The Value of Business Group Affiliation for Political Connections: Preferential Lending in Brazil

Abstract: Political connections are a worldwide phenomenon, but little is known about the capability differentials in using them. We argue that business group affiliates are capable of extracting more value from political connections than non-affiliates. We use political contributions to proxy for firm connections. A selection-corrected fixed effects model was fitted using a panel sample of 778 firm-election observations for three major elections in Brazil. We find support that group affiliation moderates the effect of political connections on preferential lending. We also find that local business groups are more capable of using their political capability than foreign groups.

Keywords: Théorie des parties prenantes. Théorie des ressources et compétences. Stratégie Politique des Entreprise. Pays Émergents.
1. Introduction

Political connections are a worldwide phenomenon (Faccio, 2006). Firms invest a considerable share of their slack resources in nurturing close relationships with the powerful. Connections can assume many forms. When businessmen enter politics or serve the government, or when former politicians sit on corporate boards or run companies. Connections may also arise from friendship, family or other social ties. Related empirical research has suggested a causal link between connections and firm value (Fisman, 2001; Hillman, Zardokoohi and Bierman, 1999; Johnson and Mitton, 2003). In particular, politically connected firms are found to have superior access to finance (Claessens, Feijen, and Laeven, 2008).

Despite the fact that research on this topic has recently advanced in management literature, little is known about the capability differentials in using such connections. The question of what explains differences in firm outcomes when comparing two firms in the same industry possessing connections with similar strength (e.g. both have former Presidents in the board) remains unanswered. We tackle this question deriving hypotheses from the business group literature (Guillén, 2000). We argue that the organizational form of business group makes affiliates more capable of using political connections.

We examine our hypotheses in the context of Brazil. This is an interesting setting for several reasons. First, Brazil is a leading emerging economy that has advanced some market reforms, but where government still makes considerable intervention in economic policy and in allocating scarce country resources. Second, business groups in Brazil still a dominant organizational form and historically have developed under the auspices of the government. They have recently restructured but continue to maintain a privilege position in the economic and political landscapes. Third, political institutions favor particularistic relationship between politicians and firms. Finally, the country provides data that matches firms to politicians individually, through the exchange of financial support for election and personal favor. Taken together, these contextual conditions provide a natural experiment to isolate the direct effects of CPA and to investigate the moderating effect of business group affiliation.

The rest of this paper is organized as follows. We initially derive our hypotheses from the combination of literatures of CPA in management and financial economics and the resource-
based view of business groups (Guillén, 2000). The next section presents the research setting and the methods used in our empirical investigation. The results are presented and discussed to show how we contribute to extend theory on corporate political activity, in particular about firm direct effects from corporate political action.

2. Firm level outcomes from political connections

Pursing competitive advantage through political means is an important part of corporate life (Schuler, Rehbein, and Cramer, 2002). Nurturing political connections are a form of corporate political strategy. The corporate political action (CPA) literature in management investigates the business-government interface. More precisely, it deals with antecedents and consequences of any “attempts to shape government policy in ways favorable to the firm” (Baysinger, 1984). Research about the efficacy of CPA usually focuses on indirect asymmetric effects of legislation (Hillman, Keim, and Schuler, 2004), such as regulations (Mcwilliams, Van Fleet and Cory, 2002; Shaffer, 1995) or deterrence of foreign competition (Schuler, 1996).

A growing body of research in management and financial economics has examined the direct effects of CPA via political connections. Connections assume many forms. They can be bought through donations to political campaigns (Claessens et. al. 2008). Politicians may sit on corporate boards or assume executive offices. Businessmen can decide to go into politics or to nurture close relationships with the powerful via friendship (Faccio, 2006). Businessmen in power may be able to influence legislation, gather privileged information, or even influence government expenditures in way favorable to their firms. Former politicians sitting on boards or running corporations have superior knowledge about the legislative process and superior access to key political actors. This movement from private to government and vice-versa is anecdotally well known worldwide with different names, such as ‘the revolving door’ in the United States or “pantoufflage” in France.

