. One way to address this possibility is to examine whether long-standing connections are just as likely to lead to a bailout as those that have been established just prior to the bailout.

To do that, we use *Lexis-Nexis*, *Reuters*, *The Financial Times*, and *The Economist* to identify the date in which each political connection in our sample was first established. With these data we conduct two tests. First, we split connections into three sets: Those that were established before December 31, 1987 ("long-term connections"), those that were established after December 31, 1987 ("short-term connections"), and those for which we could not establish an initiation date ("indeterminate"). We then re-estimate regressions (4) and (5) after replacing *Connected* with three new indicators identifying short-term, long-term, and indeterminate connections. In regression (4), both the long-term and the short-term connection indicators are positive and significantly greater than zero (p-values < 0.01). More importantly for the purpose of this sub-section, the coefficients of short-term and long-term connections are not significantly different from each other (p-value = 0.68). The results are similar in regression (5) except that the significance levels (for the difference from zero) of the two variables are slightly higher at to 0.02 and 0.01, respectively, and the two coefficients are not significantly different from each other (p-value = 0.96).

In our second test, we omit the six firms that were bailed out in 1997 along with their peers and re-estimate the regressions.[12] The coefficient of *Connected* in each regression is significantly greater than zero (p-

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[12] There were seven bailouts of six different firms in 1997.

values less than 0.02 and 0.05), and the coefficient of *IMF/WB aid* continues to be significant with p-values less than 0.01.

VII.   Commentary and conclusions

This paper investigates one form of government support for politically-connected firms: corporate bailouts. We show that political-connections lead to preferential corporate bailouts. While anecdotal claims[13] have hinted at this possibility, our study evaluates this claim empirically. For a sample of 450 politically-connected firms from 35 countries, we document that, over the period 1997 through 2002, 11.3 percent of these firms received an aid package from their home government. In contrast, only 4.4 percent of their non-connected peers received such support. Our results relate to several themes considered in prior studies.

One set of earlier studies reports that political connections influence firm value: the termination of a connection results in a decline in equity value (Roberts (1990), Fisman (2001)), while the establishment of a connection results in an increase in equity value (Faccio (2004)). Presumably, these re-valuations occur because political connections bring some form of benefit to these firms and their shareholders. Corporate bailouts may be one channel through which shareholders gain from political connections. Our evidence indicates that politically-connected firms borrow more and are bailed out with greater frequency that non-connected firms. This pattern is consistent with connected firms experiencing weaker loan requirements and more favorable interest rates due to the lower expected loan loss that their higher frequency of bailout implies. The implication is that, ex ante, shareholders gain because their firms are able to borrow at below market rates. Ex post, lenders can also benefit when their borrowers are bailed out. However, if the ex ante interest rates reflect the likelihood of bailouts, then lenders to connected firms are merely receiving a market rate of return equal to that of otherwise similar non-connected firms.

Second, our evidence also complements recent studies of lender behavior towards politically connected borrowers. For example, Johnson and Mitton (2003) report that politically-connected firms in Malaysia have

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[13] "A debt restructuring of Pernas International Holdings, a troubled Malaysian hotel and property group, has revived concerns about government support for politically connected businessmen." *Financial Times,* "Pernas debt revamp causes concern" (June 16, 2003). A number of additional claims of this sort are reported in Johnson and Mitton (2003).

greater access to debt financing while Kwaja and Mian (2004) find that politically-connected firms in Pakistan have greater access to debt financing, exhibit significantly higher default rates, but pay interest rates no higher than other borrowers; and Cull and Xu (2005) report that Chinese firms making informal payments to government officials borrow more from banks. Our evidence offers one explanation for the higher leverage and lower interest rates of politically-connected firms reported in these various studies.

Third, we examine the operating performance of bailed out firms. We find that bailed out connected firms have significantly lower ROAs than their industry peers and lower industry-adjusted ROAs than other bailed out, but non-connected firms, in the year of and in the two years following their bailouts. Assuming that capital markets channel funds to their highest value uses and that firms receiving bailouts are firms to which other capital market participants were unwilling to provide capital, the implication is that bailouts of connected firms are even more wasteful than bailouts in general. The inefficiencies are two dimensional: first, bailouts of connected firms are more frequent than bailouts of non-connected firms, meaning that funds are misallocated more often; and, second, bailouts of connected firms represent an even less efficient allocation of capital than are bailouts of non-connected firms - - which reinforces the importance of the primary finding.

