Transactional and Relational Approaches to Political Connections and the Cost of Debt

Taufiq Arifin
Universitas Sebelas Maret and University of Twente
E-mail: t.arifin@utwente.nl

Iftekhar Hasan
Fordham University and Bank of Finland
E-mail: ihasan@fordham.edu

Rezaul Kabir
University of Twente
E-mail: r.kabir@utwente.nl

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Abstract

This paper highlights how debtholders value political connections. Specifically, it investigates whether lenders favor transactional connection as opposed to repeated relational connection. Tracing firms in a politically volatile emerging democracy, the paper confirms that firms with transactional political connection strategy experience a relatively lower cost of debt than those with relational strategy. The results are more pronounced for firms with high risk of financial distress.

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Political connections, Cost of debt, Corporate governance, Indonesia.

1. Introduction

Governments around the world attempt to influence policies and activities of firms and their economic environment by means of regulation. In turn, firms develop specific strategies in order to manage and benefit from this environment. Different stakeholders of firms build and nurture relationships with the government in power. They can have sympathy with the policies of certain political parties, and/or make financial contributions to political establishments. Firms can also hire politicians or bureaucrats to become board members.

All these activities are hardly new to businesses; these are widely prevalent not only in emerging countries but also in developed countries (Faccio, 2006). Some scholars argue that political connections are more severe in emerging countries due to imperfect formal institutions, such as investor protection, low legal enforcement and poor governance (Dinc, 2005; Faccio, 2006; Fisman, 2001). Maintaining political connections has become an important component of corporate non-market strategies among firms to compete with others. Political connections can also enhance firms' competitive advantage as a source of value creation that may come from regulatory benefits as well as economic and political resources (i.e., licenses, subsidies and protections) from government institutions.

Using a framework based on a continuum of contracts developed by Macneil (1978), we distinguish between two different approaches to political connections: relational and transactional. These two approaches capture several important aspects of political connections such as focus or objective, scope, and time frame. The long tenure of a

government regime motivates firms to develop a long-term relationship with the political establishment. This relational approach is based on loyalty, trust, and long-term commitment. In contrast, when there is uncertainty on the outcome of political connections, firms may prefer to develop political relationships on short-term, issue-by-issue basis. This transactional approach, characterized by a narrower focus and shorter tenure in political connections, requires relatively less investment, and provides more certain outcome.

Since the benefits and costs of a firm's political influence can be depend on the approach it adopts, we attempt to investigate the economic effects of these two approaces. We specifically focus on firms' cost of debt. Although creditors mostly use commercial considerations in designing credit contracts, non-commercial consideration like political connection can help firms to increase their bargaining power and negotiate better to obtain favorable terms of credits. A few studies provide evidence on the preferential financial access/term obtained by politically connected firms. Beck, Demirgüç-Kunt, and Levine (2006) observe that in countries with poor law enforcement, politicians or bureaucrats utilize their power to influence banks in providing financial access to connected firms. Dinc (2005) shows that state-owned banks in emerging countries increase their lending in election years relative to private banks. Recently, Houston et al. (2014) document that the cost of bank loans is significantly lower for politically connected firms.

By disentangling the effect of transactional and relational approaches to political connections, we provide a new contribution to the extant literature. To the best of our knowledge, no study has yet examined political connections from this angle. Our study is

also important for additional reasons. While prior studies on political connections in Indonesia focused solely on the autocratic Soeharto era (Fisman, 2001; Leuz and Oberholzer-Gee, 2006), we pay attention to the post-Soeharto democratic era that has a different and more appealing political environment. In this period, political regimes change frequently and firms are motivated to constantly develop their political networks. Our study also involves a more comprehensive analysis of political connection covering the largest number of Indonesian firms to date.[1] Furthermore, we use a continuous measure of political connection (instead of commonly used binary variable) that allows us to undertake a statistically more meaningful analysis.

Tracing the different waves of power changes in an emerging democracy, we show that debtholders value political connections differently. Transactional politically connected firms experience lower cost of debt than those with relational strategy. Transactional approach facilitates obtaining benefits of implicit insurance for adverse circumstances. Debtholders therefore adjust the risk premium by reducing the interest rate of debt. We also document that firms with high financial distress enjoy greater reduction in the cost of debt when they have transactional rather than relational political connection. Additional evidence indicates that the benefit of transactional political connection remains consistent over time.

The paper proceeds as follows. Section 2 describes Indonesian institutional context. The hypotheses of our study are developed in Section 3. We describe research methodology,

[1] Fisman (2001) and Leuz and Oberholzer-Gee (2006) examine a sample of 75 and 130 firms, respectively. The cross-country analysis of Faccio (2006) includes 154 Indonesian firms.

data, and variables in Section 4. Sections 5 and 6 discuss the results and additional tests, respectively. The final section presents conclusions of the paper.

2. Transactional and relational political connections

2.1. Political connections: theory and empirics

The agency theory is widely used to explain the observed relationship between principal and agent and how the costs of conflicting interests can be minimized. Political connections could be considered as implicit contracts between firms and politicians/bureaucrats, firms working as principal and politicians/bureaucrats as agent (Getz, 2002). Firms attempt to use bureaucrats/politicians to adopt favorable policy and get a preferential access to government resources. This argument is also consistent with the resource dependent theory which suggests that political connections allow firms to reduce uncertainties related to unfavorable regulations (Kotter, 1979). According to this view, firms use political strategies for the purpose of maximizing potential economic benefits from the political environment.

Several empirical studies provide evidence on how political connections are used to obtain benefits. Khwaja and Mian (2005) find that politically-connected firms enjoy greater access to financial resources from government banks. Similarly, Claessens et al. (2008) find that firms providing political donations obtain more bank financing after the election. Bliss and Gul (2012) and Houston et al. (2014) show how the creditors value political connections and charge a lower rate for borrowing. Boubakri et al. (2012) show that investors view politically-connected firms as less-risky and thus require a lower cost

of equity. Firms also benefit from their political connections to obtain government resources, such as bailout (Faccio, Masulis, and McConnell, 2006) and procurement contract (Goldman, Rocholl, and So, 2013). In addition, Correia (2014) finds that politically-connected firms are less likely to be involved in regulator enforcement actions and enjoy a lower penalties on prosecution.

However, political connections can also bring harmful effects to firms and consequently destroy firm value. Shleifer and Vishny (1994) explain that politicians may influence firms to take inefficient decisions, such as increasing employment in exchange of receiving subsidies or tax reductions. Wang (2015) finds that politically connected independent directors help expropriation of minority investors. Habib, Muhammadi, and Jiang (2017) report related party transactions used by politically connected firms in tunneling resources and hurting the interest of minority investors. Chaney, Faccio, and Parsley (2011) document a low earnings quality of politically connected firms. Fan, Wong, and Zhang (2007) find that newly privatized firms with politically connected CEOs experience long-term underperformance. Finally, Chen et al. (2017) document a decline in firm value of state-owned enterprises with an increase in political connections.