The main challenge for scientific research is to isolate the direct effects of political activity from other effects on firm value (Hillman, Keim, and Schuler, 2004). Empirical research usually adopts the event study methodology. The main argument is that investors are able to price ex-ante the value of such connections, which is (positive or negatively) reflected on stock prices after the announcement of a nomination, election or other political or economic event. Evidence has shown that political connections affect does firm value in advanced democracies such as the
United States (Acemoglu, Johnson, Kwak, Mitton, 2010; Hillman (2005); Jayachandran, 2006; Knight, 2007) and Canada (Morck, Strangeland, and Yeung, 2000), in cronyism capitalism such as during Indonesia’s Suharto regime (Fisman, 2001) and the term of the Prime Minister Mahatir in Malaysia (Johnson and Mitton, 2003), and even during the Nazi Germany (Ferguson and Voth, 2008). Using a comprehensive cross-country sample of firms, Faccio (2006) found that the greater the strength of political connections the greater the cumulative abnormal returns accruing to firms after the political event. Although political connectedness is more common in countries with weak institutional environments (Faccio, 2006), their effect on firm value is pervasive around the world.

2.1 Preferential lending from political connections

Empirical research has shown that political connections are not only associated to firm value but also to preferential lending. For instance, Charumulind, Kali and Wiwattanakantang (2006), using the period of the Asian financial crisis in 1997, provide evidence that politically connected firms in Thailand needed less collaterals to obtain more long-term debt than non-connected firms. In her cross-country sample, Faccio, Masulis and McConnell (2006) show that private lenders facilitate lending to connected firms because they anticipate that these firms will be bailed out by the government in the case of financial distress. However, she does not rule out the possibility of government pressure on private banks to provide favorable loans to connected firms.

Another way connections translate into preferential access to finance is through state banks. Instead of promoting the reduction of transaction costs, the government uses the control of scarce country financial resources as an instrument to bargain for political support and personal interests. Dinç (2005) found that lending from government-owned banks in emerging markets is greater than private banks in election years. Sapienza (2004) shows that electoral results of the ruling party affect the lending behavior of state-owned banks in Italy. Politically connected firms are more likely to profit from such behavior. Hutchroft (1998) documents preferential lending from state banks to friend to Phillipines President Marcos. Claessens et al. (2008) found that the major channel through which connections benefit firms in Brazil is via preferential access to long-term debt which comes mostly from state banks. Using a large sample of firm loans in
Pakistan, Khawaja and Mian (2005) found that firms with political connections had preferential treatment from government banks.

Preferential access to finance for politically connected firms is particularly important in countries where the government controls important resources or where the weak institutional apparatus does not suffice to reduce information asymmetries or secure property rights. In a world of strong institutions, transactions costs are reduced, arm’s length transactions are facilitated, and the infrastructure for the market to function is set out (North, 1990). However, in the absence of strong market institutions, legal protection and law enforcement (La Porta, Lopez-de-Silanes, Shleifer, and Vishny, 1998), and in the presence of particular informal institutions (e.g. guanxi, clientelism, patronage), establishing connections with the powerful is an alternative to overcome such institutional deficiencies (Pearce, 2001), to look less risky for the market and to reduce the cost of financing their activities (Boubakri, Guedhami, Mishra, Saffar, 2008; Khwaja and Mian, 2005).

3. Business group effects on preferential lending

The effect of firm political connections on preferential lending has been reported as an important feature of countries possessing weak market institutions. Another salient feature of these countries is the importance of business groups (Hoskisson et al. 2000; Khanna and Palepu, 2000; Khanna and Palepu, 2001). This organizational form is found virtually everywhere in the world but are a more pervasive in the landscape of emerging economies. Khanna and Rivkin (2001, p. 47) define business groups as ‘set of firms which though legally independent are bound together by a constellation of formal and informal ties, and are accustomed to taking coordinated action’. In this section we derive hypotheses about the effect of being affiliated to a business group on the value of political connections in providing preferential access to debt finance.

3.1 The moderating effects of group affiliation

The theoretical perspectives for explaining the phenomenon of business groups are based on institutional economics (Khanna and Palepu, 2000), economic sociology (Granovetter, 1994), political economy (Schneider, 2009), and the resource-based view (Guillén, 2000). We focus here primarily on the resource-based and political-based approaches.
Guillén (2000) advanced and tested the proposition that entrepreneurs and firms possessing inimitable capabilities for combining foreign and domestic resources have incentives to diversify in multiple industries. According to this resource-based explanation, business groups are considered a collection of valuable resources and excess capabilities pertaining to two basic domains: technical and non-market capabilities. Technical capabilities make possible the productive use of knowledge and physical assets to develop and start new ventures in new industries (Amsden and Hikino, 1994). Non-market capabilities are the ability to use political connections to influence policy, access preferential credit, get licenses, subsidies, protection and preferential information. As long as asymmetries in capital flows exists, superior market entry capability is inimitable and those local entrepreneurs who possess them are more prone to diversify and form business group (Guillén, 2000).