A further finding of our study is that bailouts in countries that receive IMF or WB loans occur disproportionately among politically-connected firms. We find over a recent 5 year period (1997-2002) that in the 35 countries we study, politically-connected firms were substantially more likely to be bailed out when the IMF or WB intervened. This preferential access to government bailouts is consistent with allegations by IMF and WB critics, who complain that IMF and WB funds are frequently used to support companies belonging to the families and cronies of incumbent political leaders (e.g., Backman (1999), Hutchcroft (1998), and Rose-Ackerman (1999)).

We add to the evolving literature on the economic role of political connections. The apparent inefficiencies in the allocation of capital that we document for politically-connected bailouts have potentially larger ramifications for the economies involved. Studies by Demirgüç-Kunt and Maksimovic (1998), Greenwood and Jovanovic (1990), Levine (1997), and Rajan and Zingales (1998) document the important role of well functioning capital markets in facilitating economic growth. These studies conclude that better

developed capital markets spur economic growth. To the extent that bailouts of politically-connected firms undermine the role of capital markets in allocating capital, they are likely to have an adverse impact on economic growth.

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Appendix A. Data Sources.

	Panel A: Data sources for parliaments	Panel B: Data sources for governments
General sources	http://www.ipu.org/english/parlweb.htm#t	http://www.gksoft.com/govt/en/world.html
		CIA, 2001, "Chiefs of State" (available at: http://www.cia.gov/cia/publications/chiefs/)
Australia	http://www.aph.gov.au/house/ http://www.aph.gov.au/senate/	http://www.gksoft.com/govt/en/au.html
Austria	http://www.parlinkom.gv.at	http://www.gksoft.com/govt/en/at.html
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
Canada	http://www.parl.gc.ca	http://www.gksoft.com/govt/en/ca.html
Chile	http://www.congreso.cl http://www.camara.cl/ http://www.senado.cl/	http://www.gksoft.com/govt/en/cl.html
Denmark	http://www.folketinget.dk http://www.ft.dk/	http://www.gksoft.com/govt/en/dk.html
Finland	http://www.eduskunta.fi	http://www.gksoft.com/govt/en/fi.html
France	http://www.assemblee-nationale.fr/ http://www.senat.fr	http://www.gksoft.com/govt/en/fr.html
Germany	http://www.bundestag.de http://www.bundesrat.de	http://www.gksoft.com/govt/en/fr.html
Greece	http://www.parliament.gr	http://www.gksoft.com/govt/en/gr.html
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
Hungary	http://www.mkogy.hu	http://www.cia.gov/cia/publications/chiefs/chiefs78.html
India	http://alfa.nic.in http://parliamentofindia.nic.in/	http://www.gksoft.com/govt/en/in.html
Indonesia	http://www.dpr.go.id/	http://www.gksoft.com/govt/en/id.html
Ireland	http://www.irlgov.ie/oireachtas/	http://www.gksoft.com/govt/en/ie.html
Israel	http://www.knesset.gov.il http://www.israel-mfa.gov.il/gov/knesset.html	http://www.gksoft.com/govt/en/il.html
Italy	http://www.parlamento.it http://www.camera.it/ http://www.senato.it/senato.htm	http://www.gksoft.com/govt/en/it.html
Japan	http://www.shugiin.go.jp http://www.sangiin.go.jp	http://www.gksoft.com/govt/en/jp.html
Luxembourg	http://www.chd.lu/fr/organisation/membres/membres01.jsp	http://www.cia.gov/cia/publications/chiefs/chiefs106.html
Malaysia	http://www.parlimen.gov.my	http://www.gksoft.com/govt/en/my.html
Mexico	http://www.camaradediputados.gob.mx http://www.senado.gob.mx	http://www.gksoft.com/govt/en/mx.html
Netherlands	http://www.parlement.nl http://www.dds.nl/overheid/pdc/	http://www.gksoft.com/govt/en/nl.html

