



Department of Finance
Faculty of Business and Economics

Working Paper Series

Local Political-Turnover-Induced Uncertainty and Bond
Market Pricing

Zhuo Chen, Andrea Lu, Huili Xiao, Xiaoquan Zhu

Working Paper No. 10/20

Local Political-Turnover-Induced Uncertainty and Bond Market Pricing

Zhuo Chen

Andrea Lu

Huili Xiao

Xiaoquan Zhu*

Abstract

Using political turnovers in mayoral appointments at the prefecture-city level in China, we show that investors in the municipal corporate bond market price their concerns for rising local political uncertainty into bonds and relocate capital toward other corporate bonds issued by local firms. Municipal/non-municipal corporate bond issue spreads increase (decrease) by 8.9 (14) basis points before the expected political turnover of mayors and reverse afterwards. The effect is more prominent for bonds issued in cities with investors who have a strong local preference, suggesting investors switch from MCBs to local non-MCBs in their bond holdings. The pricing effect is also stronger for bonds issued in regions with more developed financial markets and bonds with lower credit ratings. Lastly, bond market participants only price in the political risk induced by the turnovers of politician with direct involvement in local economic activities.

JEL classification: G12, G18, G28

Keywords: Political uncertainty, Implicit government guarantee, Municipal corporate bonds, Local investors

*Zhuo Chen, Huili Xiao, and Xiaoquan Zhu: PBC School of Finance, Tsinghua University. Andrea Lu: Faculty of Business and Economics, University of Melbourne.

1 Introduction

Local governments rely on bond markets to finance infrastructure investments. Therefore, the determinants of municipal bond pricing have attracted the interests of both public finance researchers and policy makers (Cestau et al., 2019). One of the most prominent factors affecting the cost of municipalities’ bond financing is the local political cycle. Local politicians substantially influence the investments and resource redistributions of their local governments, and, thus, political turnover can induce substantial uncertainty.

Rational investors react to uncertainty by demanding higher risk premia for holding assets, whose prices are, in turn, affected by turnover-induced policy uncertainty (see, e.g., Pastor and Veronesi, 2012; Belo et al., 2013; Pástor and Veronesi, 2013; Kelly et al., 2016; Pástor and Veronesi, 2020). Previous researchers have documented higher municipal bond (munis) yields prior to local elections (Gao et al., 2019b); however, no one has investigated the pricing impacts of political turnovers on local government bonds and local corporate bonds simultaneously. Bond market participants may view political-turnover-induced uncertainty as increasing local corporate bond issuers’ riskiness, due to the possible connection between issuers’ business activities and the local government’s policies (Jens, 2017). Alternatively, investors could also substitute government-sponsored bonds with corporate bonds, a swap that would effectively “crowd-in” local firms’ bond financing.

In this paper, we probe the effects of local political cycles on local government bond prices and corporate bond prices. We do so by exploiting political turnovers in mayoral appointments at the prefecture-city level in China. Specifically, we examine how the credit spreads of municipal corporate bonds (MCBs) issued by local government financing vehicles (LGFV) and other non-municipal corporate bonds (non-MCBs) change in the period preceding the expected political turnover of a mayor. We show that the substitution effect dominates: the issue yield spreads of MCBs increase, whereas those of non-MCBs decrease. As a result, rising political uncertainty indeed translates into higher financing costs for local governments, while actually prompting bond issuance of local firms. Previous research shows a crowding-out of private investment during election years in the United States (Julio and Yook, 2012); we, instead, find that political uncertainty may also push capital from local government-affiliated

bonds to corporate bonds, lowering the spreads of the latter.

China's bond markets and political system suit our research objectives for three reasons. First, MCBs, which are legally corporate bonds, have an implicit local government guarantee and thus are similar in flavor to the municipal bonds in the United States (Chen et al., 2020b). In the past decade, local Chinese governments have heavily relied on MCBs to finance new projects or replace matured bank loans, and the prices of these bonds summarize investors' opinions about local governments' riskiness (Liu et al., 2017; Ang et al., 2019). Second, local governments in China are deeply involved in local economic activities, and politicians have strong incentives to promote local economic and social development (Li and Zhou, 2005; Liu et al., 2018; Chen and Kung, 2019). Therefore, political turnovers are usually associated with local policy changes, which may significantly affect future economic outcomes. Third, political cycles in all prefectures have the same expected length of 5 years (Ru and Zou, 2020). By focusing on the expected turnovers of mayors who leave the office in the fourth or fifth year, we are able to alleviate the possible endogenous concern about unexpected turnovers, which may be related to mayors' performance. Our empirical identification strategy allows us to establish a causal link between political uncertainty and the bond borrowing costs of LGFVs and local firms.

