Political Uncertainty and Private Debt Contracting: Evidence from the U.S. Gubernatorial Elections

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Abstract

We investigate the effect of political uncertainty on private loan contracts by exploiting the U.S. gubernatorial elections as a source of variation in uncertainty. Our results show that lenders are more likely to impose financial covenants and state-contingent pricing grids on borrowers headquartered in the states in election years. The effect is more pronounced for performance-based pricing grids and covenants, consistent with lenders' intention to monitor borrowers more closely. Using the term limit status of incumbent governors as the instrument for closely-contested elections, we support the causal effect of political uncertainty on loan contracting outcomes. Moreover, although a direct effect of elections on loan spread appears absent, interest rate-increasing pricing grids become more common than rate-decreasing pricing grids and the substitution between loan spreads and pricing grids becomes unfavorable for borrowers. Overall our evidence suggests that the increased uncertainty during gubernatorial election years, albeit transitory, has significant impacts on debt contracts and the cost of private debt capital.

Keywords: political uncertainty, gubernatorial election, debt contract

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1. Introduction

How do political frictions play out in capital markets and corporate decisions? The question has received increasing academic interests and media attention. The burgeoning literature assessing such an impact of political uncertainty documents the evidence of its link with corporate investment activities (Julio and Yook, 2012; Gulen and Ion, 2016; Jens, 2017), capital structure (Colak et al., 2018), asset prices and risk premia (Pástor and Veronesi, 2012, 2013), IPO activity (Colak et al., 2017), and the prices of corporate bonds (Waisman et al., 2015) and municipal bonds (Gao et al., 2019). While this strand of literature suggests that both firms and investors adjust their strategies to mitigate risks associated with changes in political leadership and economic policies, little is known about how private lenders assess and deal with risks of this kind. Given the unique features of private debt contracting, as well as the growing significance of private loans as a source of capital for many firms, we believe it is important to fill this void in the literature.

By exploiting gubernatorial elections as an exogenous source of variation in political uncertainty, we investigate how the uncertainty affects private debt contracts—consisting largely of syndicated bank loans in our sample. Our study highlights, among others, the role of debt contracting mechanisms in alleviating the uncertainty, particularly the one that is transitory. The main economic insight derives in the literature examining how debt contracts are designed to deal with unanticipated changes in the future circumstances and asymmetric information problems (Gârleanu and Zwiebel, 2009; Roberts, 2015; Hollander and Verriest, 2016; Demerjian, 2017). Do lenders require more maintenance covenants in gubernatorial-election years to ensure that timely monitoring and transfer of control rights, when necessary, can be implemented? Do lenders raise loan interest rates outright or are they, given the transitory nature of election-related uncertainty,

more likely to require that pricing be contingent upon the evolution of a borrower's economic fundamental? We aim to extend the literature by addressing these questions.

For the purpose of our study, using gubernatorial elections as a quasi-natural experiment offers inter alia two main advantages. First, as election dates are set by the state laws and thus predetermined, gubernatorial elections are exogenous to firm-specific events or decisions. Like in prior studies (see, e.g., Colak et al., 2017; Boone et al., 2017), our identification strategy thus mitigates potential endogeneity concern—often associated with index-based measures of uncertainty—that corporate outcomes might drive increases in uncertainty, changes in economic policies, or any political dynamics. Second, the staggered nature of the gubernatorial election cycle—i.e., election years varying across different states—allows us to exploit cross-sectional variation in political uncertainty while differencing out other confounders such as macroeconomic effects. Therefore, gubernatorial election, compared with presidential election, offers a more desirable empirical setting with which reliable statistical inferences can be drawn (Colak et al., 2017; Dai and Ngo, 2018). During our sample period of 1990–2014, there are 350 gubernatorial elections, whereas there are only six presidential elections. It is also important to note that a governor of each of 50 states possesses a substantial executive power overseeing a wide array of issues, such as state budgets, legislative proposals, and the implementation of state laws.

Using a large sample of U.S. syndicated loans, we document that gubernatorial elections have significant impacts on lenders' monitoring demand and their demand for state-contingent loan pricing. Our evidence yields important implications for the firms' costs of capital associated with private loans. First, we show that in a gubernatorial election year, lenders are more likely to require maintenance covenants in loans extended to firms headquartered in that state. The number of covenants increases by 0.05 (5% with respect to the sample median) in election years, compared with

off-election years. To gauge the lenders' monitoring demand in conjunction with political uncertainty, we focus our analysis on financial covenants. It is well-documented in the literature that financial covenants function as a tripwire, serving as an ex ante commitment to the renegotiation of a contract or the transfer of control rights from equity to debt (Demerjian, 2017; Hollander and Verriest, 2016; Prilmeier, 2017). Our results therefore suggest that in response to potential changes in political landscape, lenders increase their monitoring intensity as an attempt to ameliorate the uncertainty about borrowers' future economic circumstances.

Moreover, we document a nuanced yet positive effect of gubernatorial election on loan pricing. Given the positive effects on stock and bond risk premia of political uncertainty documented by previous studies (Pástor and Veronesi, 2012, 2013; Waisman et al., 2015; Gao et al., 2019), one would naturally expect private lenders to command higher interest rates in gubernatorial election years. However, applying higher rates altogether can be inefficient, because much of the uncertainty tied with election outcomes resolves once a new governor takes the office. Had lenders implemented such an outright increase across the board, they would undergo a surge of renegotiations in the years following elections. Along these lines, prior literature predicts that facing uncertainty, the contracting parties instead set a pricing schedule—referred to as performance pricing—conditioned on the measures of creditworthiness of borrowers (see, e.g., Asquith et al., 2005). Armstrong et al. (2010) and Demerjian (2017) show that performance pricing provisions help mitigate costly renegotiations.[1] Consistent with these insights, our evidence shows that gubernatorial election, although exerting little impact on loan spreads per se, does have a large positive effect on the likelihood that a loan contract includes performance pricing provisions. Since the realized

[1] In this sense, gubernatorial election is a desirable empirical setting to examine how private lenders, and specialized monitors like banks in particular, deal with transitory uncertainty.

changes in loan spreads are not observable, the direct effect on the borrowers' cost of capital is not quantifiable. However, a 3–5% increase in the likelihood of performance pricing provisions being included in a contract seems a sizable impact, enough to discourage firms' capital raising. It is important to note that our estimate is likely a lower bound, because we do not observe loan contracts that would have required performance-pricing provisions but had not reached an agreement. Our findings therefore indicate that gubernatorial elections have a significant pricing implication for private loan contracts.

To provide evidence corroborating our findings, we extend our analysis in several ways. By splitting covenants and pricing grids into two broad categories, namely, performance- and capital-based ones (Christensen and Nikolaev, 2012), we check which type of provisions lenders' focus is placed on. We show that during gubernatorial election years, performance-based covenants become more prevalent than do capital-based ones. Similarly, the increased likelihood of pricing grids is more pronounced in performance-based grids than capital-based and rating-based ones. These results taken together indicate that lenders, in response to increased political uncertainty, ex ante increase the demand for monitoring mechanisms.

To support the causal interpretation of our finding, we further ensure that the uncertainty about political decision-making is the main economic mechanism underlying the link between debt contracting outcomes and gubernatorial elections we observe. If our baseline premise is correct, less predictable elections—those that generate a greater level of uncertainty—are expected to increase further the likelihood that a loan contract includes maintenance covenants and performance pricing provisions. Using the term limit status of incumbent governors as the instrument for closely-contested elections, we find evidence consistent with our prediction.