Strategic management research, mostly resource- or institutional-based, recognizes the role of political resources for business groups (Amsden, 1989; Dieleman and Sachs, 2008; Khanna and Yafeh, 2007; Khanna and Palepu, 2000; Kang, 2002). Political connections give access to valuable domestic country resources (Wan, 2005), and groups tend to disproportionately be the recipients of political rents (Khanna and Palepu, 2000). Business groups may have superior political capabilities since they economize on information gathering for policy makers (Amsden, 1989), and find in their superior political contacts the source of their institutional power (Dieleman and Sachs, 2008), which can turn them into paragons or rent-seeker parasites (Kang, 2002; Khanna and Yafeh, 2007).

From a political economy standpoint, superior access to government is said to constitute the very essence of business groups (Encarnation, 1989; Schneider, 2008), as they serve as an important instrument for engendering economic development (Evans, 1979). Big businesses have been used by the government to ‘concertate’ market reforms in emerging economies (Maxfield and Schneider, 1997). They are not only a product of ‘policy distortions’ (Ghemawat and Khanna, 1998), but rather they influence the way market reforms are conducted in order to maintain a privileged position. For instance, political economy scholars argue that the way market reforms were implemented in Latin America created new political rents and increased politician competition for clients (Maxfield and Schneider, 1997, p. 18).

Group affiliates are part of the ‘local bourgeoisie’ (Evans, 1979) who have historically developed superior capabilities of establishing valuable political connections. Therefore, when
group affiliates decide for getting credit abroad, it is plausible to think that they will use this capability to leverage their political connections. Compared to non-affiliates, group firms may enjoy superior access to the powerful and increase the value of their connections. Political capabilities are a valuable resource heterogeneously distributed among firms (Bonardi, Holburn, and Van den Bergh, 2006) and we argue that a business group is a type of organizational form that is more likely to be the recipient of this resource. Based on these arguments, we propose the following:

*Hypothesis 1: Business group affiliation positively moderates the effect of firm political connections on providing preferential lending.*

### 3.2 The effect of the country of origin

In general, market reforms that were implemented in emerging economies increased financial liberalization and lower trade tariffs. This allowed foreign capital to operate in these countries more freely. One of the consequences of this opening to foreign competition was denationalization, as several local business groups handed over control to foreigners (Rocco, 2007). The resulting restructuring is a greater presence of foreign capital. In Brazil, for instance, around 40% of the 1,000 largest firms in Brazil were controlled by foreign capital in 2010.

The political power of local business groups can also be attested by recent international expansion of emerging multinationals (Schneider, 2009). In the case of Brazil, Baer (2008) shows that neoliberal policies in Brazil have raised market concentration up to 20% and increased verticalization and agglomeration; one possible strategy to increase international competition of domestic firms. Indeed, the anti-trust government agency has decided in several cases for the agglomeration of domestic firms (e.g. the mergers that created AMBEV, now owner of Anheuser-Busch, and Brazil Foods, one of the largest food exporters in the world). Popular press has called attention to the interventionist strategy of Brazilian government of using financial support of the National Development Bank - BNDES, who owns shares in several large companies, including the largest meat packer in the world, JBS, now owner of Swift, American Beef and Smithfield Beef.
We propose that in the case of preferential access to finance, local business groups will extract more value from their political connections than groups controlled by foreign capital in accessing preferential debt. We propose our second hypothesis:

_Hypothesis 2:_ Local business groups are better capable of using political connections to benefit from preferential lending than foreign groups.

4. Empirical investigation

4.1 Country Setting

Brazil has embraced market reforms only in the late 80’s and early 90’s, when the old Import Substitution Industrialization (ISI) policy became to the considerably dismantled. The domestic market opened to foreign competition as tariffs and non-tariff barriers collapsed from an average rate of 41% in 1989 to 13.8% in 2002 (Baer, 2008). A wave of privatization began to wipe off state assets and transfer them to private agents. The majority of privations happened after the Real plan succeeded in controlling inflation in 1994. This blue picture may give the appearance that market reforms in Brazil have been fully implemented. However, despite successful developments in bringing the country into the world market, Brazil did not abandon protection and incentives to some sectors, a feature of old ISI policy (Veiga, 2009). The implementation of an open economy agenda in Brazil is highly associated to future reelection prospects by the ruling party (Weyland, 2002), and is not tied to any ideology, but on a pragmatism tradition that has hampered the implementation of second generation reforms (Pinheiro, Bonelli, and Schneider, 2004), such as healthcare, social security, political and judiciary reforms.