2.2. Transactional and relational approaches

In this study, we use a theoretical framework based on the idea of categorization of contracts originally introduced by Macneil (1978) and further discussed by Rousseau and Parks (1993). This categorization provides an interesting direction to explore the business - government/politician relationship and its impact on firms. Given the theoretical reasoning and empirical evidence on both costs and benefits of having political

connections, it becomes necessary for firms to identify the appropriate approach to develop political connections. These approaches have implications not only for the selection process but also for the outcome of the relationship.

Macneil (1978) categorizes contracts into transactional and relational types. Transactional contracts are short-term in nature and require limited involvement by both parties with the sole focus on how to cope with single issues/transactions. Its involvement is limited in terms of skills, resources and loyalties. In contrast, relational contracts contain broad and long-term objectives which involve commitment and loyalty for sustainability and growth in firms.[2]

We therefore classify business - government/politicians relationships into transactional and relational political connections. These contracts are usually implicit and unobservable. Transactional political connections (TPC) are perceived as short-term contracts that can be more flexible and efficient in dealing with politicians in times of frequent changes in political regimes. Firms have the ability to adjust their political network that corresponds to the current regime. Given relatively short time frames and the focus on issue-by-issue, both parties have the flexibility to negotiate contract terms, and even the freedom to terminate the contract if particular requirements or objectives are not fulfilled.[3] A deterioration of political partners' ability to provide resources heightens

[2] These two types of political connections may not be mutually exclusive. It is possible that a company develops transactional and relational political connections simultaneously.

[3] Following Rousseau and Parks (1993), we argue that TPC can serve as a trial contract to minimize risk in identifying appropriate partner for long-term arrangements. As an example, consider the case of PT Freeport Indonesia, a copper and gold miner company which appointed Maroef Sjamsoeddin, a former military and government spy agency chief, as president director in 2015. He resigned after a year in office following a political scandal in which former House speaker Setyo Novanto had allegedly demanded Freeport's shares from Maroef in exchange for helping with the extension of firm's mining contract. He tried to negotiate and lobby Setyo Novanto in order to get the extentension as earlier as possible. The

the chance of firms to find an alternative partner who can provide a better fit and good solutions to solve their issues. Lobbying on particular issue and one time political donation are typical examples of TPC.

On the other hand, relational political connection (RPC) is governed by good faith and fair dealing, and has the motivation to sustain the relationship over time. Professional relation is more dominant than political objectives. Firms maintain politically-connected board members across different regimes because of their professional expertise and political ideology. Mutually beneficial relationship creates an incentive for both sides to continue the relationship overtime. This conjecture is consistent with Kroszner and Stratmann (2005) who suggest that firms provide repeated political donations to legislators in the hope of increasing acceptance (refusal) of favorable (unfavorable) government policy and supporting other favors in the future. However, firm's investment in relational political connection can be more costly when it generates less certain return in the long run. For instance, Indonesian firms that had close and long-term relationship with the Soeharto regime experienced a poor long-term performance following his departure, and faced significant difficulties to re-establish new connections with the new regime (Leuz and Oberholzer-Gee, 2006).

negotiation failed and the company would have to wait until 2019, two years prior to the end of the contract, to renegotiate new extension [http://thediplomat.com/2016/01/us-mining-giant-chief-in-indonesia-resigns-amid-uncertainty/; last accessed 9 January, 2017].

3. Institutional context

Indonesia, as an emerging country, has received much attention from scholars who study how political connection affects firm strategies and value (Dieleman, 2006; Fisman, 2001; Leuz and Oberholzer-Gee, 2006; Habib et al., 2017).[4] Fisman (2001) documents that the market value of politically-connected firms in Indonesia significantly declines when adverse rumors about the health of the president are circulated. Leuz and Oberholzer-Gee (2006) find that firms closely connected to Soeharto family are less likely to issue publicly traded foreign securities because of easier (preferential) access to domestic sources of finance. They believe that this strategy reduces the benefits firms can derive from issuing foreign securities.

It is interesting to observe that the democratization process that started subsequent to the fall of the Soeharto regime, in particular decentralization of governmental authority and resource distribution, has led to a change in the relationship between businesses and government. The president has to share power with other political institutions at various levels. Political connections in this new presidential regime might become less beneficial because the power is now more distributed across regions and institutions. Thus firms find it more complicated to develop relationships with the government. Leuz and Oberholzer-Gee (2006) report that Salim Group experienced difficulties to reestablish the

[4] For instance, Dieleman and Sachs (2008) report that Indonesian conglomerate Salim Group collaborated with Soeharto's family to receive a variety of privileges and realize business growth in a few highly protected industries such as cement, automotive and steel. According to Backman (1999), ex-president Soeharto granted exclusive rights to two firms, one owned by his half-brother and the other to Salim Group. Matsumoto (2007) reports that several major business groups that were closely-connected to Soeharto received excessive loans from state banks.

connections when a new regime took over (e.g. former President Wahid) and suffered underperformance. Firms therefore need to reshape their political connections when governments change. The combination of changes towards democratization in post-Soeharto era and the new institutional context of Indonesia as an emerging economy provides an interesting setting to investigate how firms develop their strategies to political connections.

The Soeharto regime dominated the political scene in Indonesia for more than thirty-two years. The authoritarian system of President Soeharto provoked centralistic power around the elite, bureaucrats, military and families. Legislative institutions were no more than formal legitimacy that approved whatever policy and regulation proposed by the executives. Elections were nothing more than political rituals with predictable results. When power was centralized over Soeharto's cronies, businesses had less choice over whom and how to develop their political connections (Carney and Hamilton-Hart, 2015). Politically connected firms exploit their close relationship with Soeharto's regime to get more access to government resources. A not surprising evidence is that firms closely connected with Soeharto's regime received preferential access to financing, particularly from state-owned banks (Leuz and Oberholzer-Gee, 2006; Matsumoto, 2007).

Several different regimes were in power during the post-Soeharto era. President Habibie was in office for about a year and the country experienced changes as a result of several reforms. In October 1999, President Wahid came to power by getting support from the MPR (people's and regional representative council). But, in July 2001, he was replaced by the Vice-President Soekarnoputri after being impeached by the MPR. In October 2004,

President Yudhoyono became the first directly elected president in Indonesia. He was re-elected after five years. President Widodo won the national election in July 2014, and has remained in office until now.