	http://www.eerstekamer.nl/	
Philippines	http://www.congress.gov.ph/	http://www.da.gov.ph/
	http://www.dbm.gov.ph/gov_dir/senate_dir.htm	
Portugal	http://www.parlamento.pt	http://www.gksoft.com/govt/en/pt.html
Russia *	http://www.duma.ru/deputats/list/frmlist.htm	http://www.cia.gov/cia/publications/chiefs/chiefs145.html
	http://www.council.gov.ru/sostav/members/spisok.htm	
Singapore	http://www.gov.sg/parliament/	http://www.gksoft.com/govt/en/sg.html
South Korea	http://www.assembly.go.kr	http://www.gksoft.com/govt/en/kr.html http://www.gksoft.com/govt/en/kp.html
Spain	http://www.congreso.es http://www.senado.es	http://www.gksoft.com/govt/en/es.html
Sweden	http://www.riksdagen.se	http://www.gksoft.com/govt/en/se.html
Switzerland	http://www.parliament.ch	http://www.gksoft.com/govt/en/ch.html
Taiwan	http://www.ly.gov.tw/	http://www.cia.gov/cia/publications/chiefs/chiefs173.html
Thailand	http://www.parliament.go.th	http://www.gksoft.com/govt/en/th.html
Turkey	http://www.tbmm.gov.tr	http://www.gksoft.com/govt/en/tr.html
UK	http://www.parliament.uk	http://www.gksoft.com/govt/en/gb.html
US	http://www.congress.gov http://www.senate.gov http://www.house.gov	http://www.gksoft.com/govt/en/us.html

* Transliteration from the Cyrillic made through the web site http://www.cifirica.ru/

Panel C: Data sources for ownership structures

General data	Ownership data are gathered from country sources listed below, and integrated with Extel, Worldscope, Claessens *et al.* (2000) for Asian countries, Faccio and Lang (2002) 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 are taken from Extel, Worldscope, Claessens *et al.* (2000), and Faccio and Lang (2002).
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
Denmark	Hugin, Annual Report CD (1998) (http://www.huginonline.com)
Finland	Helsinki Media Blue Book, "Major Finnish Companies Internet Database" (http://www.bluebook.fi/en/tuotteet/haku/majorfinnishcompanies.html) http://www.huginonline.com
France	http://www.bourse-de-paris.fr/fr/index_fs.htm?nc=2&ni=6&nom=marche 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 (1998)
Indonesia	Asian Company Handbook (1998)

Ireland	http://www.hemscott.com/equities/company/
Italy	http://www.consob.it/trasparenza_soc_quot/trasp_soc_quot.htm
Japan	Toyo Keizai Shanposha (2001), "Japan Company Handbook", Tokyo, Japan, Summer Edition.
Malaysia	Asian Company Handbook (1998)
Mexico	"Mexico Company Handbook 97", Reference Press, Inc.
Philippines	Asian Company Handbook (1998)
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
Taiwan	Asian Company Handbook (1998)
Thailand	Asian Company Handbook (1998)
Turkey	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:

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)

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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.

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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/

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

http://www.rulers.org/

Lexis-Nexis

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

Appendix B. Selected examples of corporate bailouts.

Bangkok Land Gets a Second Chance. *Business Day,* March 8, 2000. THE government's economic council has drawn up a debt **restructuring** deal for Bangkok Land over debts owed to the Government Savings Bank. The loans were made to fund construction of the sports complex used to host the Asian Games, which were held in Thailand over a year ago, Matichon Daily reported. About 175 million baht in principle payments due this year have been delayed until 2004.

Firms paying bonuses despite slow recovery. *The Nation (Thailand),* June 26, 2000. DESPITE the slow economic recovery, some companies in the banking, insurance, energy, and printing sectors are going to pay a half-yearly bonus to their workforce. Krung Thai Bank (KTB), which has been **bailed out** generously by the government, is to pay a relatively high bonus equivalent to two months' salary for the January-June period.

Restructuring. *Interfax Ukrainian News,* February 22, 2000. Kyiv, February 21 (Interfax-Ukraine) - More than 90% of holders of the Gazprom bonds due in 2000 and 2001 agreed on the terms of **restructuring** proposed by the Ukrainian government, Finance Minister Ihor Mitiukov told reporters on Monday. He did not disclose how much will be **restructured** though. According to Interfax-Ukraine, the government proposed to reschedule Gazprom bonds due in 2000 and 2001 worth $280 million and Gazprom bonds due in 2002-2007 worth $735 million.