Market reforms in fact created new political rents. At the same time, democratization increased the number of politicians competing to distribute rents and the bargaining power shifted to the business side. Competition among rival government factions competed rents away and reduced entry to barriers (Maxfield and Schneider, p. 18). Political parties are too fragmented, weak and led by personal motives. President Collor found a new party for himself to run for President in 1989; and seventeen parties composed the President Lula’s coalition in his second
term. This makes difficult to form majority in both chambers, deputy and senate chamber, forcing the ruling party to negotiate and to bargain for support. The necessity to bargain tends to increase the state bureaucracy and fuels rent-seeking. The executive power, for instance, can appoint around 20,000 positions in the federal bureaucracy.

Several characteristics in the Brazilian polity promote one-to-one relationship between firms and government officials or politicians. First, Brazilian political institutions, such as large district size, opaque disclosure of contributions, and open-list of candidates favors low accountability and particularistic relationships between business and state. In fact, these political institutions attract entrepreneurial candidates, i.e., personalistic campaign style, seeking personal vote in exchange of group or individual rewards, and responsible for his own career in politics (Samuels, 2008). Large districts and open list competition makes reeelection too costly and incumbents trade ‘pork’ for money (not for votes) in order to pay for television advertisements to communicate what they have done in office (Samuels, 2002). Secondly, different from the United States, corporations can make hard money donations directly to candidates, mostly in exchange of personal services and not to support public policy (Samuels, 2001). Finally, business politics in Brazil does not give incentive for collective action. The lack of encompassing peak associations (Schneider, 2004) capable of controlling free-riding and their use for personal favors (Maxfield and Schneider, 1997) push firms to act by themselves. Business political associations that existed in the 30’s were increasingly weakened by subsequent governments. The existing associations in Brazil have a considerable budget and professional structure, but they lack political influence (Schneider, 2004).

The combination of politicians competing for rents and a political system that favors one-to-one relationship between firms and politicians, particularly through political donations, constitute a natural laboratory that makes possible to isolate the exchange mechanism through which political connections translate into firm outcomes.

The Brazilian government practically controls the long-term credit markets. Only the National Development Bank (BNDES) was responsible for 15 percent of all investment in Brazil in 2010. The pension funds of SOE’s, indirectly controlled by the government, are the major institutional investors in both the equity and debt markets. Firms who succeed in accessing long-term debt from the government at a cost considerably lower that the interest rates offered by private banks are most likely to benefit from superior debt financing and lower the cost of
capital. In a country where interest rates are the highest in the world, this is an important source of competitive advantage.

Business groups are a pervasive organization form in Brazil. They are usually characterized by family governance and blockholding by a controlling group (Schneider, 2009). Different from groups in other emerging economies, they are more focused but more verticalized than in other countries (Khanna and Yafeh, 2007). They have always been an important organizational form in the economic and political landscape. Groups were a major device to push forward industrialization policies in Brazil (Evans, 1979). The recent history have shown that 21st century business groups have successfully coped with hyperinflation and stagnation in the 1980’s, and the sudden opening of Brazil to international trade in the 1990’s, through restructuring and adapting to the unfolding environment. Groups such as JBS, AMBEV, BRFoods, Vale and Odebrecht have a worldwide presence and are world leaders in their main sectors.

4.2 Sample

The availability of reliable data for strategy research in emerging economies is always problematic and challenging for researchers (Hoskinsson et al., 2000). To attenuate these limitations, we constrained our population to publicly-traded companies and relied on multiple sources of data. Listed firms provide audited information instead of self-reported figures of non-listed firms, while multiple sources allow for data triangulation. Indeed, very much effort was taken to gather data on the three critical variables in this study, namely, business group membership, firm political connections and preferential access to finance for the period of our panel: the Cardoso second presidential term (1999-2002), and Lula’s first (2003-2006) and second terms (2007-2009).

The Economatica database provided the list of sampled firms and firm financial figures. We started with the initial list of 355 active listed non-financial firms in the year of 1998. We sampled only firms having at least two entries (yearly) of each variable for each 4-year term after the election (the last one had only three years). We took into account firms that were delisted and new firms created until 2006. Each election sample had a different number of firms and some firms did not have entries in some elections. We ended up with a panel covering 16 sectors, three elections and a total of 778 observations after exclusion of aberrant data. Excluded observation
included negative equity, extremely high or low profitability ratios caused by close to zero equity or assets, firms that went to restructuration and showed extremely high or low debt ratios. Some firms disappeared from the initial listed firm sample due to bankruptcy, merging or acquisition. From 778 observations, only 556 were used for analysis using cases with complete information. These exclusions caused a selection bias that was taken into account in our models.