We find that prefecture-level political turnover increases the issue spreads of MCBs issued during the six-month pre-turnover period by 8.9 basis points (bps) on average, which accounts for 5% of the average credit spread for a typical MCB. In dollar terms, the turnover-induced premium represents an additional annual cost of RMB 0.8 million on average to issue an MCB. The magnitude is surprisingly similar to that in the United States documented by Gao et al. (2019b), who estimate the effect to be 7.2 bps (8.7%). By comparison, the average issue spread of non-MCBs decreases by 14 bps (7%) before the turnover, which translates into a savings of RMB 1.175 million per year for each non-MCB issue. The underlying force driving the opposite price movements for MCBs versus non-MCBs is the change in investors' preference before an expected turnover: the primary market subscription ratio decreases by 12% for an MCB issue but increases by 5% for a non-MCB issue. Our findings suggest that investors flee from MCBs, which usually enjoy an implicit government guarantee during normal periods, because of their exposure to political uncertainty during the period

preceding the expected turnover of a local mayor’s seat. Meanwhile, investors reallocate their investment to local corporate bonds, and reallocation reduces issue spreads of bonds issued by non-LGFVs. The turnover-induced substitution between MCBs and non-MCBs is strongest for bonds for which investors have a strong preference to invest in local corporate bonds, such as city commercial banks (CCB).

The magnitude of the turnover-induced impact on the local government’s financing cost depends on investors’ expectation about the local government’s intention and/or capacity to provide an implicit guarantee and the local economic condition. Specifically, we find that MCBs issued in cities with weaker government intention and/or capacity to provide an implicit guarantee have higher issue spreads in the period preceding the prefecture-level political turnover. In addition, the turnover-induced pricing effect is stronger for bonds issued in cities with high marketization, weak government-market relation, and advanced economic development. We also find that the flight-to-non-MCB phenomenon is more pronounced for lower-rated bonds, whereas bonds with the highest rating seem not to be affected by prefecture-level political turnover. Political-turnover-induced uncertainty is also priced in the secondary market, and this finding helps to address the concern about the endogenous timing of bond issuance. Lastly, we find that only the political turnovers of officials who can directly influence local economic policy matter to MCBs’ prices; in contrast, provincial-level political turnovers affect the costs of munis, which are issued by the provincial government, but do not affect the prices of local MCBs or non-MCBs.

2 Literature Review

Our paper contributes to three different strands of the literature. First, our paper adds to the literature that studies the determinants of public finance costs through bond markets. [Gao et al. \(2019b\)](#) is the most closely related study to ours. Using U.S. gubernatorial elections as a source of political uncertainty, they find that municipal bond yields increase by 7 bps and trading demand decreases before an election; their results indicate the unintended cost for public finance associated with local politician turnovers. While both papers focus on how the expected turnover of a politician’s seat affects local governments’ bond financing costs,

unlike our paper, they do not examine the substitution effect between municipal bonds and non-municipal bonds when political uncertainty rises. To the best of our knowledge, our study is the first that documents how investors turn away from local government-affiliated bonds to non-affiliated bonds and that investigates the resultant pricing impact in the context of the second-largest bond market in the world. Recent studies on other aspects of municipal bond pricing include default risk (Schwert, 2017), state policies toward distressed municipalities (Gao et al., 2019a), external monitoring (Gao et al., 2020), and climate risk (Goldsmith-Pinkham et al., 2020).¹ Meanwhile, several papers investigate the rising number of municipal corporate bonds in Chinese bond markets along various aspects, including origins (Chen et al., 2020b), pricing factors (Ang et al., 2019), and implicit government guarantee (Liu et al., 2017).

Second, our paper belongs to the literature studying the effects of political uncertainty on corporate bond pricing. Kaviani et al. (2020) find that changes in economic policy uncertainty, proxied using the Baker’s index (i.e., Baker et al., 2016), are associated with positive movements in credit spreads. Gad et al. (2020) extend their research to the individual firm level and find that corporate bonds issued by firms with higher exposure to political risk have higher spreads.² Waisman et al. (2015) document that the political uncertainty tied to U.S. Presidential elections led to an on average 34 bps increase in corporate bond spreads. Our paper uses political turnover of mayor in Chinese cities as an exogenous shock to local policy uncertainty and examines the impact of this shock on the pricing of local MCBs and non-MCBs.³

Third, broadly speaking, our paper belongs to the growing literature on the Chinese corporate bond markets, including the pricing determinants of corporate bonds in China (Chen et al., 2020a; Ding et al., 2020; Flannery et al., 2020; Huang et al., 2020a; Liu et al.,

¹Earlier research includes West (1965), Kidwell and Trzcinka (1982), Livingston (1982), Trzcinka (1982), Skelton (1983), Mankiw and Poterba (1996), Harris and Piwowar (2006), Butler (2008), and Poterba and Rueben (2008).

²They follow Hassan et al. (2019) to measure firm-level political risk.