Several institutional reforms leading to decentralization and democratization were introduced after the end of Soeharto's regime. Legal reforms of bureaucracy and political system provided a more distributed structure of political power and refined the role of parliament as legislative institution. Empowerment of parliament enabled businesses to enjoy direct and greater access to political power through legislative council (Fukuoka, 2012). Significant changes of political system and more frequent regime changes in post-Soeharto era led to more varied political patrons and modes of political engagement (Carney and Hamilton-Hart, 2015). Business owners and entrepreneurs were allowed to enter politics for building their own political power and gaining direct access to government resources. However, since personal political involvement can be costly, only a small number of business owners spread their bets widely (Carney and Hamilton-Hart, 2015). For instance, the wealth of Aburizal Bakrie[5] has more than doubled during his term as coordinator of different ministries. Bakrie's business group was occasionally given priority and more opportunity by the government (Fukuoka, 2012).

[5] Aburizal Bakrie is a political elite from Golkar, Indonesia's second largest party. He also owns Bakrie Business Group, one of the biggest business group in Indonesia.

4. Hypothesis development

4.1. Political connections and cost of debt

Although several studies provide empirical evidence on the value of political connections, how the lender perceives political connections in its debt contract is a topic of continuous debate. On the one hand, politically-connected firms are perceived riskier than their counterparts due to higher leverage and more likelihood to report loss (Bliss and Gul, 2012). Therefore, these firms are charged higher interest rate by lenders. However, Khwaja and Mian (2005) find that politically-connected firms enjoy preferential lending from government banks and have even a higher propensity to default. The finding indicates that banks already recognize the beneficial effect of political connections and provide favorable loans even when overall credit risk is higher. Similarly, Faccio, Masulis, and McConnell (2006) argue that politically-connected firms are perceived less risky due to the high probability of government bailouts in case of financial distress. Boubakri et al. (2012) add to this evidence by showing that politically connected firms have lower cost of equity than non-connected firms. The finding implies that shareholders view politically connected firms as less risky.

We posit that the effects of relational and transactional political connections for firms are not equal. RPC requires firms to invest resources for long term in order to maintain their political connections. Firm develops relational political connections usually because of their professional matter rather than political power. Consequently, their political power becomes powerless overtime through different political regimes. Since democratization and decentralization in Indonesia bring more frequent regime changes and more

distribution of power, the politicians or bureaucrats remain powerful only in one particular regime. Hence, it becomes costly for firms to develop RPC. Firms would not find it worthwhile to continue the relationship for long-term with a particular connection. So, TPC is more favorable when regime changes are expected to be more frequent. Adjustment to current regime is necessary to enhance firm's political network. By using transactional strategy, firms are more likely to choose their political connections that are valuable and capable to obtain favorable results. Firms focus on a short horizon and issue-by-issue basis, and get more certain outcome from their political connections and minimize the risk of rent extraction by their political partner.[6] The creditors have capabilities and resources to identify the value of firm's political connections. While setting up the debt contract, they incorporate the fact that these firms have greater access to current political regime. Therefore, we formulate the first hypothesis as follows:

> **H1:** Firms with transactional political connections pay lower cost of debt than those with relational political connections.

We further examine the value of transactional political connections for financially distressed firms. The cost of financing is considerably higher when a firm's default probability is higher. Creditors require a greater risk premium to compensate for higher default risk and therefore charge a higher interest rate. Financially distressed firms face more difficulty in obtaining an increase in debt capacity since the cost of debt is high. These firms have a stronger incentive to develop political ties that can help them obtaining favorable debt. In this case, transactional approach might be more effective since it

[6] The ultimate goal of politicians is to remain hold political power by winning in the re-election. To the extent that no free lunch in business-politics relationship and democratization makes political competition so costly, the incentive of politicians to exert firm's resources for private benefits also increases.

focuses on issue-by-issue basis, minimizes the rent-seeking risk and provides more certain outcome.

As mentioned earlier, by having better access of political network linked to the current regime, creditors are expected to consider the greater implicit insurance effect of political connections. Houston et al. (2014) argue that the insurance protects firm from low tail risk and dramatic changes in future credit risk. We therefore conjecture that having transactional political connections leads to a greater reduction in the cost of debt for firms that experience relatively higher financial distress. On the other hand, relational political connections are driven by trust, long-term embeddedness, and professional matters. Even though this approach might result in minimizing rent-seeking incentives, it is less likely to have a respectable political access to the current regime. Relational political connection will be unable to provide implicit insurance for firms in case the likelihood of a default increases; creditors will not value this connection when setting up a new debt contract. Therefore we propose the following hypothesis:

> **H2:** Given similar level of financial distress, firms with transactional political connections pay lower cost of debt than those with relational political connections.

5. Research method

5.1. Empirical model

To examine the effect of transactional and relational political connections on the cost of debt, we estimate the following two OLS regression specifications:

$$COD_{it} = \alpha_0 + \beta_1 TPC_{it} + \sum_{j=1}^{J} \beta_j X_{it-1} + \eta_t + \upsilon_t + \in_{it}$$

$$COD_{it} = \alpha_0 + \beta_1 RPC_{it} + \sum_{j=1}^{J} \beta_j X_{it-1} + \eta_t + \upsilon_t + \in_{it}$$

where COD_{it} is the cost of debt for firm *i* in year *t*; TPC and RPC represent the measure of transactional and relational political connection of the firm; X is a vector of firm-specific control variables; η_t and υ_t are year and industry fixed effects, respectively. In order to partially mitigate potential endogeneity issue (Aslan, 2016; Hasan et al., 2014), and to consider the fact that credit contracts are partially affected by borrowers' past condition, we use one year lagged values for firm characteristics. For the first hypothesis, we expect the estimated regression coefficient of transactional political connection ($ß_1$) to be lower than that of relational political connection.

The second hypothesis examines whether the risk of financial distress can affect the relationship between political connection and the cost of debt. The multivariate regression specifications to test the hypothesis are written below:

$$COD_{it} = \alpha_0 + \beta_1 TPC_{it} + \beta_2 Distress_{it-1} + \beta_3 TPC_{it} * Distress_{it-1} + \sum_{j=1}^{J} \beta_j X_{it-1} + \eta_t + \upsilon_t + \in_{it}$$

$$COD_{it} = \alpha_0 + \beta_1 RPC_{it} + \beta_2 Distress_{it-1} + \beta_3 RPC_{it} * Distress_{it-1} + \sum_{j=1}^{J} \beta_j X_{it-1} + \eta_t + \upsilon_t + \in_{it}$$

Since the cost of debt is expected to be higher for firms with higher risk of financial distress, the coefficient of β_2 should be positive. The moderating role of financial distress is examined by the interaction term of political connection and financial distress. The coefficient of interest is β_3, which is expected to be negative because we hypothesize that firms with higher financial distress can enjoy a greater reduction in cost of debt if they have transactional political connection.

In order to check the robustness of OLS regressions, we employ generalized least square random effect (GLS-RE) regressions. One advantage of GLS-RE is that the impact of our main explanatory variables, TPC and RPC which are relatively time-invariant, can be efficiently estimated.[7] We also conduct two-stage least square regression analysis to alleviate any concern that firms' political connections could be endogenously determined.