4.3 Methods

Our objective was to test whether the political capabilities of group affiliates were more efficient than those of non affiliates in using political connections to have preferential access to debt finance. We treat here political connections as a firm resource. The ability to use this political resource to acquire rents (cost of debt reduction) is the firm political capability. Such capability is the know-how that fills the gap between intention and output (Dosi, Nelson and Winter, 2000). Our conceptualization disentangles the resource from the capability, the tangible and fungible asset (donation) from the intangible, tacit knowledge-based asset (capability).

In order to capture the effects of political capabilities, we used our panel data to estimate a fixed effect model. The unobservable characteristic of the political capability is captured when the variation of each firm donating behavior, in the three elections, changes its cost of debt in the period after each election (during the electoral cycle, or the 4-year term). Fixed effect estimation alleviates endogeneity and takes into account unobservable variables of each firm, such as the ability to use connections. We are interested in the difference of the average effect of political donations between group affiliates and non affiliates. The model is described in Equation 1.

\[ y_{it} = \beta x_{it-1} + \gamma z_{it} + \lambda w_i z_{it} + \Theta_t + \alpha_i + \epsilon_{it} \]  

The dependent variable \((y_{it})\) is the measure of preferential access to finance for the firm \(i\) after the election \(t\). The set control variables are lagged one election \((x_{it-1})\). The term \((z_{it})\) captures whether firm \(i\) is connected or not at election \(t\). The interaction term \((w_i z_{it})\) captures the whether a business group affiliate is connected or not in an election \(t\) (in the estimation to test hypothesis H1) or whether the local groups are connected or not in an election \(t\) (in the estimation to test hypothesis H2). We also add election fixed effects \((\Theta_t)\) to take into account macroeconomic
variations affecting all firms during each 4-year term. The other terms \((\alpha_i + \epsilon_{it})\) are the fixed effects (time invariant error) and the time variant error, both for each firm \(i\). We used STATA (command `xtreg, fe`) to estimate the model with cluster-robust standard errors (Cameron and Trivedi, 2010). We prefer this estimation instead of using OLS with dummies as firm fixed effects because of the limited number of observations per each firm.

We also control for selection bias. Before estimating Equation 1, we used the whole sample of 778 observations to estimate a selection model that took into account two selection processes. The first was the selection of the cost of debt within acceptable limits. We set this limit to plus or minus 100. We defined that outside this limit something went wrong with the financial structure of the firm. The second process was the selection of the regressors within acceptable limits. In order to account for this truncated sample, we used the biprobit function to jointly estimate the selection using two predictors, firm equity and the log of the firm revenue. We found that excluded firms had huge accumulated losses that generated negative or close to zero equity. The log of revenue controls for firm size. Then, we calculated the Mills’ Lambda and used it to correctly estimate Equation 1 controlling for selection bias.

### 4.4 Data and measures

**Dependent variable.** Instead of using leverage ratios (Claessens et al. 2008), we used the cost of debt to proxy for preferential lending. This proxy is a more accurate measure of preferential treatment because it captures not only access, but also the quality of the debt and the efficiency in borrowing.

**Group Membership.** Different from the Chilean case (Khanna and Palelu, 2000), in Brazil there is not a formal definition for business groups nor an official list of firm group membership. We had to rely on two popular sources of the Brazilian business press, the EXAME “Maiores e Melhores” and the database of “Jornal Valor”, which assign firms to groups according to ownership ties. While we acknowledge that a more scientific measure is needed, the use of business press data has not been a problem in research on business groups. To collect data on several countries, Guillen (2000) relied on the same EXAME data we used here for Brazil. Khanna and Rivkin (2001) relied on the “America Economica” publication to identify major conglomerates in Brazil and on several other business press publications to collect group membership in other countries. We cross-matched information from these two sources to produce
our final listing of the 200 largest groups in Brazil. As found in Khanna and Palepu (2000)’s longitudinal study, a minimum group size exists for affiliates to captures benefits from group membership. Finally, group membership is time invariant as we wanted to capture only enduring group effects.