MISC -Konsortium deal not a **bailout** - Daim. *Reuters News,* March 9, 1998. KUALA LUMPUR, March 9 (Reuters) - Malaysian International Shipping Corp Bhd's purchase of shipping assets from a company run by Prime Minister Mahathir Mohamad's son was not a bail out, Economic Adviser to the Government Daim Zainuddin said on Monday. He told Reuters in an interview that MISC's decision to buy ships and subsidiaries of Konsortium Perkapalan, 51 percent owned by Mirzan Mahathir, was commercial in nature, as was the involvement of national oil company Petrolium Nasional Bhd (Petronas).

US$1.95b govt **aid** to cover MAS insurance shortfall. *Business Times,* September 26, 2001. THE Government has announced that it will provide up to US$1.95 billion (US$1 = RM3.80) to cover Malaysian Airline System Bhd's (MAS) shortfall in insurance coverage.

Malaysian government in 2.76 billion dollar bid to **restructure** Renong. *Agence France-Presse,* October 9, 1998. KUALA LUMPUR, Oct 9 (AFP) - The Malaysian government will issue 10.5 billion ringgit (2.76 billion dollars) in bonds to **restructure** diversified venture Renong Bhd, organisers of the plan, Credit Suisse First Boston, said Friday.

EU approves 121 mln Euro state aid for Italian Iveco. *Italian News Digest,* October 2, 2002. The EU commission has approved a state **aid** of 121 mln euro ($118.8 mln) for Italian carmaker Fiat's industrial vehicles unit Iveco, it was reported on October 2, 2002.

Malaysia Acts On Bad Debt. *Australian Financial Review,* August 10, 2001. Malaysia has again showed its teeth in cleaning up corporate debt. The Government has ordered a boardroom shuffle at Malaysian Resources Corp and issued new **restructuring** deadlines. Two corporate high-flyers, former executives with the State **bailout** fund, have been appointed to run the debt-ridden company. The fund's president, Mr Abdul Rahman Maidin, has been made chairman.

Railtrack may be relisted soon. *The Times,* March 26, 2002. RAILTRACK shares could resume trading on the Stock Exchange as soon as July if shareholders accept the £9 billion **rescue** package backed by the Government. Railtrack Group, the holding company which is not in administration, said yesterday that its shares could be relisted if more than 50 per cent of shareholders back the move at an extraordinary general meeting likely to be held in June.

Polysindo debt **restructured** by end Dec. *Reuters News,* November 9, 2000. JAKARTA, Nov 9 (Reuters) - An Indonesian government debt workout entity said on Thursday it would **restructure** $2 billion in debts, including obligations from PT Polysindo Eka Perkasa, by the end of December.

Table 1. Selected financial data for politically-connected firms and their matching peers

Means and medians of selected financial characteristics for a sample of 450 politically-connected firms and their matching peers. *MkcapUS$* is the company's market capitalization calculated as number of shares outstanding times price per share at year-end 1996 (in thousands of US dollars). *ROA* is annual earnings before interest and taxes divided by year-end total assets times 100 from the company's financial report closest to year-end 1996. *Stnd dev* is the standard deviation of monthly stock returns calculated with 36 monthly returns prior to year-end 1996, if available, but no less than 12 monthly returns. *Leverage* is short-term debt plus the current portion of long-term debt plus long-term debt divided by total assets times 100 from the company's financial report closest to year-end 1996. P-values for difference between means are based on the t-test for dependent samples. P-values for difference between medians are based on the Wilcoxon matched-pairs test.

	Connected firms		Matching firms		T-test	Wilcoxon test
	Mean	Median	Mean	Median	p-value	p-value
MkcapUS$	2,925.02	519.93	2,390.88	406.81	0.08	0.00
ROA (%)	6.53	4.97	6.13	5.77	0.56	0.87
Stnd dev (%)	10.07	9.00	10.45	9.20	0.21	0.28
Leverage (%)	28.16	25.21	25.25	23.28	0.01	0.04

