# РАЗДЕЛ 3 КОРПОРАТИВНОЕ УПРАВЛЕНИЕ В БРАЗИЛИИ

# SECTION 3 NATIONAL PRACTICES OF CORPORATE GOVERNANCE: BRAZIL

## CAMPAIGN FINANCE AND CORPORATE GOVERNANCE: THE CASE OF BRAZIL

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**Abstract**

Corporate governance mechanisms, such as transparency, accounting standards, responsibility, accountability, fairness, business ethics, efficient shareholder controls, and ownership rights are key tools in combating corruption. This paper investigates on a firm-level basis the relation between corporate governance practices and campaign finance in Brazil. We interpret campaign finance as a proxy for political influence by interest groups. Our results indicate that family-owned firms contribute significantly more for political campaigns, both in terms of proportion of firms and total amount spent to finance the candidates. Higher concentration of capital, and the separation of ownership and control are positively related to campaign donations, while better corporate governance is negatively related to political contributions.

**Keywords:** campaign finance, corruption, corporate governance, Brazil.

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### 1. Introduction

*"The recent collapse of Enron Corporation revealed information that helped revive the movement to rein in corporate political influence speech. Enron's large political contributions to politicians from both parties undermined public confidence in the impartiality of government officials."* (Joo (2002)).
*"Corporate governance creates a system, where the whole process of providing corrupt payments or gifts is quickly exposed, and therefore becomes unsustainable."* (Center for International Private Enterprise (2001)).

The purpose of this paper is to investigate the relation between campaign finance and corporate governance in Brazil. In other words, we intend to assess the link between firm-level corporate governance practices and campaign contributions to finance political candidates.

There are three main reasons why firms may decide to contribute to one candidate's election. First, because of ideological convictions and "individual satisfaction from participation in the political process" (Silberman and Yochum (1980)). Second, because the candidate or party may be

inclined towards a given policy that may – legally – benefit the firm. Third, large campaign contributions may be used to motivate particular kinds of legislative behavior, such as favoritism in procurement.

While it may be impossible to accurately identify the actual reasons for why any given corporation finances candidates, previous research has shown that the type of election regulation might yield favorable conditions for corruption (Samuels (2001a), Ames (1995a,b), and Chang (2005)). This is the case of the open list proportional representation, for example, in which parties do not rank-order their candidates - voters choose their preferred candidate and the candidates with the most votes win. In this case, candidates must compete, not only against opposing parties, but also against their copartisans. This intra-party competition, in addition to the inter-party, promotes relatively high individual campaign spending (Cox and Thies (1998)), and incentives for the candidates to provide favors, gifts, or other goods.

There is an extensive literature about the effects of corruption on the economy. According to Huntington (1968), "in terms of economic growth, the only thing worse than a society with a rigid, over-centralized, dishonest bureaucracy is one with a rigid, over-centralized and honest bureaucracy." This summarizes the theory in which, ethical considerations aside, corruption might enhance efficiency.

Kaufmann and Wei (1999) combat this "efficiency grease" theory, and use data to show that, if the incentives for officials to take bribes is endogenous, firms that pay more bribes have higher costs of capital. Other studies such as Mauro (1995) and Bardhan (1997) have demonstrated that corruption impedes economic growth and inhibits investment. In particular, the action of interest groups in financing candidates causes a significant economic cost in many ways. Inefficient firms are hired to work in government projects and corrupt bureaucrats tend to favor nonstandard, complex, and expensive capital-intensive projects ("white elephant") that make it easier to skim significant sums (Kaufmann (1997)).

Most empirical studies that relate corruption with economic development perform cross-country analyses, using data from polls of experts or surveys of business people or citizens (see Kaufmann, Kraay, and Mastruzzi (2005), and Kaufmann and Kraay (2002)). The reliability of this corruption measure depends greatly on the ability of the respondents to provide objective and accurate assessments of the dimensions being evaluated.

Few studies have focused on the behavior of firms. Hertzel, Martin and Meschke (2002) study the effect of the Bipartisan Campaign Reform Act that banned soft money donations on firm performance in the United States. They find a significative effect only for donors to the Republican Party.

Using survey data on a cross-country analysis, Kaufmann (2004) finds that transnationals headquartered in the OECD countries tend to exhibit behavior very similar to that of their domestic counterparts when operating in another OECD country. By contrast, when those transnational firms operate outside the OECD, they exhibit much lower (often illegal) corporate ethics standards, often more similar to those of the recipient country.

Although a number of papers analyze the relation between governance and corruption using macro data for different countries, little work assesses on a firm-level basis the relation between corporate governance and corruption. There is evidence of a direct link between corporate governance and anti-corruption initiatives (Center for International Private Enterprise (2001)).

Corruption is conventionally defined as the exercise of public power for private gain, and is often a manifestation of both the corrupter (supply-side) and the corrupted (demand-side). The relation between corporate governance and corruption is on the supply-side, that is, those firms that are providing money, payments, gifts, and other forms of benefits to government officials (demand-side) for some form of service or a favor in return. Yalamov and Belev (2001) argue that better corporate governance practices attack the supply-side of corrupt relationships. Corporate governance mechanisms, such as transparency of decision making, accounting standards, management responsibility and accountability, rule of law, fairness, business ethics, efficient shareholder controls, and ownership rights are key tools in combating corruption.

In the corporate governance system, the money flow from the private sector to the government is strictly controlled and monitored not only by auditing committees, but also by the general public. Furthermore, when corporate governance practices improve, corruption becomes an unacceptable ethical behavior. Recent research (La Porta et al. (1998, 2000)) has shown that countries with stronger protections for minority shareholders have much larger and more liquid capital markets. La Porta et al. (1999) examine the determinants of government performance in a large number of countries and use corruption as a proxy to measure the degree of corporate governance and shareholder protection.

Shleifer and Vishny (1994) derive theoretical models for the bargaining between politicians and firms, focusing on the role of transfers between the public and private sector, including subsidies to companies and bribes to politicians. They suggest that politicians prefer private to public ownership of cash flows, since private ownership enables them to extract more from shareholders through excess employment and bribes.

Joo (2001) argues that there is a strong relation between campaign finance and corporate governance issues. The separation of ownership and control in modern corporations makes small shareholders with

limited or no impact in the company's decisions such as campaign donations. When there is a huge concentration of capital in the hands of a few large shareholders, a firm's election-related spending may quite literally be the controlling shareholders' decision. Minority shareholders face collective action problems, since they are generally atomized, and have no interactions with one another. Thus, they are unlikely to have the time or interest to express their disagreement to the firm's decision. This means that, when the concentration of capital and the separation of ownership and control are high, corporate decisions, such as political contributions, are made by the large shareholders, with minimal accountability to minority shareholders.