**Political Connections.** Different from previous research that used the vague notion of ties, friendship or ‘revolving door’ data to identify connections, the Brazilian context allow us to use firm donation to political campaigns as a more objective and direct measure of firm connections. The use of political contributions is a way of buying political connections. Once established, the exchange is clear: the politician gets the money and the firm gets the favor. Previous empirical evidence on Brazil using the same proxy indicates that what comes in exchange is preferential access to finance (Claessens et al., 2008). Another advantage of using political donations as a proxy for connections comes from the fact that entrepreneurial candidates need to build a reputation in order to pursue their political careers (Samuels, 2008). There is no incentive to act opportunistically, but rather there is the need to pose credible commitments and continuously reward supporters (Claessens et al. 2008). Disclosure problems make official data on firm political donations somewhat problematic. Anecdotal events have shown that reported figures are from reality. However, they are not random numbers. Samuels (2001) found correlation between the office for which the candidate was trying election and its power to influence the sector of the donating firm in Brazil. To overcome this problem, we avoided using the amount donated and decided to use a binary variable.

**Control Variables.** We also used a set of control variables, lagged from one electoral cycle, which had expected influences on the cost of debt. Yearly values were averaged for each electoral cycle. We also add the dummy variable to capture whether a firm has board members with political experience in order to isolate the exchange mechanism of donation for personal favors. Appendix A shows the operational definitions for all modeled variables. Table 1 shows descriptive statistics and the correlation matrix using the estimated sample of 556 firm-election observations.
TABLE 1

Descriptive Statistics and the Correlation Matrix for Firm Level Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cost of Debt</td>
<td>.33</td>
<td>.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Political connections</td>
<td>.29</td>
<td>.45</td>
<td>-.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Group affiliation</td>
<td>.48</td>
<td>.50</td>
<td>-.16</td>
<td>.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Board participation</td>
<td>.53</td>
<td>.49</td>
<td>-.16</td>
<td>.08</td>
<td>.28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Foreign Capital</td>
<td>.24</td>
<td>.43</td>
<td>-.14</td>
<td>.07</td>
<td>.10</td>
<td>.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Firm Size (lag)</td>
<td>1,863,738</td>
<td>6,231,949</td>
<td>-.26</td>
<td>.17</td>
<td>.52</td>
<td>.20</td>
<td>.14</td>
<td></td>
</tr>
<tr>
<td>7. Operational profit (lag)</td>
<td>.06</td>
<td>.07</td>
<td>-.20</td>
<td>.28</td>
<td>.19</td>
<td>.19</td>
<td>.16</td>
<td>.14</td>
</tr>
</tbody>
</table>

* n = 556. b The mean and standard deviations of continuous variables are in non-centered original values

