

Political Connections and Preferential Access to Finance: The Role of Campaign Contributions

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Topic: Political Economy and Finance

- More studied recently
 - PE effects on amount and quality of financial intermediation (e.g., NPLs); quality and impact of supervision; institutional environment for finance (legal, corporate governance); etc.
- Channels though still open
 - Bribes of state bank officials or supervisors; corruption of politicians; rents being allocated; lobbying; etc.
- Policy implications less clear: improve what?
 - Strengthen institutions, e.g., supervision; increase transparency and accountability; privatize; enhance competition; reform political system
- Detailed studies can help clarify channels through which influences happen

Investigate Whether Campaign Contributions Buy Preferential Access to Finance

- We study campaign contributions patterns of 159 listed firms for the 1998 elections in Brazil and their effects
- We find that contributions to (*winning*) candidates are *robustly* and *positively* associated with:
 - Stock returns of contributors, relative to peer firms, at election time
 - Bank debt leverage of contributors, relative to peer firms, following election
- We take this as evidence that:
 - **Politicians favor individual contributors, not just industry at large**
 - **Preferential access to finance is such a political favor**

First Paper to Link Campaign Contributions and Access to Finance

- Firm value is affected by political connections
 - Indonesia: Fisman, 2001; Malaysia: Johnson and Mitton, 2003; Brazil: Ramalho, 2003; others
 - Cross-country: Faccio, 2005
- Firm value is affected by campaign contributions
 - United States: Roberts, 1990; Jayachandran, 2004
- Political connections and preferential access
 - Pakistan: Kwahja and Mian, 2005; Mexico, Russia, others
- But connection campaign contributions and access to finance unexplored to date

Context of the 1998 Elections and Access to Finance in Brazil

- Year of re-election of President Cardoso (1995-2002)
- Elections on the following levels (positions):
 - Federal deputies (513), President (1), Governor (27), Senator (27)
- Brazilian campaign contribution law:
 - Permits contributions to candidates DIRECTLY
 - Requires candidates to justify and keep records of contributions
 - Does not impose effective limits on contributions
- Preferential access to finance was valuable and feasible
 - High interest rates
 - Limited alternatives: small bond and capital markets, and poor international access
 - Prevalence of state-owned banks, > 50%

New Dataset on Contributions of Listed Firms

- Tribunal Superior Eleitoral dataset of contributions:
 - Name of contributor/firm
 - Amount and date of contribution
 - Candidate
- Hand-matched for listed firms contributions by candidate:
 - Total donations
 - Donations to winners
 - Donations to losers
- Used this data for several proxies of connections
- Firm financial data (leverage, type and maturity of debt (bank loans, debentures, bonds), assets, profitability, etc: Economatica (robustness test using Worldscope data)

Contributions to Deputies Increases CARs After Controlling for Industry-Specific Effects

	Cumulative abnormal returns for listed Brazilian firms		
	(1)	(2)	(3)
Contributions to deputies	1.958 (2.93)***		
Contributions to winning deputies		2.659 (3.32)***	4.057 (3.03)***
Contributions to losing deputies			-6.734 (1.72)*
Industry-specific effects?	Y	Y	Y
Observations	159	159	159
R-squared	0.07	0.07	0.07

- Contribution of **100,000 BRL** (US\$86,000) to winning candidates increases CAR by **2.659%**
- Going from the 25th to the 75th percentile of contributions, implies an increase in the CAR of about **19%**.

Robust Positive Effects of Contributions to (Winning) Deputies on Firm Stock Returns

- Controlling for assets, debt to assets, profitability, market capitalization
- Controlling for contributions to candidates for other levels
- All other proxies of strength of political connections
- Robust to change of event window
- Holds also for abnormal buy-and-hold returns

Contributions to (Winning) Deputies Increases Bank Debt Leverage Ratios After Elections

	Change in bank debt leverage 1998-2001		Change in short-term bank debt leverage 1998-2001	
	(1)	(2)	(3)	(4)
Contributions to deputies (as a share of total assets)	32.916** (15.723)		30.637*** (9.740)	
Contributions to winning deputies (as a share of total assets)		53.030* (29.256)		48.068** (18.489)
Industry-specific effects?	Y	Y	Y	Y
Observations	116	116	116	116
R-squared	0.11	0.11	0.12	0.12

- By estimating leverage equation in first differences, we effectively control for any fixed firm effects
- Focus on bank debt. Stronger effect for short-term debt (more likely to be renegotiated)
- One s.d. increase in contributions to winning deputies increases leverage by 0.021 (mean increase in leverage over period is 0.027)

Robust Positive Effects of Contributions to (Winning) Deputies on Leverage

- Controlling for *changes* in firm-specific variables typically used in capital structure regressions (size, tangibility, profitability, ..)
- Calculating change in leverage over different periods
- Using alternative data on leverage from Worldscope
- Also find negative effect of contributions on cost of debt (interest expenses), although not statistically significant
- No effect for other types of debt (bonds, debentures)
- No effect on amount of fixed assets (collateral)

→ Preferential access to financing through access to bank debt

Conclusion: Contributions Lead to Political Favors, incl. Preferential Access to Finance

- Contributions are effective means to gain political favors, because relatively small contributions lead to:
 - Economically large increases in stock returns
 - Economically large increases in financial leverage
- Paper attests to literature on the importance of political connections on firm value; fills gap by linking campaign contributions to access to finance
- Provides some possible policy implications
 - Transparency in campaign financing not sufficient to stop political influence
 - Politically driven access to finance can run through state-owned banks

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Abstract: We provide empirical evidence that campaign contributions are strongly associated with market expectations of future firm-specific political favors, including preferential access to external finance. Using a novel dataset, we find that Brazilian firms providing more contributions in the 1998 campaign to (elected) federal deputies experienced higher stock returns following the election, even after controlling for industry-specific effects and firm-specific characteristics. This suggests that federal deputies were expected to shape policy and actions to benefit particular firms. Consistent with such political favors, we find that these firms substantially increased their financial leverage relative to a control group in the four years following election, especially from banks, suggesting that contributions gained firms preferential access to finance.

JEL Classifications: D7, G1, G2, G3, and P48.

Keywords: Campaign Contributions; Elections; Corruption; Preferential Lending.

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Introduction

This paper studies the political influence that individual firms gain by contributing to election campaigns of legislative candidates. It addresses an important, long-standing political economy question: do higher campaign contributions imply more future *firm-specific* political favors or are contributions provided according to political ideology and lead to *economy-wide* effects? We find supporting empirical evidence for the hypothesis of firm-specific political favors by exploiting a novel dataset based on firm and candidate-level contribution data for the 1998 Brazilian elections in which President Fernando Henrique Cardoso was re-elected as president.

Brazil is notorious for the odious relationships between politicians and firms. At the same time, Brazil is an ideal test case to assess the impact of a campaign finance system on the links between politicians and firms. First, it is one of the few countries that register campaign contributions at the candidate-level. Furthermore, Brazilian law dictates individual justification of campaign expenditures by each candidate, making it more difficult for a politician to spend unofficial money on campaigning. Although there may still be other ways to influence politicians, campaign contributions can be expected to be important means to do so. Second, given its level of development, including a weak competition and limited development of its banking system, the value of political connections in Brazil is likely to be greater than in developed countries. Finally, while financing is scarce, Brazilian capital markets are relatively well-developed and information is rapidly absorbed, allowing for an event-type study. Furthermore, detailed information on firms' financial structures and performance is available, allowing for an access to financing analysis.

