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Political Uncertainty and the Choice of Debt Sources^{*}

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Political Uncertainty and the Choice of Debt Sources

This paper studies the effect of political uncertainty on the choice of debt sources. We find a positive relationship between political uncertainty stemming from elections and the proportion of bank loans over total debts, especially when elections are closely contested. Furthermore, this relationship is stronger in opaque firms and more financially constrained firms as well as firms from countries with weaker shareholder rights, labor protection, creditor rights and national governance.

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1. Introduction

Political outcomes affect the regulatory policies that shape the external environment under which firms operate. As documented in a large strand of literature, political uncertainty, such as a change in government policy and national leadership, is one of the principal means by which politics affects corporate decisions. Prior research studied the effect of political uncertainty on investment (e.g., Durnev, 2014; Jens, 2017), dividend payouts (Huang, Wu, Yu, and Zhang, 2015), foreign direct investments (FDI – Nguyen, Kim and Papanastassiou, 2018), leverage ratio (Cao, Duan, and Uysal, 2013), corporate credit risk (Liu and Zhong, 2017; Kaviani, Kryzanowski, and Maleki, 2017), industry return volatility (Boutchkova, Doshi, Durnev, and Molchanov, 2012), stock price and equity risk premia (Pastor and Veronesi, 2012, 2013), IPO activity (e.g., Colak, Durnev, and Qian, 2017), option pricing (Kelly, Pastor, and Veronesi, 2016), stock price crash risk (e.g., Li, Li and Xu, 2018).

However, to the best of our knowledge, no study has examined the relationship between political uncertainty and the choice of debt source yet. Examining debt choice rather than the amount of total debt is important because while the total amount of debt may not change over time, its composition (i.e., the allocation of debt between a bank and public debt) may change. We exploit recently available data on debt structure in Capital IQ to analyze the effect of political uncertainty stemming from national elections on the choice between public and bank debt. Most of prior studies on debt choice study the role of characteristics of the firm, like financial characteristics (e.g., Denis and Mihov, 2003), ownership structure (Lin, Ma, Malatesta and Xuan, 2013; Boubaker, et al., 2017; Boubakri and Saffar, 2018) and product market competition (e.g., Boubaker, Rouatbi and Sassi, 2018). We augment these studies by highlighting the importance of political uncertainty stemming from national elections for debt structure. Firms from different countries have different reactions to elections, allowing us to study how different is the reaction of firms from countries with a different institutional environment to national elections. Therefore, national elections provide us with a natural experiment, permitting us to explore the relationship between political uncertainty and debt structure.

Elections are associated with severe information asymmetry problems as they are accompanied by high uncertainty about the policies of the government, such as those regarding taxation and labor regulations, which can affect the firm's competitiveness as well as its expected cash flow. As argued by Imai and Shelton (2011, p. 837), elections constitute "opportunities for large, discrete changes in governments and therefore in governing philosophy and resulting policy." Information asymmetry increases capital rationing and limits the ability of the firm to raise capital in the public debt markets. Cao et al. (2013) provide evidence consistent with this view. They show that in an election year, capital providers give less credit to firms and require higher credit spreads. This finding suggests that creditors that are uncertain about government policies that could affect firms' cash flow provide less credit to firms and require a higher rate of return, which increases the cost of borrowing.

Similarly, Gao and Qi (2013) find that political uncertainty around U.S. gubernatorial elections is associated with an increase of 6 to 8 basis points in municipal bond yields. Recently, Nagar, Schoenfeld and Wellman (2019) find that economic-political uncertainty decreases the quality of firms' information environments. The authors report that managers try to reduce information asymmetry caused by economic-political uncertainty with additional voluntary disclosures; however, their disclosures are not enough, and a strong positive link between economic-political uncertainty and information asymmetry remains. Banks are efficient at monitoring and are less sensitive to information asymmetry. Indeed, banks who hold private information on firms play better monitoring of managers' actions than public debtholders.

Furthermore, banks have stronger monitoring incentives than public debtholders because debt ownership is more dispersed in public debt markets; hence, public debtholders are more likely to suffer from free-rider problems. Moreover, bank debt has an advantage over public debt because debt restructuring and renegotiation is easier in bank debt than compared to public debt. Thus, firms can still access bank debt facing problems such as agency and information asymmetry problems. We, therefore, expect that firms to use more bank debt during national elections because debtholders will require higher compensation when information asymmetry costs are high.

Using a multinational sample over the period from 1990–2015, we find that firms use more bank debt during election years. This result supports the view that elections that are associated with high political uncertainty aggravate the information asymmetry problem and render public debt more costly and less accessible. Our findings are robust to a battery of robustness tests and the use of alternative political uncertainty proxies. We also perform several cross-sectional tests to identify the factors that may affect the positive relation between national elections and bank debt ratio. We discover this relation to be more pronounced in opaque firms.

Furthermore, we find that this relationship is stronger when the financial constraints faced by firms are more severe. Additionally, we realize this relation to be more profound in firms from countries with weaker shareholder rights, labor protection, creditor rights protection and weaker national governance. Last but not least, we find this relation to be more important when elections are closely contested, which adds more credence to the positive relationship between political uncertainty and the loan to debt ratio.

Our paper contributes to the literature in at least two ways. First, our results enrich the emerging literature on political uncertainty (e.g., Ben-Nasr et al., 2014; Frankie, Deesomsak and Wang, 2014; Smales, 2014; Julio and Yook, 2012; Durnev, 2014; Huang et al., 2015; Cao et al., 2013; Colak et al., 2017; Kaviani et al., 2017; Kelly et al., 2016; Cao, Li and Liu, 2015; An, Chen, Luo, and Zhang. 2016; Li et al., 2018; Guo, Li and Zhong, 2019) by focusing on an important financial decision, namely the choice between the bank and public debt financing. In contrast to Colak, Gungoraydinoglu, and Öztekin (2018), who examine the impact of political uncertainty on the total amount of debt, this study enhances the understanding of political uncertainty on the composition of debt sources. Studying the composition of debt is important because it may change over time while the total amount of debt remains constant (e.g., Rauh and Sufi, 2010). Second, we also augment debt structure and cost studies (e.g., Krishnaswami, Spindt and Subramaniam, 1999; Dhaliwal, Khurana, and Pereira, 2011; Lin, Malatesta and Xuan, 2013; Boubaker et al., 2017 and 2018; Li et al., 2015; Boubaker et al., 2018; Pour and Lasfer, 2019; Meng and Yin, 2019; Ben-Nasr, 2019) by examining how policy risk, proxied by national elections, may affect bank debt ratio which has generally been ignored to date. In this study, we identify a new determinant for corporate debt structure from a macro aspect.

The rest of the paper is organized as follows. Section 2 reviews the related literature and develops our testable hypotheses. Section 3 describes our empirical design. Section 4 presents the results. Section 5 concludes.

2 Literature review and hypotheses

Elections are associated with uncertainty regarding the new government's policies (e.g., subsidies, allocation of government contracts, taxation, and labor policies), which can affect a

firm's expected cash flow and competitiveness. This uncertainty aggravates information asymmetry problems. Periods of political instability are associated with severe information asymmetry, which increases market participants' perception of risk. Several studies provide evidence suggesting that political uncertainty around elections is associated with higher information asymmetry. For instance, Pasquariello and Zafeiridou (2014) examine the impact of U.S. presidential elections on financial market quality. They find that presidential elections decrease trading volume and market liquidity, suggesting that political uncertainty is associated with poor and lower quality information environment. Similarly, Dai and Ngo (2019) examine the impact of U.S. gubernatorial elections on accounting conservatism. They argue that managers are better than external investors in evaluating the impact of political uncertainty on the incomes and expenses of the company, which leads to an increase in the information asymmetry between insiders and external investors.

Higher information asymmetry leads to more conservative accounting (LaFond & Watts, 2008; Khan & Watts, 2009). Consistent with this view, they find that gubernatorial elections lead to an increase in asymmetric timeliness of news recognition. Durnev (2014) examines the impact of national elections on stock price informativeness using a sample of 79 countries. He argues that national elections associated with uncertainty regarding government policies lead to uncertain future cash flows, which leads to less informative stock prices. In addition, he argues that the gap related to the access to information between managers and external investors regarding the impact of potential changes in government policies on future firm cash flows increases during national elections. Consistent with these views, he finds that national elections are positively related to stock price synchronicity, suggesting that stock prices are more correlated with market indexes, hence less informative during national elections.

Less informative stock prices are associated with higher information asymmetry (e.g., Wang, 1994). Prior literature provides support for this view. For instance, Jin and Myers (2006) report evidence (from a sample of 40 countries) suggesting that more synchronous (less informative) stock prices are associated with less corporate transparency. In the same vein, Hutton, Marcus, and Tehranian (2009) show that less informative stock prices are associated with more earnings management from a sample of 43 countries.