Additionally, we provide further support to the pricing effect of election uncertainty by

investigating the direction of the interest rate adjustment in pricing grids and the substitution effect between pricing grids and loan spreads. Our results show that in gubernatorial election years, interest rate-increasing pricing grids (Increasing PGs) become more common than do rate-decreasing pricing grids (Decreasing PGs) in loan contracts. Moreover, an increase of loan spread associated with Decreasing PG—a positive relationship between the two—becomes more pronounced when the uncertainty rises in election years. Although it is difficult to quantify the direct pricing effect of the uncertainty, our results related to performance pricing, the direction of rate adjustment in pricing grids, and the substitution effect between pricing grids and loan spreads, together, suggest that the increased uncertainty during gubernatorial elections, albeit transitory, have an adverse impact on firms' cost of private debt capital.

Our study contributes to the literature by extending two broad strands of research. First, a large volume of research concerned with private debt contract designs have shown that loan covenants mitigate the risks associated with information asymmetry and uncertainty. Recent studies in this line of literature find a strong information-driven motive in the lenders' use of covenants (see, e.g., Hollander and Verriest, 2016; Prilmeier, 2017). Our paper pursues the first systematic investigation into how private lenders assess gubernatorial elections and use different contractual arrangements in dealing with transitory uncertainty related to elections. In a study closely related to ours, Demerjian (2017) documents a positive link between uncertainty and debt covenants. However, our paper differs from his in that we exploit exogenous variation in uncertainty, rather than the borrower-level or industry-level measures of uncertainty.

Second, the literature examining the impact of political uncertainty on capital markets and corporate outcomes has documented that during the high uncertainty periods, corporate investment activities shrink (Gulen and Ion, 2016; Jens, 2017), the number of IPOs declines (Colak et al.,

2017), and the risk premia increase (Pástor and Veronesi, 2012, 2013; Waisman et al., 2015). Our evidence complements this literature by documenting a strong impact of political uncertainty on private loans, an increasingly important source of capital for many firms. Given that loan spreads per se are largely unaffected, a casual intuition might suggest that gubernatorial elections have little to do with the cost of private debt capital. However, by focusing our analysis on state-contingent pricing, we uncover implicit yet important effects on loan pricing that can go unnoticed.

The remainder of this paper proceeds as follows. Section 2 develops our main predictions. Section 3 describes our data and the empirical model. Section 4 reports our main empirical results. Section 5 presents additional analyses of the pricing effects. Section 6 concludes.

2. Related Literature and the Main Predictions

The literature assessing the impact of political frictions on corporate outcomes is fast-growing. Changes in government policies or political leadership lead to uncertainty about economic environment in which firms operate. Real option theory suggests that firms concerned with uncertainty find it optimal to delay their irreversible investment and wait until the uncertainty resolves (Bernanke, 1983; Dixit and Pindyck, 1994). Recent studies provide empirical support to this prediction in conjunction with economic policy uncertainty (Julio and Yook, 2012; Gulen and Ion, 2016; Jens, 2017).

Moreover, prior literature suggests that when political uncertainty rises, the costs of corporate bonds (Waisman et al. 2015) and municipal bonds (Gao et al. 2019) increase. Colak et al. (2017) document that IPO activities decrease during the state gubernatorial election periods. Using an international sample, Çolak et al. (2018) similarly show that political uncertainty raises financial intermediation costs, leading to slow adjustment speeds toward firms' optimal capital structure. In

a similar vein, Pástor and Veronesi (2012, 2013) show that when political uncertainty increases, asset prices decline and risk premia increase. Collectively, prior evidence suggests that both equity- and debt-capital-market investors command higher risk premia to protect themselves against political uncertainty.

The question as to how private debt contract design—optimally—responds to political uncertainty, however, has received little attention in the literature. Our study highlights, among others, the role played by debt contracting mechanisms that ameliorate uncertainty. Do lenders require more maintenance covenants in election years, compared with off-election years, to ensure that timely monitoring can be implemented? Do lenders raise loan interest rates outright or do they—given the costs associated with ex post renegotiation—make pricing contracted upon changes in a borrower's economic fundamental? We aim to contribute to the literature by addressing these questions.

It is a widely-held view in the literature that covenants in debt contracts play a role in protecting debtholders against equity's ex post opportunistic activities, which would otherwise unduly transfer wealth from debtholders to shareholders (Jensen and Meckling, 1976; Smith and Warner, 1979). The literature emphasizes two main roles of financial covenants. First, covenants provide lenders with a protection against the unforeseen states of economy in the presence of agency and information problems (Berlin and Mester 1992; Dessein, 2005). For example, Gârleanu and Zwiebel's (2009) model predicts that lenders are more likely to impose stricter conditions when information environment is opaque or the uncertainty about future state is high. Second, debt covenants give rise to a greater incentive for lenders to monitor their borrowers (Rajan and Winton, 1995; Park, 2000). Since it is prohibitively costly to write a complete contract, the state-contingent control allocation mitigates uncertainty and information asymmetry faced by lenders. The tripwire role

played by debt covenants (Dichev and Skinner, 2002) therefore allows lenders to take over the control of a borrowing firm if the firm undergoes financial distress.

In line with these arguments, prior empirical evidence supports the notion that debt covenants facilitate the allocation of control rights between debt and equity. Hollander and Verriest (2016) find a strong information-driven motive in the link between remote lenders and debt covenants. Prilmeier (2017) documents that borrower's relationship with lenders are positively correlated with covenant tightness because relationship between borrowers and lenders reduces information asymmetry concerns for lenders. Overall, previous evidence suggests that covenants in debt contracts mitigate agency problem and alleviate exogenous uncertainty for lenders.

Although not possessing fully independent sovereignty, each state of the U.S. does exercise certain functions of government. A governor, as a commander-in-chief, oversees and makes influences on a wide array of issues in her state, including state budgets, legislative proposals, and the implementation of state laws. Peltzman (1987) argues that presidents and governors have similar executive powers in appointment and budget making. Besley and Case (1995) show that gubernatorial election outcome affects economic policy choices because a newly elected governor can make changes to taxes, state and federal contracts, and wages. A gubernatorial election thus can bring about substantial uncertainty to the economic environment of a state in which firms are based and operate.

While the outcome of an election—and its economic consequences—is uncertain, the election cycle is known to everyone; that is, the increased uncertainty is anticipated by lenders, or any market participants. It is thus highly conceivable that lenders ex ante take this uncertainty into account. Theory suggests that lenders can mitigate the uncertainty about a borrowing firm by setting an ex ante rule that enables the transfer of control rights from equity to debt contingent on the

firm's economic fundamentals (Aghion and Bolton, 1992). It is well-documented that financial covenants function as a tripwire and thus a threshold for the control allocation (Christensen and Nikolaev, 2012). We therefore hypothesize that as the lenders' monitoring demand grows in election years, financial covenants are more likely included in loans extended to borrowers based in a state that is about to have a gubernatorial election.

Hypothesis 1: *The likelihood that a loan contract includes financial covenants is higher in gubernatorial election years than off-election years.*

Moreover, prior literature documents a positive effect on stock and bond risk premia of political uncertainty. On this ground, one could easily speculate that lenders would command higher interest rates for the syndicated loans closed in gubernatorial election years. Charging higher rates across the board, however, can cause substantial inefficiency, because much of the uncertainty associated with a state's gubernatorial election can resolve once a new governor takes the office. Given that the new information—as to the governor's policy stance and the state's economic outlook—becomes available shortly after the election concludes, a rational borrower would return to its lenders to lower the loan interest rate if the information received is favorable (Roberts, 2015; Roberts and Sufi, 2009). Were lenders and borrowers to deal with ex post renegotiations after each election, the costs would be nontrivial. Presumably the contracting parties would benefit from ex ante agreeing on a pricing schedule that is conditioned on the evolution of a borrowing firm's creditworthiness. As is well-documented in the literature, performance pricing is a common feature in debt contracts that enables a commitment to modifying loan interest rates on the basis of changes in a borrowing firm's financial performance, credit rating, or other similar measures (see, e.g., Asquith et al., 2005). A performance-pricing provision in a loan contract thus specifies a state-contingent pricing grid, a mapping between the loan spread schedule and a measure of the borrower

creditworthiness. As Armstrong et al. (2010) argue, in the presence of contracting frictions that make incomplete contracts unavoidable, performance pricing provisions help to reduce costly debt renegotiations that would otherwise occur too often. In a similar vein, Demerjian (2017) notes that ex ante negotiations are less costly than ex post renegotiations triggered by a default event, such as covenant violations. We therefore predict that while loan spreads are not materially affected, performance pricing provisions become more prevalent in gubernatorial election years.