Table 2. Distribution of bailed out firms by type of connection, 1997-2002

This table gives politically-connected firms by type of political connection. Direct connections include connections through a top officer and connections through a large shareholder. A company is defined as connected through a top officer if the company's chief executive officer (CEO), chairman of the board (COB), president, vice-president, or secretary of the board was head of state (i.e., president, king, or prime minister), government minister, or a member of the national parliament as of the beginning of 1997. A company is defined as connected through a large shareholder if anyone controlling at least 10 percent of the company's voting shares was head of state (i.e., president, king, or prime minister), government minister, or a member of the national parliament as of the beginning of 1997. Indirect connections (or close relationships) can come about in one of three ways. (1) A company is considered to be connected through a close relationship if a relative with the same last name as a head of state or minister was a top officer or large shareholder, as defined above, as of the beginning of 1997. (2) A company is considered to be connected through a close relationship when a top executive or large shareholder has been described by *The Economist*, *Forbes*, or *Fortune* as having a friendship with a head of state, a government minister, or a member of parliament during 1997; or (3) A company is considered to be connected through a close relationship if such a relationship has been identified in prior studies: Agrawal and Knoeber (2001) for the U.S.; Backman (1999) for Asia; Gomez and Jomo (1997) and Johnson and Mitton (2002) for Malaysia; and Fisman (2001) for Indonesia. A given company may fall into more than one of the above groups. P-values for equality of proportions are reported in the table.

Type of political connection	Number of politically-connected firms	Number of connected firms bailed out	Percent of connected firms bailed out (A)	Number of matching firms bailed out	Percent of matching firms bailed out (B)	Diff. (A)-(B)	P-value for equality of proportions
Panel A: "Direct" connections							
Connected through a top officer	262	17	6.49	6	2.29	4.20	0.02
Connected through a large shareholder	60	6	10.00	5	8.33	1.67	0.75
Total "direct" connections*	306	23	7.52	11	3.59	3.92	0.03
Panel B: "Indirect" connections							
Connected through a relative or a close friendship	57	4	7.02	4	7.02	0.00	1.00
Connections based on prior studies	96	25	26.04	5	5.21	20.83	0.00
Total "indirect" connections	149	29	19.46	9	6.04	13.42	0.00

*There are 16 companies with both a connection through a top officer and through a large shareholder.

Table 3. Distribution of politically-connected firms and corporate bailouts from 35 countries, 1997-2002

The sample includes 450 politically-connected firms and 450 matching peers from 35 countries. As first best, a match is identified as a firm from the same country with the same 2-digit SIC code and market capitalization within ±40% of the connected firm's. If no company satisfies such criteria, a matching firm is selected based on country, market capitalization and Campbell's (1996) industry classification. If again no match is identified, a matching firm is selected with the closest market capitalization to the connected firm with the same Campbell industry, but from any country. *Corruption* is the 1997 and 1998 measure of perceived corruption from Kaufmann et al. (2003). The original index was scaled from -2.5 to 2.5. For our purposes, we rescaled the index from 0 to 10 with higher scores representing higher corruption. *GDP per capita* is in constant 1995 international dollars, and refers to 1996.