³Researchers have studied the effects of local political officials’ turnover on other aspects of economic activities and firms’ decisions, including R&D (Feng and Johansson, 2017), pollution discharges (Deng et al., 2019), corporate investment (An et al., 2016), cash holdings (Xu et al., 2016), idiosyncratic information (Chen et al., 2018), government relationship building (Fang et al., 2018), and corporate decision cyclicity (Feldman et al., 2017).

2019; Wang et al., 2020), monetary policy transmission and repo markets (Fan and Zhang, 2007; Fang et al., 2020), and bond credit risk (Geng and Pan, 2019; Jin et al., 2019). For a comprehensive review of the recent development of Chinese bond markets, see Amstad and He (2020).

3 Political Details and Data

In this section, we provide an overview of the Chinese political system. A grasp of the local political cycles will be useful in understanding the rationale behind our choice of the key variables. Next, we describe the data sources and the construction of data used in this paper.

3.1 Chinese local political cycles

We exploit prefecture-level mayor turnover to investigate the pricing impact of political uncertainty on local government bonds and corporate bonds. The unique political system and its cyclical nature make prefecture-level mayor turnover an ideal setting for capturing exogenous changes in political uncertainty and allow us better understand the impact of such uncertainty on the cost of local bond financing in China.

State power within China is exercised through the Chinese Communist Party (CCP), the central government, and local representations. The hierarchical structure of local governments comprises four administrative levels (from the smallest to the largest): township, county, prefecture, and province (Li and Zhou, 2005). Political power increases with the size of the jurisdiction's geographical area. At the end of 2019, China had 34 provinces (excluding Hong Kong, Macau, and Taiwan), 333 prefectures, 2,854 counties, and 40,381 townships.⁴ Each level of the hierarchy is responsible for overseeing the lower-level officials on their administrative strata. At each level, two representatives, the local CCP committee and the local government, preside. Therefore, the two top officials preside over each administrative level: the CCP committee secretary and the local government chief.

The decentralization of political power since the 1980s has placed more autonomy in

⁴Source: Ministry of Civil Affairs of the People's Republic of China.

the hands of the local administrative levels in deciding and implementing local policies. Meanwhile, the rotation and promotion of local officials are typically handled by the superior level of government with a performance assessment of the local officials' tasks and targets (Li and Zhou, 2005; Chen et al., 2005). Legally, one term for a local official lasts for five years, and officials are allowed to take the position for two consecutive terms at most.⁵ Meanwhile, the actual local chiefs' rotation could happen out of the normal cycle and take place at a higher frequency (Xu, 2011).

The prefecture-level division is the second level of division from the top of the political hierarchy. The majority of the prefectures in China are prefecture-level cities that are given the prefecture status and granted the right to manage their surrounding counties.⁶ For this reason, in this paper, we will refer to prefectures and cities interchangeably. The dual political chiefs at the prefecture level are the secretary of city CCP committee and the prefecture governor, which is more commonly referred to as the city mayor.

We focus on the turnover of the political chief at the prefecture government level, also known as the city mayor, for two important reasons. First, prefectures are the lowest rung of the hierarchy with the right to make local decrees and administrative regulations, but it is also the highest hierarchy that directly affects local economic affairs (Wu et al., 2020). The Chinese economic reform that began in 1978 redistributed socioeconomic management powers from the central government to local governments to speed up economic growth. The local political divisions, including prefectures, have been given greater autonomy in terms of economic policies as well as other aspects of policy, such as education and foreign direct investment. Specifically, local prefectures have authority to make developmental plans, issue debts, and launch investment projects. As a result, turnovers of political chiefs at the prefecture level are expected to directly influence local economic development and thus its public financing policy (Bai et al., 2016; Liu et al., 2017; Ang et al., 2019; Huang et al., 2020b). Second, there is a broad cross-section of turnovers at the prefecture level with unsynchronized timing. Unlike

⁵This rule is listed in the "Provisional Regulations on Terms of Cadres of the Party and Government," which was issued by the Organization Department of the Central Committee of the Communist Party of China in 2006.

⁶As of December 2019, of the 333 prefectures in China, 293 were prefecture-level cities, 30 were autonomous prefectures, and 3 were leagues. The latter two groups are designed for areas with mainly ethnic minority residents.

political turnovers at the provincial level, which must coincide with the national political cycles, prefecture-level political turnovers have their own distinct timetable. A city’s own political cycle begins when a city is first established, thus resulting in unsynchronicity in the timing of mayor turnovers across prefectures despite the expected uniformity in length for each term. This heterogeneity allows us to exploit the within-prefecture variation in turnovers over time as well as the cross-prefecture variation in turnovers for a given year.