Joo (2002) also argues that the profit-seeking nature of corporations makes their campaign finance activity more likely to cause corruption or the appearance of corruption, and may be a justification for campaign finance regulation. Furthermore, minority shareholders are generally susceptible to the misuse of corporate funds for unauthorized political purposes by the controlling shareholders. He points out that the protection of shareholders is enhanced when there is a campaign finance regulation.

The presence of controlling shareholders may be harmful to the firm because their interests may not align with those of non-controlling shareholders (Shleifer and Vishny (1997), La Porta et al. (1998, 2000), and Claessens et al. (2000, 2002)). Morck, Shleifer, and Vishny (1988) point out that the separation between ownership and control increases the conflicts of interest. Garmaise and Liu (2005) use firm-level data to perform a cross-country analysis, and find that the relation between corporate governance and corruption is closely related to the firm's value and exposure to systematic risk. In other words, the effect of corruption on risk is much greater in countries in which shareholder rights are weak. In that paper, each firm is assigned the rating of corruption that is attributed to the country in which it is located. This paper innovates for investigating on a firm-level basis the relation between corporate governance practices and campaign finance in Brazil. We interpret campaign finance as a proxy for political influence by interest groups. From the above discussion, we should expect that firms with poor corporate governance practices, high concentration of capital, and large separation of ownership and control are more likely to make campaign contributions.

Using data publicly available eliminates the perception bias inherent to survey data used in other studies, but as a drawback this "corruption" variable is measured with error due to the other possible motivations for campaign financing. We argue that this measurement error may be smaller or larger, depending on the legal framework of the country.

Our results indicate that 45% of the Brazilian companies in our sample financed political candidates during the election in 2002, with an average of 0.06% of their annual gross revenues, significantly lower than the maximum allowed by law (2%). There is evidence that family-owned firms contribute significantly more for political campaigns, both in terms of proportion of firms and total amount spent to finance the candidates. Higher concentration of capital, and the separation of ownership and control are positively related to campaign donations, while better corporate governance is negatively related to political contributions.

The paper is structured as follows. Section 2 describes the data and methodology. Section 3 presents the empirical results of the relation between campaign finance and corporate governance. Section 4 concludes.

## 2. Data and Methodology

Brazil reportedly has one of the most expensive elections in the world (Ames (1995a,b)). The success of political candidates in Brazilian elections depends critically on the amount of money they can spend on their campaign, and candidates are heavily dependent on donations to raise the large sums of money that are needed to succeed.

Samuels (2001b) argues that the electoral regulation in Brazil leads to highly competitive elections, and organizationally weak parties. Therefore, candidates must spend more to differentiate themselves from the other candidates. For the legislative office, Brazil uses a version of open-list proportional representation in at-large constituencies that promotes individualistic campaign tactics. In addition, the weakness of the parties is exacerbated by the fact that the law encourages individuals, and not parties, to raise, spend and keep records, making the process even more personal and the competition more fierce. This legal framework may imply that the measurement error of our variable of corruption is smaller.

History also provides some examples in which campaign funds were suspected to be exchanged for policy influence, without proof. However, in Brazil, probably the most important campaign finance scandal was the one that resulted in the impeachment of the first democratically elected president after the end of dictatorship in Brazil[1]. President Fernando Collor de Mello was impeached in 1992 for influence peddling and graft two years after he was elected on an anti-corruption platform. This was one of the factors that influenced the change in electoral legislation in the country.

Until 1993, campaign contributions to individual candidates were prohibited in Brazil. All contributions should be made to the political party. In 1994, due to the campaign finance scandals in

[1] Brazil became the first presidential system to impeach a president. See Ramalho (2004) for an analysis of the 1992 presidential impeachment, and Dellasoppa (2005) for an overview of the corruption in the Brazilian society.

1992 and 1993, the Congress approved a new electoral legislation, in which candidates are allowed to obtain limited campaign financing, as long as they provide a registry of campaign contributions.

As argued in Wilcox (2001), such measures facilitate the enforcement of campaign regulations and helps to control corruption, increases accountability and engenders more trust in the government. Coate (2004) argues that imposing limits on the campaign finance policy is Pareto-improving. According to the present legislation, individuals are allowed to donate 10% of his or her annual gross income, and corporations can donate 2% of their annual gross revenues. The failure in reporting campaign contributions may result in fine, candidacy revocation or even loss of position after the election (Samuels (2001b), and Fleischer (1997)).

In this paper, we assess the relation between corporate governance and campaign finance focusing on the largest election of Brazilian history (in 2002), with more than 115 million registered voters choosing 1 president, 27 governors, 54 senators, 513 federal deputies, and 1,024 state deputies. More than 76,812 firms and individuals contributed to political candidates, totaling more than R$ 676 million (US$ 191 million) in campaign finance (Transparência Brasil (2005)). Our sample includes only companies listed on the Sao Paulo stock exchange (Bovespa) during the Brazilian election in 2002. The sample contains both financial institutions and non-financial institutions and excludes companies with incomplete or unavailable information. The final sample consists of 214 firms, which represent 54% of the number of listed companies and 67% of the total market capitalization. We analyze two corporate governance characteristics of firms that financed political candidates in 2002: the ownership and control structure, and the quality of the firm's corporate governance practices. First, we analyze the ownership and control structure, both directly and indirectly. Direct shareholders are those who own shares in the public company itself. We consider all shareholders with 5% or more of the voting capital. This is because 5% is the threshold for mandatory identification of shareholders in Brazil. Indirect shareholding represents stockholders who ultimately own the company. We analyze both control (voting shares) and cash flow rights (voting and non-voting shares). We compute the ultimate percentage ownership differently for cash flow and control rights. For example, if a shareholder has 60% of the total capital of company B that owns 70% of the total capital of company A, the shareholder ultimately owns 42% of the total capital of company A (60% times 70%). Assuming that all shares have equal voting rights, the shareholder controls 60% of company A (the minimum between 60% and 70%).