Hypothesis 2: *The likelihood that a loan includes performance pricing terms is higher in gubernatorial election years than off-election years.*

3. Data and the Empirical Model

3.1 Data

To construct our sample, we begin by retrieving all syndicated loan contracts from the Thomson Reuters LPC's Dealscan database between 1990 and 2014. Our loan sample contains the information on all dollar-denominated loans extended to the U.S. borrowers. Following Christensen and Nikolaev (2012), we focus our analysis on the loan-package level by aggregating the facility information at the package level, because in most cases, financial covenants apply to all loan facilities in a package.[2] We then merge our loan sample with Compustat and CRSP files to obtain borrower characteristics.[3] Excluding financial firms (SIC from 6000 to 6999), we obtain 17,195

[2] As Berlin et al. (2019) document, a split-control-right arrangement has become popular in the later part of our sample period (i.e., 2010–2014). Under this arrangement, a loan package consists of revolving credits with maintenance covenants and term loans without covenants. The term-loan tranche participants—usually dispersed—therefore avoid getting involved in costly renegotiation process, although still benefiting from monitoring activities taken by revolving creditors. 34% of our baseline sample includes multiple facilities and our results are robust to filtering these loans out in our tests.

[3] We use the Dealscan-Compustat link table from Chava and Roberts (2008). The version we used contains the links updated through the end of 2017.

observations in our baseline sample. We extract the historical information on firms' headquarter locations from Bill McDonald's website, because Compustat only provides the most recent records.[4] The state-level data, such as real GDP, GDP per capita, are collected from the Bureau of Economic Analysis (BEA) Regional Economic Accounts database. State unemployment rates are extracted from Bureau of Labor Statistics.

We collect gubernatorial election data from Congressional Quarterly (CQ) Electronic Library. We prepare a dummy variable *Gubernatorial Election* (or *GE* in short) that equals one if a loan is issued to a firm headquartered in a state in which a gubernatorial election is held in that year, and zero otherwise. During our sample period from 1990 to 2014, there are 350 gubernatorial elections and six presidential elections. Table 1 reports the fraction of votes earned by the winner and the winning voting margins.

[Insert Table 1]

Panel A of Table 2 reports the summary statistics for the variables used in our baseline regressions. These statistics are in line with those reported in prior literature. The sample mean of the number of financial covenants is 2.3, very similar to the means reported by Demerjian (2017) and Prilmeier (2017). Approximately 69% of the loans in our sample have at least one performance-pricing provision, comparable to 55% reported by Ball et al (2008). The distribution of other loan-level variables in our sample is also similar to that of prior studies (see, e.g., Hasan et al., 2017). Like Hollander and Verriest (2016), we use the number of financial covenants (*Covenant Intensity*) in a loan package to measure lenders' monitoring demand. Following prior literature (e.g., Nini et

[4] The EDGAR 10-K header information compiled by Bill McDonald and Tim Loughran is available from https://sraf.nd.edu/data/augmented-10-x-header-data/. When the relevant information is missing (before 1994 for most firms), the records in the earliest years are backward-interpolated.

al., 2009), we classify various financial covenants into one of the following six groups: (1) ratios of debt to various balance sheet items, (2) various coverage ratios, (3) ratios of debt to cash flow items, (4) liquidity ratios, (5) net worth requirements, and (6) EBITDA requirements. We then count the number of these six categories of financial covenants to construct *Covenant Intensity*. Panel B of Table 2 reports the frequency of each group, as well as individual covenants, in our sample. Among the most common are coverage, debt to cash flow, and net worth categories, which, respectively, appear in 83.5%, 66.3%, and 33.8% of loan contracts in our sample. Overall these statistics are in line with those reported in prior literature.[5]

[Insert Table 2]

We use performance-pricing provisions to gauge the lenders' demand for the state-contingent loan pricing. In our baseline tests, we use a dummy indicator for pricing grids (Demerjian, 2017). In Section 5, we examine the direction of the interest rate adjustment in a grid, that is, whether the menu offered is a rate-decreasing pricing grid (Decreasing PG henceforth) or a rate-increasing pricing grid (Increasing PG). While some pricing grids only contain the rates that go in one direction (i.e., either lower or higher than the initial base rate), others contain both scenarios. We therefore count both the available new rates r_N that are lower and higher than the base rate r_B, and check which direction is more prevalent in a pricing grid. Specifically, a pricing grid is referred to as Decreasing PG if the number of lower-rate cases ($r_N < r_B$) exceeds that of higher-rate cases ($r_N > r_B$). Increasing PG is similarly defined in the inverse way. When a facility has multiple priding grids, we check whether it has more Decreasing PGs than Increasing PGs and vice versa.

[5] Prilmeier (2017) for instance reports 79%, 60%, and 43%, respectively, for coverage, debt to cash flow, and net worth categories.

Finally, the information is aggregated at the package level.[6]

3.2 Empirical Model

To investigate the impact of gubernatorial elections on loan contracting outcomes, we estimate the following equation:

$$y_{i,j,s,t} = \beta GE_{s,t} + \gamma W_{i,j,s,t} + \delta X_{j,s,t} + \phi Z_{s,t} + a_s + b_t + \varepsilon_{i,j,s,t}\,, \quad (1)$$

where $y_{i,j,s,t}$ is a contracting term included in a loan i issued for a firm j headquartered in state s in year t and $GE_{s,t}$ is a dummy indicator that takes one if a gubernatorial election is held in the state s in year t. Our dependent variables of interest include the loan interest rate (all-in-drawn spreads), financial covenant intensity, and performance pricing imposed on a contract. By including state fixed effects a_s, we estimate the effect of elections after differencing out time-invariant heterogeneities in economic and political conditions across states. Similarly, year fixed effects b_t ensure that our results are not driven by aggregate economic conditions. Following Bertrand et al. (2004), we use standard errors accounted for within-state clustering.

We also include vectors of covariates $W_{i,j,s,t}$, $X_{j,s,t}$, and $Z_{s,t}$ to account for loan characteristics, firm attributes, and time-varying economic conditions of states, respectively. Following prior literature, we include in $W_{i,j,s,t}$ loan maturity, deal size, the secured-loan dummy, and the revolving-loan dummy (all-in-drawn loan spreads is also included in the covenant and performance pricing regressions). The vector $X_{j,s,t}$ includes, in a lagged form, firm size, market to book, return on assets

[6] There are several cases where the numbers of decreasing cases and increasing cases equal each other at the facility or package level. We do not include these cases. Asquith et al. (2005) define Decreasing PG (Increasing PG) as a grid that contains *at least* one decreasing case (increasing case). Under this approach, a Decreasing PG can have more upward adjustments than downward adjustments, and vice versa.

(ROA), leverage ratio, asset tangibility, Altman's (1969) Z-score, cash to assets, sales growth rate, earnings volatility, the negative-earning dummy, research and development (R&D) expenses to assets, the credit-rating dummy, and the lending-relationship dummy. We winsorize the variables at 1% in both tails. Appendix provides the variable definitions in detail.

4. Empirical Results

We begin by examining how gubernatorial elections affect private debt contracting outcomes. As discussed, given the transitory nature of uncertainty associated with elections, we posit that a direct effect on loan pricing of elections is likely vague (due to costly renegotiations following the election results). In this section, therefore, we focus our analysis on non-pricing contracting mechanisms that help mitigate the uncertainty. In Section 5, we then return to the cost-of-capital implications of election uncertainty.