We find that the cross-sectional variation in stock market responses at the announcement of the election results can be explained by the campaign contributions of individual firms to federal deputies. Since we control for industry-specific effects, we can reject the hypothesis that firms provided contributions solely according to political ideology, since this would have led to only economy or industry rather than firm-specific results. Rather our results suggest that the stock market expected deputies to shape policy to benefit their campaign donors. In addition, we study the relationship between campaign contributions and future access to finance. Since the two largest commercial banks are government owned and a large portion of financing is extended by government-owned development banks, political influence can easily translate in preferential access to financing. Preferential access is particularly attractive to firms in Brazil given the high interest rates and limited overall financial intermediation. We find indeed that the financial leverage of firms that made more financial contributions to (elected) federal deputies increased more relative to other firms in the four years following the election. This suggests that political influenced was used to grant preferential access to financing.

The remainder of the paper is structured as follows. Section I describes the related literature and the context of the 1998 elections. Section II lays out the methodology used and Section III describes the data. Section IV provides a discussion of the results and the robustness checks. Section V concludes.

I. Related Literature and the Context of the 1998 Elections in Brazil

This section gives a brief overview of related literature, describes the Brazilian election system, the political situation surrounding the 1998 elections, and the Brazilian campaign finance law, and discusses the interaction between firms and politicians in Brazil.

Our paper straddles two related strands of literature. First are studies of the relationships between campaign contributions and policy outcomes (e.g., Snyder 1990, Grossman and Helpman 1996, and Coate 2004). This literature has found it difficult to disentangle the matching of ideological voting dispositions of politicians with preferences of firms (e.g., left wing firms provide contributions to left wing politicians) from incentives of politicians to provide contributors with specific favors. Combined with simultaneity bias (Durden and Silberman 1976 and Grenzke 1989), this has made it hard to establish whether contributions do not have a substantial influence on political decision-making because politicians act according to their ideology (Chappell 1982) or whether contributions are used to forge “cozy” alliances between politicians and specific (groups of) contributors (Stratmann 1995 and Kroszner and Stratmann 1998). The literature has used the event study methodology to try to overcome these problems, but found mixed results (Roberts 1990, Jayachandran 2004, Ansolabehere et al. 2004).¹

Second are studies of the influence of special interests on economic outcomes, without specific reference to campaign contributions. There is a growing literature that finds that firms have strong incentives to forge alliances with politicians and that such connections affect the economic outcomes, in part through affecting the general institutional environment. Acemoglu (2005) shows in a theoretical model how in a society where political power is in the hands of a few producers, economic growth is

¹ Jayachandran (2004) documents that political contributions—soft money donations to Republicans and Democrats—matter for the value of U.S. firms. In May 2001, Senator Jim Jeffords suddenly left the Republican Party, and hence shifted control of the Senate towards the Democrats. Jayachandran shows that firms who made soft money donations to the Republicans (Democrats) lost (gained) market capitalization proportionately to the amount of their contributions. Roberts (1990) conducts an event regarding the impact of Senator Henry Jackson’s unexpected death in 1983 on firms connected to him and firms connected to his successor in the Armed Services Committee. Roberts finds that share prices of firms affiliated with Jackson declined whereas prices surged of firms who were connected to his successor. On the other hand, Ansolabehere et al. (2004), exploiting variation in campaign finance law, do not find that soft money contributions affect firm value substantially in the United States.

initially higher than in a society where political power is more diffused, but later economic comparative advantage declines, with effects due to impacts on the institutional environment. He, Morck, and Yeung (2000) find that political rent-seeking by large established firms and relative stability in the top firms is associated with slower economic growth in a Schumpeterian sense. The channels for political influence are multiple. Rajan and Zingales (2003), for example, argue that incumbents using political channels have incentives to oppose financial development because it limits competition, hence maintaining incumbents' rents.

There is some cross-country and country-specific evidence that political connections indeed matter for firm value, including through preferential access to financing. Faccio (2005) shows that firm value increases when large shareholders or officers enter politics. Fisman (2001) finds that the market value of politically connected firms in president Suharto's Indonesia declined more when adverse rumors circulated about the health of the president. Johnson and Mitton (2003) provide empirical evidence for Malaysia that the imposition of capital controls during the Asian financial crises benefited primarily firms with strong connections to Prime Minister Mahathir. Kwahja and Mian (2005) using loan-level data for Pakistan find that politically connected firms – firms with a director participating in an election – borrow twice as much and have 50% higher default rates, with connected firms obtaining exclusively loans from government-owned banks.

We next describe the electoral system in Brazil and the institutional setup for campaign contributions. Brazil has a bicameral National Congress (*Congresso Nacional*)

consisting of the Federal Senate (81 seats) and the Chamber of Deputies (513 seats).² There are 27 federal units, comprised of 26 states and one Federal District, with each unit electing its own governor. The president is directly elected by a simple majority vote for a four-year term. The Senate includes three senators from each federal unit and senators are elected via majority voting in staggered elections. In 1998, one-third of the Senate (27 seats) was up for election. Senators serve eight-year terms. All members of the Chamber of Deputies are elected for a four-year term via a party-list proportional system. In practice, elections are very individualized and party votes are few. In total, positions open were that of president (1 position), governor (27 positions), senator (27 positions), and federal deputy (513 positions). In the empirical section, we focus on federal deputies, but we analyzed all positions.

In the 1994 national election, presidential candidate Fernando Henrique Cardoso (Brazilian Social Democratic Party, PSDB) received 52.97% of votes, defeating Luiz Inácio (Lula) da Silva (Worker's Party, PT), his closest competitor, who received 26.39% of votes. Due to a constitutional amendment, the 1998 election was the first in which the current president was allowed to run for re-election and Cardoso won in the first round with 53.06% of votes. Again, his close runner up was Lula da Silva with 31.71% of votes. While the presidential election was not a great surprise, the 1998 election was close for many deputies and the announcement of election results resolved much uncertainty about the political future of individual deputies.

Before 1993, it was prohibited for business and individuals to contribute to candidates directly. Triggered by campaign finance scandals, Congress passed a law (Law no. 8713) in 1993, which allowed contributions for all offices directly, but required

² This section is largely based on information provided by the International Foundation for Election Systems (2005) and IUJPER (2005).

candidates to submit an overview of *all* their campaign contributions and sources, at the donor level, to electoral courts. Non-compliance can result in, among others, fines or removal of candidacy/appointment and several state courts indeed imposed these (Veja, 1998). Individuals can donate up to ten percent and companies up to two percent of their gross annual income, making contributions virtually unconstrained. Furthermore, campaign funding is individual-based and not channeled via the party to which the candidate is affiliated.