[7] Because the political connections variable does not vary much over time, the fixed-effect panel estimation is not suitable for our study (Wooldridge, 2002, p. 286).

All our regressions include a set of control variables related to firm characteristics *(X_{it})*. Larger firms *(FIRMSZ)* tend to be more diversified and have less information asymmetry. Therefore, larger firms are expected to pay lower cost of debt. Similarly, firms with higher liquidity (CASH) and growth opportunity (GROWTH) have higher ability to pay interest and the principal; and therefore a lower cost of debt. Older firms (AGE) tend to have stronger reputation and longer track record; debtholders are expected to charge lower interest rate. Finally, intangible assets (INTANG) create more information asymmetry, increase the agency cost of debt; so, the cost of debt increases.

5.2. Data

We initially select all Indonesian public firms listed on Jakarta stock exchange during 2007-2016. The time period is chosen for two reasons. First, our focus is to investigate how firms develop their political connections in the years of decentralized and democratized era after the Soeharto regime that ended in 1998. Second, the data for listed firms in Indonesian are available in ORBIS from 2007 onwards. We exclude firms operating in the financial sector because these are heavily regulated by the government and have a different financial structure. We require that all necessary data be available in ORBIS, in particular information on SIC industry classifications, amount of interest paid, debt, assets, cash, intangibles assets, date of listing on stock exchange, and foreign ownership. The number of firms in the sample increases from 284 firms in 2007 to 424 in 2016. In total, our sample consists of 3,907 firm-year observations making it to be the largest sample of Indonesian firms analyzed to date.

5.3. Variable measurement

Cost of debt

Bond yield spread, defined as the difference in yield-to-maturity between corporate bond and government bond, can be used as a measure of cost of debt when the bonds are listed on stock exchanges. Since the large majority of Indonesian firms do not issue public bonds, we use the information disclosed in financial statements and follow previous studies (Bauwhede, De Meyere, and Van Cauwenberge, 2015; Bliss and Gul, 2012; Francis et al., 2005; Minnis, 2011) to calculate the cost of debt as the ratio of firm's annual interest payments to its total debt.

Political connection

Publicly listed firms in Indonesia are required to disclose the biographic information of their board members in their annual reports. We hand-collect this information and follow Faccio (2006) and Chaney et al. (2011) to capture political connections of firms. A firm is identified as politically connected if at least one board member is a current or former government official, member of parliament, a minister or a politician.[8] We define relational (transactional) connections if a board member could (couldn't) survive more than one term and across two political regimes. Information on the commencement and resignation date of all board members is collected to determine the duration of board membership. Firms are also classified as having relational political connections if the ultimate owner (or at least one of their family members) is involved in the political arena.

[8] Although we consider a large variety of channels to measure firms' political connection, information on few other measures such as political donation and corporate lobbying are not available for Indonesian firms.

In the regression analysis, we use the proportion of politically-connected board members by counting either the number of transactional or relational politically-connected board members and dividing it by the total number of board members.

Other variables

We use firm's leverage ratio estimated as the proportion of long-term debt to total assets to measure financial distress (Chen and King, 2014). Higher leverage ratio suggests a greater probability of distress; thus it should have a positive effect on the cost of debt.[9] Diverse firm characteristics also influence a firm's cost of debt. We use these as control variables in all regressions. Firm size (LNSIZE) is calculated the natural logarithm of total assets. Investment in property, plant and equipment (PPE) is estimated as proportion of total assets. CASH and INTANG are the proportion of cash and intangibles assets, respectively. Firm age (AGE) is estimated as the number of years since listing on the stock exchange. Growth opportunity (GROWTH) is calculated as the market value of equity divided by book value of equity. FOR is a dummy variable that takes value of one if the ultimate owner is a foreign company or institution, and zero otherwise.

Table 1 present the definition and measurement of all variables used in the study.

[Insert Table 1 here]

[9] We use Altman's Z-Score as a second proxy for financial distress (Adhikari and Agrawal 2016). Since we obtain qualitatively similar results from the regression estimations with Z-Score, we do not seperately present these results in the paper.

6. Results

6.1. Univariate analysis

We first winsorize all variables at 5% to mitigate potential problems with outliers. The summary statistics of key variables are presented in Panel A of Table 2. The mean cost of debt of sample firms is 3.8%. It is lower than 5.6% reported by Bliss and Gul (2012) for politically-connected firms in Malaysia during the post-Asian financial crisis period (2001-2004). The lowest quartile of firms have cost of debt lower than 1.6% whereas the firms in the highest quartile have cost of debt between 5.6% and 9.4%.

As of 2016, we have 197 firms (46%) in our sample that have political connections. About 80% of these firms follow transactional political connection (TPC) approach while 10% of firms have relational political connection (RPC). The remaining 10% of sample firms have both types of political connections. We also find that transactional politically connected board members are more dominant than relational ones. Two (one) out of ten board members of politically-connected firms are transactional (relational) type. These figures indicate that, on average, firms seek access to political power by using more of transactional approach to political connection. The number of firms in the sample without any political connection in 2016 is 227 (53%). Considering the full sample of firms, we find that the average proportion of board members in transactional politically connected firms is 8.7% while the corresponding figure for RPC firms is 1.1%.

The average firm in our sample has almost $300 million of total debt outstanding. We use the long-term debt ratio as the proxy for firm's financial distress. The mean long-term

debt ratio is 13%, the median is 7%. We observe a large variation in total assets of sample firms. The 25th percentile firm has assets of about $43 million, but that of the 75th percentile firm is almost ten time higher ($443 million). The mean (median) firm has total assets of $525 million ($140 million). The average PPE and CASH are 34.6% and 9.3% of total assets, respectively. Intangible assets represent on average only about 1% of total assets. Sample firms have on average growth opportunity; the market-to-book ratio is 1.88. The average firm in our sample is listed on the stock exchange for more than 13 years. We also find that about one-fifth of firms have foreign companies or institutions as ultimate shareholder.

The industry distribution of firms is presented in Panel B of Table 2. We observe that the sample is dominated by manufacturing firms representing about 40% of the sample. The next important industrial sectors are transportation & communication, real estate and services.

We also estimate the cost of debt for firms categorized on the basis of high and low financial distress and the two approaches to political connections (transactional and relational). The univariate test statistics are presented in Panel C of Table 2. For the subsample of firms with higher likelihood of suffering from financial distress, we find that the cost of debt is significantly lower for TPC firms (4.1%) than non-TPC firms (4.7%). The differences in the cost of debt for RPC firms either in high- or low-distress categories are statistically insignificant. This univariate analysis provides an initial evidence on the impact of the two different approaches to political connections on firm's

cost of debt. In the following section we perform multivariate analysis by including other potential explanatory variables of cost of debt.