4.1 Effect of Gubernatorial Elections on Corporate Loan Contracts

To investigate the impact of gubernatorial elections on loan spreads and contracting terms, we estimate Equation (1) using financial covenant intensity, performance pricing provision, and loan spreads, respectively, as our dependent variable. The equation is estimated using either logit model or linear model, depending on our variable of interest. As discussed, we include state and year fixed effects.

Panel A of Table 3 reports our baseline regression results for financial covenant intensity (Columns 1 and 3) and performance pricing provision (Columns 2 and 4). Across all models, we find that the coefficient on the dummy variable *Gubernatorial Election* is positive and statistically significant. When we additionally control for Fama-French 48 industry fixed effects, the results are

similar or slightly stronger (Columns 3 and 4). Consistent with our hypothesis, lenders are more likely to require maintenance covenants and performance-pricing provisions in loan contracts during gubernatorial election years. The effect we document is also economically sizeable. Our results indicate that the number of financial covenants increases by 5%, which is equivalent to an increase of 5% relative to the sample median. It is worth noting that our estimate is likely a lower bound, because some firms, with stricter covenant requirements imposed, might have decided not to enter into their loan agreements. These unexecuted contracts are not observable to us. Overall, our evidence suggests that, in response to the increased uncertainty associated with potential changes in political leadership and subsequent economic policies, lenders increase their monitoring intensity.

[Insert Table 3]

Moreover, we document an important pricing implication of election uncertainty that may go unnoticed. As discussed above, given the transitory nature of election uncertainty, along with the prevalence of renegotiations in private loan contracting, lenders' action of increasing loan interest rates outright across the board is likely a costly proposition for both sides of contracting parties. Consistent with this intuition, we find that loan spreads remain largely unaffected in gubernatorial election years (see Panel B of Table 3, to which we will return shortly). The marginal effects reported in Column 2, however, show that gubernatorial election is associated with a 3% increase in the likelihood that a performance pricing provision is included in a loan contract. This incremental effect is again economically significant as it translates to a 7% increase in the likelihood relative to its sample mean of 44% (as aforementioned, these estimates are arguably a lower bound).

Panel B of Table 3 reports the results of our loan spread regressions. The coefficient on the election dummy is statistically insignificant albeit positive. As expected, the *direct* effect of election uncertainty appears to be small due to the possibility that contracting parties need to deal with

renegotiations once the election outcome is realized. We note that the level of loan spreads and whether to include performance pricing provision are likely jointly determined. To account for this, we estimate the equations for loan spreads and performance pricing provision together in a two-stage least square (2SLS) system. To identify the system of two equations, we include industry mean loan spreads and industry mean rate of performance pricing provision, respectively, in the loan spread and performance pricing equations. The second-stage regression results, reported in Panel C of Table 3, show that the effects of election uncertainty on loan spreads and performance pricing provision, respectively, remain unchanged.[7]

A pricing grid in a loan contract allows lenders to adjust loan interest rates conditional on ex post economic states of borrowers but the realized changes in these rates are not observable. Although this property makes unmeasurable the direct effect on firms' cost of capital, the economic magnitude of the implicit pricing effect—inferred from our evidence on performance pricing—appears to be nontrivial, enough to make firms to reconsider their capital raising decisions. We further investigate the pricing effect of election uncertainty in Section 5.

Overall our findings suggest that gubernatorial elections have important implications for syndicated loan contracting and the cost of private debt capital. The associated uncertainty, albeit arguably transitory, significantly impacts lenders' stance on monitoring of borrowers and state-contingent pricing.

4.2 Types of Covenants and Pricing Grids

Prior literature argues that financial covenants and pricing grids can be classified into two broad

[7] In unreported results, we estimate the loan spread, performance pricing, and debt maturity equations jointly. We find that the results are similar.

categories that play distinct roles in policing borrowers, namely, performance-based and capital-based provisions (Christensen and Nikolaev, 2012). In this subsection, we therefore aim to assess whether lenders' focus during gubernatorial election years is placed on a particular type of covenants and pricing girds.

To elaborate, incomplete contract theory predicts that an optimal debt contract can be characterized by the tradeoff between ex ante interest alignment and ex post control rights (Aghion and Bolton, 1992). Consistent with this prediction, Christensen and Nikolaev (2012) show that financial covenants mitigate the conflicts of interest between lenders and borrowers either by reducing agency problem via capital covenants or by facilitating the transfer of control rights to lenders via performance covenants when the value of their claim is at risk. They argue that capital-based covenants (C-covenants) help align the interests of shareholders with debtholders because the covenants of this type require shareholders to maintain enough skin in the game. In contrast, performance-based covenants (P-covenants) often serve as a tripwire facilitating ex post monitoring and a timely transfer of control rights to debtholders when necessary. Pricing grids are similarly classified into P-grids and C-grids, while credit rating-based grids (Rating-grids) are also common. Given that flow-based financial ratios are more sensitive to changes in borrower economic states than are the balance sheet-based ones, performance-based covenants and pricing grids are akin to early warning signals about borrowers' economic conditions, which may be affected by election outcomes. We thus expect that P-covenants and P-grids, compared with other types, are more likely to be in gubernatorial election years.

Following Christensen and Nikolaev (2012), we divide financial covenants into C-covenants and P-covenants, and count the number of each type of covenants to construct our variables,

namely, *C-covenant* and *P-covenant*, respectively.[8] Similarly, we classify pricing grids into three types to construct dummy variables *P-grid*, *C-grid*, and *Rating-grid* (credit rating-based one). Summary statistics of different types of covenants and pricing grids are reported in Table 2. The sample means of *P-covenant* and *C-covenant*, respectively, are 0.93 and 0.42, while the means of *P-grid*, *C-grid*, and *Rating-grid*, respectively, are 0.26, 0.03, and 0.16. Capital-based pricing grids are relatively uncommon. Given that changes in credit rating can be informative, the rating-based pricing grids seem to substitute for capital-based ones.

[Insert Table 4]

Table 4 reports our estimation results for covenants (Columns 1 and 2) and pricing grids (Columns 3–5), respectively, by their type. The results support our predictions discussed. Columns 1 and 2 show that the coefficient on *Gubernatorial Election* is positive and significant for *P-covenant* but not for *C-covenant*. The results in Columns 3–5 similarly confirm that the impact of election uncertainty is concentrated in *P-grid*, whereas it is insignificant for *C-grid* and *Rating-grid*.

Our results collectively indicate that lenders ex ante take into account the monitoring demand in response to greater uncertainty associated with gubernatorial elections. Because raising interest rates outright can lead to costly renegotiations, contracting parties seem to rely more on state-contingent pricing schemes.

4.3 Closely Contested Elections

[8] Specifically, the following covenants are classified as C-covenants: quick ratio, current ratio, debt to equity, loan to value, debt to tangible net worth, leverage ratio, senior leverage ratio, and the net worth requirement. Included in P-covenants are: cash interest coverage ratio, debt service coverage ratio, level of EBITDA, fixed charge coverage ratio, interest coverage ratio, debt to EBITDA, and senior debt to EBIT.

In this subsection, we check our baseline premise, namely, whether political uncertainty is the key economic mechanism underlying the relationship we find. While we use gubernatorial elections as a proxy for such uncertainty, the level of uncertainty is likely to differ across elections. Although a direct measure is not readily available, the uncertainty should be high when the election outcome is harder to predict. As prior literature suggests, the winning voting margin is informative of the extent to which an election is fought for (Julio and Yook, 2012; Boutchkova et al., 2012). Colak et al. (2017) similarly argue that the winning margin, although an ex post measure of election closeness, reflects the ex-ante uncertainty level of the election outcome.