Brazilian election campaigns are expensive and candidates have strong demand for campaign contributions. In turn, individual firms may be willing to make contributions because elected officials can provide favors. Elected officials can presumably affect the distribution of export subsidies, banking recapitalization, financial sector regulations, the allocation of “pork-barrel” funds and other government contracts, and the provision of external financing from (state-owned) banks. While politicians have ex-post incentives to renege on promises (since it is impossible to write and enforce a favor-contract based on campaign finance), repeated interactions are common in Brazil (Samuels, 2002).³ Politicians establish long-term relationships with potential campaign financiers to develop reputation. Many politicians also have long political careers. Although the turnover of deputies in each election is 50%, typically a politician spends a few terms in Congress and then continues in state or local levels of government. Furthermore, most campaign contributions come from a small number of firms,

³ In the United States, Kroszner and Stratmann (1998) argue that to overcome this commitment problem, legislators have an incentive to create specialized standing committees that enable repeated interaction between special interests and committee members. Standing committees give rise to a reputational equilibrium where special interests give high contributions to committee members who carry out favors for them. They show that members of the House Banking Committee were able to attract significantly higher contributions from financial interests than other legislators. Furthermore, they document that uncertainty about a committee member gradually resolves resulting in the sources of contributions becoming more concentrated over time. In addition, when membership is likely to be terminated, for example because of age, the concentration and level of contributions decline.

facilitating tighter personal relationships. This relatively closed campaign finance market provides for credible commitments (Samuels, 2001).

II. Methodology

This section discusses the specific hypotheses we test, the construction of measures of the strength of political connections, and the econometric methodology we use to explain the cross-sectional variation in stock returns and the degree of access to finance.

If the market expects that contributions lead to beneficial connections for individual firms because of future political favors, firm value, i.e., its stock price, should increase at the announcement of the candidate supported being elected. If the election leads to the appointment of candidates with a certain political ideology, then we would expect to find more general valuation changes for whole industries or even economy-wide. Therefore, *if* individual firms have strong connections *and* experience a significant positive stock returns around the election announcement *relative to their competitors*, we can conclude that the market expects firm-specific political favors. Vice-versa, firms that saw their connected candidate lose—or industries that may not see their ideological favorite candidate elected—may suffer valuation losses.

Regarding the channels through which political connections pay off, we focus on access to finance. Political favors can come in many forms, but given the predominance of state-owned banks in Brazil⁴ and the unattractive interest rate environment for borrowers,⁵ preferential access to finance is a likely candidate for how political favors get

⁴ According to LLS (2002), the share of the assets of the top 10 banks in Brazil controlled by the government at the 20 percent level was 57 percent in 1995 (a bank is considered controlled by the government stake in the bank is larger than 20 percent and the state is the largest shareholder).

⁵ Brazilian interest rate spreads are among the highest in the world, averaging around 58 percent in 1998, with lending rates averaging around 86 percent in 1998 (source: WDI database of the World Bank).

provided. Specifically, we hypothesize that contributions gained firms access to (more) bank loans at preferential terms. We therefore expect that those firms that have political connections increased, relative to a control group of firms, their financial leverage more in the four years following election. Since short-term loans are renewed more often during the four-year the elected deputies are in office, we can expect the effect to be more pronounced for short-term loans. On the other hand, long-term loans in Brazil are largely being provided by a state-owned bank, BNDES, and the presumably greater political influence over this bank can make the effect of contributions greater on increases in long-term loans. We therefore investigate separately increases in short- and long-term loans.

Following this discussion, we develop the following main empirical hypotheses. The first hypothesis is that politically active firms (i.e., those with larger absolute campaign contributors) are more likely to receive future firm-specific political favors, which in turn means these firms' stock market value increases more following the announcement of the elections result. Specifically, our TOTAL hypothesis is: *Using contributions to federal deputies as a proxy for political connections, better connected firms have significantly higher stock market returns.* However, since it matters whether a candidate to whom the firm contributes wins or loses its election, we develop WINNERS and LOSERS sub-hypotheses: *Using contributions to federal deputies as a proxy for political connections to winning federal deputies, better connected firms to winners (losers) have significantly higher (lower) returns.* The second hypothesis is that firms with larger campaign contributors are more likely to receive preferential access to financing. Specifically, our ACCESS hypothesis is: *Using contributions to federal deputies as a proxy for political connections, better connected firms have significantly greater increases in leverage in the years following the election.* Since political

connections may matter more for short-term debt or long-term debt increases, we develop SHORT and LONG ACCESS sub-hypotheses: *Using contributions to federal deputies as a proxy for political connections, better connected firms have significantly greater increases in short-term (long-term) leverage in the years following the election.*

To test these hypotheses, we collected new campaign data and constructed a novel dataset. As we argue, the aim of campaign finance is to buy direct or indirect political influence. However, the functional form of how campaign contributions translate in political influence is non-trivial. Therefore, using contribution data, we construct three different, yet simple and intuitive measures of how donations may translate in terms of strength of political connections for donors. In the construction of these measures, we assume that if a listed firm does not appear in the official contribution data, then it did not donate in any way to political candidates, and hence becomes part of the control group.

Our first measures are simply the absolute amounts a firm donates altogether to candidates for the four different positions at stake in the 1998 election. Arguably, a donor will benefit more if she contributed to winning rather than to losing candidates. Hence, we also split each of the four measures into the amount provided to winners and to losers.

Our second measures are based on the relative contributions among donors where we take into account the fact that donors compete with each other to gain political influence with a specific candidate. To gain political influence with a popular candidate requires more money than with a less popular candidate. Therefore, the absolute amount of contributions may not translate into proportional political influence. We assume here that a donor gets political influence with a candidate in relation to the ratio of the amount

it contributed to the total sum of contributions received by the candidate.⁶ Note that with this second measure we implicitly assume homogeneity of political influence for all candidates.

Our third measures are based on the relative amounts among donors and candidates. In addition to acknowledging competition among donors, we consider heterogeneity of the political influence of candidates. That is, politicians differ in their ability to define, lobby, and decide over issues on the political agenda. For example, incumbents may be better able to exert political influence than newcomers are. As a consequence, some politicians attract more and some less contributions. Using the total amount of contributions for a candidate as a fraction of the total contributions to all candidates in a state as a proxy for the candidate's overall political influence, we construct this new proxy.⁷

For our dependent variables, we use abnormal rates of return and increased access to finance. For the rates of return, we use a standard event study approach to construct cumulative abnormal returns (MacKinlay, 1997). We define the estimation window as the period (τ_0, τ_1) and the event window as (τ_1, τ_2) . The event itself is at $\tau = 0$, October 9 1998, when the election results became publicly known (Reuters, 1998), and where $\tau_0 < \tau_1 < 0 < \tau_2$. Next we calculate daily stock returns for 159 companies listed on

⁶ For deputy candidates for firm i , this measure is calculated as $\sum_{j=1}^n \frac{CONTRIBUTION_{i,j}}{TOTAL_j}$, where $CONTRIBUTION_{i,j}$ denotes the contribution from firm i to candidate j , $TOTAL_j$ is the total amount of contributions candidate j received, and n is the total number of deputy candidates.