Higher quality of accounting information mitigates information asymmetry problems (Diamond and Verrecchia, 1991). Furthermore, Li, Li and Xu (2018) show that national elections

are positively related with the likelihood to withhold bad news (in a sample of 38 countries) as measured by stock price crash risk, suggesting that national elections are associated with more asymmetry of information between insiders and external investors. More recently, Nagar et al. (2019) use economic-political uncertainty (EPU index) as a measure of policy uncertainty. From a sample of U.S. firms, they find that higher policy uncertainty is associated with higher information asymmetry as measured by bid-ask spread and prices react less to earnings surprises.²

Political uncertainty, which is associated with higher information asymmetry, affects the capital structure and debt cost. For instance, Cao et al. (2013) argue that creditors who are uncertain about the cash flows of firms due to government instability provide less credit and require a higher rate of return, which lead to higher borrowing cost. Consistent with this argument, they show that under conditions of political uncertainty, firms need more time to adjust their leverages toward targets. Indeed, they demonstrate that under-levered (over-levered) firms are less (more) likely to increase (decrease) their debt ratios during periods of political uncertainty. They also show that firms tend to delay debt issuances in periods of high political uncertainty. More importantly, they show that political uncertainty increases credit spreads. In the same vein, Gao and Qi (2013) show that political uncertainty around U.S. gubernatorial elections is linked with an increase of 6 to 8 basis points in municipal bond yields. Colak et al. (2018) use a multinational sample of firms from 38 countries and various proxies of political uncertainty including the election dummy. They find that political uncertainty decreases the speed of leverage adjustments. Overall, this discussion suggests that political uncertainty is associated with severe information asymmetry, which increases financial friction and leads to higher public financing costs. In this paper, we extend this strand of literature by examining the impact of political

² This study empirically test whether national elections is associated with higher information asymmetry by using the EPU index and a U.S. sample. We calculate the Amihud Illiquidity proxy for our sample firms. We regress the Amihud Illiquidity proxy on on *ELEC_DUMMY*, the volatility of monthly stock returns (*RET_VOL*), turnover (*TURNOVER*), the logarithm of dollar trading volume (*DTV*) and logarithm of stock prices (*Log*(1+*PRICE*)). *DTV* is defined as the logarithm of one plus trading volume multiplied by stock price, *PRICE* is stock price. The results of our Model 1 (available upon request) show that *ELEC_DUMMY* loads positive and highly significant, suggesting that information asymmetry increases during national elections. Furthermore, we use subsample analysis to examine the validity of information asymmetry channel through which national election affect firm's debt choice. The results of our Models 2 and 3 (also available on request) show that the coefficient for *ELEC_DUMMY* is significantly in the sub-sample of firms with high Amihud Illiquidity ratio, suggesting that the positive relationship between national elections and bank debt ratio is more pronounced in the sub-sample of firms suffering from severe information asymmetry problems in line with *H*₂ (described below).

uncertainty on the composition of firm debt.

Several studies examine the determinants of choice between public and private debt (e.g., Ben-Nasr, 2019; Boubaker et al., 2018). They argue that banks are more efficient at monitoring and are less sensitive to information asymmetry than public debtholders. For instance, banks are known for their superior monitoring ability since they can easily access private firm information (Diamond, 1984). Moreover, the monitoring incentives of banks are higher than those of public debtholders because the ownership of public debt is more dispersed when compared to bank debt (Houston and James, 1996). Additionally, banks are less sensitive to information asymmetry because they can discipline firms in case of misbehavior through contract renegotiation and restructuring (Park, 2000).

Nikolaev (2018) points out that exogenous uncertainty is thus the primary driver of renegotiation. Given a certain level of exogenous uncertainty, because of agency and information problems, it is difficult to induce the agent's endogenous non-contractible actions via ex-ante contracts, which creates a need to monitor and discipline the agent ex-post³. Since bank debts are less costly than public debts in periods of high information asymmetry(e.g., Li et al., 2015), in line with Nikolaev (2018)'s reasoning, Krishnaswami et al. (1999) document that high residual stock return volatility (i.e., higher information asymmetry costs) is associated with a high bank debt ratio. Similarly, Denis and Mihov (2003) report evidence suggesting that fewer fixed assets (i.e., high information asymmetry costs) lead to higher bank debt ratio. In more recent work, Li et al. (2015) document that an information shock is associated with higher bank debt use. Thus, we expect that firms prefer to use bank debt when information asymmetry is high in the face of political uncertainty.

To summarize, the above arguments suggest that national elections are associated with high political uncertainty and tend to aggravate information asymmetry problems, hence increase debt rationing and result in a high public debt financing cost. Therefore, we expect that in periods of high political uncertainty, firms will rely more on a debt source that is less sensitive to information asymmetry, namely bank debt. Our first hypothesis is as follows:

H1: Firms tend to use more bank debt during election years than during non-election years.

Information opacity increases public debt costs (e.g., Sengupta, 1998; Mansi, Maxwell and Miller, 2011). Indeed, it aggravates moral hazard problems by rendering contracting less efficient

³ See the second paragraph on page 271 on Nikolaev (2018).

and impeding effective monitoring by capital suppliers. Similarly, information opacity increases information asymmetry costs, hence aggravates adverse selection problems. As discussed above, firms facing higher public financing costs may decide to use more bank debt. The reason for this is that banks, being efficient monitors and less reliant on publicly available information, are less sensitive to information asymmetry problems. This point of view is supported by the literature. For instance, Li et al. (2015) report a positive association between information opacity and bank debt ratio. In the same vein, Dhaliwal, Khurana and Pereira (2011) show that firms with less disclosure use less public debt. Consequently, we expect that the association between national elections and bank debt ratio will be more pronounced in opaque firms.

H₂: The positive relation between national elections and bank debt usage is stronger in opaque firms.

Financial constraints may also affect the impact of national elections on the bank debt ratio. Megginson, Ullah, and Wei (2014) argue that agency problems are more severe in firms facing more financial constraints. Such firms are more likely to experience bankruptcy, hence have a higher public debt cost. The high public debt costs faced by financially constrained firms may lead them to substitute away from a financing source that is more sensitive to information asymmetry, namely public debt toward bank debt. Bank debt seems to be more appropriate for firms with high bankruptcy risk (e.g., Denis and Mihov, 2003). Consequently, we may expect that financially constrained may rely more on bank debt during national elections.

H₃: Financial constraints strengthen the relation between national elections and bank debt ratio.

Legal protection may affect the association between national elections and bank debt ratio. We study several aspects of legal protection. First, we explore the role played by shareholder rights in protecting external shareholders. Strong legal protection prevents managers from expropriating the wealth of shareholders and reduces their need to rely on banks to monitor managers. Thus, firms are less likely to use debt from banks in the presence of strong shareholder rights. Consequently, we can expect that the positive association between national elections and bank debt ratio is weaker (stronger) when the protection of shareholder rights is strong (weak).

Second, labor protection may also affect the association between national elections and bank debt ratio. Firms from countries with strong labor protection tend to hide corporate resources when employees have a high degree of bargaining power, to reduce their ability to extract corporate resources in the form of high wages and highly favorable working conditions. For instance, Hilary (2006) report evidence suggesting that labor protection and information opacity are positively correlated. We expect that in the presence of rigid labor regulations, firms use more public debt because banks are better able to detect the opportunistic behavior of managers aiming to hide corporate resources from workers. Therefore, we expect a stronger relation between political uncertainty and bank debt ratio in the presence of weaker labor regulations.

Third, we examine whether the relationship between national elections and bank debt ratio depends on creditor rights, which protects against borrower expropriation (e.g., Qian and Strahan, 2007) and leads to lower public debt cost. For instance, Boubakri and Ghouma (2010) show that the enforcement of creditor rights is linked with lower credit spreads. Firms in countries with weaker creditor rights are penalized with higher public debt costs, hence are more likely to use bank debt. Therefore, we expect that firms that weak creditor rights strengthen the positive association between national elections and bank debt ratio.

H₄: The positive association between elections and bank debt ratio is weaker (stronger) when the shareholder, labor and creditor rights are strong (weak), respectively.

We assess the effect of election closeness measured by the victory margin on the relationship between national elections and bank debt ratio. A lower value of the victory margin index is linked with more electoral uncertainty. National elections that are won by a smaller margin (i.e., closely contested elections) are related to a greater decrease in investment (Julio and Yook, 2012). Similarly, Durnev (2014) shows that national elections reduce investment-to-price sensitivity more when elections are closely contested elections. Colak et al. (2017) document that election closeness is associated with a sharper decrease in IPO volume during election years. Electoral uncertainty aggravates information asymmetry problems and further increases capital rationing during election years; hence, it further increases the cost of public debt. Therefore, we predict that firms use less public debt when the results of elections are unexpected. We also explore the role of national governance (i.e., voice and accountability and political stability) as proxies for policy uncertainty. Policy uncertainty is higher in countries with weaker national governance. Therefore, firms located in countries with weak national governance suffering from severe uncertainty use more bank debt, which is less sensitive to information asymmetry. *H*₅: The positive relationship between national elections and bank debt ratio is stronger in closely contested elections and when national governance is weak.