The computation of the ultimate control ownership uses the weakest link method commonly employed in the literature (La Porta et al. (2000, 2002) and Claessens et al. (2000)). We analyze the shareholding composition backwards until we are able to classify the ultimate owners into one of the following groups: individuals or families, institutional investors (banks, insurance companies, pension funds, foundations or mutual funds), foreigners (either individuals or entities) and the government. Data on the shareholding structure come from the Infoinvest database, and the market and accounting information comes from the Economatica database. In order to measure the quality of the firm's corporate governance practices, we use the corporate governance index (CGI) developed by Leal and Carvalhal da Silva (2005), who follow an approach that has recently become very popular in the literature (Black, Jang, and Kim (2004), Klapper and Love (2004), and Gompers, Ishii, and Metrick (2003)). The CGI consists of 24 questions (see Table 1), covering four dimensions: disclosure, board composition and functioning, ethics and conflicts of interest, and shareholder's rights. Each question can have a "yes" or "no" answer. If the answer is "yes", the value of 1 is attributed to the question, otherwise the value is 0. The index is the sum of the points for each question. There is no weighing of individual questions in the index.

The discussion in Section 1 leads us to the following hypotheses regarding the relation between corporate governance and campaign finance:

*H1: Better corporate governance practices leads to smaller campaign contributions.*

*H2: Higher concentration of capital leads to larger campaign contributions.*

*H3: Higher separation of ownership and control leads to larger campaign contributions.*

In order to analyze the relation between campaign finance and firm's corporate governance, we use six different types of dependent variables: Finance (dummy variable that takes the value 1 if the firm financed political candidates), FinanceElected (dummy variable that takes the value 1 if the firm financed elected candidates), TotalFinance (total amount spent by the firm to finance political candidates), TotalFinanceElected (total amount spent by the firm to finance elected candidates), RelativeFinance (total amount spent by the firm to finance political candidates relative to annual gross revenue), and RelativeFinanceElected (total amount spent by the firm to finance elected candidates relative to annual gross revenue). The following linear regression model is specified for each one of the six dependent variables:

$$Financing\ Dependent\ Variables = \beta_0 + \beta_1 Votes + \beta_2 CashFlow + \beta_3 Votes/CashFlow + \beta_4 CGI + \beta_5 Foreign + \beta_6 Government + \beta_7 Institutional + \beta_8 Others + \varepsilon$$

where Votes is the percentage of voting capital owned by the largest shareholder, CashFlow is the percentage of total capital owned by the largest shareholder, Vote/CashFlow is the ratio of voting to total capital owned by the largest shareholder, CGI is the corporate governance index developed by Leal and Carvalhal da Silva (2005), Foreign is a dummy variable that takes the value 1 if the largest ultimate shareholder is a foreign investor, Government is a dummy variable that takes the value 1 if the largest ultimate shareholder is the government, Institutional is a dummy variable that takes the value 1 if the largest ultimate shareholder is an institution, Others is a set of firm-specific variables such as industry (according to the industry classification of the Economatica database), leverage (ratio of total non equity liabilities to total assets), volatility (annualized standard deviation of daily stock prices from the previous 12 months), growth (average annual growth of sales over the past 3 years), ROA (return on assets measured by the ratio of operating income to total assets), firm size (natural logarithm of total assets), Tobin's Q (market value of assets divided by the book value of assets)[2], and ε is an error term. The description of each variable can be found in Table 2. Table 3 reports the summary statistics of selected variables. A few observations can be made from these statistics. We can note that 45% of the companies in our sample financed political candidates during the election in 2002, and 39% of the companies financed candidates that were elected. The average amount spent on campaign financing was R$ 496,280.06 (US$ 140,457.95), reaching a maximum of R$ 7,055,254.68 (US$ 1,996,789.03). Funds contributed to the political campaign represented on average 0.06% of the firms' annual gross revenues. However, it is important to note the existence of firms that spent the maximum amount allowed by law (2% of annual gross revenues) on campaign financing.

There is a high degree of concentration of ownership and control. The largest shareholder owns on average 70.90% of the voting shares, but only 50.71% of total shares. The separation of control and ownership can be measured by the controlling shareholders' ratio of voting rights to cash-flow rights (1.69), higher than the one-share-one-vote rule. The average corporate governance index (CGI) is 10.40 (out of 24 possible points), indicating that the quality of corporate governance practices in Brazil is moderate. Most companies are family-owned (58%), however the opening process of the Brazilian economy and mass privatizations in the 90's enabled the entrance of foreign investors (25%) and reduced the number of government-owned firms (8%). Brazilian firms are moderately leveraged (65.35%), and have high volatility (82.69%). The mean value of Tobin´s Q is 0.99, while the average sales growth and ROA are 22.88% and 11.33%, respectively. At the end of 2002, the average firm size in our sample was R$ 4.4 billion (US$ 1.2 billion).

[2] Researchers have employed Tobin's Q as a general measure of relative value of firms (Morck, Shleifer, and Vishny (1988), La Porta et al. (2002)). An estimate of the numerator of Tobin's Q is the book value of assets minus the book value of common equity plus the market value of common equity. The denominator is the book value of assets. Other forms of computing Tobin's Q are described in DaDalt et al. (2003), who find that simpler computations should be preferred over more complex estimates.

## 3. Empirical Results

### *3.1. Ownership and Control Structure*

Table 4 shows the direct and indirect ownership and control structure of Brazilian companies classified in two major groups: with and without a controlling shareholder. A company with a controlling shareholder is one where a single owner has directly more than 50% of the voting capital.

Our results reveal that 86% (184 out of 214) of the companies have a single shareholder, who owns on average 77% of the voting capital. Even when the company does not have a controlling shareholder, the largest investor holds a considerable portion (33%) of the votes. Considering the sample as a whole, the largest, the three largest, and the five largest shareholders control, respectively, 71%, 83% and 86% of the voting capital. There is also a substantial difference between the percentage of voting and total capital held by large shareholders. The issuance of non-voting shares appears to be used by large shareholders to maintain control of the firm without having to hold 50% of the total capital. In companies with a controlling shareholder, this investor has on average 77% of the votes but only 56% of the total capital, and there is a huge departure from the one-share-one-vote rule, as can be seen by the average voting to total capital ratio by the controlling shareholder (1.65). We also can note the use of indirect structures to maintain control with reduced overall investment in the company. The stake owned directly by the controlling shareholders is generally higher than that owned indirectly, and the voting to total capital ratio is higher indirectly (ranging from 1.79 to 2.81) than directly (ranging from 1.54 to 1.92). Table 5 reports the ownership characteristics according to the type of the controlling shareholder (families, foreigners, government, and institutions). Most companies (58%) are controlled by families, followed by foreigners (25%), institutions (9%), and government (8%). Family-owned firms tend to have the highest voting to total capital ratio, both directly (1.81) and indirectly (3.13), while the government generally presents the lowest departure from the one-share-one-vote rule (1.50 directly and 1.75 indirectly). Table 6 shows the companies that financed political candidates during the Brazilian election in 2002, classified according to the type of controlling shareholders. Most family-owned firms

(58%) financed political candidates, and a large proportion of the firms controlled by foreigners (33%) and institutions (32%) contributed with funds to the campaign. In constrast, only 6% of government-owned companies made political contributions. Furthermore, family-owned firms spent on average 0.09% of their annual gross revenues on financing political candidates, which is higher than the amount spent by companies controlled by the government (0.06%), foreigners (0.02%), and institutions (0.02%).