⁷ For deputy candidates for firm i , this measure is calculated as $\sum_{j=1}^n \frac{CONTRIBUTION_{i,j}}{TOTAL\ IN\ STATE_j}$, where $TOTAL\ IN\ STATE_j$ is the total amount all deputy candidates in the state of candidate j received.

the Brazilian stock market using $R_{i,t} = \ln\left(\frac{P_{i,t}}{P_{i,t-1}}\right)$, where $P_{i,t}$ is the stock price index of company i at time t . To calculate the abnormal returns, we estimate the following market model:

$$R_{i,t} = \alpha_0 + \beta_0 R_{B,t} + \varepsilon_{i,t}, \text{ where } E[\varepsilon_{i,t}] = 0 \text{ and } Var[\varepsilon_{i,t}] = \sigma_i^2, \quad (1)$$

where $R_{B,t}$ is the return on the whole São Paulo stock exchange (as measured by the BOVESPA index) at time t . In the event window, the abnormal return for company i is defined as:

$$AR_{i,t} = R_{i,t} - \hat{R}_{i,t}, \quad (2)$$

where $\hat{R}_{i,t}$ is the return predicted according to Equation (1). The cumulative abnormal return for company i is given by:

$$CAR_i(\tau_1, \tau_2) = \sum_{\tau=\tau_1}^{\tau_2} AR_{i,t}. \quad (3)$$

In terms of access to finance, while we do not have data on the loan contracts of each firm in our sample, we do know from the Economatica database the amount and types of short-term and long-term debt outstanding at the time of the election and at the end of the following four years. Specifically, we have data on the amount of short-term bank debt, the amount of long-term bank debt, the amount of debentures, the amount of corporate bonds, and the amount of account payables outstanding. Because corporate bond markets are not well developed in Brazil, most debt liabilities of firms are bank loans. A substantial increase in total bank debt outstanding and leverage, *ceteris paribus*, could thus be indicative of preferential access to bank finance. We define LEVERAGE CHANGE as the absolute change in the ratio of total bank debt to total assets over the

period 1998-2001, the four years following the 1998 election that representatives were in office and able to extend political favors. We are also interested whether the effect differs between short and long-term debt. We therefore create two additional variables: ST LEVERAGE CHANGE is the absolute change in the ratio of short-term bank debt (plus current portion of long-term bank debt) to total assets over the period 1998-2001, and LT LEVERAGE CHANGE is the absolute change in the ratio of long-term bank debt to total assets over the period 1998-2001.⁸

We estimate the following two regression models:

$$CAR_i = \alpha + B \text{ Campaign Contribution Items}_i + \Gamma \text{ Industry Dummies}_i + K \text{ Control Variables} + \varepsilon_{i,t}, \quad (4)$$

and

$$\text{Change in Leverage}_i = \alpha + \Lambda \text{ Campaign Contribution Items}_i + \Phi \text{ Industry Dummies}_i + \Psi \text{ Control Variables} + \varepsilon_{i,t}, \quad (5)$$

where *Campaign Contribution Items_i* are the various political influence measures as defined in the previous subsection. The TOTAL hypothesis predicts that the coefficients in vector B for the amount of campaign contributions to federal deputies are positive and statistically and economically significant. According to the WINNERS (LOSERS) hypothesis, these coefficients are positive (negative) and significant for political connection measures for winning (losing) deputy candidates. The ACCESS hypothesis predicts that the coefficients in vector Λ for the amount of campaign contributions are positive and statistically and economically significant. By using the change in leverage as a dependent variable, we are essentially performing a difference estimation of a traditional leverage regression, and thus effectively control for fixed firm effects. Still, we

⁸ As a robustness check, we construct similar leverage variables using data from Worldscope. The disadvantage of using Worldscope is that we have data on fewer firms and that we do not have a detailed breakdown by type of debt. Specifically, Worldscope does not have separate data for bank debt and bonds.

are concerned that changes over time in firm level characteristics may affect the result. We therefore include changes in firm level characteristics as control variables. Following the capital structure literature, we include changes in the following variables as control variables: log of total assets (proxy for firm size), ratio of fixed assets to total assets (proxy for asset tangibility), and pre-tax return on assets (proxy for profitability). We also consider separately changes in other types of debt.

III. Data

This section describes the sources of the firm-level campaign contribution, the construction of the contributions dataset, the stock market and financial debt data, and the outcomes of the 1998 election.

A. Data Sources

The data collected by the Brazilian national election court, the *Tribunal Superior Eleitoral* (TSE) (Tribunal Superior Eleitoral, 2005), contains detailed information about donors and recipients. For each candidate we know the name, the state, candidate number, party, and position (federal deputy, senator, governor or president). Furthermore, we know the name of the donor, the size of its contribution and the type (individual, corporate, political party or unknown). Each entry corresponds to a single contribution. There are 5,675, 26,199, 5,992, and 1,360 entries in the dataset at the presidential, federal deputy, governor, and senator level respectively. Most donations are from individuals. There are 378, 4,053, 1,101, and 307 entries of contributions from listed and non-listed companies at the presidential, federal deputy, governor, and senator level respectively.

Data are in Brazilian Reais (BRL), which had an average 1998 exchange rate of \$0.86 per BRL.

Data on whether deputy candidates lost or won were taken from the TSE. There were 513 deputy candidates to be appointed. Data on whether governor, senator and president candidates lost or won are from Instituto Universitário de Pesquisas do Rio de Janeiro, a Brazilian academic social sciences research institute (IUPERJ, 2005). In 1998, there were 27 candidates—one for each district—to be chosen for both the senate and governor positions. Our contributions dataset contains 292 entries for all listed firms. In compiling our campaign contributions dataset we had to correct some trivial differences in the donor names.⁹

For the CAR tests, we need to restrict ourselves to the publicly traded firms. For the relevant period, we collect market data from Thomson's Financial Datastream for 159 actively traded listed firms for which we have both data on campaign contributions and data on stock prices and market capitalization. From Datastream, we also obtain data on the sectoral classification of each firm. We distinguish sectors as defined by Datastream: Basic Industries, Cyclical Consumer, Financials, General Industrials, Information Technology, Non-cyclical Consumer, Non-cyclical Services, Resources, and Utilities.

We also collect accounting data from Economatica for these firms on total assets, fixed asset tangibility ratio, profitability ratio, financial leverage ratios, and other basic financial ratios. Unfortunately, we have accounting information for only 116 out of these 159 listed firms.

⁹ For example, Companhia Siderurgica Nacional occurs in 12 different ways in the deputy contribution data. These include, Campanha Siderurgica Nacional, Companhia Siderurgica Nacional, Companhia Siderurgica Nacional, Cia Siderúrgica Nacional – CSN, or just CSN.

B. Descriptive Statistics

This subsection provides descriptive statistics of contributions on the industry level and of contributions on each position level, the cumulative abnormal returns, and increase in leverage and correlations among these variables.