3. Description of Data

3.1 Sample

To scrutinize the impact of political uncertainty on the choice of debt source, we first collect election data from the 2015 Database of Political Institutions (DPI) of the World Bank. We cross-check this with that in the Polity IV database.⁴ When information is missing from Polity IV, we use from other sources such as Elections around the World, Election Guide, and The CIA World Factbook. Next, we merge the election data with Capital IQ's debt choice data and Compustat's data on financial variables. We exclude financial firms to eliminate outliers. We end up with a sample of 219,999 firm-year observations from 35 countries for the period 1990–2015.

Tables 1 and 2 respectively illustrate the data sources for control variables and the descriptive statistics by country. We report the bank debt ratio and the number of elections by country. Our sample includes countries from different geographic regions to better allow us to analyze the effect of differences in political uncertainty between countries on the choice of debt source. As can be seen, the U.S.A. and Japan contribute the largest proportions of the sample. Indeed, 33.21% of our firm-year observations are contributed by the U.S.A. and 20.34% by Japan. Each of the remaining countries contributes less than 10%. Our sample firms experience an average of three election cycles. The average bank debt ratio for our sample firms ranges from 25% for the U.S.A. to 73% for Turkey.

[Please insert Tables 1 and 2 about here]

3.2 Variables

We use the ratio of bank debt over the total as a dependent variable $(BANK_LOAN/TOTAL_DEBT_{i,t})$. Table 3 reports descriptive statistics for the bank debt ratio. The average (median) for $BANK_LOAN/TOTAL_DEBT_{i,t}$ is equal to 0.423 (0.230).

We use national elections as a proxy for political uncertainty as our main test variable. Specifically, we use a dummy variable equal to one if the election is held between 60 days before the fiscal year-end and 274 days after the fiscal year-end and zero otherwise (*ELEC_DUMMY*).

⁴ Please refer to Julio and Yook (2012, page 51) for a description of Polity IV database.

The rationale behind this index is that political uncertainty increases in election years. Consistent with this view, Baker, Bloom, and Davis (2015) show that their economic-political uncertainty index takes a higher value during election years. Table 2 shows that Mexico has the lowest number of elections and the U.S.A. has the highest number of elections.

We control for several variables. First, we control for firm size using the logarithm of total assets in U.S.\$ ($SIZE_{i,t}$). Second, we use the ratio of long-term debt over total assets to control for leverage ($LEVERAGE_{i,t}$). Third, we control for Tobin's Q, calculated as the sum of the market value of equity and the book value of debt over the book value of assets ($Q_{i,t}$). Fourth, we control for firm profitability using the return on assets ratio ($ROA_{i,t}$). Fifth, we control for property, plant, and equipment over the total assets ratio ($TANGABILITY_{i,t}$). Sixth, we control for financial constraints using Altman's (1968) Z-score. Seventh, we control for information opacity using the number of analysts covering the firm ($ACOV_{i,t}$) and earnings quality ($AQ_{i,t}$) using the absolute value of discretionary accruals. Finally, we control for macroeconomic conditions using the logarithm of GDP per capita (LNGDPC) and GDP growth (GDPG). Table 3 provides descriptive statistics for the control variables. The data sources for the control variables are given in Appendix 1.

[Please insert Table 3 about here]

4. Empirical Results

4.1 National elections and the choice of debt sources

We estimate the following multivariate model to study the relationship between national elections and bank debt ratio:

$$BANK _LOAN / TOTAL _DEBT_{i,c,j,t} = ELEC _DUMMY_{c,t} + CONTROLS_{i,c,j,t} + \gamma_j + \lambda_c * \eta_t + \varepsilon_{i,c,j,t}$$
(1)

Where *BANK_LOAN/TOTAL_DEBT* is our dependent variable and *ELEC_DUMMY* is our proxy for political uncertainty. *CONTROLS* include the following control variables discussed in section 3.2. γ_i , λ_c , and γ_t are industry, country, and year dummies. $\mathcal{E}_{i,c,j,t}$ is the error term.

Table 4 reports the OLS results of estimating several specifications of equation (1). The results of our basic Model 1show that the coefficient for *ELEC_DUMMY* is positive and significant at the 1% level. This finding suggests that firms tend to rely more on bank debt during election years. Moving *ELEC_DUMMY* from 0 to 1 (i.e., from a non-election to an election year) increases the bank debt ratio by 0.012, which represents a 2.84% increase relative to the average of bank debt ratio. We can interpret this finding to imply that elections related to high political uncertainty

aggravate the information asymmetry problem. This leads to more capital rationing, and an increase in the public debt financing cost (e.g., Cao et al., 2013; Gao and Qi, 2013).

In Model 2, we re-estimate equation (1) using a Tobit model to address the issue related to the fact that *BANK_LOAN/TOTAL_DEBT* takes values between 0 and 1. The results illustrate that the coefficient for *ELEC_DUMMY* loads again positive and significant at the 1% level, confirming our earlier findings. In Model 3, we use a weighted least square model to address issues related to the unbalanced nature of our sample. The results depict that *ELEC_DUMMY* continues to load positive and significant. In Model 4, we cluster standard errors by country to address issues related to cross-country heterogeneities. The results reported in Model 4 show that our previous findings remain qualitatively unchanged.

We find that several control variables have significant coefficients. For instance, we find that the coefficients for *SIZE*, *LEVERAGE*, *Z-SCORE*, *ACOV*, *AQ* and *LNGDPC* are negative and significant, implying that larger, more levered firms and firms with fewer financial constraints, higher analyst coverage, higher earnings quality and from high-income countries use less bank debt.

[Please Insert Table 4 about here]

4.2 The impact of information opacity

In Table 5, we split our sample based on information opacity. We use two opacity proxies. First, we use the number of analysts following a firm (*ACOV*) as a proxy for information opacity. Analyst coverage is negatively related to information asymmetry costs. Since the literature suggests that information opacity increases the cost of public debt, we expect that firms with low analyst coverage use more bank debt during election years. Consistent with this view, we find, in Models 1 and 2 of Table 5, that the *ELEC_DUMMY* loads positive and significantly higher in the set of firms having low *ACOV*.

Second, we use the standard deviation of earnings (*STDEV_EARNINGS*) and research and development expenses divided by sales (*R&D/SALES*) as proxies of information opacity. A higher value for *STDEV_EARNINGS* indicates higher earnings volatility, hence higher information opacity. A higher value for *R&D/SALES* also coincides with higher information opacity. Indeed, the uncertainty about the success of research and development expenses is associated with higher

information opacity. The results reported in Models from 3 to 6 of Table 5 show that the coefficient for *ELEC_DUMMY* is statistically higher in the subsample of firms with high *STDEV_EARNINGS* and *R&D/SALES* when compared to the subsample of firms with low *STDEV_EARNINGS* and *R&D/SALES*, further supporting H₂.

[Please Insert Table 5 about here]

4.3 The effect of financial constraints

We split our sample based on three financial constraint proxies. A dummy variable, (DIV_POS) equal to one if the firms distribute dividends and zero otherwise, is our first proxy for financial constraints. Firms that do not pay dividends are more financially constrained. The results reported in Models 1 and 2 of Table 6 indicate the coefficient for *ELEC_DUMMY* is significantly higher when *DIV_POS*=0, supporting H₃. This finding suggests that financially constrained firms are more affected by information asymmetry problems associated with national elections, hence tend to use more bank than public debt. Firm size (SIZE) calculated as the natural logarithm of total assets in U.S. dollars is our second proxy for financial constraint. Small firms that are more financially constrained in constrast to large firms, hence are more likely to use bank debt. Consistent with this view, we find in Models 3 and 4 of Table 6 that the coefficient for ELEC_DUMMY is higher in the sub-sample of firms with small SIZE. Finally, we use firm profitability (ROA) calculated as net income divided by total assets as the third proxy for financial constraint. Less profitable firms are more financially constrained. The results reported in Models 5 and 6 of Table 6 illustrate that the coefficient for ELEC_DUMMY is higher in the low ROA subsample, consistent with H_3 . This implies that the positive association between national elections and bank debt ratio is more pronounced in less profitable firms (i.e., more financially constrained firms).

[Please Insert Table 6 about here]

4.4 The effect of legal protection

We use several proxies for legal protection. First, we use the legal system and property rights index (*LEGAL_SYSTEM*) from the Fraser Institute as a proxy for shareholder rights protection. A higher score indicates stronger shareholder protection rights. In Models 1 and 2 of Table 7, we observe the positive coefficient for *ELEC_DUMMY* is significantly higher in the subsample of firms with low *LEGAL_SYSTEM*, consistent with H_4 . These findings suggest that

firms located in countries with weak investor protection use more bank debt during periods of high political uncertainty.