[Insert Table 2 here]

Table 3 presents the correlation matrix of the major variables used in the regression analysis. TPC is negatively correlated with the cost of debt, whereas RPC has an insignificant correlation with it. We observe that financial distress (LTD), and growth opportunity (GROWTH) are negatively correlated with the cost of debt. In contrast, property, plant, and equipment (PPE) and intangible assets (INTANG) are positively correlated with the cost of debt. To test for multicollinearity, we calculate variance of inflation factors (VIF) and find that the value of VIF is around 2, which is much below the threshold of 10. It indicates that multicollinearity is not a problem in the regression analysis.

[Insert Table 3 here]

6.2. Regression results

We begin the multivariate analysis by performing pooled ordinary least square regressions. In all regressions, we adjust the standard errors to correct possible heteroscedasticity problem. Table 4 reports the regression results of transactional and relational political connections on the cost of debt after controlling firm specific variables. The results indicate a negative and statistically significant relationship between transactional political connection and the cost of debt. Model 1 indicates that 1% increase

in transactional politically-connected board membership leads to a reduction of 2.3% in cost of debt. The effect of TPC is not only statistically significant, but also economically significant. For an average long-term debt of $107 million, one standard deviation increase in TPC results in a reduction of $322.4 thousands in interest paid.[10] Employing generalized least square random effect (GLS-RE) regressions (Model 3), we also observe a negative and statistically significant coefficient (-0.014) for TPC variable. The reduction in cost of debt for firms following the transactional approach of political connection is consistent with the result from OLS regression.

We perform similar regressions for firms with relational political connection. The OLS estimation in Model (2) shows a positive and statistically significant (at the 10% level) impact of relational political connection on the cost debt. The result is in contrast to the decline in cost of debt found for transactional politically connected firms. Conducting a robustness check with GLE-RE estimation in Model (4), we do not find any significant impact of RPC on the cost of debt. The results suggest that firms do not obtain any benefit from their relational political connections.

[Insert Table 4 here]

Turning to the firm-specific variables, Models 1 and 2 in Table 4 show that the coefficients of financial distress variable are positive and significant. Firms with increased financial distress risk pay a higher cost of debt. The variable intangibles assets

[10] The detailed calculation is follows: the standard deviation TPC is 0.131 and the estimated coefficient of TPC in Table 4 is 0.023. Thus, a one standard-deviation increase in TPC leads to a reduction of interest rate by 0.131 x 0.023 = 0.003013. The total decline in interest paid per year is $107 million x 0.003013 = $322.4 thousand.

is positively related to cost of debt. Intangible assets involve high risk and uncertainty which might increase information asymmetry and the level of agency cost of debt. As a result, the creditors are more likely to charge a higher interest rate. Older and foreign-owned firms pay less costs for their borrowing, *ceteris paribus*. We also find that firm growth is negatively related to cost of debt and statistically significant at the 5% level. The control variables show consistent results across different models. Using different combinations of control variables also show similar results (untabulated).

A similar result holds for estimation with Altman Z-score as another proxy for financial distress and when we use dummy variables for TPC and RPC.[11] Overall, the finding supports the first hypothesis that transactional political connection provides a greater reduction in cost of debt than the relational one. The finding indicates that relational political connection strategy becomes less valuable in times of frequent regime changes.

The analysis is extended to examine whether firms in financial distress can benefit from lower cost of debt if these have transactional or relational political connections. Therefore, we form an interaction term of political connections and financial distress, and run the cost of debt regressions. The results are reported in Table 5. We find a significant coefficient of the interaction term in Model (1). The estimated regression coefficient of TPC × DISTRESS is -0.059 (t value = -2.47), suggesting that TPC provides 5.9% additional reduction in cost of debt when financial distress increases by 1%. When we estimate a similar regression for firms with relational approach of political connection

[11] We also find that the results are qualitatively similar if we exclude firms with zero leverage and years of crisis period (2008-2009). We do not present all these results in separate tables in the paper for the sake of brevity.

(Model 2), we do not find a significant interaction coefficient for RPC × DISTRESS. Hypothesis two is therefore supported.

[Insert Table 5 here]

6.3. Additional tests

We undertake a series of robustness analysis. First, we examine whether the effects of two political connection strategies on the cost of debt vary across financial distress risk distributions. We therefore classify firms into high and low financial distress categories and perform analysis with interaction variables as well as sub-samples. The results are presented in Table 6. In Panel A, we categorize high distress risk firms by constructing a HIGH_DISTRESS dummy variable that identifies firms with long-term debt ratios above the industry median. We identify low risk firms by the variable LOW_DISTRESS that equals 1 - HIGH_DISTRESS. Following Hasan et al. (2014), we create two interaction terms between political connection variables and the dummy variables. The regression results for transactional political connection (Models 1 and 2) show that the interaction coefficients of TPC and high-distress dummy are lower than those for the low-distress dummy. Statistical test results show that across the two model specifications of TPC, the coefficients of the interaction terms with high-distress dummy (-0.027 and -0.029) are significantly lower than those with the low-distress dummy (-0.010 and -0.014). The finding indicates a beneficial effect of transactional political connection on the cost of debt of firms facing high financial distress. The regression results for relational political connection show that the coefficient of RPC interacted with high-distress dummy in

Model (3) is *higher* than that with low-distress dummy. RPC firms with high-distress risk are charged *higher* cost of debt than those with low-distress risk. Overall, the results indicate a beneficial effect of transactional political connection whereas firms that use relational approach to political connection do not obtain any benefit.

[Insert Table 6 here]

For the sub-sample analysis, we classify firms into high (low) distress risk categories when the leverage ratio is above (below) the industry median in a given year; and belongs to the category of highest and lowest one-third values. Panel B of Table 6 presents the estimations results for these sub-samples. In general, we find that the regression coefficients of TPC are negative across all model specifications, whereas the coefficients of RPC are not negative. Furthermore, we find that the coefficients of TPC in high-risk and top one-third categories are significantly lower than those of low-risk and bottom one-third firms. Given the same proportion of TPC, the decrease in cost of debt is greater for firms in high financial distress than for low-distress firms. The finding shows that the value of TPC is more pronounced for firms with more severe financial distress. In contrast, we find (in several models) a positive relationship between RPC and the cost of debt. It suggests that firms do not obtain benefit from relational political connection.

To sum up, the results support our hypothesis that the role played by transactional political strategy to reduce the cost of debt is greater than the relational political strategy. This reduction is even higher for firms with high financial risk. The empirical results indicate a consistent impact of transactional and relational political connections on cost of debt.