### *3.2. Corporate Governance Index*

The companies in our sample have an average CGI of 10.40 (see Table 3). This indicates that the quality of corporate governance practices in Brazil is moderate. The maximum CGI is 19.00 (out of 24 possible points), and the minimum is 5.00. Table 7 reports the firms classified into 5 groups according to their CGI level: low (from 0 to 5), moderately low (from 6 to 10), moderate (from 11 to 15), moderately high (from 16 to 20), and high (from 21 to 24).

For most companies, the CGI is moderately low (51%) or moderate (44%). Only a few firms present low or moderately high CGI, while no firm has a CGI score higher than 20. We can conclude that, although a few outlying firms are achieving better levels of corporate governance (2% of firms have moderately high CGI), there are still a relatively large number of firms with moderate or poor corporate governance practices. Table 7 also reports the proportion of companies that financed political candidates during the Brazilian election in 2002, classified according to their CGI level. There is evidence of an inverse relation between the CGI level and the contributions to finance political candidates. On average, 50% of the firms with low CGI spent 0.13% of their annual gross revenues to finance political candidates. On the other hand, a smaller proportion (40%) of firms with moderately high CGI contributed with 0.02% of their revenues to finance the campaign in 2002.

Overall, the results of Table 6 and 7 suggest that there is some evidence that family-owned firms are more likely to finance political candidates, and companies with better corporate goverance practices are less likely to contribute with campaign donations.

### *3.3. Campaing Finance and Corporate Governance*

Table 8 reports the results of different specifications of regressions for three dependent variables: Finance (if the firm financed political candidates), TotalFinance (total amount spent by the firm to finance political candidates), RelativeFinance (total amount spent by the firm to finance political candidates relative to gross revenue).

Regressions I, IV, and VII include the controlling shareholder's direct stake of voting capital, Regressions II, V, and VIII add the controlling shareholder's direct stake of total capital, while Regressions III, VI, and IX add the controlling shareholder's ratio of voting to total capital owned directly by the largest shareholder[3].

The coefficients for Votes, CashFlow, and Vote/CashFlow are positive and statistically significant in all specifications. These results support our hypotheses that higher concentration of capital as well as the separation of ownership and control are positively related to financing political candidates.

There is a significantly negative relation between the CGI and campaing financing. This is evidence that firms with better corporate governance pratices tend to contribute significantly less to political candidates. This finding supports our hypothesis that better corporate governance is negatively related to financing political candidates.

We also can note that family-owned firms contribute significantly more for political campaigns, both in terms of proportion of firms and total amount spent to finance the candidates. One possible explanation is that family-owned firms are more likely to finance political candidates, because some types of controlling shareholders are legally prohibited or restricted (government and some institutional investors) to finance political campaigns.

Furthermore, foreign controlling shareholders have different cultural backgrounds, rules, legal institutions, and perceptions of the role of campaing finance and corruption, so that they may be less likely to contribute with political donations outside their home country. The coefficients on the set of firm-specific variables indicate that large firms tend to contribute more than small and medium-sized firms. Moreover, there is evidence that profitable firms (higher ROA) are more likely to finance political candidates (significantly positive coefficient for Finance), but with a lower amount relative to their gross revenues (significantly negative coefficient for RelativeFinance).

Table 9 reports the same analysis but focusing only on elected candidates, using the following dependent variables: FinanceElected (if the firm financed elected candidates), TotalFinanceElected (total amount spent by the firm to finance elected candidates), and RelativeFinanceElected (total amount spent by the firm to finance elected candidates relative to gross revenue). The results are substantially the same. Higher concentration of capital, and the separation of ownership and control are positively related to financing political candidates, while better corporate governance pratices are negatively related to financing political candidates.

[3] Alternatively, we use the controlling shareholder's indirect (instead of direct) stake of capital, but the results (not reported) yield similar conclusions.

### *3.4. Discussion about Potential Biases*

Our results may raise concerns about selection bias. Our sample consists of firms traded on the Sao Paulo stock exchange in 2002. We do not include companies with incomplete or unavailable information, and firms whose shares were not traded on the stock market during this period. The final sample consists of a total of 214 firms, which represent 54% of the number of listed companies and 67% of the total market capitalization.

Our sample represents the largest and most traded Brazilian firms, and their corporate governance practices are probably better than that of private companies, or public companies with unavailable information. However, including firms that do not have complete information would not allow us to compute our corporate governance variables. Thus, our results most likely overstate the quality and importance of corporate governance practices for Brazilian firms. It would be reasonable to expect that private or small public companies are more likely to contribute funds to political campaigns. Therefore, the potential selection bias will most likely understate the relation between corporate governance and campaign finance in Brazil.

Another potential bias is related to our measure of campaign finance. We interpret campaign finance as a proxy for political influence by interest groups, and use only publicly available data reported by firms to the Electoral Supreme Court (TSE). Using data publicly available eliminates the perception bias inherent to survey data used in other studies, but as a drawback this "corruption" variable is measured with error due to the other possible motivations for campaign financing. Moreover, it is common in Brazil for firms to keep "double books" (Fleischer (1997)). Generally, the "second book" is used to hide excess profits from taxation, and can be used for campaign contributions, normally made in spot cash (local currency or U.S. dollars). This bias also understates the relation between corporate governance and campaign finance in Brazil. Therefore, taking into account the above potential biases, the relation between campaign finance and corporate governance can be even stronger in Brazil.

## 4. Conclusion

There is an extensive literature about the effects of corruption on the economy. However, most studies that relate corruption with economic development perform cross-country analyses. Furthermore, although a number of papers analyze the relation between governance and corruption using macro data for different countries, little work assesses on a firm-level basis the relation between corporate governance and corruption. The relation between corporate governance and corruption is on the supply-side of corruption, that is, those firms that are providing money, payments, gifts, and other forms of benefits to government officials (demand-side) for some form of service or a favor in return. Corporate governance mechanisms, such as transparency of decision making, accounting standards, management responsibility and accountability, rule of law, fairness, business ethics, efficient shareholder controls, and ownership rights are key tools in combating corruption. This paper innovates for investigating on a firm-level basis the relation between corporate governance practices and campaign finance in Brazil. We interpret campaign finance as a proxy for political influence by interest groups. Our results indicate that family-owned firms contribute significantly more for political campaigns, both in terms of proportion of firms and total amount spent to finance the candidates. Higher concentration of capital, and the separation of ownership and control are positively related to campaign donations, while better corporate governance is negatively related to political contributions.