Second, we use a proxy for labor protection, namely the Fraser Institute's Labor Market Regulation Index (*LMR*). Higher values of *LMR* indicate more protective labor regulations. Strong labor protection increases the incentives of managers to hide corporate resources (e.g., Hillary, 2006) to reduce the ability of employees to extract corporate resources in the form of high wages and highly favorable working conditions. Thus, under strong labor protection, firms use more public debt. Consistent with this view, we find in Models 3 and 4 of Table 7 that the coefficient for *ELEC_DUMMY* is positive and significant (at the 1% level) only in the low *LMR* subsample. Also, we find the positive coefficient for *ELEC_DUMMY* to be higher in the low *LMR* subsample, suggesting that countries with weaker labor regulations substitute away public debt toward bank debt. Overall, these findings support H_4 , suggesting that the positive relationship between national elections and the degree of reliance on bank debt is more pronounced in firms from countries with weak labor protection.

Third, we use the creditor rights index (*CR*) from Djankov, McLeish, and Shleifer (2007). This index ranges from 0 (weak creditor rights) to 4 (strong creditor rights). Strong creditor rights are associated with a lower cost of public debt (e.g., Boubakri and Ghouma, 2010) since they protect credit suppliers against borrower expropriation. Firms with low *CR* are more likely to use bank debt. We find the coefficient for *ELEC_DUMMY* in Models 5 and 6 of Table 7 to be positive and significant at the 1% level only in the low *CR* subsample, consistent with H_4 .

[Please Insert Table 7 about here]

4.5 The degree of political uncertainty and national governance

In Table 8, we use three proxies for the degree of political uncertainty. First, we use a dummy variable (*CLOSE*) equal to one if elections are closely contested and zero otherwise. The election outcome is less predictable in closely contested elections (e.g., Julio and Yook, 2012), which increases political uncertainty. A high degree of political uncertainty aggravates information asymmetry problems and leads to more capital rationing during election years, which is linked with a higher public debt cost. We report a positive and significant coefficient at the 1% level for *ELEC_DUMMY* in Models 1 and 2 of Table 8 only when *CLOSE* is equal to zero, supporting H_5 .

Second, we use the voice and accountability index (*VOICE*) from World Governance Indicators (*WGI*). The index measures how the citizens are able to select the government and the freedom of expression, association and media. A higher score indicates a high level of democracy and freedom. Stronger national governance reduces the need for monitoring from banks and mitigates agency as well as information asymmetry problems, which can facilitate the access of firms to public debt and reduces the degree of reliance on bank debt. In line with this argument, we find that the coefficient for *ELEC_DUMMY* in Models 3 and 4 of Table 8 is positive and significant at the 1% level only in the low *VOICE* subsample, consistent with *H*₅.

Third, we use an alternative proxy for national governance, namely the political stability index (*POLSTAB*) from WGI. The index assesses the political stability of the country and the risk of politically motivated violence including terrorism. A higher score indicates strong national governance. As can be seen in Models 5 and 6 of Table 8, the coefficient for *ELEC_DUMMY* loads positive and significant only in the subsample of firms with low *POLSTAB*, consistent with H_5 .

Additionally, we find that *ELEC_DUMMY* loads negative and significant at the 1% level in the high *VOICE* and *POLSTAB* and sub-samples (Models 3 and 5 of Table 8), suggesting that firms located in countries with strong national governance use less bank debt during the national elections period. Based on this, we can see national governance and bank debt as substitutes. In fact, shareholder need less bank monitoring to discipline managers when national governance is strong. Collectively, the results of this section imply that firms from countries where elections are strongly contested and national governance are weak use more bank debt during election years.

[Please Insert Table 8 about here]

4.6 Additional controls

We include additional variables to ensure that our results are not affected by potential omitted variables.⁵ First, we control for the political rights index (*POLRIGHTS*) from Freedom House (2014). A higher score is associated with tighter constraints on the government. It is more

⁵ For the sake of brevity, we do not report the correlation matrix of the time-invariant country variables. This is available upon request. Here, we find that some of time-invariant country variables are highly correlated. For instance, the coefficient of correlation between *CR* and *REV_ANTIDR* is equal 0.639 and the coefficient of correlation between *CORRUPTION* and *PUBLIC_ENF* is equal to -0.520. To alleviate the multicollinarity problem, we include the time-invariant country-level control variables one by one in Table 8.

difficult for the executive branch of the government to obtain approval from the legislative and judicial branches and pass the declared reforms under political systems with strong political constraints (i.e., higher checks and balances). Therefore, tight political constraints on the government are associated with higher political uncertainty. As can be observed in Model 1 of Table 9, *POLRIGHTS* loads positive and significant at the 1% level, suggesting that firms from countries with politically constrained governments use more bank debt. More importantly, for our purposes, we find that *ELEC_DUMMY* continues to load positive and significant.

Second, we control for corruption using the ICRG's assessment of corruption in a government (*CORRUPTION*). The index ranges from 0 to 6, with higher scores indicating higher levels of corruption in a country. We report (in Model 2 of Table 9) a positive and significant coefficient at the 1% level for *CORRUPTION*, suggesting that firms located in countries with a high level of corruption use bank debt more. This result implies that shareholders of firms from countries with highly corrupted governments prefer to rely on bank debt because banks have strong incentives and the ability to monitor managers. More interestingly, *ELEC_DUMMY* is still positive and significant at the 1% level.

Third, we control for legal institutions using the revised anti-director rights index (*REV_ANTIDR*) from Djankov, La Porta, Lopez- de – Silanes and Shleifer (2008). A higher index is associated with stronger shareholder rights protection. We also use the legal enforcement of contracts index (*PUBLIC_ENF*) from the Fraser Institute. A higher score for *PUBLIC_ENF* indicates more efficient enforcement contracts in the country. The results for these tests, as reported in Models 4 and 5 of Table 9, illustrate that *ELEC_DUMMY* is again positive and significant at the 1% level, supporting our previous findings. In Model 6, we include all the additional control variables in the same regression. Our main results remain qualitatively unchanged, suggesting that our findings are not affected by multicollinearity problems.

[Please Insert Table 9 about here]

4.7 Robustness checks

In this section, we perform several tests to ensure the robustness of our findings. First, we segregate our results for firms from countries where election timing is not fixed (e.g., Greece and Italy) and countries where election timing is not flexible. In countries with flexible timing elections (e.g., Greece and Italy), the government may be forced to step down due to financial/economic

issues that can also influence the decision to use bank debt. The results reported in Models 1 and 2 of Panel A in Table 10 depict that the coefficient for *ELEC_DUMMY* is positive and significant at the 1% level only for the sub-sample of firms from countries with fixed election timing. This suggests that the impact of political uncertainty on the bank debt ratio is more pronounced when election timing is fixed.

Second, we re-run our basic model separately for the high and low leverage sub-samples. The results are reported in Models 3 and 4 of Panel A in Table 10. We find that the coefficient for *ELEC_DUMMY* loads positive and significant at the 1% level in both sub-samples. This suggests that studying the impact of national elections on the level of debt (e.g., Colak et al., 2018) is different from studying the composition of debt. Examining debt choice is important because the total amount of debt may remain constant while the composition of debt (i.e., the allocation of the total amount of debt between the bank and public debt) may change.

Third, we appraise the effect of the 2008–09 financial crisis. Our results for the period preceding the crisis and the period following the crisis are reported in Models 5 and 6 of Panel A in Table 10. We find that *ELEC_DUMMY* is positive and significant at the 1% level for both the pre-crisis subsample and the post-crisis subsample. However, it is higher in the post-crisis period.

In Panel B of Table 10, we perform additional tests. First, we only use the sub-sample of large firms. The intuition is that small firms are not qualified to raise public debt. The results for this test are reported in Model 1 of Panel B in Table 10 show that *ELEC_DUMMY* loads positive and significant, suggesting that our findings are not driven by small firms. Second, we exclude countries that represent a large proportion of the observations of our sample (i.e., U.S.A., Japan, and India) to mitigate concerns that our results are driven by large countries. The results reported in Model 2 of Panel B in Table 10 show that the coefficient for *ELEC_DUMMY* loads positive and significant at the 1% level, reducing the concern that our earlier results are driven by the overrepresentation of firms from these countries. Third, we exclude observations with a zero bank debt over the total debt ratio to ensure that our findings are not affected by the inclusion of firms with neutral banks over the total debt ratio. The results of this test are reported in Model 3 of Panel B in Table 10. We find that the positive and significant for *ELEC_DUMMY* persists, again confirming our earlier findings.