One can argue that our empirical analysis might suffer from endogeneity between political connection and cost of debt as well as the omitted variables bias (firms might become politically active based on unobserved characteristics that can also affect the cost of debt). To mitigate these issues, we conduct two-stage least squares (2SLS) regressions. In employing 2SLS technique, the selection of an appropriate instrumental variable is challenging. Following prior literature, we use three instrumental variables to predict political connection: regulated industry classification, the industry average of TPC/RPC, and geographic location of the firm. It can be argued that firms operating in regulated environments have higher degree of dependency on government policy (Hillman and Hitt, 1999). Thus it creates incentive for firms to be more politically active to influence public policy decisions. We use dummy variable equal to one if a firm operates in regulated industry. A firm's political connection can also be influenced by the political connections of other firms within the same industry (Hersch and McDougall, 2000; Schuler, Rehbien, and Cramer, 2002) and the firm's location (Boubakri, Cosset, and Saffar, 2012; Houston et al., 2014). We use dummy variable equal to one if the firm is located in the capital city. The results of 2SLS estimation are presented in Table 7. We observe that in Model (1) the TPC variable is significantly negatively related to the cost of debt. On the other hand, Model (2) shows that the RPC variable has an insignificant impact on the cost of debt. The results once again show that firms that follow the transactional approach to political connection enjoy a greater reduction in their cost of debt.

[Insert Table 7 here]

Finally, we examine the sustainability benefit of having transactional and relational political connections. Transactional politically-connected firms that consistently maintain their connections to current political network might enjoy greater access to policy makers and enhance their implicit insurance from the government. Thus, this strategy should lead to more consistent and sustainable benefit. A consequence of this benefit will be that the firms in question experience a lower volatility of cost of debt. Using the standard deviation of cost of debt as the dependent variable we re-estimate the regression models. The obtained results are presented in Table 8. We observe a negative and statistically significant effect of transactional political connection on the volatility of cost of debt. Relational political connection variable still remains insignificant. Supporting our prior finding on the association between two approaches to political connection and the cost of debt, these results provide evidence that firms developing transactional approach to political connection enjoy a relatively lower variability in interest rate.

[Insert Table 8 here]

7. Conclusions

We empirically examine the impact of two different approaches to political connections on the cost of debt. We find that firms with transactional political connection experience a lower cost of debt. In contrast, relational political connection has no statistically significant impact on firm's cost of debt. Performing robustness test of results using alternative regression methods (GLS-RE and 2SLS), different proxies for financial distress, interactions and sub-sample analysis show consistent results.

All tests indicate that given the same level financial distress risk, transactional politically-connected firms experience a significant lower of cost of debt than their counterpart. This effect is stronger for firms with higher financial distress risk. These findings support that transactional political connection helps to increase the implicit insurance of riskier firms and the creditors reward the firm by reducing the interest rate they charge. In times of frequently changing political regimes, transactional contracts with the politicians are apparently better to solve particular problems facing the firms because they focus on issue-by-issue basis. Firms can even terminate and develop new political connections in case specific objectives are not fulfilled.

We also find that firms that engage transactional political connection enjoy lower volatility in cost of debt. These results are consistent with the finding of Brown, Drake, and Wellman (2015). They find that firms that build relational connection with tax policy maker pay lower tax rate than those do not.

This empirical evidence provided in this study supports the hypothesis that transactional politically-connected firms enjoy more reduction on cost of debt than relationally connected firms. Firms' capabilities in adjusting their political connection to the current political regime enhance their access to a greater political network. Moreover, developing transactional political connection might minimize the rent-seeking incentives and expropriation by the politicians. On the other hand, developing relational political connection that is usually governed by good faith and trust might provide uncertain benefits for firms in case of frequent regime changes. The creditors recognize the advantage and value this implicit insurance of taking into consideration transactional political connection in credit pricing, thus charging a lower cost of debt.

While the results presented here are conclusive, this study has a few limitations that might affect the results. Data considerations restrict us to focus on the political affiliation of board members. Alternative proxies for approaches to political connections (for example, political donations) could provide robust evidence. Examining political connections in more specific settings (for example, firms under legal investigation of tax offices or capital market regulatory institutions) might improve our understanding of different effects and consequences. This research can also be a baseline for further studies on examining other dimensions (for example, local or regional) of political connections. Finally, extending this study to other countries with different political systems could be challenging and interesting.

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Table 1. Variable definitions

Variables	Description
Cost of debt (COD)	Interest paid divided by total debt
Transactional political connection (TPC)	The number of board members classified as transactional political connections divided by the total number of board members.
Relational political connection (RPC))	The number of board members classified as relational political connections divided by the total number of board members.
Financial distress (DISTRESS)	Long-term debt divided by book value of total assets
Firm size (LNSIZE)	Natural logarithm of book value of total assets
Property, Plant, and Equipment (PPE)	Net investment in property, plant, and equipment scaled by book value of total assets
Inventory (INV)	Net inventory scaled by book value of total assets
Cash (CASH)	Cash and equivalent cash scaled by book value of total assets
Intangible assets (INTANG)	Intangible assets scaled by book value of total assets
Growth opportunity (GROWTH)	Market value of equity divided by book value of equity
Firm age (AGE)	Years since IPO *(natural logarithm)*
Foreign ownership (FOR)	Dummy variable equal to one if the ultimate owner is foreign company or institution, and zero otherwise.

Table 2. Descriptive statistics, Industry distribution and Cost of debt for sub-samples

Panel A: Descriptive statistics

Variable	N	Mean	SD	Min	P25	P50	P75	Max
COD	3630	0.038	0.027	0.001	0.016	0.035	0.056	0.094
TPC	3388	0.087	0.131	0	0	0	0.143	0.667
RPC	3388	0.011	0.04	0	0	0	0	0.4
DISTRESS	3907	0.133	0.152	0	0.001	0.072	0.224	0.492
ASSETS (US$ million)	3907	525	1,300	0.06	42.70	140.00	443.00	19,500
PPE	3907	0.346	0.24	0.012	0.146	0.308	0.538	0.799
CASH	3907	0.093	0.092	0.003	0.02	0.06	0.138	0.321
INTANG	3907	0.010	0.025	0	0	0	0.003	0.099
GROWTH	3466	1.881	1.835	0.050	0.592	1.179	2.558	6.971
AGE	3486	13.344	7.753	1	6	14	19	36
FOR	3405	0.214	0.410	0	0	0	0	1

Panel B: Industry distribution

Name	No	% of sample
Agriculture, Forestry and Fishing	24	5.66%
Mining	28	6.60%
Construction	23	5.42%
Manufacturing	169	39.86%
Transportation, Communication, Electric, Gas, and Sanitary service	62	14.62%
Wholesale Trade	16	3.77%
Retail Trade	22	5.19%
Real Estate	39	9.20%
Services	41	9.67%
Total	424	100%

Panel C: Average cost of debt categorized by approaches to political connection and financial distress risk

	High distress	n	Low distress	n	t-stat
TPC	0.041	662	0.032	493	-7.04***
Non-TPC	0.047	873	0.032	1013	-13.41***
t-stat	4.74***		0.78		
RPC	0.049	61	0.032	85	-3.97***
Non-RPC	0.044	1474	0.031	1421	-13.96***
t-stat	-1.64		-0.3		