5. Results

From the main model in Equation 1, we fitted six different models to find evidence for our two hypotheses. Table 2 shows the estimates. Looking at Models 1 to 6, they all show significant explained variance (from 35% to 64%). The first interesting result from Model 1 is that political connections are negatively related to the reduction of cost of debt, but it is not statistically significant. All other variables present the expected sign. Claessens et al. (2008) found that political contributions in Brazil facilitate access to debt as connected firms showed superior leverage ratios. However, we present some evidence (although not significant) that connections also increase the quality of such debt, which is reflected in its price.
<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political connections</td>
<td>-0.02</td>
<td>0.03</td>
<td>0.02</td>
<td>-0.08*</td>
<td>-0.10**</td>
<td>-0.02</td>
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<td></td>
<td>(0.024)</td>
<td>(0.03)</td>
<td>(0.03)</td>
<td>(0.03)</td>
<td>(0.04)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>Board participation</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.00</td>
<td>-0.02</td>
<td>-0.03</td>
<td>-0.03</td>
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<td></td>
<td>(0.03)</td>
<td>(0.03)</td>
<td>(0.04)</td>
<td>(0.03)</td>
<td>(0.04)</td>
<td>(0.04)</td>
</tr>
<tr>
<td>Foreign capital</td>
<td>-0.01</td>
<td>-0.01</td>
<td>0.06*</td>
<td>-0.05+</td>
<td>-0.04</td>
<td>-0.04</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.03)</td>
<td>(0.02)</td>
<td>(0.03)</td>
<td>(0.03)</td>
</tr>
<tr>
<td>Firm Size (lag)</td>
<td>-0.05*</td>
<td>-0.05*</td>
<td>-0.06+</td>
<td>-0.02</td>
<td>0.01</td>
<td>-0.01</td>
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<td></td>
<td>(0.03)</td>
<td>(0.02)</td>
<td>(0.03)</td>
<td>(0.03)</td>
<td>(0.03)</td>
<td>(0.03)</td>
</tr>
<tr>
<td>Operational profit (lag)</td>
<td>-0.49**</td>
<td>-0.49***</td>
<td>-0.55**</td>
<td>-0.53*</td>
<td>-0.17</td>
<td>-0.16</td>
</tr>
<tr>
<td></td>
<td>(0.15)</td>
<td>(0.14)</td>
<td>(0.19)</td>
<td>(0.22)</td>
<td>(0.27)</td>
<td>(0.27)</td>
</tr>
<tr>
<td>Political connection*Group</td>
<td>-0.11**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>affiliation</td>
<td>(0.04)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group capital origin</td>
<td></td>
<td></td>
<td></td>
<td>0.02</td>
<td>0.06*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.03)</td>
<td>(0.03)</td>
<td></td>
</tr>
<tr>
<td>Group net income</td>
<td></td>
<td></td>
<td></td>
<td>0.01</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.01)</td>
<td>(0.01)</td>
<td></td>
</tr>
<tr>
<td>Political connection*group</td>
<td>-0.08*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>capital origin</td>
<td></td>
<td></td>
<td></td>
<td>(0.04)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mills ratio</td>
<td>-0.42</td>
<td>-0.43</td>
<td>-0.48</td>
<td>-0.97</td>
<td>2.38</td>
<td>2.47</td>
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<tr>
<td></td>
<td>(0.61)</td>
<td>(0.60)</td>
<td>(0.71)</td>
<td>(1.98)</td>
<td>(1.90)</td>
<td>(1.91)</td>
</tr>
<tr>
<td>Industry transient effects</td>
<td>Included</td>
<td>Included</td>
<td>Included</td>
<td>Included</td>
<td>Included</td>
<td>Included</td>
</tr>
<tr>
<td>Election fixed Effects</td>
<td>Included</td>
<td>Included</td>
<td>Included</td>
<td>Included</td>
<td>Included</td>
<td>Included</td>
</tr>
<tr>
<td>N</td>
<td>548</td>
<td>548</td>
<td>279</td>
<td>269</td>
<td>188</td>
<td>188</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.36</td>
<td>0.38</td>
<td>0.26</td>
<td>0.54</td>
<td>0.64</td>
<td>0.64</td>
</tr>
<tr>
<td>F</td>
<td>16.27***</td>
<td>19.73***</td>
<td>6.08**</td>
<td>22.12***</td>
<td>12.24***</td>
<td>18.95</td>
</tr>
<tr>
<td>log-likelihood</td>
<td>574.99</td>
<td>583.20</td>
<td>279.03</td>
<td>321.18</td>
<td>282.50</td>
<td>283.79</td>
</tr>
</tbody>
</table>

* Standard errors in parentheses
+ p < .10
* p < .05
** p < .01
*** p < .001

The value of political connections only becomes significant for business group affiliates (model 2: $\lambda = -.1099$, $p <.001$). Group firms show a difference of 10 perceptual points in the cost of debt compared to non-affiliates when they become connected. In Model 2, the coefficient for non-affiliates is positive but non-significant. Taken together, these results provide reasonable indication that group affiliates use the political capability developed by their groups to superior profit from political connections. A closer look in Models 3 and 4 split the sample in affiliated
and non-affiliated firms, and confirm our findings. This indicates the positive moderation effects of group affiliation, giving support for hypothesis H1.

We estimated Models 5 and 6 to test hypothesis H2 using a sample of only affiliated firms. We add to Model 5 two group level variables. The first is the origin of controlling capital, coded “1” for Brazilian capital and “0” for foreign capital. The second is a proxy for group size, the pooled net income of all firms in a group. As the other control variables, group net income was also lagged and yearly averaged. Again, as expected, even controlling for group characteristics, affiliates show greater significant reduction of the cost of debt via political connection. (model 6: $\lambda = -0.0958$, $p < .05$). This finding has important economic value for the firm because it estimates a reduction in the cost of debt of 9.6 percent points below the industry average when business group affiliates become connected.

The origin of group capital seems to matter only when we add the interaction term in Model 6. Since the coefficient of political connections is not statistically significant, political connections for business group affiliates seem to matter only if Brazilian capital controls the group (-0.0819, $p < 0.05$). Another striking result is that being in a group controlled by Brazilian capital does not help much in reducing the cost of debt, only if the firm becomes connected.