We examine the pricing impact of political turnover in mayoral appointments, rather than turnovers of the other local chief, the CCP committee secretary, in our study. According to the CCP constitution, the secretary of the prefecture-level CCP committee is considered to be in precedence to the city mayor in terms of his/her political power; however, his/her responsibility falls more on making sure the city obeys the Party’s rule (Liu et al., 2018). City mayors, meanwhile, are responsible for daily affairs and the implementation of policies, and thus have more direct influence on local economic development and public financing decisions.

3.1.1 Prefecture-level political turnovers

Following Liu et al. (2018) and Chen et al. (2020b), we only consider expected turnovers, that is, turnovers that occur according to the five-year political cycle. The timing of expected turnovers is pre-determined, and, thus expected turnovers are not affected by general economic conditions. We exclude unexpected political turnovers, such as those caused by an anti-corruption campaign or promotion to an upper-level position due to an unexpected vacancy, from our analysis as including them could lead to potential endogeneity problems, especially in the backdrop of China’s pro-growth cadre evaluation.

To study the impact of prefecture-level political turnover on the credit spread of municipal and non-municipal bonds, we use two indicator variables to characterize the timing of a bond’s issuance in relation to an expected mayor turnover in the city in which the issuer is located. Since the term of office for a city’s mayor is five years and each mayor can serve at most two consecutive terms, we define the 4th and the 5th years from the commencement of

a mayor's most recent term as the predicted turnover period.⁷ We identify expected turnovers as those in which the actual turnover date falls in the predicted turnover period, and we set the month in which the actual turnover takes place as the event month. The pre-turnover period is defined as the six months preceding an expected mayor turnover (i.e., months [-6, -1]), and the post-turnover period is defined as the six months intermediately after the turnover (i.e., months [0, 5]). The pre-turnover (post-turnover) dummy equals one if the bond is issued during the pre-turnover (post-turnover) period of the city in which the issuer is located, and zero otherwise.

The data on turnovers of mayor are constructed based on mayors' resumes, which are hand-collected from various sources, including Wikipedia, Baidu.com, and local Chinese government websites. Resumes usually contain detailed information about the timing and the nature of a government official's appointment. Using the appointment data, we are able to construct a full timeline of each city's mayor turnover since 2009, and we identify the corresponding pre- and post-turnover periods. We identify 559 expected turnovers in our sample period of 2009–2019, accounting for 41% of the overall number of prefecture-level political turnovers that took place in the same period. The fraction of expected prefecture-level political turnovers with respect to all (expected and unexpected) turnovers is consistent with that reported by previous research that uses a similar definition but an earlier sample period.⁸

3.1.2 Bond data

The main source of the bond data used in our study is WIND. These data include the issue yield and other bond and issuer characteristics for both municipal corporate bonds and non-municipal corporate bonds. In addition to the primary market data, we obtain data on bonds' secondary market trading in the interbank market from the China Foreign Exchange Trade System (CFETS), which is the primary platform for all interbank bond trading in China (Chen et al., 2020a), and data on the exchange market trading from WIND.

⁷For mayors who are currently serving their second term, the predicted turnover period is the 9th/10th year from the start of their initial term.

⁸See Ru (2018), who finds that 46% of mayor turnovers are expected turnover in a sample period from 1997 to 2013.

To compute the yield spread, we benchmark all yield terms against the yield to maturity of a China Development Bank (CDB) bond with a matching maturity. Specifically, the issuing spread is computed as a bond’s coupon rate minus the yield to maturity of a synthetic CDB bond with a matching maturity measured as of the day of issuance, and the trading yield spread is computed as a bond’s daily trading yield minus the yield of a synthetic CDB with a matching maturity as of the day of trade. The choice of using CDB bonds to construct the reference bond and the methodology used in computing the matching maturity reference yield follow the standard practice in the literature ([Ang et al., 2019](#); [Liu et al., 2017](#)).

We consider a number of bond and issuer characteristics as control variables in our study. Bond characteristics include issue size, credit ratings, and the bond’s status on explicit guarantee and special clauses. Issuer characteristics include the issuer’s size, leverage, return on assets, and whether the issuer is a state-owned enterprise (SOE).

3.1.3 City-level data

We include several city-level variables that summarize the local economic and public financing conditions. Variables capturing the local macroeconomic conditions include gross domestic product (GDP) growth, GDP per capita, and the fiscal deficit. Other city-level variables include the aggregate leverage of all local government financial vehicles within a city, the presence of a CCB headquarters, and the city’s marketization level. City-level data come from WIND, except for the marketization index, which comes from the National Economic Research Institute.

3.2 The sample and summary statistics

Because of the sparse issuance of municipal corporate bonds before 2009, we restrict our sample period from 2009 to 2019. We lag variables that use issuers’ balance sheet data and city-level macroeconomic data by six months to account for the delay in the release of data. To minimize the impact of outliers and data errors, we winsorize credit spreads at the 1st and 99th percentiles. Our final sample covers issue spreads of 12,493 MCBs and 16,180 non-MCBs in the primary market and trade spreads of 13,035 MCBs and 13,642 non-MCBs

in the secondary market.