However, the closeness of elections may be correlated with states' economic conditions, which then affect firms' creditworthiness and debt contracting outcomes. To address this concern, we use the term limit status of incumbent governors as an instrument for closely contested elections (Jens, 2017). It is well-known that incumbents are re-elected in the majority of cases. When an incumbent governor cannot run for the office due to her term limit, a close election is therefore more likely. As reported in Table 1, 42% of the elections in our sample have a winning margin smaller than 10%. For these elections, the winner earned on average 50% of votes, indicating that the election outcome was likely harder to predict, compared with other elections (e.g., in the elections with a margin greater than 20%, a typical winner earned 64% of votes). As expected, when an incumbent reaches her term limit, the election is more closely contested; the mean winning margin for the term-limited elections is 13%, whereas that of normal elections is 19%.

Specifically, we use an instrumental variable (IV) approach by estimating the following equations:

$$CGE_{s,t} = \theta Term\ limit_{s,t} + \gamma W_{i,j,s,t} + \delta X_{j,s,t} + \phi Z_{s,t} + a_s + b_t + \varepsilon_{i,j,s,t} \qquad (2)$$

$$y_{i,j,s,t} = \beta \widehat{CGE}_{s,t} + \gamma W_{i,j,s,t} + \delta X_{j,s,t} + \phi Z_{s,t} + a_s + b_t + \varepsilon_{i,j,s,t}\,, \quad (3)$$

where $CGE_{s,t}$ is a dummy variable for closely-contested election that equals one if the winning margin is smaller than 10%. $\widehat{CGE}_{s,t}$ is the predicted value of election closeness estimated from Equation (2) and $y_{i,j,s,t}$ is either covenant intensity or performance pricing.

[Insert Table 5]

Table 5 reports our estimation results. The first stage result in Column 1 shows that our instrument *Term limit* is a strong predictor of a close election. Columns 2 and 3 report the second-stage results for covenant intensity and performance pricing, respectively. We find that during the periods of close elections, the number of financial covenants increases by 17%. More importantly, the likelihood that a loan contract includes a performance pricing provision increases by 5%. These results confirm that when an upcoming election is expected to be hotly contested, borrowers are more likely required to accept contracting terms that help lenders to deal with a higher level of uncertainty.

Overall, our evidence suggests that political uncertainty associated with gubernatorial elections does play a crucial role in private debt contracting space. The IV estimation results support the causal interpretation of our findings.

5. Further Evidence on the Pricing Effect of Election Uncertainty

In this section, we provide additional support for the pricing effect of election uncertainty discussed in the previous section. As a first step, we examine in which direction the loan interest rates in a pricing grid can change, that is, whether it is a Decreasing PG or an Increasing PG as defined in Section 3. It is worth clarifying that a loan contract with a Decreasing PG does not necessarily

imply that the contract is more favorable to a borrower, compared with the one with an Increasing PG. When the creditworthiness of a borrower is expected to change in the future, lenders may charge a relatively high interest rate and in return offer an option to lower the rate, conditional on the evolution of the borrower's condition. That is, in the face of the increased uncertainty, lenders can impose on borrowers not just Increasing PG, but also Decreasing PG combined with a relatively high loan spread.

It is therefore plausible that the uncertainty of gubernatorial election has a positive impact on both Increasing PGs and Decreasing PGs in a loan contract. However, we posit that a positive relationship between Increasing PG and the uncertainty is likely more pronounced than is that of Decreasing PG and the uncertainty, provided that loan spread is controlled for. As the simultaneous nature of the determination of loan spreads and the adjustment direction of pricing grids makes our estimations challenging, we use several approaches to support our findings.

[Insert Table 6]

Panel A of Table 6 reports our separate estimations of logit models. The coefficient on the election dummy is positive for both Decreasing PG and Increasing PG. We see that the effect, albeit statistically insignificant, is more pronounced for Increasing PG, consistent with our prediction discussed above. It is also worth noting that the loan interest rate, in line with the intuition, is positively associated with Decreasing PG, while it is negatively correlated with Increasing PG. Below we return to this *substitution* effect and further investigate it from a different angle.

To mitigate the simultaneity bias, we then jointly estimate three equations, respectively, for loan spread, Decreasing PG, and Increasing PG. Panel B of Table 6 reports these results. As before, a direct effect on loan spreads of the election uncertainty appears absent; the result in Column 1

shows that its effect is small and insignificant. However, the effect of gubernatorial elections on Increasing PG is positive and significant—the coefficient here is estimated from a linear model—whereas the effect on Decreasing PG is somewhat weaker.

We provide additional support to the nuanced pricing effect of gubernatorial elections by zooming into the substitution between loan spreads and pricing grids during gubernatorial election years. Specifically, we examine whether the loan spread increase associated with Decreasing PG—a positive relationship between loan spreads and Decreasing PGs—becomes more pronounced when the uncertainty rises in election years. Similarly, we check whether the negative relationship between loan spreads and Increasing PGs becomes smaller in election years. To this end, we regress loan spreads on the interactions of the election dummy *GE* with Decreasing PG and Increasing PG, respectively.

[Insert Table 7]

Table 7 reports the results of loan spread regressions with these interaction terms. Consistent with our prediction, the interaction term *GE*Decreasing PG* is positive and significant. Borrowers with Decreasing PGs tend to accept a relatively high loan rate in general and this positive association gets even stronger in election years. The rate reduction linked with Increasing PGs does not seem to attenuate in election years, however, as the interaction term *GE*Increasing PG* is small and insignificant.

These results, collectively, suggest that the uncertainty associated with gubernatorial election, albeit transitory, has important cost of capital implications for firms. Although it is difficult to quantify the direct pricing effect of the uncertainty, our evidence on performance pricing, the direction of loan rate adjustment in pricing grids, and the substitution effect between pricing grids

and loan spreads, together, points to an adverse impact of gubernatorial elections on firms' cost of private debt capital.

6. Conclusions

By exploiting the U.S. gubernatorial elections as an exogenous shock to political uncertainty, we have examined how the uncertainty affects lenders' monitoring demand and loan pricing decision in the private syndicated loan markets. We document substantial impacts of political uncertainty on the covenant requirements and the state-contingent pricing grids. Our results show a sizeable increase in the likelihood that a loan contract includes financial covenants and performance-pricing provisions in gubernatorial election years, compared with off-election years. The more closely contested an election is, the stronger are these effects, indicating that political uncertainty is indeed an important channel through which elections affect the loan contracting outcomes. Overall, our evidence suggests that political uncertainty associated with gubernatorial elections has a significant impact on private loans, an increasingly important source of capital for many firms.

Appendix: Variable definitions

Loan characteristics	
Covenant Intensity	Number of financial covenants (the count of six types defined in Table 1).
P-covenant	Number of performance-covenants (Christensen and Nikolaev, 2012).
C-covenant	Number of capital-covenants (Christensen and Nikolaev, 2012).
Performance Pricing	A dummy variable to indicate performance pricing provision included in a loan contract.
P-grid	A dummy variable to indicate performance-based pricing grid.
C-grid	A dummy variable to indicate capital-based pricing grid.
Rating-grid	A dummy variable to indicate rating-based pricing grid.
Decreasing (*Increasing*) *PG*	A dummy variable to indicate a decreasing (increasing) pricing grid. *Decreasing PG* equals one if the number of lower-rate cases ($r_N < r_B$) exceeds that of higher-rate cases ($r_N > r_B$), where r_B is the initial base rate and r_N is the new rates available in a grid. *Increasing PG* is similarly defined. When a facility has multiple priding grids, we check whether it has more Decreasing PGs than Increasing PGs and vice versa. Finally, the information is aggregated at the package level.
Secured	A dummy indicator for a secured debt.
Revolver	A dummy indicator for a revolving facility included in a deal.
Relationship lending	A dummy variable that equals one if a loan is extended to a firm that borrows from the same lender in the last five years.
Relative deal size	Deal amount scaled by a borrower's total assets.
Debt maturity	Average maturity weighted by facility amount.
Spreads	Average all-in-drawn spreads weighted by facility amount.
Firm characteristics	
ln[*assets*]	Natural logarithm of total assets in year *t*–1.
MTB	Market to book in year *t*–1.
Leverage	The sum of long-term and short-term debt scaled by total assets, both in year *t*–1.
Tangibility	Net property, plant, and equipment divided total assets in year *t*–1.
Z-score	Modified Altman's (1968) Z-score in year *t*–1. Z-score is calculated as (1.2 working capital + 1.4 retained earnings + 3.3 EBIT + 0.999)/total assets. We use modified Z-score as in Graham et al., (2008).
Cash holding	Cash and short-term investment divided by total assets in year *t*–1.
Sales growth	The difference in sales between year *t*–1 and *t*–2, divided by sales in year *t*–1.