## References


1. Ames, B., 1995a. Electoral rules, constituency pressures and pork barrel: bases of voting in the Brazilian congress. Journal of Politics 57, 324-343.
2. Ames, B., 1995b. Electoral strategy under open-list proportional representation. American Journal of Political Science 39, 406-433.
3. Bardhan, P., 1997. Corruption and development: a review of issues. Journal of Economic Literature 35, 1320–1346.
4. Black, B., Jang, H., Kim, W., 2004. Does corporate governance affect firms' market values? Evidence from Korea. Stanford Law and Economics Olin Working Paper 237.
5. Center for International Private Enterprise, 2001. Corporate governance: an antidote to corruption. 10th International Anti-Corruption Conference, Prague, Czech Republic.
6. Chang, E., 2005. Electoral incentives for political corruption under open-list proportional representation. Journal of Politics 67, forthcoming.
7. Claessens, S., Djankov, S. Lang, L., 2000. The separation of ownership and control in East Asian corporations. Journal of Financial Economics 58, 81-112.
8. Claessens, S., Djankov, S., Fan, J., Lang, L., 2002. Disentangling the incentive and entrenchment effects of large shareholdings. Journal of Finance 57, 2741-2771.
9. Coate, S., 2004. Pareto-improving campaign finance policy. American Economic Review 94, 628–655.
10. Cox, G., Thies, M., 1998. The cost of intra-party competition: the single nontransferable vote and money politics in Japan. Comparative Political Studies 31, 267–91.

11. Dadalt, P., Donaldson, J., Garner, J., 2003. Will any q do? Journal of Financial Research 26, 535-551.
12. Dellasoppa, E., 2005. Corruption in Brazilian society: an overview. In: Sarre, R. (ed.) Policing Corruption: International Perspectives, ch. 2, 37–50.
13. Fleischer, D., 1997. Political corruption and campaign financing: Brazil's slow shift toward anti-corruption laws. XX International Congress of the Latin American Studies Association, Guadalajara, Mexico.
14. Garmaise, M., Liu, J., 2005. Corruption, firm governance, and the cost of capital. UCLA Working Paper.
15. Gompers, P., Ishii, J., Metrick, A., 2003. Corporate governance and equity prices. Quarterly Journal of Economics 118, 107-155.
16. Hertzel, M., Martin, J., Meschke, J., 2002. Corporate soft money donations and firm performance. Arizona State University Working Paper.
17. Huntington, S. 1968. Political Order in Changing Societies. Yale University Press, p. 368.
18. Joo, T., 2001. The modern corporation and campaign finance: incorporating corporate governance analysis into first amendment jurisprudence. Washington University Law Quarterly 79, 1-88.
19. Joo, T., 2002. Corporate governance and the constitutionality of campaign finance reform. Election Law Journal 1, 361-372.
20. Kaufmann, D., 1997. Corruption: the facts. Foreign Policy 107, 114-131.
21. Kaufmann, D., 2004. Corruption, governance and security: challenges for the rich countries and the world. Global Competitiveness Report 2004/2005, World Economic Forum, 83-102.
22. Kaufmann, D., Kraay, A., 2002. Growth without governance. World Bank Policy Research Working Paper 2928, Washington, D.C.
23. Kaufmann, D., Kraay, A., Mastruzzi, M., 2005. Governance matters IV – governance indicators for 1996-2004. World Bank Policy Research Working Paper, Washington, D.C.
24. Kauffman, D., Wei, S., 1999. Does "grease money" speed up the wheels of commerce? NBER Working Paper 7093.
25. Klapper, L., Love, I., 2004. Corporate governance, investor protection, and performance in emerging markets. Journal of Corporate Finance 10, 703-728.
26. La Porta, R., Lopez-De-Silanes, F., Shleifer, A., Vishny, R., 1998. Law and finance. Journal of Political Economy 106, 1113-1155.
27. _____, 1999. The quality of government. Journal of Law, Economics and Organization 15, 222-279.
28. _____, 2000. Investor protection and corporate governance. Journal of Financial Economics 58, 3-28.
29. _____, 2002. Investor protection and corporate valuation. Journal of Finance 57, 1147-1170.
30. Leal, R., Carvalhal-da-Silva, A., 2005. Corporate governance and value in Brazil and Chile. Inter-American Development Bank Working Paper.
31. Mauro, P., 1995. Corruption and growth. Quarterly Journal of Economics 110, 681-712.
32. Morck, R., Shleifer, A, Vishny, R., 1988. Management ownership and market valuation: an empirical analysis. Journal of Financial Economics 20, 293-315.
33. Ramalho, R., 2004. The effects of an anti-corruption campaign: evidence from the 1992 presidential impeachment in Brazil. The World Bank Working Paper.
34. Samuels D, 2001a. When does every penny count? Intra-party competition and campaign finance in Brazil. Party Politics 7, 89-102.
35. Samuels, D., 2001b. Money, elections and democracy in Brazil. Latin American Politics and Society 43, 27-48.
36. Shleifer, A.,Vishny, R., 1997. A survey of corporate governance. Journal of Finance 52, 737-783.
37. Shleifer, A.,Vishny, R., 1994. Politicians and firms. Quarterly Journal of Economics 109, 995-1025.
38. Silberman, J., Yochum, G, 1980. The market for special interest campaign funds: an exploratory approach. Public Choice 35, 75-83.
39. Transparência Brasil, 2005. Quem financiou quem nas eleições 2002. Available at http://www.asclaras.org.br.
40. Wilcox, C., 2001. Transparency and disclosure in political finance: lessons from the United States. Democracy Forum for East Asia Conference on Political Finance, Sejong Institute, Seoul, Korea.
41. Yalamov, T., Belev, B., 2001. Corporate governance as antidote for corruption: examples/lessons learned in Bulgaria and transition countries. 10th International Anti-Corruption Conference, Prague, Czech Republic.