Table I reports the summary statistics for the main variables used in this study. Table A1 in the appendix defines each variable. We present the summary statistics for the primary market, measured at the bond level, MCB bonds, and non-MCB bonds separately.⁹ We find that MCBs have a lower issue spread (1.886%) than do non-MSBs (2.119%) but longer maturities (3.904 vs. 2.293 years). This difference in issue spreads is likely due to the presence of an implicit or explicit government guarantee for MCBs, as argued by Liu et al. (2017). MCBs and non-MCBs are comparable in size at around RMB 0.9 billion; however, non-MCB bonds exhibit slightly greater variation in issuance size. Having an explicit guarantee clause is not common for either types of bonds; that is, less than 15% of bonds have a guarantor. In terms of issuer characteristics, issuers of MCB and non-MCB bonds have similar leverage and size. The return on assets is much higher for issuers of the non-MCBs at 3.239%, which is almost double the ROA for issuers of MCBs. This difference is probably because LGFVs that issue MCBs usually do not generate business revenues but instead only receive a fiscal transfer (Bai et al., 2016; Huang et al., 2020b). There is no evident difference between MCB issuers and non-MCB issuers in terms of their cities' macroeconomic conditions, such as GDP growth and fiscal deficit.

4 Empirical Results

In this section, we present empirical findings. We first describe our research design and present the main results. We further conduct sub-sample analyses based on the intensity of the implicit guarantee, the level of development in the financial markets, and the quality of bond credit. Lastly, we provide additional evidence using trade spreads and provincial-level political turnovers (i.e., the provincial-level governor).

⁹Table A2 in the appendix presents summary statistics for the secondary market.

4.1 Research design

To investigate the impact of turnover-induced political risk on the pricing of MCBs and non-MCBs, we use a multivariate model of a bond-level panel taking into account that the issue spreads are also determined by a variety of bond-, issuer-, and city-level characteristics. The regression specification is as follows:

$$y_{i,j,c,t} = \beta_{pre}Pre_{c,t} + \beta_{post}Post_{c,t} + \gamma'X_{i,t} + \delta'W_{j,t} + \eta'Z_{c,t} + \alpha_{yq} + \alpha_p + \epsilon_{i,j,c,t}$$

, where i , j , c , and t denote the bond, issuer, city, and date of issuance, respectively. We use a bond's issue spread, defined as the coupon rate over the yield of a synthetic China Development Bank bond with the same maturity as of the day of issue, as the dependent variable (Chen et al., 2020a). $Pre_{c,t}$ and $Post_{c,t}$ are our two main explanatory variables that capture the timing of a bond's issuance in relation to the prefecture-level political turnover in the city in which the issuer is located. $Pre_{c,t}$ takes the value of one if the issuance takes place in the six-month window before an for the issuer's city and zero otherwise; $Post_{c,t}$ takes the value of one if the issuance takes place in the six-month window (including the turnover month) immediately following an expected prefecture-level political turnover and zero otherwise. We include year-quarter fixed effects (α_{yq}) to absorb time-dependent shocks that are common to all bonds. We include province fixed effects (α_p) to control for the time-invariant pricing determinants that vary across provinces. $X_{i,t}$ is a vector of bond-level control variables that consists of the following: (1) the time to maturity; (2) the natural logarithm of the bond's issuance amount in RMB billions; (3) three indicator variables for the bond's credit rating (AAA, AA+, AA, or below);¹⁰ (4) an indicator variable for a third-party guarantor; and (5) indicator variables for five covenants associated with corporate bonds.¹¹ $W_{j,t}$ is a vector consisting of issuer characteristics that are measured in the financial year ending at least six months before the issuance date: (1) leverage, that is, the total liabilities over total assets; (2) the issuer's return on asset, that is, net profit in a year over the average of its assets measured at the beginning and end of the year; (3) the natural logarithm of the issuing firm's

¹⁰We use three dummy variables to capture the non-linear relation between credit rating and credit worthiness following Kaviani et al. (2020).

¹¹The five covenants are adjustable, callable, extendable, puttable, and sinkable.

total assets in RMB billions; and (4) an indicator variable for SOE issuers. Finally, $Z_{c,t}$ is a vector consisting of city-level variables that capture time-varying macroeconomic conditions: GDP growth and the fiscal deficit. We maintain the same set of control variables in all tests, unless specified.