Earnings volatility	Standard deviation of quarterly earnings in the last three years before the loan year.
Loss	A dummy variable that equals one if a firm's net income is negative, and zero otherwise.
R&D	R&D expenses scaled by total assets in year *t*–1. Missing R&D expense is replaced with zeros.
ROA	Income before extraordinary items divided by total assets in year *t*–1–
Unrated	A dummy variable that equals one if a firm is not rated by S&P ratings.
State-level variables	
Gubernatorial election	A dummy variable that equals one if a gubernatorial election is held in a state in a given year.
Real GDP growth	State real GDP growth.
ln[*GDP per capita*]	Natural logarithm of state real GDP per capital.
Unemployment rate	State seasonally adjusted rate of unemployment.

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TABLE 1

Distribution of the Fraction of Votes Earned by the Winner and the Winning Margin

This table reports the distribution of the fraction of votes earned and the winning voting margin for the sample period from 1990–2014 and that of 1952–2014.

Distribution of % votes earned [1990–2014]

By winning margin	N	Mean	Median	Cumulative	N	Mean	Median
Winning margin < 5%	82	0.488	0.496	Winning margin < 5%	82	0.488	0.496
Winning margin 5%-7%	30	0.498	0.511	Winning margin < 7%	112	0.491	0.500
Winning margin 7%-10%	35	0.518	0.527	Winning margin <10%	147	0.497	0.505
Winning margin 10%-15%	40	0.530	0.550	Winning margin <15%	187	0.504	0.510
Winning margin 15%-20%	50	0.570	0.575	Winning margin <20%	237	0.518	0.522
Winning margin > 20%	113	0.642	0.636	Whole sample	350	0.558	0.548

Winning margin by term limit [1990–2014]

	N	Mean	Median
Term limited = 0	257	0.186	0.149
Term limited = 1	93	0.128	0.095
Whole sample	350	0.171	0.135

Distribution of % votes earned [1952–2014]

By winning margin	N	Mean	Median	Cumulative	N	Mean	Median
Winning margin < 5%	215	0.499	0.506	Winning margin < 5%	215	0.499	0.506
Winning margin 5%-7%	85	0.511	0.525	Winning margin < 7%	300	0.502	0.509
Winning margin 7%-10%	103	0.529	0.538	Winning margin <10%	403	0.509	0.514
Winning margin 10%-15%	145	0.547	0.556	Winning margin <15%	548	0.519	0.522
Winning margin 15%-20%	100	0.576	0.579	Winning margin <20%	648	0.528	0.528
Winning margin > 20%	255	0.659	0.640	Whole sample	903	0.565	0.548

Winning margin by term limit [1952–2014]

	N	Mean	Median
Term limited = 0	685	0.179	0.121
Term limited = 1	179	0.128	0.099
Whole sample	864	0.168	0.115

TABLE 2

Descriptive Statistics

This table reports the summary statistics for the variables used in the baseline model (Panel A) and for the frequency of financial covenants by types. The sample contains 17,195 loan observations from 1990–2014. Appendix provides the variable definitions in detail. All financial ratios are winsorised at the 1% and 99% levels. The loans with multiple facilities are aggregated at the loan package level. The loan- and state-level variables are measured as at year *t*. The firm-level characteristics are measured as at year *t*–1.

Panel A: Descriptive statistics					
N = 17,195	Mean	Std. Dev.	P1	Median	P99
Main dependent variables					
Covenant Intensity	1.351	1.367	0.000	1.000	5.000
P-covenant	0.931	1.064	0.000	1.000	4.000
C-covenant	0.419	0.704	0.000	0.000	3.000
Performance Pricing	0.442	0.497	0.000	0.000	1.000
P-grid	0.263	0.440	0.000	0.000	1.000
C-grid	0.031	0.173	0.000	0.000	1.000
Rating-grid	0.163	0.369	0.000	0.000	1.000
Firm-level variables					
ln[*Assets*]	7.095	1.792	3.214	7.051	11.067
MTB	2.574	3.355	-9.818	1.978	18.782
ROA	0.086	0.081	-0.182	0.084	0.308
Leverage	0.288	0.195	0.000	0.274	0.940
Tangibility	0.345	0.241	0.022	0.283	0.907
Z-score	1.849	1.266	-1.653	1.842	5.174
Cash holding	0.083	0.106	0.000	0.041	0.511
Sales growth	0.073	0.202	-0.683	0.072	0.607
Earnings volatility	0.021	0.027	0.002	0.012	0.160
Loss dummy	0.202	0.401	0.000	0.000	1.000
R&D	0.016	0.037	0.000	0.000	0.181
Unrated	0.445	0.497	0.000	0.000	1.000
State-level variables					
Real GDP growth	0.027	0.025	-0.041	0.026	0.082
ln[*GDP per capita*]	10.594	0.276	9.978	10.604	11.128
Unemployment rate	5.885	1.511	3.967	5.542	9.608
Loan-level variables					
Revolver	0.809	0.393	0.000	1.000	1.000
Relationship lending	0.513	0.500	0.000	1.000	1.000
Secured	0.455	0.498	0.000	0.000	1.000
Relative deal size	0.296	0.323	0.007	0.195	1.840
Deal maturity	45.113	21.457	5.000	48.000	94.800
ln[Spread]	4.831	0.830	2.862	5.011	6.397

Panel B: Frequency of financial covenants by types	
	Fraction (%) of loans with covenants
1. Debt to balance sheet covenant (28.7%)	
Debt to equity covenant	0.53
Debt to tangible net worth covenant	6.63
Leverage ratio covenant	21.35
Loan to value covenant	0.06
Senior leverage covenant	0.13
2. Coverage covenant (83.5%)	
Cash interest coverage covenant	1.11
Debt service coverage covenant	5.46
Fixed charge coverage covenant	38.05
Interest coverage covenant	38.92
3. Debt to cash flow covenant (66.3%)	
Debt to EBITDA covenant	57.09
Senior debt to EBITDA covenant	9.91
4. Liquidity covenant (10.3%)	
Current ratio covenant	8.55
Quick ratio covenant	1.75
5. Net worth covenant (33.8%)	
Net worth covenant	17.84
Tangible net worth covenant	19.30
6. EBITDA covenant (8.3%)	
EBITDA requirement	8.30
	N = 8,413