[Please insert Table 10 about here]

Additionally, we use alternative uncertainty proxy. Indeed, we use general macroeconomic uncertainty as a measure of policy uncertainty instead of national elections. Specifically, we use the newly-based *EPU* index developed by Baker et al. (2016).⁶ It reflects the beliefs of the media on macroeconomic policy. The EPU index has limited coverage. Indeed, it is available for 18 countries, which reduces our sample size. The results reported in Model 1 of Table 11 show that the coefficient for *EPU* is positive and significant at the 1% level, confirming our earlier findings. We also use the ratio of bank debt over total assets (*BANK_DEBT/TOTAL_ASSETS*) as a proxy for the degree of reliance on bank debt instead of (*BANK_DEBT/TOTAL_DEBT*). The results, reported in Model 2 of Table 11, show that the coefficient for *ELEC_DUMMY* continues to load positive and significant at the 1% level. This suggests that our findings are not driven by a specific proxy for the degree of reliance on bank debt.

Finally, we argue that changes in the debt mix are driven by changes in the supply of bank loans and bonds. Specifically, we argue that national elections increase political uncertainty, which aggravates information asymmetry problems and increases capital rationing. Such an increase results in a switch from public debt to bank debt. However, changes in debt mix are driven by changes in bank loan and bond supply and also changes in the firm' s relative demand for loans and bonds. Therefore, changes in debt mix may be driven by changes in the bank loan and bond demand (i.e., the fact that firms did not apply for bank loans and bonds) and not to changes in the bank loan and bond supply (i.e., the fact that firms did not get new funding). To rule out this possibility, we exclude firms that did not receive new funding (i.e., either bank loan or bonds), in line with Becker and Ivashina (2014). We create a dummy variable equal to one if the firm issued bank debt in a given year and zero otherwise (BANK_DEBT_ISSUE). The results of the logit regression of BANK_DEBT_ISSUE on the election dummy and the control variables are reported in Model 3 of Table 11. As we can see, the coefficient for ELEC_DUMMY loads positive and significant at the 1% level, suggesting that national elections increase the likelihood that firms issue new bank debt. This finding implies that our results are driven by changes in the bank loan and bond supply and not by changes in the demand for bank loans and bonds.

[Please insert Table 11 about here]

⁶ We calculate EPU as the average of monthly country news based uncertainty indexes.

5. Conclusion

This study advances the capital markets focused literature dealing with the economic outcomes of political uncertainty (e.g., Boutchkova et al., 2012; Julio and Yook, 2012; Pastor and Veronesi, 2012, 2013; Durnev, 2014; Cao et al., 2015; Huang et al., 2015; Kelly et al., 2016; Colak et al., 2017; Kaviani et al., 2017; Li et al., 2018). We focus on how national elections impact an important financing decision, namely the composition of debt. Using a multinational sample of firms from 35 countries over the period 1990–2015, we show that firms substitute bank debt for public debt in election years. This result is consistent with the view that elections that are associated with a high degree of political uncertainty aggravating information asymmetry and thus leading firms to use less public debt during election years.

We find that the positive association between national elections and bank debt ratio is more pronounced in opaque firms, more financially constrained firms and firms from countries with weaker shareholder rights, labor protection and creditor rights. Furthermore, we discover the influence of national elections on the use of bank debt is more profound when elections are closely contested and in countries with weak national governance. Collectively, our paper contributes to the body of empirical studies on capital structure by providing novel evidence concerning the impact of national elections on debt structure. Prior literature focuses on firm leverage (e.g., Colak et al., 2018). We contribute to this literature by studying the composition of debt instead of only examining debt leverage. This contribution is important because the composition of debt may vary, while the total amount of debt remains constant (Rauh and Sufi, 2010). We also add to the growing body of evidence on the effect of policy on financial markets by focusing on an important channel through which policy risk may affect capital markets, namely debt structure.

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Appendix

Table 1: Definitions and data Sources

Variable	Description	Source		
BANK_LOAN/TOTAL_DEBT	The ratio of bank debt over total debt	Capital IQ		
ELEC_DUMMY	A dummy variable equal to one if the election is held in the period between 60 days before fiscal year-end and 274 days after the fiscal year-end, in line with Julio and Yook (2012).	The Database of Political Institutions		
SIZE	The natural logarithm of total assets in U.S. dollars.	Authors' calculation		
LEVERAGE	Long-term debt divided by total assets.	Authors' calculation		
Q	Total assets less the book value of equity divided by the market value of equity over total assets.	Authors' calculation		
ROA	Net income divided by total assets.	Authors' calculation		
TANGABILITY	Property, plant, and equipment net divided by total assets.	Authors' calculation		
Z_SCORE	A dummy variable equal to one if Altman's (1968) Z-score is different from zero.	Authors' calculation		
ACOV	The logarithm of one plus analyst coverage.	I/B/E/S		
AQ	The absolute value of discretionary accruals.	Authors' calculation		
LNGDPC	The logarithm of GDP per capita.	WDI		
GDPG	GDP growth.	WDI		
STDEV_EARNINGS	The standard deviation of earnings per share.	Authors' calculation		
R&D/SALES	Research and development expenses divided by total sales.	Authors' calculation		
DIV_POS	A dummy variable equal to one if the firms distributes dividends and zero otherwise.	Authors' calculation		
LEGAL_SYSTEM	Legal system and property rights index.	Fraser Institute		
LMR	Labor market regulations Index.	Fraser Institute		

CR	An index of creditor rights developed by Djankov, McLeish, and Schleifer (2007).	Djankov et al. (2007)
CLOSE	A dummy variable equal to one if elections are closely contested and zero otherwise.	Authors' calculation
VOICE	The voice and accountability index.	WGI
POLSTAB	The political stability index.	WGI
POLRIGHTS	The political rights index.	Freedom House (2014)
CORRUPTION	The corruption in a government index.	ICRG
REV_ANTIDR	The revised anti-directors index.	Djankov et al. (2008)
PUBLIC_ENF	The legal enforcement of contracts index.	Fraser Institute
EPU	The average of monthly new-based policy uncertainty indexes.	Baker et al. (2016)

Table 2: Descriptive Statistics by Country

Country	Number of	Number of	BANK_DEBT/TOTAL_DEBT
	Elections	Observations	
Australia	7	6957	0.52
Austria	5	839	0.51
Belgium	6	1202	0.45
Brazil	2	1606	0.63
Colombia	7	181	0.45
Denmark	6	1408	0.58
Finland	6	1586	0.54
France	4	7562	0.46
Germany	1	6366	0.53
Greece	7	2220	0.53
India	4	15654	0.67
Indonesia	5	2917	0.52
Ireland	2	382	0.50
Israel	8	1417	0.60
Italy	6	2198	0.60
Japan	9	44742	0.45
Kenya	5	200	0.69
Mexico	5	725	0.45
Netherlands	7	1453	0.46
New Zealand	6	854	0.58
Norway	3	1797	0.49
Peru	2	500	0.54
Philippines	6	1061	0.59
Poland	5	2495	0.63
Portugal	10	593	0.44
Singapore	5	5606	0.61
South Korea	3	8230	0.27
Spain	5	1455	0.51

This table presents the distribution of the number of observations, bank debt ratio, and the number of elections, by country. The full sample comprises 219,999 firm-year observations from 35 countries for the period 1990–2015.

Sri Lanka	5	1287	0.70
Sweden	6	2922	0.59
Switzerland	9	2337	0.44
Thailand	5	4557	0.60
Turkey	7	1432	0.73
U.K.	4	12202	0.48
U.S.A.	5	73056	0.25
Total	188	219,999	

Table 3: Descriptive Statistics

This table presents the descriptive statistics for our variables. Our sample includes 219,999 firmyear observations from 35 countries for the period 1990–2015.

Variable	Ν	Mean	Median	Standard deviation	Q1	Q3
BANK_DEBT/TOTAL_DEBT _t	219,999	0.423	0.230	0.440	0.000	0.950
$ELEC_DUMMY_t$	219,999	0.262	0.000	0.440	0.000	1.000
$SIZE_t$	219,999	5.616	5.504	2.132	4.186	6.916
$LEVERAGE_t$	219,999	0.256	0.234	0.184	0.108	0.371
Q_t	219,999	1.534	1.152	1.543	0.916	1.614
ROA_t	219,999	0.078	0.090	0.118	0.043	0.140
$TANGABILITY_t$	219,999	0.590	0.542	0.380	0.281	0.845
Z_SCORE_t	219,999	0.229	0.000	0.420	0.000	0.000
ACOV	219,999	2.328	0.000	4.334	0.000	3.000
AQ	219,999	0.180	0.079	0.305	0.033	0.183
LNGDPC	219,999	10.098	10.495	1.098	10.146	10.699
GDPG	219,999	0.026	0.025	0.028	0.014	0.039

Table 4: Main Evidence

This table presents regression results of the impact of political uncertainty on the choice of debt source. Our sample comprises of 219,999 firm-year observations from 35 countries for the period 1990–2015. We include industry, year, and country dummies in all models. Robust standard errors are clustered at the firm level. The t-statistic values are reported in the parentheses below the corresponding coefficient. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. Please refer to Table 1 for a description of the data sources and variables definitions. The t-statistic values are reported in the parentheses below the corresponding coefficient.