Table I presents the descriptive statistics on deputy contributions and our political influence measures (statistics were also calculated for other candidate positions, but are not reported). As can be seen from Panel A, the 889 federal deputy candidates received 5,580 donations for a total amount of 65,315,860 BRL, or an average per candidate of 73,471 BRL. Deputy candidates received campaign contributions from 60 listed donor firms and as a group, the listed firms in our sample are the largest contributors, responsible for 15.9% of total contributions.¹⁰

Winners received significant substantially larger amounts of contributions than losers did. The 385 winning candidates on average received 118,014 BRL, while the 504 losers received only 39,445 BRL. This mean difference is statistically significant, suggesting that campaign donors successfully targeted future winners. There was remaining uncertainty about future winners and losers, however, since a lot of contributors gave to losers, suggesting there was enough uncertainty to elicit a stock market response after the announcement of results, if the market indeed expected firm-specific political favors as a result of contributions.

There is substantial variation among contributors. In terms of political influence, there are a few firms who stand out in their size and spread of contributions. These include Ipiranga, Banco Itau, Siderurgica Nacional and Gerdau, well-known Brazilian blue-chips. Gerdau contributed to the equivalent of 161 deputies. However, when we

¹⁰ Candidates for senator received contributions from 13 listed firms, candidates for governor from 30 listed firms, and candidates for president from 22 listed firms.

correct for inter-state competition among candidates, Banco Itau has the broadest coverage: an equivalent of 18 deputies. All in all, the four largest contributors contributed to over 3.23 deputies on average and accounted in total for about 33 deputies.

Panel B presents summary statistics for our different measures of political influence for the 292 listed firms, including those firms that did not make contributions to candidates. The first measure reflects the total amounts to candidates for the position of federal deputy. The second measure is calculated by summing the fractions of total contributions of a firm to a candidate per position. The third measure is calculated by summing the contributions of a firm to a candidate as a fraction of total contributions per state to all candidates.

Table II provides descriptive statistics for the accounting and stock market data for contributing firms. Panel A shows that there are no significant differences at the 5% level in the mean of major accounting variables between campaign donors and non-donors, including total assets, total sales, total pre-tax profits, total debt, and financial leverage. In fact, profits of donor firms are statistically significant lower than profits of non-donors. This suggests that there is no obvious selection bias problem, where better performing firms have higher returns and higher contributions.

Panel B reports the summary statistics of the main variables. For the main analysis, we choose the window for estimating the cumulative abnormal return (CAR) to be 100 trading days and the event window to be 41 trading days, i.e. $(\tau_0, \tau_1, \tau_2) = (-120, -20, 20)$. The overall average CAR was 1.46%, which is statistically not different from zero given the relatively large standard error. The mean change in leverage was 0.027, also not statistically different from zero.

When we compute simple correlations between the firm-level variables used in the regression analysis, we find that the amount given to (winning) deputies is positively correlated with the CAR and with the change in bank debt, although these correlations are not statistically significant.

IV. Empirical Results

In this section, we empirically assess whether the market expected firm-specific future political favors and whether contributions were associated with (preferential) future access to finance.

A. Campaign Contributions and Stock Returns

Table III presents OLS regressions for the TOTAL hypothesis that the market expects political firm-specific future favors for firms who actively contributed to deputy candidates where we use the absolute amounts of contributions as the explanatory variable and the dependent variable is the CAR, expressed in percentage points. All standard errors are corrected for heteroskedasticity using the Huber-White estimator of variance. Industry-specific effects and a constant are included in each regression. Column (1) shows a coefficient of 1.96, significant at the 1%-level for the absolute amount of total contributions (in 100,000BRL) made by a firm. The economic effect of the result is substantial. Going from the 25th to the 75th percentile of contributions, a variation of approximately 1 million BRL, implies an increase in CAR of about 20%.

Next, we refine the analysis by using total contributions to winning and losing candidates for each position. This allows us to test the WINNER and LOSER hypotheses. The results are presented in columns (2) and (3). Column (2) shows the positive

coefficient of contributions to winning candidates (2.66), which is significant at the 1%-level and larger in magnitude than the coefficient obtained for all deputies. Going from the 25th to the 75th percentile of contributions, a variation of approximately 700,000 BRL, implies an increase in the CAR of about 19%. In Columns (3), we control for the contributions to losers and the coefficients on the winner and loser variables have the each expected sign, positive and negative.

In columns (4) and (5), we show that the results for deputies are robust to controlling for firm-level profitability, debt to assets, and market capitalization at the start of the event window. However, the number of observations decreases due to the lack of some firm-level financial data.

Next, we take into account possible competition amongst donors and use the relative amounts that a firm gave to winning and losing candidates as a proxy for the strength of political connections. For example, if a firm provided 20% of all campaign funds to winning candidate A and 30% of winning candidate B, then the contribution variable is 50. The results are presented in columns (1) to (4) of Table IV. Column (1) shows a significant and positive coefficient of relative contributions to winners of 0.002. The interpretation is that when a firm finances 100% of the campaign of a winning deputy, its CAR increases with 0.2%. Going from the 25th to the 75th percentile of contributions, a distance of approximately 6,000 (expressed in percentage points), this implies an increase in the CAR of about 12%. When we control for the fraction extended to losers in column (2), the effect of contributing to winning deputy candidates increases slightly to 0.003. Again, this result is substantial.

As an additional extension, we take into account the differences between politicians as perceived by donors: candidates who receive more contributions are

probably more important to influence for firms. Therefore for each firm we sum the contributions as a percentage point of total contributions in a state. For example, if a firm provided 100,000 BRL of campaign funds to winning candidate A and 200,000 BRL of winning candidate B in state S, and total contributions in state S were 3,000,000 BRL, then the contribution variable would be 10 percentage points. The results are presented in columns (3) and (4) of Table IV. In column (3), we control for contributions to winning deputy candidates, and in column (4) we also control for contributions to losing candidates. In both specifications, we find a positive coefficient on the winning deputy variable of about 0.02, significant at the 1% level. Going from the 25th to the 75th percentile of contributions, a distance of approximately 323 (expressed in percentage points), this result implies an increase in the CAR of about 6.5%.

As a first robustness check, we adjust the standard errors using industry clusters because observations may not be independent within industries. The results are unaltered (Table V, column 1). We also adjust the event window to 20 days before and 5 days after the announcement of the election results and results remained similar (Table V, column 2)). We also re-run our main specification on the sub-sample of firms who contributed to deputies (column 3). Again, our results do not change qualitatively. We also controlled for other firm characteristics (including total assets, sales, and earnings) and results remained similar (not reported).

In columns (4) to (5), we report regressions that control for connections to candidates on all political levels (deputy, senator, governor, and president). Again, we find that contributions to (winning) candidates are positively associated with excess stock returns. When we control for contributions to other candidates in our main regression, the results are also unaltered (not reported). We find in all specifications that contributions to

winning deputies are positively associated with excess stock returns. While the results also show significant coefficients of several measures of political connections to winning president, governor and senator candidates—suggesting political favors were also obtained from these other officials, the coefficients for political connections to deputies remain similar to our previous results. Also when we run these regressions using industry clusters, results are unaltered.

We also used the abnormal buy-and-hold returns (BHR) as the dependent variable, without and with controlling for other firm characteristics (columns 6 and 7). We find robust results in all specifications: firms that made contribution to winning deputies experienced larger BHRs. We also find that BHRs are negatively related to the initial market capitalization of firms, suggesting that larger firms (as measured by market capitalization) exhibit smaller excess returns on average.