Country	Number of connected firms	Bailouts of connected firms	% Connected firms bailed out (A)	Bailouts of matching firms	% Matching firms bailed out (B)	Diff. (A)-(B)	Corruption index	GDP per capita (PPP)
Australia	2	2	100.0	0	0.0	100.0	1.80	21,780
Austria	1	0	0.0	0	0.0	0.0	2.09	22,829
Belgium	5	0	0.0	0	0.0	0.0	3.66	21,661
Canada	6	1	16.7	0	0.0	16.7	0.89	22,366
Chile	2	0	0.0	0	0.0	0.0	2.94	7,767
Denmark	7	0	0.0	0	0.0	0.0	0.74	23,871
Finland	2	0	0.0	0	0.0	0.0	0.83	19,441
France	16	1	6.3	1	6.3	0.0	2.44	21,066
Germany	10	0	0.0	1	10.0	-10.0	1.76	22,115
Greece	1	0	0.0	0	0.0	0.0	3.35	13,118
Hong Kong	7	0	0.0	0	0.0	0.0	2.37	21,966
Hungary	1	0	0.0	0	0.0	0.0	3.77	9,253
India	8	0	0.0	1	12.5	-12.5	5.61	1,939
Indonesia	27	5	18.5	3	11.1	7.4	6.60	2,934
Ireland	2	0	0.0	0	0.0	0.0	1.87	18,582
Israel	2	0	0.0	0	0.0	0.0	2.45	17,167
Italy	21	1	4.8	0	0.0	4.8	3.40	21,239
Japan	30	0	0.0	0	0.0	0.0	3.55	23,242
Luxembourg	1	0	0.0	0	0.0	0.0	1.66	33,450
Malaysia	81	17	21.0	3	3.7	17.3	3.73	7,599
Mexico	7	0	0.0	0	0.0	0.0	5.55	7,113
Netherlands	1	0	0.0	0	0.0	0.0	0.95	21,994
Philippines	5	1	20.0	1	20.0	0.0	5.46	3,513
Portugal	3	1	33.3	0	0.0	33.3	2.56	13,575
Russian Fed.	4	2	50.0	0	0.0	50.0	6.23	5,753
Singapore	16	1	6.3	1	6.3	0.0	1.10	18,892
South Korea	7	1	14.3	1	14.3	0.0	4.68	12,431
Spain	1	0	0.0	0	0.0	0.0	2.57	15,936
Sweden	3	0	0.0	0	0.0	0.0	0.83	19,855
Switzerland	4	0	0.0	0	0.0	0.0	0.86	25,219
Taiwan	6	1	16.7	1	16.7	0.0	3.75	14,700
Thailand	32	11	34.4	4	12.5	21.9	5.33	6,275
Turkey	1	0	0.0	0	0.0	0.0	5.70	5,387
U.K.	118	5	4.2	3	2.5	1.7	1.59	20,527
U.S.A.	10	1	10.0	0	0.0	10.0	2.19	28,486
Full sample	450	51	11.3	20	4.4	6.9		

Table 4. Corporate bailouts and IMF/WB country loans. 1997-2002

The sample includes 450 politically-connected firms and 450 matching peers from 35 countries. The table classifies firms according to whether they were or were not politically connected and whether their home country received assistance from the IMF or World Bank. Countries receiving IMF/WB loans are those that obtained an Extended Fund Facility loan or a Standby Arrangement loan from the IMF, or a loan from the World Bank during 1996-2002. P-values for equality of proportions are reported in the table. In Panel A, firms with multiple bailouts are counted only once because we are interested in bailed out firms. Panel B gives data for only the first bailout of a company following IMF or WB aid.

Panel A: Company bailouts as function of IMF/WB country loans

	Countries receiving IMF/WB loans (A)	Countries not receiving IMF/WB loans (B)	Difference in percentages (A)-(B)	P-value for equality of proportions
No. of connected firms	175	275		
No. of connected firms bailed out	37	14		
Percent of connected firms bailed out	21.1	5.1	16.0	0.00
No. of non-connected firms bailed out	13	7		
Percent of non-connected firms bailed out	7.4	2.5	4.9	0.01
Difference in percentages	13.7	2.6	11.1	0.00
P-value for equality of proportions	0.00	0.12		

Panel B: Frequency of corporate bailouts within 1 and 2 years of IMF/WB loans vs. corporate bailouts outside this period

	Within 12 months after an IMF/WB loan	Between 13 and 24 months after an IMF/WB loan	Bailouts before the IMF/WB loan or more than 24 months after
No. of connected firms bailed out	24	3	10
Percent of connected firms bailed out	64.86	8.11	27.03
No. of non-connected firms bailed out	10	1	2
Percent of non-connected firms bailed out	76.92	7.69	15.38