	Basic	Tobit	WLS	Clustering by
Variable	Model	Model	regression	Country
	(1)	(2)	(3)	(4)
$ELEC_DUMMY_t$	0.012***	0.019***	0.012***	0.019**
	(9.114)	(6.772)	(6.288)	(2.655)
$SIZE_t$	-0.014***	-0.015***	-0.013***	-0.013***
	(-14.555)	(-7.546)	(-31.905)	(-3.045)
LEVERAGE _t	-0.000	-0.099***	0.001	-0.015
	(-0.017)	(-5.203)	(0.114)	(-0.814)
Q_t	-0.002***	-0.006***	-0.003***	-0.004
	(-2.939)	(-2.749)	(-5.549)	(-1.371)
ROA_t	0.189***	0.415***	0.184***	0.197***
	(16.255)	(14.280)	(24.744)	(7.295)
$TANGABILITY_t$	0.009**	0.013	0.013***	0.015*
	(2.089)	(1.461)	(6.126)	(1.818)
Z_SCORE_t	-0.008**	-0.013*	-0.010***	-0.018**
	(-2.483)	(-1.905)	(-4.481)	(-2.217)
$ACOV_t$	-0.005***	-0.011***	-0.005***	-0.006***
	(-12.209)	(-12.862)	(-26.166)	(-3.461)
AQ_t	-0.019***	-0.030***	-0.020***	-0.017***
	(-6.442)	(-4.943)	(-7.371)	(-4.786)
LNGDPC _t	-0.158***	-0.377***	-0.159***	-0.058***
	(-23.832)	(-22.199)	(-35.605)	(-3.059)
$GDPG_t$	0.826***	0.462***	0.818***	0.502
	(18.265)	(4.174)	(20.055)	(0.757)
Intercept	1.662***	1.832***	1.312***	0.587***
	(24.903)	(7.270)	(39.750)	(3.046)
Industry FE	YES	YES	YES	YES
Country FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Ν	219,999	219,999	219,999	219,999
R-squared	0.428		0.428	0.400
Pseudo R ² /Adjusted		0.332		

Table 5: Impact of Information Opacity

This table presents cross-sectional tests based on information opacity proxies. Our sample comprises of 219,999 firm-year observations from 35 countries for the period 1990–2015. We include industry, year, and country dummies in all models. Robust standard errors are clustered at the firm level. The t-statistic values are reported in the parentheses below the corresponding coefficient. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. Please refer to Table 1 for a description of the data sources and variables definitions. The t-statistic values are reported in the parentheses below the corresponding coefficient.

	AC	COV	STDEV_E	ARNINGS	R&D/	SALES
Variable	High	Low	High	Low	High	Low
	(1)	(2)	(3)	(4)	(5)	(6)
$ELEC_DUMMY_t$	0.021***	0.025***	0.017***	0.003	0.018***	0.007***
	(9.300)	(13.173)	(8.038)	(1.441)	(8.453)	(3.767)
$SIZE_t$	-0.015***	-0.006***	-0.009***	-0.020***	-0.011***	-0.015***
	(-9.706)	(-5.685)	(-6.097)	(-13.293)	(-8.199)	(-12.247)
$LEVERAGE_t$	-0.031**	-0.009	-0.016	0.008	-0.025*	0.014
	(-2.314)	(-0.824)	(-1.300)	(0.556)	(-1.901)	(1.225)
Q_t	0.000	-0.007***	0.000	-0.005***	-0.000	-0.005***
	(0.150)	(-6.603)	(0.038)	(-3.911)	(-0.142)	(-3.543)
ROA_t	0.153***	0.172***	0.080***	0.232***	0.152***	0.213***
	(8.417)	(11.552)	(3.257)	(14.607)	(9.938)	(12.160)
$TANGABILITY_t$	0.026***	0.024***	0.017***	-0.004	0.015**	-0.001
	(3.935)	(4.433)	(2.848)	(-0.638)	(2.405)	(-0.148)
Z_SCORE_t	-0.011**	-0.031***	-0.004	-0.013**	-0.007	-0.008*
	(-2.074)	(-7.019)	(-0.921)	(-2.264)	(-1.477)	(-1.779)
$ACOV_t$			-0.004***	-0.005***	-0.006***	-0.003***
			(-7.084)	(-9.344)	(-10.633)	(-6.066)
AQ_t	-0.025***	-0.022***	-0.021***	-0.018***	-0.015***	-0.020***
	(-5.005)	(-5.812)	(-4.340)	(-4.120)	(-3.397)	(-5.101)

LNGDPC _t	-0.031***	-0.029***	-0.178***	-0.081***	-0.204***	-0.113***	
	(-9.871)	(-15.950)	(-19.799)	(-5.372)	(-18.824)	(-12.707)	
$GDPG_t$	0.145	-0.186***	0.644***	0.858***	0.741***	0.730***	
	(1.613)	(-2.720)	(10.172)	(10.561)	(9.143)	(13.313)	
Intercept	0.575***	0.368***	1.817***	0.962***	2.157***	1.194***	
	(17.836)	(17.931)	(18.140)	(6.479)	(19.564)	(13.504)	
Difference test for coefficients	15.1	7***	9.9	9.93***		7.95**	
Industry FE	YES	YES	YES	YES	YES	YES	
Country FE	YES	YES	YES	YES	YES	YES	
Year FE	YES	YES	YES	YES	YES	YES	
Ν	97,431	122,568	92,563	92,522	98,354	121,645	
R-squared	0.418	0.371	0.486	0.393	0.456	0.409	

Table 6: Effect of Financial Constraints

This table presents cross-sectional tests based on financial constraints proxies. Our sample comprises of 219,999 firm-year observations from 35 countries for the period 1990–2015. We include industry, year, and country dummies in all models. Robust standard errors are clustered at the firm level. The t-statistic values are reported in the parentheses below the corresponding coefficient. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. Please refer to Table 1 for a description of the data sources and variables definitions. The t-statistic values are reported in the parentheses below the corresponding coefficient.

	DIV	_POS	SI	ZE	PROFIT	ABILITY
Variable	1	0	High	Low	High	Low
	(1)	(2)	(3)	(4)	(5)	(6)
$ELEC_DUMMY_t$	0.038***	0.042***	0.012**	0.036***	0.010***	0.015***
	(5.998)	(6.679)	(2.054)	(5.581)	(4.841)	(6.982)
$SIZE_t$	-0.018***	-0.013***	-0.036***	0.012***	-0.021***	-0.007***
	(-13.416)	(-9.876)	(-19.928)	(6.079)	(-17.494)	(-5.435)
$EVERAGE_t$	-0.003	-0.039***	-0.053***	0.014	0.012	-0.020*
	(-0.211)	(-3.307)	(-3.835)	(1.192)	(1.001)	(-1.883)
Q_t	-0.003*	-0.008***	-0.001	-0.005***	0.000	-0.002*
	(-1.788)	(-7.373)	(-0.747)	(-4.916)	(0.444)	(-1.646)
ROA_t	0.215***	0.186***	0.101***	0.158***	-0.061*	0.186***
	(9.292)	(13.482)	(3.298)	(11.877)	(-1.782)	(11.911)
$CANGABILITY_t$	-0.013**	0.000	-0.017**	0.001	0.010*	0.012**
	(-2.165)	(0.052)	(-2.507)	(0.112)	(1.756)	(2.416)
L_SCORE_t	-0.011**	-0.006	0.009*	-0.020***	-0.019***	-0.004
	(-2.343)	(-1.217)	(1.818)	(-4.175)	(-3.381)	(-0.884)
COV_t	-0.005***	-0.005***	-0.005***	-0.007***	-0.004***	-0.006***
	(-10.852)	(-8.813)	(-10.676)	(-5.409)	(-8.190)	(-9.454)
Q_t	0.046***	0.012***	0.049***	0.020***	-0.018***	-0.014***
	(9.503)	(2.950)	(9.382)	(5.172)	(-4.122)	(-3.527)

LNGDPC _t	-0.033***	-0.019***	-0.034***	-0.036***	-0.082***	-0.224***	
	(-9.415)	(-5.729)	(-7.535)	(-11.351)	(-8.240)	(-25.942)	
$GDPG_t$	-1.671***	-1.108***	-2.211***	-1.188***	0.769***	0.901***	
	(-10.513)	(-8.413)	(-15.019)	(-8.508)	(11.457)	(13.841)	
Intercept	0.427***	0.257***	0.639***	0.299***	1.023***	2.234***	
	(10.710)	(6.565)	(12.679)	(8.056)	(10.312)	(25.660)	
Difference test for coefficients	7.24	4***	6.5	6.59***		13.45***	
Industry FE	YES	YES	YES	YES	YES	YES	
Country FE	YES	YES	YES	YES	YES	YES	
Year FE	YES	YES	YES	YES	YES	YES	
N	114,876	105,123	110,000	109,999	110,000	109,999	
R-squared	0.449	0.296	0.404	0.348	0.439	0.426	

Table 7: Role of Legal Protection

This table presents cross-sectional tests based on legal variables. Our sample comprises of 219,999 firm-year observations from 35 countries for the period 1990–2015. We include industry, year, and country dummies in all models. Robust standard errors are clustered at the firm level. The t-statistic values are reported in the parentheses below the corresponding coefficient. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. Please refer to Table 1 for a description of the data sources and variables definitions. The t-statistic values are reported in the parentheses below the corresponding coefficient.