TABLE 3

Effect of Gubernatorial Election on Debt Contracts

This table reports the regression results for the impact of gubernatorial elections on contracting terms (Panel A) and loan spreads (Panel B-C). *Covenant Intensity* is the number of financial covenants in a loan package. *Performance Pricing* is an indicator variable that takes one if a loan contains performance-pricing provisions. Appendix provides the variable definitions in detail. State, year and industry fixed effects are included. Standard errors in the parentheses are robust to clustering at the state level. *, **, and *** denote the statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Contracting terms				
	(1) Covenant In-tensity	(2) Performance Pricing	(3) Covenant In-tensity	(4) Performance Pricing
Gubernatorial Election	**0.047****	**0.116*****	**0.048****	**0.125*****
	0.022	0.042	0.023	0.046
[logit marginal effect, ***GE***]		[2.8%]		[3.0%]
Real GDP growth	0.337	2.147**	0.426	2.193**
	0.554	0.889	0.561	0.947
ln[GDP per capita]	0.195	-0.202	0.241	-0.178
	0.316	0.647	0.307	0.628
Unemployment rate	-0.054*	-0.077	-0.056*	-0.075
	0.030	0.071	0.029	0.073
ln[*Assets*]	-0.121***	0.069**	-0.115***	0.084**
	0.012	0.032	0.013	0.037
MTB	-0.003	-0.007	-0.004	-0.007
	0.004	0.005	0.004	0.005
ROA	1.350***	2.635***	1.082***	2.156***
	0.281	0.281	0.259	0.321
Leverage	-0.248***	-0.444***	-0.218***	-0.496***
	0.076	0.120	0.080	0.112
Tangibility	-0.226***	-0.901***	-0.040	-0.543**
	0.066	0.246	0.103	0.235
Z-score	-0.055***	-0.091***	-0.021	-0.027
	0.013	0.028	0.018	0.036
Cash holding	-0.399***	-0.848***	-0.455***	-0.852***
	0.124	0.218	0.126	0.211
Sales growth	0.144*	0.029	0.138*	0.118
	0.082	0.139	0.078	0.125
Earnings volatility	-2.634***	-5.621***	-2.357***	-4.219***
	0.363	0.765	0.373	0.604
Loss dummy	-0.113***	-0.239***	-0.130***	-0.256***
	0.036	0.045	0.035	0.058
R&D	-0.507	-1.133	-1.018**	-1.680**
	0.391	0.720	0.396	0.665
Unrated	0.130***	-0.041	0.118***	-0.080
	0.030	0.056	0.031	0.066
Revolver	0.476***	0.912***	0.479***	0.948***
	0.038	0.073	0.039	0.078
Relationship lending	-0.001	-0.122***	-0.002	-0.117***
	0.016	0.039	0.017	0.041
Secured	0.552***	0.195***	0.547***	0.212***
	0.039	0.068	0.039	0.068

Relative deal size	0.013	0.562***	0.010	0.648***
	0.046	0.132	0.047	0.127
Deal maturity	0.002**	0.011***	0.002**	0.011***
	0.001	0.001	0.001	0.001
ln[*Spread*]	0.045**	-0.254***	0.039**	-0.258***
	0.019	0.045	0.019	0.045
Constant	-0.314	-2.030	-0.881	-2.996
	3.366	7.130	3.278	6.951
N	17195	17195	17043	17043
State FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Industry FE			Yes	Yes
Model	OLS	Logit	OLS	Logit
Adjusted [Pseudo] R^2	0.275	0.128	0.282	0.139

Panel B: Loan spread – single equation

	(1) ln[Spread]	(2) ln[Spread]	(3) ln[Spread]
Gubernatorial Election	**0.020**	**-0.000**	**0.002**
	0.012	0.009	0.009
Real GDP growth	-0.311	-0.451	-0.422
	0.408	0.330	0.334
ln[GDP per capita]	0.366**	0.271*	0.268*
	0.168	0.155	0.152
Unemployment rate	0.118***	0.102***	0.100***
	0.017	0.019	0.019
ln[*Assets*]		-0.147***	-0.145***
		0.007	0.007
MTB		-0.016***	-0.016***
		0.002	0.002
ROA		-1.059***	-1.016***
		0.231	0.232
Leverage		0.669***	0.660***
		0.040	0.039
Tangibility		-0.163***	-0.176***
		0.038	0.038
Z-score		-0.025***	-0.026***
		0.009	0.009
Cash holding		0.221***	0.207***
		0.073	0.074
Sales growth		0.107***	0.107***
		0.035	0.036
Earnings volatility		0.261	0.175
		0.210	0.213
Loss dummy		0.138***	0.134***
		0.020	0.020
R&D		-0.798***	-0.810***
		0.268	0.272
Unrated		0.024	0.023
		0.017	0.017
Revolver		-0.061***	-0.046***
		0.012	0.012
Relationship lending		-0.012	-0.013
		0.011	0.011
Secured		0.502***	0.503***
		0.017	0.017

Relative deal size		0.049	0.058*
		0.032	0.033
Deal maturity		0.003***	0.003***
		0.000	0.000
Performance Pricing			-0.074***
			0.013
Constant	0.263	2.067	2.114
	1.788	1.683	1.658
N	17195	17195	17195
State FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Adjusted R^2	0.159	0.569	0.570

Panel C: Loan spread – system of equations

	(1) ln[Spread]	(2) Performance Pricing
Gubernatorial Election	**0.001**	**0.021***
	0.013	0.011
Real GDP growth	-0.377	0.316
	0.254	0.215
ln[GDP per capita]	0.217**	-0.056
	0.107	0.091
Unemployment rate	0.089***	-0.033**
	0.017	0.014
ln[*Assets*]	-0.140***	0.036***
	0.004	0.006
MTB	-0.015***	0.001
	0.001	0.001
ROA	-1.056***	0.584***
	0.075	0.069
Leverage	0.647***	-0.191***
	0.028	0.031
Tangibility	-0.132***	-0.085***
	0.022	0.019
Z-score	-0.027***	-0.009**
	0.005	0.004
Cash holding	0.177***	-0.164***
	0.047	0.040
Sales growth	0.084***	0.014
	0.022	0.019
Earnings volatility	0.079	-0.871***
	0.179	0.147
Loss dummy	0.115***	-0.060***
	0.013	0.012
R&D	-0.572***	0.050
	0.132	0.114
Unrated	0.013	-0.015
	0.012	0.010
Revolver	-0.053***	0.191***
	0.014	0.010
Relationship lending	-0.015*	-0.022***
	0.009	0.007
Secured	0.472***	-0.014
	0.010	0.017
Relative deal size	0.043***	0.114***
	0.016	0.013

Deal maturity	0.003***	0.002***
	0.000	0.000
ln[Spread]		0.075**
		0.031
Performance pricing	-0.008	
	0.040	
Industry loan spread	0.446***	
	0.016	
Industry performance pricing		0.959***
		0.032
Constant	0.200	0.073
	1.141	0.967
N	17195	17195
State FE	Yes	Yes
Year FE	Yes	Yes
Adjusted R^2	0.589	0.176

TABLE 4

Types of Financial Covenants and Pricing Grids

This table reports the regression results for the impact of gubernatorial elections on financial covenants and pricing grids by types. *P-covenant* and *C-covenant* are the numbers of performance-based and capital-based covenants, respectively, included in a loan package. *P-grid*, *C-grid*, and *Rating-grid* are dummy variables, respectively, that equal one if a loan includes performance-based, capital-based, and rating-based pricing grids, respectively. Appendix provides the variable definitions in detail. State and year fixed effects are included. Standard errors in the parentheses are robust to clustering at the state level. *, **, and *** denote the statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1) P-covenants	(2) C-covenants	(3) P-grid	(4) C-grid	(5) Rating grid
Gubernatorial Election	**0.034***	**0.013**	**0.129*****	**0.005**	**0.073**
	0.018	0.014	0.049	0.110	0.053
[logit marginal effect, ***GE***]			[2.0%]	[0.0%]	[0.4%]
N	17195	17195	16922	16932	17144
Controls	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Model	OLS	OLS	Logit	Logit	Logit
Adjusted [Pseudo] R^2	0.266	0.205	0.225	0.174	0.319