B. Preferential Access to Finance as a Political Favor

Having established that campaign contributions are associated with higher stock returns at the time of election, suggesting that the market expects political favors for contributing firms, we investigate whether the financial leverage of firms that made financial contributions to (elected) federal deputies increased more than control firms during the four years following the election that brought these deputies into office. Table VI shows the results when we regress LEVERAGE CHANGE, as measured by the absolute change in the ratio of bank debt to total assets over the period 1998 to 2001, on the amounts of campaign contributions relative to the firm's total assets, controlling for industry-specific effects. Since our hypothesis is that firms benefit via preferential access to bank credit, we focus on that part of debt that is outstanding with banks. We drop financial companies

such as banks and insurance companies from all the leverage regressions. Since we are essentially estimating a leverage equation in first differences, we control for any fixed firm effects that could explain differences in financial leverage. Because of missing financial data, our sample of firms reduces to 116 firms.

Consistent with our hypothesis, we find that the financial leverage of firms that made contributions to (elected) federal deputies increased more during the four years following the election that these deputies were in office. The effect holds not only for federal deputies, but also for the other candidates (not reported). The economic effects are substantial. Regression 1 in Table VI suggests that a one standard deviation increase in the total absolute amounts firms contributed to federal deputy candidates (as a share of the firm's total assets) would result in an additional increase in bank debt leverage over the period 1998-2001 of 0.020, which is substantial given the mean increase in bank debt leverage over this period of 0.027.

In regression 2, we estimate the effect of contributions to winning deputies on the financial leverage of firms. Again, we find a strong positive effect. A one standard deviation increase in the total absolute amounts firms contributed to winning federal deputy candidates (as a share of firm total assets) would result in an additional increase in bank debt leverage over the period 1998-2001 of 0.021, which is substantial given the mean increase in bank debt leverage over this period of 0.027.

The effect is even larger when we consider changes in short-term bank debt leverage (regressions 3 and 4). Regression 3 in Table VI suggests that a one standard deviation increase in the total absolute amounts firms contributed to federal deputy candidates (as a share of firm total assets) would result in an additional increase in short-term bank debt leverage over the period 1998-2001 of 0.018, which is substantial given

the mean increase in short-term bank debt leverage over this period of 0.014. We do not find a significant effect of contributions on changes in long-term bank debt leverage (regression 5 and 6). This is consistent with the notion that short-term debt contracts are more likely renegotiated during the four-year term that the elected deputies are in office than long-term debt contracts. We obtain similar results when considering only the effect of contributions to winning candidates (not reported).

Table VII reports a number of robustness checks on the relationship between contributions and financial leverage. Regressions 1 to 3 show that the result is robust to using a different period to calculate the change in financial leverage, differentiating also short-term and long-term leverage. Because the election we focus on took place in 1998, we use year-end 1997, the year before the election, as an alternative base year to calculate the change in bank debt. Again, we find that contributions are strongly, positively correlated with future increases in bank debt, particularly short-term bank debt. The effect is not significant for long-term bank debt.

In regression 4, we control for period changes in firm-specific variables that have often been used in capital structure regressions (see, for example, Rajan and Zingales 1995). We control for the absolute change in log of total assets, the absolute change in the ratio of fixed assets to total assets, and the absolute change in the ratio of pre-tax profits to total assets, all over the period 1998 to 2001. While we find that firms that experienced an increase in fixed assets and an increase in return on assets also increased total bank debt, our main result is not affected. In fact, comparing the coefficient on the campaign contributions variable in regression 4 of Table VII with that obtained in regression 1 of Table VI, shows that the effect of contributions is even more pronounced controlling for (changes in) other firm-level characteristics.

In regressions 5 and 6 we show that our main result is robust to using alternative data on firm leverage from Worldscope. We do not have data specifically on bank debt from Worldscope; Worldscope only has data on total debt, consisting of total short-term debt and total long-term debt, which includes both loans, debentures and bonds. Still, we find that contributions have a positive effect on the change in the ratio of debt to assets, and that the effect is statistically significant for short-term debt (regression 6).

Instead of gaining access to an increased amount of debt, firms could also benefit from making contributions to politicians by gaining access to debt at preferential terms. In regression 7, we assess the impact of contributions on the cost of debt, as measured by the change in the ratio of total interest expense to total interest-bearing debt obligations. While the effect is negative, suggesting that contributions lower the cost of financing, the effect is not statistically significant. Note that we only have data on total interest expense, and not a breakdown of interest expense by type of debt. We can therefore only imperfectly measure the impact of contributions on the cost of bank debt.

Next, we investigate whether the effect can also be found for other types of debt. If the political economy channel is through preferential access to bank credit, then we should not find an effect of contributions on changes in financial leverage of other types of debt financing. In regression 8, we study the effect of contributions on the change in bonds (relative to total assets) and in regression 9 we study the effect of contributions on the change in debentures. In both cases, the effect is not significant, supporting our hypothesis that the preferential access is through bank financing. We also want to make sure that the effect does not work through an increase in collateral that may make it easier for firms to attract external financing. It could be that contributing firms gain preferential access to land and buildings and other types of fixed assets and that this would help them

to gain increased access to (collateralized) borrowing from banks. We find no evidence that this is the case. Regression 10 shows that contributions have a negative relationship with increases in fixed assets. These regressions confirm that the preferential access to financing occurs through access to bank debt.

V. Conclusions

This paper addresses the question whether campaign contributions made by firms are associated with future firm-specific favors. We provide empirical support for the existence of such a link based on an analysis of the 1998 elections in Brazil. We find robust evidence that higher campaign contributions to federal deputy candidates are associated with higher stock returns around the announcement of the election results, even after controlling for industry-specific effects, firm-specific controls, and contributions to candidates at other levels. The economic effects are substantial: going from the 25th to the 75th percentile of political connections implies an increase in CAR of about 20% and in abnormal buy-and-hold returns of about 18%. Contributing to candidates that win (lose) has an even larger positive (negative) impact on stock returns.

Besides establishing a link between campaign finance and political favors at the firm-level using candidate-level campaign data, we investigate the possible channel for political favors. In terms of channels for firm-specific favors, we study the relationship between campaign contributions and future access to finance. We find that the financial leverage of firms that made financial contributions to (elected) federal deputies increased substantially during the four years following the election that put deputies into office. This suggests that contributing firms gained preferential access to finance. Although we do not have direct evidence of preferential lending and associated benefits for

contributing firms,¹¹ our results suggest that the benefits likely exceeded the cost paid for the political favors. On average, a listed firm contributed to all candidates only 1.2 million BRL, while its average outstanding debt was 2.0 billion BRL. At less than 0.1% of debt outstanding and give the high interest rates in Brazil, contributions were likely less than the gross benefit of increased access to finance.

While finance may not be the only channel through which firms benefit from political favors, our results support the notion that it is one of the channels through which contributing firms benefit from political favors. More generally, our findings provide new evidence of the value of political connections in emerging markets like Brazil. They suggest that the operation of corporations in these environments, including their financing, depends importantly on their relationships with politicians.

¹¹ To fully proof this, we would need more detailed information on the credit contracts of firms, including the loan size, interest rate, maturity, and collateral value, which is not available to us.