Table 3. Correlation matrix

The table presents Pearson correlation coefficient among variables used in the regression analysis. All variables are defined in Table 1.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
COD (1)	1										
TPC (2)	-0.074	1									
RPC (3)	0.031	0.003	1								
DISTRESS (4)	0.295	0.109	-0.085	1							
PPE (5)	0.200	0.020	0.019	0.368	1						
CASH (6)	-0.210	0.084	-0.052	-0.172	-0.253	1					
LNSIZE (7)	-0.039	0.207	-0.043	0.272	0.050	0.159	1				
INTANG (8)	0.089	0.065	-0.064	0.128	-0.078	0.051	0.204	1			
GROWTH (9)	-0.070	0.046	0.025	-0.011	-0.047	0.186	0.113	0.079	1		
AGE (10)	-0.191	-0.019	0.008	-0.076	-0.005	-0.072	0.036	-0.149	-0.083	1	
FOR (11)	-0.159	-0.118	-0.014	-0.106	0.048	0.020	0.073	0.033	0.060	0.229	1

Table 4. The effect of transactional and relational political connections on the cost of debt

This table presents the pooled ordinary least square (OLS) and generalized least square random effect (GLS-RE) regression results of the cost of debt on transactional and relational political connections. The definitions of all variables are presented in Table 1. The t-statistics, reported in parentheses, are based on robust standard errors adjusted for heteroscedasticity.

	OLS		GLS-RE	
	(1)	(2)	(3)	(4)
TPC	-0.023***		-0.014**	
	(-6.65)		(-2.20)	
RPC		0.030*		0.003
		(2.29)		(0.21)
$DISTRESS_{(t-1)}$	0.050***	0.049***	0.038***	0.038***
	(11.23)	(10.86)	(5.81)	(5.78)
$PPE_{(t-1)}$	0.003	0.003	0.008*	0.007*
	(1.18)	(1.22)	(1.89)	(1.89)
$CASH_{(t-1)}$	-0.039***	-0.040***	-0.033***	-0.034***
	(-6.34)	(-6.56)	(-3.81)	(-3.87)
$INTANG_{(t-1)}$	0.040*	0.041*	-0.017	-0.019
	(2.01)	(2.07)	(-0.54)	(-0.60)
$LNSIZE_{(t-1)}$	-0.000	-0.000	0.001**	0.001*
	(-0.31)	(-1.20)	(2.16)	(1.83)
$GROWTH_{(t-1)}$	-0.001**	-0.001**	-0.001	-0.001
	(-2.68)	(-2.78)	(-1.46)	(-1.43)
$AGE_{(t-1)}$	-0.004***	-0.004***	-0.005***	-0.005**
	(-6.79)	(-7.10)	(-5.03)	(-5.00)
$FOR_{(t-1)}$	-0.007***	-0.006***	-0.007***	-0.007***
	(-6.03)	(-5.32)	(-3.08)	(-2.88)
Constant	0.049***	0.053***	0.019	0.022**
	(7.10)	(7.80)	(-1.61)	(-1.86)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	No	No
Observations	2197	2197	2197	2197
Adjusted R^2	0.24	0.23		
Model fits:				
Within R^2			0.09	0.08
Between R^2			0.35	0.33
Overall R^2			0.22	0.21
Wald χ^2- statistics (17)			287.54***	247.16***

Table 5. The joint effect of political connection and financial distress on the cost of debt

This table presents the OLS regression results of the cost of debt on transactional and relational political connections conditional on financial distress. The definitions of all variables are presented in Table 1. The t-statistics, reported in parentheses, are based on robust standard errors adjusted for heteroscedasticity.

	(1)	(2)
$DISTRESS_{(t-1)}$	0.056***	0.050***
	(10.92)	(10.90)
TPC	-0.014**	
	(-2.84)	
$TPC \times DISTRESS_{(t-1)}$	-0.059*	
	(-2.47)	
RPC		0.039*
		(2.07)
$RPC \times DISTRESS_{(t-1)}$		-0.079
		(-0.67)
$PPE_{(t-1)}$	0.003	0.003
	(1.11)	(1.22)
$CASH_{(t-1)}$	-0.039***	-0.040***
	(-6.35)	(-6.57)
$INTANG_{(t-1)}$	0.040*	0.041*
	(2.01)	(2.09)
$LNSIZE_{(t-1)}$	-0.000	-0.000
	(-0.32)	(-1.22)
$GROWTH_{(t-1)}$	-0.001**	-0.001**
	(-2.70)	(-2.79)
$AGE_{(t-1)}$	-0.004***	-0.004***
	(-6.58)	(-7.11)
$FOR_{(t-1)}$	-0.007***	-0.006***
	(-6.11)	(-5.35)
Constant	0.048***	0.053***
	(6.99)	(7.81)
Year FE	Yes	Yes
Industry FE	Yes	Yes
Observations	2197	2197
Adjusted R^2	0.24	0.23

Table 6. **The effect of political connection on the cost of debt: additional analysis**

Panel A: Full sample analysis with interaction variables

This table presents the regression results of the cost of debt on transactional and relational political connections conditional on high and low financial distress. HIGH_ DISTRESS is a dummy variable representing high-financial-distress firms when DISTRESS value is greater than the median value of firms in the same industry. The definitions of all variables are presented in Table 1. The t-statistics, reported in parentheses, are based on robust standard errors adjusted for heteroscedasticity.

	(1)	(2)	(3)	(4)
TPC × HIGH_DISTRESS	-0.027***	-0.029***		
	(-5.95)	(-6.71)		
TPC × LOW_ DISTRESS	-0.010*	-0.014**		
	(-1.87)	(-2.71)		
RPC × HIGH_ DISTRESS			0.046*	0.031
			(2.31)	(1.50)
RPC × LOW_ DISTRESS			0.019	0.030*
			(1.11)	(1.79)
HIGH_DISTRESS	0.010***	0.008***	0.008***	0.007***
	(6.73)	(4.99)	(5.78)	(4.54)
$DISTRESS_{(t-1)}$	0.027***	0.034***	0.026***	0.033***
	(5.23)	(5.85)	(4.92)	(5.50)
$PPE_{(t-1)}$		0.002		0.003
		(0.83)		(0.93)
$CASH_{(t-1)}$		-0.038***		-0.040***
		(-6.31)		(-6.47)
$INTANG_{(t-1)}$		0.038		0.038
		(1.92)		(1.95)
$LNSIZE_{(t-1)}$		-0.000		-0.001
		(-0.86)		(-1.81)
$GROWTH_{(t-1)}$		-0.001*		-0.001*
		(-2.45)		(-2.55)
$AGE_{(t-1)}$		-0.004***		-0.004***
		(-6.27)		(-6.70)
$FOR_{(t-1)}$		-0.007***		-0.006***
		(-5.99)		(-5.20)
Constant		-0.000		-0.001
		(-0.86)		(-1.81)
ΔCoef.	-0.017	-0.015	0.027	0.001
(p-value)	(0.02)	(0.02)	(0.44)	(0.76)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Observations	2754	2197	2754	2197
Adjusted R^2	0.15	0.25	0.15	0.24

Panel B: Sub-sample analysis based on the severity of financial distress

This table presents sub-sample regression results of the cost of debt on transactional and relational political connections. We classify firms into high (low) financial distress categories when DISTRESS value is greater (lower) than the median value of firms in the same industry; and top (bottom) categories based on the top one-third and bottom one-third values of DISTRESS. The definitions of all variables are presented in Table 1. The t-statistics, reported in parentheses, are based on robust standard errors adjusted for heteroscedasticity.