	LEGAL_SYS	LEGAL_SYSTEM			CR	
Variable	High	Low	High	Low	High	Low
	(1)	(2)	(3)	(4)	(5)	(6)
ELEC_DUMMY _t	0.015***	0.029***	0.006***	0.022***	-0.028***	0.017***
	(8.219)	(11.568)	(3.375)	(9.599)	(-8.998)	(10.663)
$SIZE_t$	-0.008***	-0.015***	-0.012***	-0.011***	-0.013***	-0.014***
	(-7.885)	(-10.778)	(-8.955)	(-8.219)	(-5.611)	(-13.325)
LEVERAGEt	-0.015	0.001	-0.001	-0.002	0.039*	-0.012
	(-1.624)	(0.097)	(-0.063)	(-0.188)	(1.871)	(-1.234)
Q_t	0.000	-0.008***	-0.001	-0.004***	-0.008***	-0.002**
	(0.083)	(-4.693)	(-1.245)	(-3.207)	(-3.308)	(-2.019)
ROA_t	0.179***	0.203***	0.205***	0.150***	0.227***	0.180***
	(14.740)	(9.247)	(14.252)	(8.384)	(8.882)	(13.880)
$TANGABILITY_t$	0.008	0.020***	0.005	0.011*	-0.002	0.013***
	(1.637)	(3.275)	(0.983)	(1.720)	(-0.248)	(2.727)
Z_SCORE_t	-0.013***	-0.008	-0.012***	-0.002	0.009	-0.013***
	(-3.283)	(-1.563)	(-2.691)	(-0.413)	(1.219)	(-3.473)
$ACOV_t$	-0.003***	-0.008***	-0.007***	-0.001	0.002*	-0.006***
	(-7.757)	(-12.567)	(-13.622)	(-1.583)	(1.738)	(-13.146)
AQ_t	-0.021***	-0.015***	-0.012***	-0.020***	-0.035***	-0.015***
	(-5.256)	(-3.468)	(-3.083)	(-4.509)	(-5.340)	(-4.470)

LNGDPC _t	-0.009***	0.005**	-0.164***	0.012	-0.055**	-0.191***
	(-3.552)	(1.976)	(-17.006)	(0.890)	(-2.485)	(-25.428)
$GDPG_t$	0.156***	0.283***	1.548***	0.123*	0.540***	1.033***
	(2.783)	(3.017)	(27.240)	(1.689)	(6.342)	(18.470)
Intercept	0.192***	0.024	1.486***	0.040	0.523**	2.019***
	(7.171)	(0.610)	(15.634)	(0.314)	(2.433)	(25.927)
Difference test for coefficients	11.85***	*	18.07***		14.85**	
Industry FE	YES	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Ν	128,026	91,973	129,927	90,072	122,773	97,226
R-squared	0.497	0.216	0.473	0.384	0.418	0.343

Table 8: Degree of Political Uncertainty

This table presents cross-sectional tests based on political uncertainty proxies. Our sample comprises of 219,999 firm-year observations from 35 countries for the period 1990–2015. We include industry, year, and country dummies in all models. Robust standard errors are clustered at the firm level. The t-statistic values are reported in the parentheses below the corresponding coefficient. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. Please refer to Table 1 for a description of the data sources and variables definitions. The t-statistic values are reported in the parentheses below the corresponding coefficient.

	CLOSE		VOICE		POLSTA	В
Variable	1	0	High	Low	High	Low
	(1)	(2)	(3)	(4)	(5)	(6)
ELEC_DUMMY _t	-0.001	0.012***	-0.008***	0.029***	-0.015***	0.005**
	(-0.549)	(6.094)	(-3.455)	(11.579)	(-5.884)	(1.902)
$SIZE_t$	-0.012***	-0.011***	-0.025***	-0.005***	-0.008***	-0.012***
	(-10.602)	(-8.652)	(-16.710)	(-3.725)	(-5.716)	(-7.481)
$LEVERAGE_t$	-0.011	0.016	-0.002	-0.012	0.004	-0.044***
	(-1.048)	(1.388)	(-0.104)	(-1.002)	(0.348)	(-3.035)
Q_t	-0.001	-0.006***	-0.006***	-0.012***	-0.007***	-0.005***
	(-1.159)	(-4.718)	(-4.284)	(-6.759)	(-5.177)	(-3.487)
ROA_t	0.172***	0.188***	0.304***	0.142***	0.138***	0.273***
	(12.717)	(10.682)	(18.063)	(6.279)	(7.821)	(13.458)
$TANGABILITY_t$	0.004	0.009*	-0.009	0.012**	0.018***	-0.001
	(0.820)	(1.703)	(-1.280)	(2.075)	(3.069)	(-0.115)
Z_SCORE_t	-0.004	-0.009**	-0.012**	-0.002	-0.003	-0.020***
	(-1.057)	(-1.981)	(-1.962)	(-0.352)	(-0.572)	(-3.649)
$ACOV_t$	-0.005***	-0.004***	-0.009***	-0.007***	-0.005***	-0.012***
	(-11.988)	(-7.686)	(-16.180)	(-10.732)	(-9.167)	(-17.752)
AQ_t	-0.019***	-0.013***	-0.029***	-0.018***	-0.019***	-0.022***
	(-4.851)	(-3.013)	(-6.394)	(-4.040)	(-3.823)	(-5.018)
LNGDPC _t	-0.033***	-0.262***	-0.129***	-0.080***	-0.033***	-0.083***

	(-2.602)	(-27.157)	(-9.857)	(-19.396)	(-4.427)	(-33.694)
$GDPG_t$	0.443***	0.509***	-1.122***	1.116***	0.013	-1.534***
	(5.510)	(7.516)	(-6.579)	(15.011)	(0.141)	(-15.241)
Intercept	0.533***	2.590***	1.511***	0.715***	0.403***	0.861***
	(4.116)	(26.946)	(11.239)	(17.210)	(5.146)	(30.273)
Difference test for coefficients	11.06***	*	24.64**	*	18.20***	ŧ.
Industry FE	YES	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Ν	110,159	109,840	87,419	89,853	86,838	90,434
R-squared	0.451	0.397	0.275	0.331	0.433	0.182

Table 9: Additional Controls

This table presents our regression results while controlling for additional variables. Our sample comprises of 219,999 firm-year observations from 35 countries for the period 1990–2015. We include industry, year, and country dummies in all models. Robust standard errors are clustered at the firm level. The t-statistic values are reported in the parentheses below the corresponding coefficient. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. Please refer to Table 1 for a description of the data sources and variables definitions. The t-statistic values are reported in the parentheses below the corresponding coefficient.

Variable	POLRIGHTS	CORRUPTION	CR	REV_ANTIDR	PUBLIC_ENF	ALL
Variable	(1)	(2)	(3)	(4)	(5)	(6)
ELEC_DUMMY _t	0.012***	0.011***	0.012***	0.013***	0.023***	0.022***
	(9.085)	(8.550)	(9.169)	(9.448)	(14.538)	(13.885)
$SIZE_t$	-0.014***	-0.014***	-0.014***	-0.014***	-0.013***	-0.013***
	(-14.544)	(-14.352)	(-14.574)	(-14.631)	(-10.724)	(-10.763)
LEVERAGE _t	0.000	0.002	0.000	0.001	-0.009	-0.005
	(0.008)	(0.272)	(0.024)	(0.112)	(-0.813)	(-0.422)
Q_t	-0.002***	-0.002***	-0.003***	-0.003***	-0.004***	-0.004***
	(-2.932)	(-2.898)	(-2.952)	(-3.012)	(-3.393)	(-3.437)
ROA_t	0.189***	0.189***	0.189***	0.189***	0.223***	0.225***
	(16.242)	(16.246)	(16.255)	(16.239)	(15.190)	(15.215)
$TANGABILITY_t$	0.009**	0.008*	0.009**	0.009**	0.010*	0.009*
	(2.076)	(1.853)	(2.066)	(2.111)	(1.912)	(1.714)
Z_SCORE_t	-0.008**	-0.009***	-0.008**	-0.009**	-0.012***	-0.013***
	(-2.500)	(-2.688)	(-2.501)	(-2.545)	(-2.864)	(-3.074)
$ACOV_t$	-0.005***	-0.005***	-0.005***	-0.005***	-0.007***	-0.007***
	(-12.202)	(-12.387)	(-12.197)	(-12.115)	(-13.531)	(-13.494)
AQ_t	-0.019***	-0.019***	-0.019***	-0.019***	-0.020***	-0.020***
	(-6.426)	(-6.453)	(-6.434)	(-6.424)	(-6.163)	(-6.133)
LNGDPCt	-0.158***	-0.157***	-0.159***	-0.163***	-0.139***	-0.145***
	(-23.843)	(-23.576)	(-23.845)	(-24.206)	(-15.486)	(-15.860)