Table 5. Determinants of corporate bailouts

Results of logit regressions used to predict firm bailouts. Dependent variable is an indicator equal to 1 if a company was bailed out during 1997-2002, and zero otherwise. *Connected* is an indicator equal to 1 if a company has a shareholder with greater than 10% ownership or a top executive who was a head of state, government minister, or member of parliament as of the beginning of 1997 or if the company had a close relationship with a politician or political party as of the beginning of 1997, and 0 otherwise. *Log (MkcapUS$)* is the log of the company's market capitalization calculated as number of shares outstanding times price per share at year-end 1996 (in thousands of US dollars). *Log (employees)* is the log of the number of company employees based on the company's financial report that occurred closest to year-end 1996. *Collateral* is the ratio of property, plant and equipment to total assets from the company's financial report closest to year-end 1996. *ROA* is annual earnings before interest and taxes divided by year-end total assets times 100 from the company's financial report closest to year-end 1996. *Leverage* is short-term debt plus the current portion of long-term debt plus long-term debt divided by total assets times 100 from the company's financial report closest to year-end 1996. *Stnd dev* is the standard deviation of monthly stock returns calculated with 36 monthly returns prior to year-end 1996, if available, but no less than 12 monthly returns. *GovStake* is the percentage of voting shares held by a firm's home country national and local governments as of 1997. *Privatized* is an indicator equal to 1 if the company was privatized prior to 1997 and 0 otherwise. *Corruption* is the 1997 and 1998 measure of perceived corruption from Kaufmann et al. (2003). The original index was scaled from -2.5 to 2.5. For our purposes, we rescaled the index from 0 to 10 with higher scores representing higher corruption. *GDP per capita* is in constant 1995 international dollars, and refers to 1996. *IMF/WB aid* is an indicator equal to 1 if the firm's home country obtained an Extended Fund Facility loan or a Standby Arrangement loan from the IMF, or a loan from the World Bank during 1996-2002. P-values, adjusted for heteroskedasticity and clustering at the country level, are reported in parentheses below the coefficients.

Variable	(1)	(2)	(3)	(4)	(5)	(6)
Connected	0.805	0.674	0.761	0.764	0.622	0.727
	(0.001)	(0.008)	(0.007)	(0.002)	(0.013)	(0.014)
Log (mkcapUS$)	0.821	0.922	0.824	0.849	0.958	0.753
	(0.002)	(0.014)	(0.125)	(0.002)	(0.017)	(0.157)
Log (employees)			0.177			0.236
			(0.219)			(0.150)
Collateral		-0.025	-0.031		-0.026	-0.032
		(0.013)	(0.011)		(0.010)	(0.007)
ROA		-0.061	-0.079		-0.061	-0.081
		(0.000)	(0.001)		(0.000)	(0.000)
Leverage		0.027	0.021		0.026	0.021
		(0.050)	(0.105)		(0.067)	(0.104)
GovStake	2.582	2.491	1.489	2.417	2.225	1.325
	(0.182)	(0.201)	(0.440)	(0.203)	(0.235)	(0.467)
Privatized	1.682	2.497	3.321	1.724	2.578	3.384
	(0.010)	(0.001)	(0.000)	(0.014)	(0.001)	(0.000)
Stnd dev			8.430			8.118
			(0.001)			(0.002)
Corruption	0.153	-0.112	0.106	0.107	-0.164	0.065
	(0.489)	(0.636)	(0.677)	(0.530)	(0.411)	(0.804)
Log (GDP per capita)	-2.184	-3.362	-2.713	-0.791	-1.712	-1.487
	(0.050)	(0.009)	(0.023)	(0.451)	(0.187)	(0.327)
IMF/WB aid				1.295	1.520	1.149
				(0.001)	(0.001)	(0.105)
Intercept	0.354	5.566	0.807	-5.928	-1.827	-4.544
	(0.943)	(0.315)	(0.894)	(0.245)	(0.766)	(0.577)
Observations	900	803	636	900	803	636
Bailouts of connected firms	51	43	35	51	43	35
Bailouts of non-connected firms	20	17	16	20	17	16
Wald Chi2	469.69	854.70	861.01	605.40	1,076.82	604.52
Prob > chi2	0.00	0.00	0.00	0.00	0.00	0.00

Table 6. Operating performance and financial leverage of bailed out connected and non-connected firms and their matching peers

This table gives mean and median ROAs and financial leverage ratios for bailed out firms and their matching peers. *ROA* is calculated as annual earnings before interest and taxes divided by year-end total assets times 100. *Leverage* is calculated as short-term debt plus the current portion of long-term debt plus long-term debt divided by total assets times 100. Year 0 is the year of announcement of a company bailout. Year -2, Year -1, Year +1, and Year +2 are two years before, one year before, one year after, and two years after the bailout announcement, respectively. *Difference* represents the level of underperformance of companies bailed out relative to their peers. Whenever the ROA or Leverage is not available for a peer, we replace the missing value with the median for the peer's (Campbell) industry in the peer's country. The number below the means (on the left side of the panel) is the p-value of a matched pairs t-test for difference in means between bailed-out and matching companies. The number in parenthesis (on the right side of the panel) is the number of matching pairs. The number below the medians is the p-value for the difference from zero, based on the Wilcoxon matched pairs test. The p-values for difference in means (medians) between industry and peer adjusted ROA/leverage of connected firms and industry and peer adjusted ROA/leverage of non-connected peers (last row in each panel) are based on t-tests for independent samples (Mann-Whitney U tests). For companies receiving multiple bailouts, we always include the first bailout in our sample period. Subsequent bailouts are included only if they took place at least 3 calendar years after the first bailout.