	High	Low	High	Low	Top	Bottom	Top	Bottom
TPC	-0.030***	-0.014*			-0.031***	-0.002		
	(-6.18)	(-2.45)			(-5.38)	(-0.33)		
RPC			0.046*	0.027			0.015	0.067**
			(2.48)	(1.74)			(0.72)	(3.17)
$DISTRESS_{(t-1)}$	0.029***	0.103***	0.027***	0.101***	0.026***	0.129	0.023**	0.186
	(5.41)	(5.40)	(5.07)	(5.29)	(3.45)	(0.44)	(3.00)	(0.64)
$PPE_{(t-1)}$	0.004	-0.001	0.005	-0.002	0.004	0.001	0.004	0.000
	(1.29)	(-0.30)	(1.53)	(-0.43)	(0.93)	(0.14)	(0.95)	(0.02)
$CASH_{(t-1)}$	-0.012	-0.059***	-0.014	-0.060***	0.005	-0.057***	-0.003	-0.057***
	(-1.30)	(-7.52)	(-1.48)	(-7.61)	(0.38)	(-5.99)	(-0.22)	(-5.96)
$INTANG_{(t-1)}$	0.038	0.032	0.037	0.036	0.051	-0.012	0.055*	-0.000
	(1.63)	(1.09)	(1.56)	(1.20)	(1.93)	(-0.27)	(2.05)	(-0.00)
$LNSIZE_{(t-1)}$	-0.000	-0.000	-0.001*	-0.001	0.000	-0.001	-0.000	-0.001
	(-0.97)	(-0.79)	(-2.29)	(-1.06)	(0.47)	(-1.39)	(-0.52)	(-1.48)
$GROWTH_{(t-1)}$	-0.000	-0.001*	-0.000	-0.001*	-0.000	-0.000	-0.000	-0.000
	(-0.48)	(-2.35)	(-0.69)	(-2.37)	(-0.66)	(-0.25)	(-0.64)	(-0.19)
$AGE_{(t-1)}$	-0.002**	-0.005***	-0.003***	-0.005***	-0.003**	-0.006***	-0.004***	-0.005***
	(-2.98)	(-5.95)	(-3.56)	(-5.84)	(-3.19)	(-4.30)	(-3.70)	(-4.24)
$FOR_{(t-1)}$	-0.007***	-0.007***	-0.004**	-0.007***	-0.006*	-0.006**	-0.003	-0.006**
	(-4.02)	(-4.19)	(-2.60)	(-4.15)	(-2.57)	(-2.78)	(-1.49)	(-3.04)
Constant	0.058***	0.064***	0.066***	0.065***	0.045***	0.067***	0.052***	0.066***
	(6.22)	(6.36)	(7.10)	(6.46)	(3.82)	(5.29)	(4.41)	(5.29)
ΔCoef. (p-value)	-0.016 (0.01)		0.019 (0.49)		-0.029 (0.00)		-0.052 (0.11)	
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1231	966	1231	966	859	629	859	629
Adjusted R^2	0.16	0.24	0.14	0.23	0.10	0.14	0.07	0.15

Table 7. The effect of political connection on the cost of debt: 2SLS regression analysis

This table presents results from the Heckman two-stage least squares (2SLS) regressions for the effect of approaches to political connections on the cost of debt. The instrumental variables for first-stage regression are geographic location of a firm's headquarter, dummy for regulated industry, and median value of TPC (RPC) per year per industry. The definitions of all variables are presented in Table 1. The t-statistics, reported in parentheses, are based on robust standard errors adjusted for heteroscedasticity.

	1	2
TPC	-0.079*	
	(-1.77)	
RPC		0.057
		(0.46)
$DISTRESS_{(t-1)}$	0.053***	0.050***
	(11.68)	(10.13)
$PPE_{(t-1)}$	0.003	0.003
	(0.97)	(1.25)
$CASH_{(t-1)}$	-0.033***	-0.039***
	(-4.07)	(-5.15)
$INTANG_{(t-1)}$	0.043*	0.043*
	(2.26)	(2.03)
$LNSIZE_{(t-1)}$	0.001	-0.000
	(0.93)	(-1.36)
$GROWTH_{(t-1)}$	-0.001*	-0.001**
	(-2.36)	(-2.94)
$AGE_{(t-1)}$	-0.004***	-0.004***
	(-4.95)	(-7.15)
$FOR_{(t-1)}$	-0.010***	-0.006***
	(-4.24)	(-5.26)
Constant	0.043***	0.057***
	(4.16)	(8.46)
Year FE	Yes	Yes
Industry FE	Yes	Yes
Observations	2197	2197
Adjusted R^2	0.16	0.23

Table 8. Sustainability benefits of transactional and relational political connections

This table presents the regression results of the variability of cost of debt on transactional and relational political connections. The definitions of all variables are presented in Table 1. The t-statistics, reported in parentheses, are based on robust standard errors adjusted for heteroscedasticity.

	(1)	(2)
TPC	-0.004*	
	(-2.08)	
RPC		-0.004
		(-0.70)
$DISTRESS_{(t-1)}$	0.007**	0.007**
	(2.87)	(2.73)
$PPE_{(t-1)}$	0.003*	0.003*
	(2.19)	(2.23)
$CASH_{(t-1)}$	-0.018***	-0.019***
	(-5.39)	(-5.53)
$INTANG_{(t-1)}$	0.029**	0.029**
	(2.70)	(2.63)
$LNSIZE_{(t-1)}$	-0.001***	-0.001***
	(-5.23)	(-5.58)
$GROWTH_{(t-1)}$	0.000	0.000
	(1.21)	(1.17)
$AGE_{(t-1)}$	-0.001**	-0.001**
	(-2.75)	(-2.87)
$FOR_{(t-1)}$	-0.001	-0.001
	(-1.74)	(-1.49)
Constant	0.035***	0.036***
	(9.51)	(9.82)
Year FE	Yes	Yes
Industry FE	Yes	Yes
Observations	2011	2011
Adjusted R^2	0.09	0.09