## Appendices

**Table 8.** Corporate Governance Index Developed by Leal and Carvalhal da Silva (2005)

Corporate governance index developed by Leal and Carvalhal da Silva (2005), consisting of 24 "yes" or "no" questions. If the answer is "yes", the value of 1 is attributed to the question, otherwise the value is 0. The index is the sum of the points for each question.

| Disclosure |
|---|
| 1. Does the company's annual report, website or publicly disclosure include information about potential conflicts of interest such as related party transactions? |
| 2. Does the company specify in its charter, annual reports or other means sanctions against management in the case of violations of its desired corporate governance practices? |
| 3. Does the company produce its legally required financial reports by the required date? |
| 4. Does the company use an international accounting standard (IASB or US GAAP)? |
| 5. Does the company use one of the leading global auditing firms? |
| 6. Does the company disclose compensation information for the CEO and board members? |
| Board Composition and Functioning |
| 7. Are the Chairman of the Board and the CEO different persons? |
| 8. Does the company have monitoring committees (compensation, nominations, auditing, etc)? |
| 9. Is the board clearly made up of outside and possibly independent directors? |
| 10. Is the board size between 5 and 9 members? |
| 11. Do board members serve consecutive one-year terms? |
| 12. Is there a permanent Fiscal Board? |
| Ethics and Conflicts of Interest |
| 13. Is the company free of any undergoing inquiries at CVM regarding governance malpractices? |
| 14. Is the company free of any CVM convictions and/or fining for governance malpractices or other securities law violations in the last five years? |
| 15. Does the company submit to arbitration in place of regular legal procedures in the case of corporate governance malpractices? |
| 16. Do ultimate controlling shareholders, considering shareholder agreements, own less than 50% of the voting shares? |
| 17. Is the percentage of non-voting shares in total capital less than 20%? |
| 18. Is the ultimate controlling shareholders' ratio of cash-flow rights to voting rights greater than 1? |
| Shareholder's Rights |
| 19. Does the company charter or verifiable actions facilitate the process of voting to all shareholders beyond what is legally required? |
| 20. Does the company charter grant additional voting rights beyond what is legally required? |
| 21. Does the company grant tag along rights beyond what is legally required? |
| 22. Are pyramid structures that decrease the control concentration present? |
| 23. Do shareholder agreements that decrease the control concentration exist? |
| 24. Is the free-float greater than or equal to what is required in Bovespa's Level I trading list (25%)? |

**Table 2.** Description of Variables

| Variable | Description |
|---|---|
| Finance | Dummy variable that takes the value 1 if the firm financed political candidates during the Brazilian election in 2002. |
| FinanceElected | Dummy variable that takes the value 1 if the firm financed elected candidates during the Brazilian election in 2002. |
| TotalFinance | Total amount (in Brazilian *reais*) spent by the firm to finance political candidates during the Brazilian election in 2002. |
| TotalFinance Elected | Total amount (in Brazilian *reais*) spent by the firm to finance elected candidates during the Brazilian election in 2002. |
| RelativeFinance | Total amount spent by the firm to finance political candidates during the Brazilian election in 2002 relative to the firm's annual gross revenue. |
| RelativeFinance Elected | Total amount spent by the firm to finance elected candidates during the Brazilian election in 2002 relative to the firm's annual gross revenue. |
| CGI | Corporate governance index developed by Leal and Carvalhal da Silva (2005), scaled to a value between 0 and 24 (see Table 1). |
| Votes | Percentage of voting capital owned directly by the largest shareholder. |
| CashFlow | Percentage of total capital owned directly by the largest shareholder. |
| Vote/CashFlow | Ratio of voting to total capital owned directly by the largest shareholder. |
| Foreign | Dummy variable that takes the value 1 if the largest ultimate shareholder is a foreign investor. |
| Government | Dummy variable that takes the value 1 if the largest ultimate shareholder is the government. |
| Institutional | Dummy variable that takes the value 1 if the largest ultimate shareholder is an institution (banks, insurance companies, pension funds, foundations or mutual funds). |
| Leverage | Ratio of total (non equity) liabilities to total assets. |
| Volatility | Annualized standard deviation of daily stock prices from the previous 12 months. |
| Growth | Average annual growth of sales over the past 3 years. |
| ROA | Return on assets measured by the ratio of operating income to total assets at year-end. |
| Size | Firm size, measured by the natural logarithm of total assets in thousands of Brazilian *reais*. |
| Tobin's Q | The numerator of Tobin's Q is the book value of assets minus the book value of common equity plus the market value of common equity, while the denominator is the book value of assets. |

**Table 3.** Summary Statistics of Selected Variables

Descriptive statistics of selected variables used in our sample. Definitions for each of the variables can be found in Table 2.

| Variable | Mean | Median | Stdev | Min | Max |
|---|---|---|---|---|---|
| Finance | 0.45 | 0.00 | 0.50 | 0.00 | 1.00 |
| FinanceElected | 0.39 | 0.00 | 0.49 | 0.00 | 1.00 |
| TotalFinance | 496,280.06 | 0.00 | 1,243,429.50 | 0.00 | 7,055,254.68 |
| TotalFinanceElected | 326,492.22 | 0.00 | 838,982.96 | 0.00 | 5,558,404.00 |
| RelativeFinance | 0.06% | 0.00% | 0.24% | 0.00% | 2.00% |
| RelativeFinanceElected | 0.05% | 0.00% | 0.22% | 0.00% | 2.00% |
| CGI | 10.40 | 10.00 | 2.65 | 5.00 | 19.00 |
| Votes | 70.90% | 71.22% | 22.65% | 11.39% | 100.00% |
| CashFlow | 50.71% | 49.88% | 26.22% | 7.10% | 100.00% |
| Vote/CashFlow | 1.69 | 1.44 | 0.89 | 0.72 | 10.29 |
| Foreign | 0.25 | 0.00 | 0.44 | 0.00 | 1.00 |
| Government | 0.08 | 0.00 | 0.27 | 0.00 | 1.00 |
| Institutional | 0.09 | 0.00 | 0.29 | 0.00 | 1.00 |
| Leverage | 65.35% | 63.48% | 28.35% | 1.32% | 270.13% |
| Volatility | 82.69% | 70.00% | 66.69% | 10.00% | 520.00% |
| Growth | 22.88% | 16.93% | 56.49% | -85.99% | 778.04% |
| ROA | 11.33% | 11.45% | 9.77% | -27.17% | 38.10% |
| Size | 13.71 | 13.90 | 1.82 | 8.96 | 18.62 |
| Tobin's Q | 0.99 | 0.92 | 0.45 | 0.07 | 4.77 |

**Table 4.** Shareholding Composition of Brazilian Corporations

Direct and indirect shareholding composition of Brazilian corporations. Average voting capital, total capital, and voting to total capital ratio of firms with and without a controlling shareholder. The indirect composition is calculated backwards until the effective shareholder is revealed to be from one of the following groups: individuals, institutions (banks, insurance companies, pension funds, foundations or mutual funds), foreigners and the government. A company with a controlling shareholder is one where a single owner has directly more than 50% of the voting capital. Data collected from the annual reports in 2002.