β_{pre} and β_{post} are the key parameters to be estimated. They capture the effects of prefecture-level political turnover on the issue spreads of MCBs and non-MCBs issued during the half-year period immediately before and after an expected turnover. By including both $Pre_{c,t}$ and $Post_{c,t}$ in the regression, we benchmark the impact to what it would be for bonds issued outside of the 12-month event window, which is centered on the actual turnover date. We run the regressions for the MCBs and the non-MCBs separately to paint a better picture of the pricing impact on these two local corporate bond products in the context of rising political uncertainty.

4.2 Main results

The first two columns of Table II report the main results from estimating the multivariate regression model in the primary issuance market. We report the estimates for β_{pre} and β_{post} along with the coefficients for the control variables. Results indicate that MCBs that are issued in the six months leading up to the expected turnovers have higher issue spreads relative to the ones issued during normal times outside of the 12-month turnover window. The magnitude of this political-turnover-induced spread increase is 8.9 bps (t -statistic = 2.14), which represents an additional cost of RMB 0.797 million per issue per year for a typical MCB bond in this period.¹² This finding supports our main hypothesis that the risks associated with political-turnover-induced uncertainty are significantly priced into the primary market of locally issued MCBs.

Meanwhile, we observe that higher issue spreads for MCBs during the pre-turnover period are accompanied by a statistically significant decrease in issue spreads for local non-MCBs. Specifically, non-MCBs' issue spreads are lowered by 14 bps during the six months leading

¹²MCBs issued in the pre-turnover period have an average issue size of RMB 896 million, which is similar to the average size of MCBs issued during normal times outside of the turnover window.

up to turnovers compared to their average level during normal periods. This pricing impact translates into a savings of RMB 1.175 million per issue per year. Investors perceive political-turnover-induced uncertainty as a substantial risk, because the next mayor may adopt different local economic policies and may not provide a strong enough implicit guarantee for these close-to-turnover MCBs. Meanwhile, non-MCBs, which are the alternative local corporate bonds investment option and which are less subject to the political-turnover-driven uncertainty, can effectively enjoy the “crowd-in” effect and be sold at higher prices.

The coefficients for the *Post* indicator variable, in contrast, are relatively small and statistically insignificant for both MCBs and non-MCBs. This finding highlights the relevance of time in studying the political uncertainty risk: the issue spreads of MCBs recover after the next mayor is appointed, that is, upon resolution of the political-turnover-induced uncertainty. Correspondingly, the crowd-in effect on non-MCBs is no longer present. This observation validates our hypothesis that uncertainty around prefecture-level political turnovers drives the higher (lower) pre-turnover borrowing costs for MCBs (non-MCBs).

To investigate the potential channels underlying this pattern of investor flight from MCBs to non-MCBs, we examine the change in subscription ratio before expected turnovers. In particular, we are interested in whether investors’ preferences drive the opposite price movements in MCBs and non-MCBs. If the results were indeed demand driven, we would expect the subscription ratio, defined as the subscribed amount divided by the issuance amount, to rise for non-MCBs and decrease for MCBs.¹³ Columns 3 and 4 in Table II present the results using the subscription ratio as the dependent variable. We find that MCBs issued in the pre-turnover period have a 11.9% (t -statistic = 2.31) lower subscription ratio. Meanwhile, non-MCBs experience a 5.2% (t -statistic = 1.42) increase in subscription ratio during the same period. Therefore, investors who are concerned about political uncertainty allocate less capital to government-affiliated MCBs and invest in the less exposed non-MCBs issued by local firms, resulting in a crowd-in effect on the local corporate bond market. Further, the coefficients for the indicator variable *Post* are also close to zero and statistically insignificant, further validating the use of to capture exogenous changes in political uncertainty.

¹³Our choice of using the subscription ratio to capture investor demand follows the literature that studies the relation between investor demand and initial public offering (IPO) performance in the stock market (e.g., [Cornelli and Goldreich \(2003\)](#); [Agarwal et al. \(2008\)](#)).

Table II also presents the estimated coefficients for the control variables. We briefly highlight a number of notable observations. First, the relation between bonds' issue spreads and bond characteristics, that is, maturity, issue amount, and ratings, hold in the commonly expected directions for both MCBs and non-MCBs. Second, bonds with guarantors, either MCBs or non-MCBs, tend to have a higher subscription ratio at issuance; the impact of having an explicit guarantee on yield spreads is different in MCBs and in non-MCBs: a guarantor does not affect MCB prices, whereas having one has a statistically significant, large, and positive effect on non-MCBs' spreads (43.4 bps). One possible explanation is that non-MCBs that have a guarantor are typically ones with weaker issuers; thus, the higher spread reflects compensation to the investor for bearing higher credit risk. Third, bonds issued in cities with higher GDP growth and better fiscal conditions have lower issue spreads. The magnitude of estimates is larger for the MCBs, consistent with the findings in Liu et al. (2017). On the other hand, issuer characteristics matter more for non-MCBs than for MCBs: non-MCBs issued by firms that have lower leverage, higher returns on assets, and a larger size tend to have lower issue spreads and a higher subscription ratio. Lastly, there is a stronger demand for SOE-type non-MCBs: non-MCBs have 67.4 bps lower spreads and a 31.5% higher subscription ratio than their non-SOE counterparts.