5.1 Robustness Checks

We conducted a series of robustness checks. First, we test if firms give money with the purpose of getting favors or they contribute for other reasons. Following Claessens et al. (2008), we estimated the same models using other measures of political connections discriminating between elected and non-elected politicians. Since we are able to match firms and politicians, we verify if there are significant differences among these groups. If there are no significant differences, then is more likely that donation is motivated by other reasons. Different from Claessens et al. (2008) who used a sample of only deputies, for the robust test we used winning and loosing candidates for executive offices, i.e. the president and state governors. Although we do not report here, results showed the expected signs, i.e., only business group firms connected to the winning president or governors were able to reduce the cost of debt. For the losing candidates, results indicated an increase on the debt, even though non-significant.
6. Discussion

We use a sample of publicly traded firms in Brazil to test our hypothesis about the effect of business group affiliation on the value of political connection in providing preferential lending. We derive hypotheses from the literature on corporate political activity in management and financial economics, and from the resource-based view of business groups. Our main idea is that business groups are the more likely to be the recipients of superior political capabilities, and therefore, are more likely to extract superior value from political connections. We found strong support for our hypotheses. First, business group affiliation moderates the effect of political connections on preferential lending. Second, local business groups are capable of extracting more value from connections than groups controlled by foreign capital. The economic value of group affiliation is considerable, given that when affiliates get connected to politicians they are able of reduce their cost of debt in almost 10 percent points.

These results have three major theoretical implications. First, it provides empirical evidence of direct effects of CPA (Hillman, Keim, and Schuler, 2004). Our research context allows us to isolate the exchange mechanism though which connections translate into firm level benefits. It also extends theory since we suggest that differences in organizational forms should be considered in assessing the capability of firms exchanging with politicians. In particular, we test the effects of being affiliated. For instance, the political market framework (Bonardi et al. 2006) could be extended if one considers that the capability of a firm to operate in a given political market is dependent on its organizational form. In our study, business groups were more likely to win competition in the political markets because they have better political capabilities.

The second implication is to the literature of business groups. This is the first attempt to verify econometrically the value of business group political capabilities. Previous attempts to study political connections did not control for group affiliation, and research on the political view of business groups, or on the evolution of political vis-à-vis technical capabilities, is descriptive and based on case studies (Encarnation, 1989; Ghemawat and Khanna, 1998; Kock and Guillén, 2001; Chung, 2005; Rettberg, 2001; for an exception, see Yiu, Bruton, and Lu, 2005). The context of Brazil allowed us to isolate this capability and to assess their value in reducing the cost of debt.
It is beyond the scope of this paper to discuss whether business groups or political connections and preferential lending are beneficial for economic development. There are conflicting views about this matter. On stream argues that rent seeking always decreases social welfare (Krueger, 1974), while the other favors an embedded autonomy (Evans, 1995) and controlled rent seeking (Wade, 1990). Nor we want to value whether research on CPA should be more we concerned with the social aspect of this activity (Schuler, 2008). While acknowledge the importance of these debates, in this paper we only present empirical evidence and extend theory on CPA, and we do not aim to go beyond that.

7. Conclusion

The organizational form a firm assumes matter for profiting from political connections. Particularly, the form of a business group moderates the effect of political connections on accessing preferential lending. Local business groups are more capable than foreign groups in extracting more value from their political resources. Literature on CPA should take into account how differences in organizational form affect the political capability of a firm to exchange with politicians.
References


## APPENDIX A

### Operational Definitions of Modeled Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Operational Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group affiliation</td>
<td>It captures enduring group membership as the firm must pertain to the group for the whole period. We set two levels for this dummy: 1 for affiliate and 0 for non-affiliated firms. It is a time invariant variable.</td>
</tr>
<tr>
<td>Political connections</td>
<td>We measured political connectedness as a single categorical measure coded ‘1’ for a donating firm in any given election or coded ‘0’ otherwise.</td>
</tr>
<tr>
<td>Cost of debt</td>
<td>The dependent variable. It is the ratio of the amount of interest paid (financial expenses) to total debt. It also includes debentures. It is a yearly average considering the 4-year period after any given election.</td>
</tr>
<tr>
<td>Firm size (lag)</td>
<td>Usual control variable. It is log transformation of the yearly average of firm total assets considering the 4-year period of the previous election. Original figures are in thousands of US Dollars.</td>
</tr>
<tr>
<td>Operational profit (lag)</td>
<td>Usual control variable. It is the ratio of EBIT to total assets. It is a yearly average considering the 4-year period of the previous election. Firms experiencing higher operational profits are expected to lower the cost of debt in the next period.</td>
</tr>
<tr>
<td>Board participation</td>
<td>If a firm has at least one board member who has or had political experience sitting on the board for at least two in the 4-year period after any election, then the variable was coded ‘1’; coded ‘0’ otherwise.</td>
</tr>
<tr>
<td>Group capital origin</td>
<td>Coded ‘1’ if the group as a whole is controlled by Brazilian capital. Coded ‘0’ otherwise.</td>
</tr>
</tbody>
</table>