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Table I: Descriptive Statistics of Corporate Campaign Contributions

This table reports summary statistics of campaign contributions by listed and non-listed firms to candidates who officially received contributions and ran for the position of federal deputy. Amounts are in 1998 Brazilian Reais (1BRL \approx 0,86\$). Panel A contrasts the total amount received, the total number of donations and the average size of a donation for *all* firms with the amount received, the number of donations, the average size of a donation, the number of donors, and the average total amount for *listed* firms, and also presents the total number of candidates (including for winning and losing candidates), the average total amount per candidate (including for winning and losing candidates), and the average number of donations per candidate. Panel B presents summary statistics for different measures of political influence for the 292 listed firms with data on campaign contributions of firms, including those firms that did not make contributions. The first measure reflects the total amounts to candidates for the position of federal deputy. The second measure is calculated by summing the fractions of total contributions of a firm to a candidate per position. The third measure is calculated by summing the contributions of a firm to a candidate as a fraction of total contributions per state to all candidates.

Panel A:

	All firms	<i>of which:</i> Listed firms
Total received	65,315,860	10,372,432
Number of donations	5,580	423
Average size donation	11,705	24,521
Number of donor firms		60
Average amount per firm		172,874
Number of federal deputy candidates	889	
<i>of which:</i> Number of winning candidates	385	
<i>of which:</i> Number of losing candidates	504	
Average amount per candidate	73,471	
<i>of which:</i> Average amount per winning candidate	118,014	
<i>of which:</i> Average amount per losing candidate	39,445	
Average number of donations per candidate	6.28	

Panel B:

Variable	Observations	Mean	Std. Dev.	Min	Max
Contributions to deputies	292	26,839.41	134,800.7	0	1,300,000
Contributions as a fraction of contributions of all firms	292	2.17	1.40	0	160.93
Contributions as a fraction of contributions of all firms in the state	292	0.14	1.19	0	18.00

Table II: Descriptive Statistics of Contributing Listed Firms

This table reports summary statistics of accounting and market variables for the listed Brazilian firms for which we have data on campaign contributions. Panel A reports summary statistics for total assets, total net sales, pre-tax profits, total debt, and the ratio of debt to total assets (leverage). We report the mean and standard deviation for each variable for the subgroup of firms that made contributions (donors) and firms that did not (non-donors). The final column contains the p-values of a two-sided t-test for difference in means between donors and non-donors. Panel B reports summary statistics for the main variables in the CAR and leverage regressions. Amounts are in thousands of 1998 Brazilian Reais (1BRL \approx 0.86\$).

Panel A:

Variable	Observations		Mean		Standard Deviation		Difference in means between donors and non-donors (p-values)
	Total	Donors	Donors	Non-donors	Donors	Non-donors	
Assets	116	36	2,884,441.00	6,516,524.00	0.30e+07	2.16e+07	0.32
Sales	116	36	1,785,013.00	1,626,154.00	2,100,904.00	4,122,943.00	0.83
Profits	116	36	95,111.47	146,692.30	186,862.80	687,043.90	0.66
Debt	116	36	1,470,749.00	3,322,154.00	0.15e+07	1.10e+07	0.32
Leverage	116	36	0.511	0.567	0.154	0.374	0.39

Panel B:

Variable	Observations	Mean	Standard Deviation
<i>CAR regressions</i>			
CAR	159	1.458	51.25
Contributions to deputies	159	0.586	2.200
Contributions to winning deputies	159	0.451	1.796
Leverage ratio	116	0.550	0.322
Profitability ratio	116	-0.020	0.195
Initial market capitalization	159	649.69	2451.90
<i>Leverage regressions</i>			
Change in bank debt	116	0.027	0.139
Change in short-term bank debt	116	0.014	0.122
Change in long-term bank debt	116	0.013	0.085
Contributions to deputies as a share of total assets	116	0.00019	0.00060
Contributions to winning deputies as a share of total assets	116	0.00013	0.00039
Change in log of total assets	116	0.005	0.709
Change in fixed assets ratio	116	-0.051	0.118
Change in return on assets	116	-0.139	2.153
Change in debt from Worldscope	68	0.027	0.148
Change in short-term debt from Worldscope	67	0.006	0.094
Change in bonds	116	0.004	0.066
Change in debentures	116	0.019	0.222
Change in interest expense	104	2.647	16.41

Table III: Impact of Absolute Size of the Sum of Campaign Contributions on Cumulative Abnormal Returns

This table reports OLS regressions. The dependent variable is the cumulative abnormal return (in %), calculated with an event window covering the 20 days before and 20 days after the election. The independent variables are the total absolute amounts (in 100,000BRL) firms contributed to federal deputy candidates. Here we control for other firm characteristics, including profitability (pre-tax return on assets), financial leverage (total liabilities to total assets), and market capitalization of the firm at the start of the event window. A constant and industry-specific effects are included in the regressions, but these are not reported. *, **, *** indicate significance at 10%, 5%, and 1% level, respectively. T-statistics corresponding to heteroskedasticity robust standard errors are reported in parentheses.

Panel A:

	Cumulative abnormal returns for listed Brazilian firms				
	(1)	(2)	(3)	(4)	(5)
Contributions to deputies	1.958 (2.93)***			2.022 (2.33)**	
Contributions to winning deputies		2.659 (3.32)***	4.057 (3.03)***		2.629 (2.68)***
Contributions to losing deputies			-6.734 (1.72)*		
Profitability				-48.004 (-0.74)	-47.858 (-0.74)
Debt to assets				13.437 (0.55)	13.546 (0.56)
Initial market cap				-0.001 (-1.62)	-0.001 (-1.52)
Industry-specific effects?	Y	Y	Y	Y	Y
Observations	159	159	159	116	116
R-squared	0.07	0.07	0.07	0.12	0.26

Table IV: Impact of Campaign Contributions to Winners and Losers as a Fraction of Total Contributions on Cumulative Abnormal Returns

This table reports OLS regressions. The dependent variable is the cumulative abnormal return (in %), calculated with an event window covering the 20 days before and 20 days after the election. In regressions (1) and (2), the independent variables are the sum of percentage points of campaign contributions to winners and losers as a fraction of total contributions per candidate. In regressions (3) and (4), the independent variables are the sums of percentage points of campaign contributions to winners and losers as a fraction of total contributions to all candidates in a state. A constant and industry-specific effects are included in the regressions, but these are not reported. *, **, *** indicate significance at 10%, 5%, and 1% level, respectively. T-statistics corresponding to heteroskedasticity robust standard errors are reported in parentheses.