The fact that investors flee from local MCBs to local non-MCBs before the expected turnover indicates that Chinese corporate bond markets are geographically segmented in the sense that some investors have a strong local preference for bond investments.¹⁴ Otherwise, even investors turn away from MCBs of a city facing a prefecture-level political turnover, so we would not expect see a drop in yield spreads for non-MCBs issued in the very same city. One possible type of investor with a strong preference, or perhaps obligation, to invest in local corporate bonds is the CCB. CCBs are local banks that emerged in the late 1990s via the merger and restructuring of urban credit cooperatives. CCBs operate like state-owned and joint venture banks in cities in which they have a presence by providing financing to local businesses. Compared to their larger counterparts, CCBs are heavily influenced by local

¹⁴Many papers document both retail and institutional investors' local preference for stocks, for example, French and Poterba (1991), Ivković and Weisbenner (2005), Pirinsky and Wang (2006), Seasholes and Zhu (2010), Pool et al. (2012), Giannetti and Laeven (2016), Tuzel and Zhang (2017), and Branikas et al. (2020), among others.

governments and thus are responsible for supporting local firms, both LGFVs and other firms (Wang, 2017). As a result, they are likely to rebalance their bond portfolio across MCBs and non-MCBs within locally issued bonds before an expected prefecture-level political turnover.

We divide the sample into two sub-samples based on whether or not the issuer city has a CCB. While 112 of 312 prefecture-level cities have a CCB, 8,048 MCBs/12,339 non-MCBs are issued in these with-CCB cities, compared to 4,445/3,840 issued in those without-CCB cities, suggesting cities with CCBs probably have better economic development. Panel A of Table III presents the results using these two sub-samples. Columns 1 and 2 contain results for bonds issued in cities with a CCB, and Columns 3 and 4 contain ones for bonds issued in cities without the presence of a CCB. We find that the MCBs-to-non-MCBs pattern is concentrated in the with-CCB sub-sample. In these cities, the average issue spread of MCBs statistically and significantly increases by 8.8 bps in the pre-turnover period; meanwhile, the issue spread of non-MCBs statistically and significantly decreases by 20.3 bps. By comparison, for cities without a CCB, even the average spread of MCBs increases by 10.5 bps before the expected turnover, so we do not witness any contemporaneous decrease in the issue spread of non-MCBs. Therefore, absent a CCB, which naturally has a strong preference for local bonds, a prefecture-level political turnover discourages investors from local MCBs, but does not necessarily push investors into local non-MCBs.

Panel B of Table III reports the sub-sample results using the subscription ratio as the dependent variable. The evidence is even clearer: LGFV issuers in cities with a CCB perceive their bonds as being less attractive, while corporate issuers' bonds enjoy higher popularity before , due to local CCB's reallocation from MCBs to non-MCBs. On the other hand, in cities without a CCB, the subscription ratios decrease for both MCBs and non-MCBs (though not significantly), suggesting that investors without a strong local preference rationally eschew the bond market as political uncertainty swells. Overall, all evidence supports our conjecture that local investors' portfolio reallocation from MCBs to non-MCBs drives changes in issue spreads around heightened turnover-induced uncertainty.

4.3 Sub-sample results

Our baseline multivariate regression provides evidence that investors demand higher issue spreads for holding MCBs issued in the pre-turnover period. Higher issue spreads compensate investors for bearing the risk of political uncertainty associated with holding the MCBs during a political turnover. Our finding supports the theoretical prediction in [Kelly et al. \(2016\)](#) and the empirical analyses conducted using U.S. municipal bonds ([Gao et al., 2019b](#)). In addition, we document a substitution effect for some investors, for example, CCBs, which have a strong local preference, crowding into the local non-MCBs. In this section, we present results for the heterogeneous impacts of prefecture-level political turnovers on local bond pricing, given the intensity of the local government’s implicit guarantee, its financial market development, and its bond rating.

4.3.1 The government’s implicit guarantee

Despite both being corporate bonds in the legal sense ([Chen et al., 2020b](#)), MCBs are distinct relative to non-MCBs, in that market participants view the former as having local government backing ([Liu et al., 2017](#)). Investors would expect repayment from the government should the MCB default. Thus, the local government’s willingness and ability to provide an implicit guarantee should matter for the pre-turnover variations in issue spreads of MCBs and non-MCBs. Specifically, the pattern of investor flight to non-MBSs should be more evident in places where local governments have a strong incentive to provide an implicit guarantee for the MCBs; thus, a prefecture-level political turnover may affect the government’s ability and/or willingness to provide an implicit guarantee in the future.