$GDPG_t$	0.813***	0.968***	0.825***	0.822***	0.020	0.102
	(18.113)	(20.690)	(18.237)	(18.065)	(0.301)	(1.556)
$POLRIGHTS_t$	0.007***	(()	((1111)	0.009**
	(2.744)					(2.400)
CORRUPTION _t	(,)	0.018***				0.071***
		(8.931)				(2.781)
CR_t			0.045***			0.007**
			(8.519)			(2.486)
REV_ANTIDR_t				0.090***		-0.059
				(8.473)		(-1.154)
PUBLIC_ENF _t					-0.078***	-0.076***
					(-21.280)	(-21.172)
Intercept	1.615***	1.636***	1.528***	1.345***	2.077***	2.086***
	(23.518)	(24.447)	(22.365)	(16.991)	(21.411)	(19.571)
Industry FE	YES	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Ν	219,999	218,582	219,799	218,512	173,931	171,133
R-squared	0.428	0.431	0.428	0.427	0.265	0.267

Table 10: Robustness Results

This table presents regression results of robustness tests. This table presents cross-sectional tests based on legal variables. Our sample comprises of 219,999 firm-year observations from 35 countries for the period 1990–2015. We include industry, year, and country dummies in all models. Robust standard errors are clustered at the firm level. The t-statistic values are reported in the parentheses below the corresponding coefficient. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. Please refer to Table 1 for a description of the data sources and variables definitions. The t-statistic values are reported in the parentheses below the corresponding coefficient.

		Panel A: Sensit	ivity test			
	Tin	iing	Leve	erage	Pre- vs. Post-crisis	
Variable	Flexible	Fixed	High	Low	Per	riod
	(1)	(2)	(3)	(4)	(5)	(6)
$ELEC_DUMMY_t$	0.024***	-0.009***	0.014***	0.014***	0.018***	0.008***
	(12.716)	(-3.380)	(7.288)	(6.568)	(10.121)	(3.019)
$SIZE_t$	-0.005***	-0.016***	-0.013***	-0.012***	-0.013***	-0.011***
	(-4.214)	(-10.953)	(-11.637)	(-9.387)	(-10.774)	(-6.476)
EVERAGE _t	0.042***	-0.039***	-0.114***	0.261***	-0.010	0.000
	(3.616)	(-3.135)	(-8.486)	(9.845)	(-0.846)	(0.006)
Q_t	-0.008***	-0.001	-0.007***	-0.004***	0.001	-0.005***
	(-4.870)	(-0.882)	(-5.287)	(-3.268)	(0.601)	(-3.314)
OA_t	0.129***	0.210***	0.208***	0.204***	0.192***	0.149***
	(6.470)	(14.210)	(11.458)	(13.963)	(12.545)	(7.457)
ANGABILITY _t	0.009*	0.006	0.013**	-0.005	0.016***	0.004
	(1.677)	(0.845)	(2.239)	(-0.846)	(2.644)	(0.545)
L_{SCORE_t}	-0.015***	-0.004	0.003	-0.027***	-0.013***	-0.005
	(-3.554)	(-0.816)	(0.804)	(-3.672)	(-2.783)	(-0.946)
COV_t	-0.001	-0.007***	-0.007***	-0.008***	-0.004***	-0.005***
	(-1.025)	(-13.379)	(-13.565)	(-14.889)	(-9.505)	(-6.588)

AQ_t	-0.014***	-0.022***	-0.017***	-0.018***	-0.024***	-0.013***
	(-3.433)	(-5.221)	(-4.230)	(-4.193)	(-5.319)	(-2.879)
LNGDPC _t	-0.144***	-0.126***	-0.080***	-0.067***	-0.169***	-0.106***
	(-18.698)	(-7.970)	(-20.026)	(-14.930)	(-16.076)	(-7.835)
<i>GDPG</i> _t	0.147**	1.565***	0.820***	0.608***	0.844***	0.667***
	(2.422)	(18.213)	(12.834)	(6.955)	(12.913)	(7.850)
Intercept	1.392***	1.441***	0.868***	0.672***	1.757***	1.027***
	(17.914)	(9.201)	(21.227)	-14.27	(17.098)	(7.306)
Industry FE	YES	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Ν	115,703	104,296	109,999	110,000	111,344	72,420
R-squared	0.471	0.331	0.450	0.373	0.430	0.353
		Panel B: Alternat	ive samples			
	Η	Excluding	Excluding		Excluding firms wit	h
Variable		small			a zero bank	
variable		firms		debt ratio		
		(1)			(3)	
$ELEC_DUMMY_t$		0.012***	0.061***	0.008**		
		(6.921)	(11.453)		(1.951)	
$SIZE_t$		-0.031***	-0.023***		-0.041***	
		(-18.547)	(-18.389)		(-28.395)	
LEVERAGE _t		-0.041***	0.032**		-0.141***	
		(-3.188)	(2.264)		(-13.121)	
Q_t		0.001	-0.009***		-0.004***	
		(0.756)	(-5.718)		(-3.089)	
ROA_t		0.119***	0.162***		0.105***	
		(4.050)	(7.983)		(6.842)	
		· /	(

$TANGABILITY_t$	0.008	-0.004	-0.009*
	(1.309)	(-0.610)	(-1.772)
Z_SCORE_t	0.009*	-0.023***	0.008**
	(1.803)	(-4.360)	(2.011)
$ACOV_t$	-0.004***	-0.001	-0.006***
	(-9.661)	(-1.295)	(-10.084)
AQ_t	-0.015***	0.024***	0.001
	(-3.092)	(5.356)	(0.212)
LNGDPC _t	-0.229***	0.018***	0.006**
	(-22.645)	(6.185)	(2.316)
$GDPG_t$	0.809***	-1.572***	-0.087
	(11.905)	(-14.021)	(-0.903)
Intercept	2.531***	-0.081**	0.745***
	(24.197)	(-2.377)	(4.817)
Industry FE	YES	YES	YES
Country FE	YES	YES	YES
Year FE	YES	YES	YES
Ν	110,000	99,284	123,360
R-squared	0.450	0.319	0.163

Table 11: Alternative uncertainty and bank debt ratio proxies

This table presents regression results while using alternative proxies for political uncertainty and bank debt ratio. Our sample comprises of 219,999 firm-year observations from 35 countries for the period 1990–2015. We include industry, year, and country dummies in all models. Robust standard errors are clustered at the firm level. The t-statistic values are reported in the parentheses below the corresponding coefficient. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively. Please refer to Table 1 for a description of the data sources and variables definitions. The t-statistic values are reported in the parentheses below the corresponding coefficient.

	Alternative uncertainty proxy	Alternative bank debt ratio proxy		
ariable	EPU	BANK_DEBT/TOTAL_ASSETS	BANK_DEBT_ISSUE	
	(1)	(2)	(3)	
PU_t	0.001***			
	(3.423)			
LEC_DUMMY_t		0.003***	0.048***	
		(7.543)	(2.735)	
IZE_t	-0.015***	-0.004***	0.049***	
	(-14.092)	(-12.385)	(8.854)	
$EVERAGE_t$	-0.004	0.394***	0.789***	
	(-0.479)	(89.871)	(14.099)	
t	-0.004***	0.001**	-0.024**	
	(-4.930)	(2.348)	(-2.565)	
OA_t	0.200***	0.035***	0.346***	
	(16.274)	(9.589)	(3.655)	
$ANGABILITY_t$	-0.001	0.009***	0.118***	
	(-0.312)	(6.342)	(4.510)	
$S_{SCORE_{t}}$	-0.008**	0.000	0.030	
	(-2.070)	(0.177)	(1.198)	
COV_t	-0.007***	-0.001***	0.012***	
	(-16.266)	(-8.090)	(4.947)	
Q_t	-0.018***	-0.005***	0.037	

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	(-5.679)	(-4.892)	(1.361)
$LNGDPC_t$	-0.305***	-0.038***	0.480***
	(-39.373)	(-13.875)	(13.642)
$GDPG_t$	1.076***	0.312***	-0.026
	(16.309)	(16.993)	(-0.073)
Intercept	3.082***	0.293***	-6.635***
	(39.211)	(10.626)	(-17.247)
Industry FE	YES	YES	YES
Country FE	YES	YES	YES
Year FE	YES	YES	
Ν	189,701	219,999	99,245
R-squared	0.429	0.470	0.081