	Campaign Contributions as a Fraction of Contributions of All Firms		Campaign Contributions as a Fraction of Contributions of All Firms in the State	
	(1)	(2)	(3)	(4)
Sum fraction deputy winners	0.002 (2.28)**	0.003 (2.19)**	0.021 (3.28)***	0.021 (2.89)***
Sum fraction deputy losers		-0.004 (1.22)		0.011 (0.07)
Industry-specific effects?	Y	Y	Y	Y
Observations	159	159	159	159
R-squared	0.07	0.07	0.07	0.07

Table V: Impact of Campaign Contributions using Alternative Measures of Excess Returns and Controlling for Other Firm-Level Characteristics

This table reports OLS regressions. The dependent variable is the cumulative abnormal return and the buy-and-hold return (in %), respectively, calculated with an event window covering the 20 days before and 20 days after the election. The independent variables are the total absolute amounts (in 100,000BRL) firms contributed to winning federal deputy candidates, the log of total assets, the ratio of pre-tax profits to total assets, and the firm's market capitalization at the start of the event window. In Column (1), we cluster observations at the industry level. In Column (2) we adapted the event window starting 20 trading days before up to 5 days after the announcement election results. In column (3), we re-run our main specification on the sub-sample of firms who contributed to deputies. In column (4), the independent variable is the total contributions to all types of candidates (deputy, senator, governor, and president). In column (5), the independent variable is the total contributions to all types of winning candidates. Columns (6) and (7) pertain to regressions regarding abnormal buy-and-hold returns. A constant and industry-specific effects are included in the regressions, but these are not reported. *, **, *** indicate significance at 10%, 5%, and 1% level, respectively. T-statistics corresponding to heteroskedasticity robust standard errors are reported in parentheses.

	Cumulative abnormal returns					Abnormal buy-and-hold returns	
	(1)	(2) Event window (-20,5)	(3) Sub-sample without control group	(4) Contributions to all types of candidates	(5) Contributions to all types of winning candidates	(6)	(7)
Contributions to winning deputies	2.659 (3.25)**	1.158 (2.79)**	4.503 (2.56)**			2.618 (2.21)**	1.343 (2.31)*
Assets							0.000 (0.64)
Profitability							-0.000 (1.02)
Initial market cap						-0.000 (1.20)	-0.000 (2.74)**
Contributions to all candidates				0.540 (2.43)**			
Contributions to all winning candidates					1.356 (2.94)***		
Industry-specific effects?	Y	Y	Y	Y	Y	Y	Y
Industry clusters?	Y	N	N	N	N	N	N
Observations	159	159	39	159	159	159	69
R-squared	0.07	0.06	0.21	0.07	0.07	0.08	0.15

Table VI: Impact of Campaign Contributions on Bank Debt Leverage

This table reports OLS regressions. The dependent variable in regressions (1) and (2) is the absolute change in the ratio of total bank debt to total assets over the period 1998-2001. The dependent variable in regressions (3) and (4) is the absolute change in the ratio of short-term bank debt to total assets over the period 1998-2001. The dependent variable in regressions (5) and (6) is the absolute change in the ratio of long-term bank debt to total assets over the period 1998-2001. Total bank debt is the sum of short-term bank debt and long-term bank debt. Short-term bank debt represents that portion of bank debt payable within one year including current portion of long-term bank debt. Long-term bank debt represents all interest bearing bank debt obligations, excluding amounts due within one year. Contributions to deputies as a share of total assets is the total amount (in 100,000BRL) contributed to federal deputy candidates relative to the firm's total assets in 1998. Contributions to winning deputies as a share of total assets is the amount (in 100,000BRL) contributed to winning federal deputy candidates relative to the firm's total assets in 1998. A constant and industry-specific effects are included in the regressions, but these are not reported. *, **, *** indicate significance at 10%, 5%, and 1% level, respectively. Heteroskedasticity robust standard errors are reported in parentheses.

	Change in bank debt leverage over the period 1998-2001		Change in short-term bank debt leverage over the period 1998-2001		Change in long-term term bank debt leverage over the period 1998-2001	
	(1)	(2)	(3)	(4)	(5)	(6)
Contributions to deputies as a share of total assets	32.916** (15.723)		30.637*** (9.740)		2.279 (8.029)	
Contributions to winning deputies as a share of total assets		53.030* (29.256)		48.068** (18.489)		4.961 (14.808)
Industry-specific effects?	Y	Y	Y	Y	Y	Y
Observations	116	116	116	116	116	116
R-squared	0.11	0.11	0.12	0.12	0.20	0.20

Table VII: Impact of Campaign Contributions on Financial Leverage: Robustness Checks

This table reports OLS regressions. The dependent variable in regression (1) is the absolute change in the ratio of bank debt to total assets over the period 1997-2001. The dependent variable in regression (2) is the absolute change in the ratio of short-term bank debt to total assets over the period 1997-2001. The dependent variable in regression (3) is the absolute change in the ratio of long-term bank debt to total assets over the period 1997-2001. The dependent variable in regression (4) is the absolute change in the ratio of bank debt to total assets over the period 1998-2001. The dependent variable in regression (5) is the absolute change in the ratio of total debt to total assets over the period 1998-2001 using data from Worldscope. Total debt is the sum of short term debt and long term debt. Short term debt represents that portion of debt payable within one year including current portion of long term debt. Long term debt represents all interest bearing financial obligations, excluding amounts due within one year. The dependent variable in regression (6) is the absolute change in the ratio of short-term debt to total assets over the period 1998-2001 using data from Worldscope. The dependent variable in regression (7) is the absolute change in the ratio of total interest expenses to total interest-bearing debt obligations over the period 1998-2001. The dependent variable in regression (8) is the absolute change in the ratio of long-term bonds to total assets over the period 1998-2001. The dependent variable in regression (9) is the absolute change in the ratio of short-term debentures outstanding to total assets over the period 1998-2001. The dependent variable in regression (10) is the absolute change in the ratio of fixed assets (property, plant, and equipment) to total assets over the period 1998-2001. All data on financial obligations are from Economatica, unless otherwise indicated. Contributions to winning deputies as a share of total assets is the amount (in 100,000BRL) contributed to winning federal deputy candidates relative to the firm's total assets in 1998. Change in log of total assets is the absolute change in the logarithm of total assets over the period 1998 to 2001. Change in fixed assets ratio is the absolute change in the ratio of fixed assets to total assets over the period 1998 to 2001. Change in return on assets is the absolute change in the ratio of pre-tax profits to total assets over the period 1998 to 2001. A constant and industry-specific effects are included in the regressions, but these are not reported. *, **, *** indicate significance at 10%, 5%, and 1% level, respectively. Heteroskedasticity robust standard errors are reported in parentheses.

	Change in bank debt 1997-2001	Change in short-term bank debt 1997-2001	Change in long-term bank debt 1997-2001	Change in bank debt	Change in debt from Worldscope	Change in short-term debt from Worldscope	Change in interest expense	Change in bonds	Change in debentures	Change in fixed assets
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Contributions to winning deputies as a share of total assets	87.839** (38.093)	57.854*** (17.848)	29.984 (24.392)	57.811** (28.747)	52.351 (32.936)	60.151** (24.048)	-722.489 (896.156)	-6.289 (5.293)	-24.372 (31.673)	-23.114 (19.830)
Change in log of total assets				0.006 (0.032)						
Change in fixed assets ratio				0.212* (0.110)						
Change in return on assets				0.002 (0.006)						
				0.212*						
Industry-specific effects?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	103	103	103	116	68	67	104	116	116	116
R-squared	0.17	0.21	0.09	0.15	0.22	0.14	0.09	0.07	0.05	0.09