	Panel A: ROA									
	Mean ROA					Median ROA				
Sample	Year -2	Year -1	Year 0	Year +1	Year +2	Year -2	Year -1	Year 0	Year +1	Year +2
A. Connected & bailed out	2.09	1.47	-2.88	-5.33	-3.41	2.32	2.24	-0.61	-2.19	-1.32
B. Non-connected peer	4.41	3.95	3.61	2.72	2.78	3.86	4.48	3.83	3.04	2.52
Difference (A-B)	*-2.33*	*-2.47*	*-6.49*	*-8.05*	*-6.19*	*-1.54*	*-2.24*	*-4.44*	*-5.23*	*-3.84*
P-value difference (N. of pairs)	0.03 (49)	0.03 (51)	0.00 (52)	0.00 (51)	0.00 (45)	0.00 (49)	0.00 (51)	0.00 (52)	0.00 (51)	0.00 (45)
C. Non-connected & bailed out	2.46	2.31	-0.84	-1.69	0.29	1.67	2.03	0.04	-1.18	0.87
D. Connected peer	4.29	3.44	1.10	0.36	-0.15	2.33	2.10	0.74	0.77	0.13
Difference (C-D)	*-1.83*	*-1.03*	*-1.94*	*-2.05*	*0.43*	*-0.66*	*-0.07*	*-0.70*	*-1.95*	*0.74*
P-value difference (N. of pairs)	0.19 (16)	0.53 (17)	0.29 (17)	0.38 (16)	0.87 (15)	0.47 (16)	0.65 (17)	0.41 (17)	0.53 (16)	0.61 (15)
Difference [(A-B)-(C-D)]	*-0.50*	*-1.44*	*-4.55*	*-6.00*	*-6.62*	*-0.88*	*-2.17*	*-3.74*	*-3.28*	*-4.58*
P-value difference	0.80	0.51	0.04	0.17	0.02	0.21	0.16	0.02	0.09	0.01

Table 6. Operating performance and financial leverage of bailed out connected and non-connected firms and their matching peers

	Mean leverage					Median leverage				
Panel B: Leverage	Year -2	Year -1	Year 0	Year +1	Year +2	Year -2	Year -1	Year 0	Year +1	Year +2
A. Connected & bailed out	38.3	43.5	45.9	51.5	52.1	36.2	44.9	46.7	53.6	60.8
B. Non-connected peer	26.7	28.7	25.7	25.19	26.6	26.1	28.7	24.7	23.4	23.5
Difference (A-B)	*11.6*	*14.8*	*20.2*	*26.3*	*25.5*	*10.1*	*16.2*	*22.0*	*30.2*	*37.3*
P-value difference (N. of pairs)	0.00 (50)	0.00 (51)	0.00 (51)	0.00 (49)	0.00 (43)	0.00 (50)	0.00 (51)	0.00 (51)	0.00 (49)	0.00 (43)
C. Non-connected & bailed out	31.1	29.3	29.7	29.3	26.2	25.3	29.1	26.6	25.4	21.1
D. Connected peer	20.9	25.1	25.1	23.0	24.2	16.1	16.5	22.2	16.5	16.8
Difference (C-D)	*10.2*	*4.2*	*4.6*	*6.3*	*2.0*	*9.2*	*12.6*	*4.4*	*8.9*	*4.3*
P-value difference (N. of pairs)	0.22 (17)	0.63 (18)	0.62 (18)	0.47 (17)	0.84 (17)	0.21 (17)	0.71 (18)	0.40 (18)	0.31 (17)	0.65 (17)
Difference [(A-B)-(C-D)]	*1.4*	*10.6*	*15.7*	*19.9*	*23.5*	*0.9*	*3.6*	*17.7*	*21.3*	*32.9*
P-value difference	0.86	0.22	0.09	0.05	0.04	0.71	0.21	0.13	0.06	0.06