TABLE 5

Term Limit as the Instrument for Closely Contested Elections

This table reports the regression results for the impact of contested election on financial covenants and pricing grids using term limit as the instrument. *Covenant Intensity* is the number of financial covenants in a loan package. *Performance Pricing* is an indicator variable that takes one if a loan contains performance-pricing provisions. *Term limit* is a dummy variable that equals one if the incumbent governor is term limited. *Closely Contested GE* (*CGE*) is a dummy variable that equals one if the winning margin is less than 10%. Appendix provides the variable definitions in detail. State and year fixed effects are included. Standard errors in the parentheses are robust to clustering at the state level. *, **, and *** denote the statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1) IV 1st stage (Dependent var: *CGE*)	(2) Covenant Intensity	(3) Performance Pricing
Term limited	**0.387*** **		
	0.115		
Closely Contested GE		**0.173***	**0.199***
		0.098	0.103
N	17195	17195	17195
Controls	Yes	Yes	Yes
State FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Adjusted R^2	0.291		
Weak ID F-stat	11.3		

TABLE 6

Adjustment Direction of Pricing Grids

This table reports the regression results for the relationship between gubernatorial elections and the directions of adjustment in pricing grids. *Decreasing* (*Increasing*) *PG* is a dummy variable that equals one if a package includes the number of decreasing (increasing) performance-pricing contingents exceeds the number of increasing (decreasing) performance-pricing contingents. Appendix provides the variable definitions in detail. State and year fixed effects are included. Standard errors in the parentheses are robust to clustering at the state level. *, **, and *** denote the statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Separate estimations		
	(1)	(2)
	Decreasing PG	Increasing PG
Gubernatorial Election	**0.072**	**0.143**
	0.058	**0.097**
Real GDP growth	0.431	1.823
	1.189	1.262
ln[GDP per capita]	-0.550	-0.067
	0.610	0.810
Unemployment rate	-0.055	0.017
	0.067	0.069
ln[*Assets*]	0.171***	-0.198***
	0.024	0.042
MTB	-0.002	-0.009
	0.006	0.011
ROA	1.049***	3.040***
	0.310	0.433
Leverage	-0.118	-1.280***
	0.166	0.259
Tangibility	-0.577***	-0.646***
	0.204	0.161
Z-score	-0.054*	-0.117***
	0.030	0.025
Cash holding	-0.570**	-0.856***
	0.243	0.239
Sales growth	-0.067	0.221
	0.111	0.187
Earnings volatility	-4.505***	-4.904***
	0.566	1.562
Loss dummy	-0.266***	-0.214***
	0.055	0.080
R&D	-1.752***	1.211
	0.583	0.956
Unrated	-0.117**	0.277***
	0.054	0.076
Revolver	1.003***	0.112
	0.090	0.082
Relationship lending	-0.016	-0.129**
	0.035	0.060
Secured	-0.034	0.448***
	0.066	0.080
Relative deal size	0.670***	-0.127
	0.076	0.180

Deal maturity	0.010***	0.004***
	0.001	0.001
ln[Spread]	0.364***	-1.050***
	0.048	0.066
Constant	-2.762	0.267
	6.590	7.980
N	17193	17168
State FE	Yes	Yes
Year FE	Yes	Yes
Pseudo R^2	0.118	0.128

Panel B: Loan spreads and pricing grids – system of equations

	(1) ln[Spread]	(2) Decreasing-PG	(3) Increasing-PG
Gubernatorial Election	**0.004**	**0.010**	**0.013***
	0.013	**0.010**	**0.007**
Real GDP growth	-0.328	-0.044	0.165
	0.250	0.193	0.141
ln[GDP per capita]	0.213**	-0.051	-0.040
	0.106	0.081	0.060
Unemployment rate	0.086***	-0.009	-0.020**
	0.016	0.013	0.009
ln[*Assets*]	-0.141***	0.025***	0.009**
	0.004	0.005	0.004
MTB	-0.015***	-0.001	0.001*
	0.001	0.001	0.001
ROA	-0.958***	0.096	0.401***
	0.075	0.063	0.045
Leverage	0.610***	-0.022	-0.162***
	0.028	0.028	0.021
Tangibility	-0.140***	-0.071***	0.003
	0.021	0.017	0.013
Z-score	-0.028***	-0.007**	-0.003
	0.005	0.004	0.003
Cash holding	0.162***	-0.057	-0.084***
	0.046	0.036	0.026
Sales growth	0.086***	0.010	0.003
	0.022	0.017	0.012
Earnings volatility	0.001	-0.578***	-0.310***
	0.177	0.133	0.099
Loss dummy	0.113***	-0.040***	-0.015*
	0.013	0.010	0.008
R&D	-0.523***	-0.137	0.176**
	0.130	0.102	0.075
Unrated	0.021*	-0.022**	0.022***
	0.012	0.009	0.006
Revolver	-0.053***	0.147***	0.022***
	0.013	0.009	0.008
Relationship lending	-0.016*	-0.004	-0.009*
	0.008	0.007	0.005
Secured	0.471***	0.024	-0.028**
	0.010	0.016	0.012
Relative deal size	0.035**	0.135***	-0.015
	0.016	0.012	0.009
Deal maturity	0.003***	0.002***	-0.000
	0.000	0.000	0.000

ln[Spread]		0.019	0.053**
		0.028	0.021
Decreasing PG	0.009		-0.031
	0.046		0.026
Increasing PG	-0.274***	-0.055	
	0.062	0.048	
Industry mean loan spreads	0.441***		
	0.016		
Industry mean Decreasing PG		1.017***	
		0.036	
Industry mean Increasing PG			1.143***
			0.041
Constant	0.294	0.273	0.233
	1.126	0.867	0.635
N	17193	17193	17193
State FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Adjusted R^2	0.601	0.175	0.081

TABLE 7

Effect of Elections on the Relationship between Loan Spreads and Pricing Grids

This table reports the regression results for the effect of elections on the relationship between loan spreads and pricing grids. *Decreasing* (*Increasing*) *PG* is a dummy variable that equals one if a package includes the number of decreasing (increasing) performance-pricing contingents exceeds the number of increasing (decreasing) performance-pricing contingents. Appendix provides the variable definitions in detail. State and year fixed effects are included. Standard errors in the parentheses are robust to clustering at the state level. *, **, and *** denote the statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1) ln[Spread]	(2) ln[Spread]
Gubernatorial Election	0.002	-0.008
	0.010	0.015
Decreasing PG	0.063***	0.053***
	0.013	0.016
Increasing PG	-0.271***	-0.271***
	0.018	0.019
GE*Decreasing PG		**0.036***
		0.021
GE*Increasing PG		**0.003**
		0.028
Real GDP growth	-0.398	-0.397
	0.334	0.334
ln[GDP per capita]	0.266*	0.266*
	0.148	0.148
Unemployment rate	0.098***	0.097***
	0.019	0.019
ln[*Assets*]	-0.149***	-0.149***
	0.007	0.007
MTB	-0.016***	-0.016***
	0.002	0.002
ROA	-0.962***	-0.962***
	0.228	0.227
Leverage	0.630***	0.630***
	0.041	0.041
Tangibility	-0.167***	-0.167***
	0.038	0.038
Z-score	-0.026***	-0.026***
	0.008	0.008
Cash holding	0.208***	0.207***
	0.072	0.071
Sales growth	0.109***	0.109***
	0.036	0.036
Earnings volatility	0.213	0.214
	0.199	0.200
Loss dummy	0.137***	0.137***

	0.020	0.020
R&D	-0.733***	-0.735***
	0.268	0.269
Unrated	0.032*	0.032*
	0.016	0.016
Revolver	-0.067***	-0.067***
	0.013	0.013
Relationship lending	-0.013	-0.013
	0.011	0.011
Secured	0.499***	0.499***
	0.017	0.017
Relative deal size	0.035	0.034
	0.035	0.035
Deal maturity	0.003***	0.003***
	0.000	0.000
Constant	2.186	2.192
	1.612	1.614
N	17193	17193
State FE	Yes	Yes
Year FE	Yes	Yes
Adjusted R^2	0.581	0.581