**Panel A:** Direct Structure

| | Firms with a Controlling Shareholder (184 firms) | | | Firms without a Controlling Shareholder (30 firms) | | | Total Sample (214 firms) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Voting Capital (%) | Total Capital (%) | Voting/ Total Capital | Voting Capital (%) | Total Capital (%) | Voting/ Total Capital | Voting Capital (%) | Total Capital (%) | Voting/ Total Capital |
| Largest Shareholder | 77.09 | 55.70 | 1.65 | 32.93 | 20.27 | 1.92 | 70.90 | 50.71 | 1.69 |
| 3 Largest Shareholders | 87.41 | 65.34 | 1.56 | 56.99 | 37.72 | 1.74 | 83.14 | 61.46 | 1.58 |
| 5 Largest Shareholders | 88.69 | 66.90 | 1.54 | 67.04 | 45.48 | 1.69 | 85.66 | 63.90 | 1.56 |

**Panel B:** Indirect Structure

| | Firms with a Controlling Shareholder (184 firms) | | | Firms without a Controlling Shareholder (30 firms) | | | Total Sample (214 firms) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Voting Capital (%) | Total Capital (%) | Voting/ Total Capital | Voting Capital (%) | Total Capital (%) | Voting/ Total Capital | Voting Capital (%) | Total Capital (%) | Voting/ Total Capital |
| Largest Shareholder | 69.81 | 45.69 | 2.81 | 39.37 | 22.41 | 2.26 | 65.54 | 42.43 | 2.74 |
| 3 Largest Shareholders | 82.36 | 55.34 | 2.13 | 60.22 | 37.50 | 1.84 | 79.25 | 52.84 | 2.09 |
| 5 Largest Shareholders | 84.84 | 58.53 | 1.83 | 67.05 | 43.56 | 1.79 | 82.35 | 56.43 | 1.82 |

**Table 5.** Ownership and Control of Brazilian Firms by Type of Controlling Shareholders

Direct and indirect shareholding composition of Brazilian corporations classified according to the type of controlling shareholders: families, foreigners, government, and institutions (banks, insurance companies, pension funds, foundations or mutual funds). Average voting capital, total capital, and voting to total capital ratio in 2002. Data collected from the annual reports.

| Type of Controlling Shareholder | Proportion (%) of Firms | Direct Structure | | | Indirect Structure | | |
|---|---|---|---|---|---|---|---|
| | | Voting Capital (%) | Total Capital (%) | Voting/ Total Capital | Voting Capital (%) | Total Capital (%) | Voting/ Total Capital |
| Family | 57.95 | 69.08 | 46.49 | 1.81 | 65.23 | 37.84 | 3.13 |
| Government | 7.94 | 74.30 | 56.99 | 1.50 | 71.95 | 49.23 | 1.75 |
| Institutional | 8.88 | 71.76 | 57.87 | 1.44 | 55.26 | 37.56 | 3.00 |
| Foreign | 25.23 | 73.70 | 56.05 | 1.57 | 67.86 | 52.53 | 2.04 |

**Table 6.** Firms that Financed Political Candidates by Type of Controlling Shareholders

Proportion of companies that financed political candidates during the Brazilian election in 2002, classified according to the type of controlling shareholders (families, foreigners, government, and institutions). The amount spent by firms to finance political candidates relative to annual gross revenue (%) is also reported. Data collected from the Electoral Supreme Court (TSE) and Economatica database.

| Type of Controlling Shareholder | Proportion (%) of Firms in Each Group that Financed Political Candidates | Amount Spent by Firms to Finance Political Candidates Relative to Annual Gross Revenue (%) |
|---|---|---|
| Family | 58.06 | 0.09 |
| Government | 5.88 | 0.06 |
| Institutional | 31.58 | 0.02 |
| Foreign | 33.33 | 0.02 |

**Table 7.** Firms that Financed Political Candidates by Corporate Governance Index Level

Proportion of companies that financed political candidates during the Brazilian election in 2002, classified according to the corporate goverance index (CGI) level. The CGI is a firm-level corporate governance index composed of 24 questions developed by Leal and Carvalhal da Silva (2005). Description of the CGI can be found in Table 1. The amount spent by firms to finance political candidates relative to annual gross revenue (%) is also reported. "NA" (not applicable) means that no firm had a CGI score higher than 20. Data collected from the Electoral Supreme Court (TSE), Economatica database and company charters.

| CGI Level | Proportion (%) of Firms Belonging to Each Group | Proportion (%) of Firms in Each Group that Financed Political Candidates | Amount Spent by Firms to Finance Political Candidates Relative to Annual Gross Revenue (%) |
|---|---|---|---|
| Low (0-5) | 2.80 | 50.00 | 0.13 |
| Moderately Low (6-10) | 50.93 | 45.87 | 0.09 |
| Moderate (11-15) | 43.93 | 44.68 | 0.04 |
| Moderately High (16-20) | 2.34 | 40.00 | 0.02 |
| High (21-24) | NA | NA | NA |

**Table 8.** Financing Political Candidates and Corporate Governance

The dependent variables in each regression are: Finance (dummy variable that takes the value 1 if the firm financed political candidates during the Brazilian election in 2002), TotalFinance (total amount spent by the firm to finance political candidates), and RelativeFinance (total amount spent by the firm to finance political candidates relative to annual gross revenue). All coefficients are obtained by estimating linear regression models. Definitions for each of the variables can be found in Table 2. The intercept term as well as industry dummies are included in each regression but are not reported. The p-values are shown in parentheses. ***, **, * denote statistical significance at the 1%, 5% and 10%, respectively.

| Variables | Finance | | | TotalFinance | | | RelativeFinance | | |
|---|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | VII | VIII | IX |
| Vote | 0.03* (0.08) | | | 0.64** (0.05) | | | 1.37** (0.03) | | |
| CashFlow | | 0.01** (0.03) | | | 0.64** (0.05) | | | 0.02* (0.09) | |
| Vote/CashFlow | | | 0.00* (0.10) | | | 1.73** (0.04) | | | 0.10* (0.08) |
| CGI | -0.02** (0.02) | -0.02** (0.03) | -0.02** (0.02) | -0.12* (0.07) | -0.20** (0.05) | -0.20** (0.05) | -0.16** (0.02) | -0.18** (0.02) | -0.18** (0.02) |
| Foreign | -0.34*** (0.00) | -0.34*** (0.00) | -0.35*** (0.00) | -8.24*** (0.00) | -8.39*** (0.00) | -8.06*** (0.00) | -0.95 (0.20) | -0.89 (0.23) | -0.92 (0.21) |
| Government | -0.65*** (0.00) | -0.65*** (0.00) | -0.65*** (0.00) | -14.20*** (0.00) | -14.25*** (0.00) | -14.01*** (0.00) | -1.34 (0.26) | -1.28 (0.28) | -1.30 (0.28) |
| Institutional | -0.32*** (0.01) | -0.34*** (0.00) | -0.32*** (0.01) | -4.52* (0.09) | -5.80** (0.04) | -3.96 (0.14) | -0.98 (0.26) | -1.00 (0.37) | -1.00 (0.36) |
| Tobin's Q | -0.04 (0.66) | -0.05 (0.55) | -0.04 (0.62) | 3.41* (0.07) | 2.42 (0.20) | 3.13* (0.10) | 0.11 (0.88) | 0.22 (0.77) | 0.22 (0.77) |
| Leverage | -0.00 (0.29) | -0.00 (0.32) | -0.00 (0.31) | -0.01 (0.61) | -0.01 (0.74) | -0.02 (0.41) | -0.01 (0.43) | -0.01 (0.42) | -0.01 (0.45) |
| Volatility | 0.04 (0.46) | 0.04 (0.47) | 0.04 (0.47) | -1.47 (0.26) | -1.57 (0.23) | -1.57 (0.23) | -0.66 (0.21) | -0.64 (0.22) | -0.64 (0.22) |
| Growth | 0.00 (0.18) | 0.00 (0.19) | 0.00 (0.19) | 0.01 (0.46) | 0.01 (0.56) | 0.01 (0.44) | 0.01 (0.71) | 0.00 (0.68) | 0.00 (0.69) |
| ROA | 0.01** (0.02) | 0.01** (0.02) | 0.01** (0.02) | -0.04 (0.65) | -0.04 (0.65) | -0.04 (0.62) | -0.07** (0.03) | -0.07** (0.03) | -0.07** (0.03) |
| Size | 0.07*** (0.00) | 0.07*** (0.00) | 0.07*** (0.00) | 3.48*** (0.00) | 3.32*** (0.00) | 3.43*** (0.00) | 0.21 (0.32) | 0.23 (0.28) | 0.23 (0.28) |
| Observations | 214 | 214 | 214 | 214 | 214 | 214 | 214 | 214 | 214 |
| Adjusted $R^2$ | 0.16 | 0.16 | 0.16 | 0.28 | 0.28 | 0.53 | 0.05 | 0.05 | 0.05 |

**Table 9.** Financing Elected Candidates and Corporate Governance

The dependent variables in each regression are: FinanceElected (dummy variable that takes the value 1 if the firm financed elected candidates during the Brazilian election in 2002), TotalFinanceElected (total amount spent by the firm to finance elected candidates), and RelativeFinanceElected (total amount spent by the firm to finance elected candidates relative to annual gross revenue). All coefficients are obtained by estimating linear regression models. Definitions for each of the variables can be found in Table 2. The intercept term as well as industry dummies are included in each regression but are not reported. The p-values are shown in parentheses. ***, **, * denote statistical significance at the 1%, 5% and 10%, respectively.

| Variables | FinanceElected | | | TotalFinanceElected | | | RelativeFinanceElected | | |
|---|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | VII | VIII | IX |
| Votes | 0.02* (0.09) | | | 0.47** (0.03) | | | 0.64** (0.04) | | |
| CashFlow | | 0.01** (0.03) | | | 0.40* (0.07) | | | 0.01* (0.09) | |
| Vote/CashFlow | | | 0.02** (0.05) | | | 1.20** (0.04) | | | -0.08 (0.72) |
| CGI | -0.02** (0.02) | -0.02** (0.02) | -0.02** (0.02) | -0.03* (0.09) | -0.09* (0.07) | -0.09* (0.07) | -0.11** (0.02) | -0.12** (0.02) | -0.12 (0.16) |
| Foreign | -0.28*** (0.00) | -0.28*** (0.00) | -0.28*** (0.00) | -5.74*** (0.00) | -5.86*** (0.00) | -5.63*** (0.00) | -0.60 (0.20) | -0.57 (0.22) | -0.59 (0.20) |
| Government | -0.62*** (0.00) | -0.62*** (0.00) | -0.62*** (0.00) | -9.42*** (0.00) | -9.59*** (0.00) | -9.42*** (0.00) | -0.89 (0.23) | -0.86 (0.25) | -0.88 (0.24) |
| Institutional | -0.30*** (0.01) | -0.32*** (0.00) | -0.29*** (0.01) | -3.02* (0.10) | -3.83** (0.04) | -2.64 (0.15) | -0.57 (0.40) | -0.58 (0.40) | -0.59 (0.39) |
| Tobin's Q | -0.03 (0.75) | -0.04 (0.64) | -0.02 (0.77) | 2.71** (0.03) | 2.02 (0.11) | 2.49** (0.05) | 0.07 (0.88) | 0.12 (0.80) | 0.12 (0.81) |
| Leverage | 0.00 (0.15) | 0.00 (0.18) | 0.00 (0.13) | -0.01 (0.46) | -0.01 (0.57) | -0.02 (0.29) | -0.01 (0.36) | -0.07 (0.35) | -0.01 (0.39) |
| Volatility | -0.01 (0.88) | -0.01 (0.88) | -0.01 (0.88) | -1.00 (0.25) | -1.07 (0.22) | -1.07 (0.22) | -0.46 (0.16) | -0.45 (0.17) | -0.45 (0.17) |
| Growth | 0.00 (0.12) | 0.00 (0.13) | 0.00 (0.11) | 0.01 (0.35) | 0.01 (0.43) | 0.01 (0.33) | 0.00 (0.49) | 0.00 (0.47) | 0.00 (0.48) |
| ROA | 0.01 (0.15) | 0.00 (0.16) | 0.00 (0.16) | -0.01 (0.84) | -0.01 (0.86) | -0.01 (0.81) | -0.04** (0.04) | -0.04** (0.04) | -0.04** (0.04) |
| Size | 0.09*** (0.00) | 0.09*** (0.00) | 0.09*** (0.00) | 2.37*** (0.00) | 2.26*** (0.00) | 2.33*** (0.00) | 0.11 (0.41) | 0.12 (0.38) | 0.12 (0.38) |
| Observations | 214 | 214 | 214 | 214 | 214 | 214 | 214 | 214 | 214 |
| Adjusted $R^2$ | 0.15 | 0.16 | 0.15 | 0.29 | 0.29 | 0.29 | 0.05 | 0.05 | 0.06 |