We use the leverage of LGFVs to capture the heterogeneous effects of an implicit guarantee on the relation between the turnover-induced political uncertainty and local bond prices. High LGFV leverage indicates the active involvement of local governments in local business activities. Active involvement incentives government officials to provide a stronger implicit guarantee for MCBs. Meanwhile, high LGFV leverage also could be associated with a weaker ability to provide an implicit guarantee in the future. Either way, a political turnover could lead to an increase in investors’ uncertainty about whether the government will continue

offering an implicit guarantee, and their political uncertainty could prompt higher MCB spreads.

Following [Huang et al. \(2020b\)](#), we measure a city’s LGFV leverage as its aggregate LGFV debts outstanding, that is, the sum of both short- and long-term liabilities across all LGFVs located in that city, standardized by the city’s GDP. We divide our sample into three sub-groups based on the LGFV leverage rank of the city in which the bond issuer is located and perform a multivariate regression for MCBs and non-MCBs within each sub-group.¹⁵

Table IV presents the results. We find that, while there is no pre-turnover issue spread for MCBs issued in the median LGFV leverage sub-group, positive pre-turnover spreads are observed for MCBs in cities with more extreme values of LGFV leverage. Expected turnovers raise the issue spreads of MCBs by 11.3 bps and 21.7 bps, respectively, for the high and low LGFV leverage sub-groups. The “V-shaped” pattern suggests that MCB investors interpret issuing cities’ LGFV leverage differently for high versus low levels: investors of MCBs issued in high-LGFV-leverage cities are concerned about their local governments’ capacity to provide an implicit guarantee, and such concerns are exacerbated around prefecture-level political turnovers; investors of MCBs issued in low-LGFV-leverage cities are concerned that low leverage is a signal of a local government’s passive involvement in the local debt market, and, thus, these investors exhibit low confidence in the government’s intention to provide an implicit guarantee in the future. Nevertheless, in both cases, the turnover-induced discount for MCBs is temporary and only valid in the pre-turnover period; the discount vanishes when political uncertainty about the next mayor is resolved.

Note that the flight-to-non-MCB phenomenon is only observed for cities with high LGFV leverage. The magnitude is -7.2 bps with a statistically significant t -statistic of 2.03. The likely reason undergirding this phenomenon is that cities with high LGFV leverage also have stronger economic development and thus more financial institutions, including CCBs. As a result, local investors are more likely to move from MCBs to non-MCBs when faced with a prefecture-level political turnover.

¹⁵The rank is determined on a year-by-year basis.

4.3.2 Local financial market development

The local market environment matters for public financing and is particularly relevant in China, where regions vary largely in their pace of moving toward a market-based economy (Lucey et al., 2020). The relationship between government intervention and market forces can shed light on different bond market reactions to rising political uncertainty.

To study this relation, we test the baseline model using sub-groups sorted by the market environment in the issuers' cities. We adopt the China Provincial Marketization index, which is published by the National Economic Research Institute, to capture cross-provincial differences in the local financial market environments (Gang et al., 2011). The China Provincial Marketization index is an annual index that measures the development of the market economy at the provincial level. The index evaluates each province's marketization level along five dimensions: (1) the relationship between government and market; (2) the development of a non-state-owned economy; (3) the development of a product market; (4) the development of a factor market; and (5) the development of intermediaries and the legal environment. Each province is given a score for each sub-index category on a scale of 0 to 10, with higher numbers representing a higher level of marketization, and the total index is constructed as the arithmetic average of the five sub-indices.¹⁶ For each year, we apply the provincial index total score to all prefecture-level cities in that province and sort bonds into three groups (i.e., high, median, or low marketization groups) based on the marketization score of the issuer's city.

Panel A of Table V reports the estimated coefficients for the multivariate regressions using each of these three sub-groups. We find that political-turnover-induced uncertainty strongly affects the prices of MCBs in high marketization cities. The magnitude is 16 bps with a t -statistic of 2.04. In contrast, MCBs issued in cities with lower marketization levels do not experience any change in their issue spread before a city prefecture-level political turnover. That is, investors take turnover-induced political uncertainty into consideration when they buy MCBs issued in market-oriented environments.

¹⁶Principal component analysis is used to calculate the total index from the sub-indices in the pre-2004 sample. According to Gang et al. (2011), the two aggregation approaches yield very similar results.

We also use the sub-index that measures the relationship between the government and the market to further understand the differential impact of prefecture-level political turnovers on the pricing of MCBs and non-MCBs in cities with different government-market relations. Specifically, the sample is divided into three sub-groups based on the issuing city's categorization for the relationship between the local government and the market: weak, medium, and strong. A weak relation between the government and the market implies high marketization. Panel B of Table V presents the results. Consistent with the earlier finding based on the total index, we observe higher issue spreads in MCBs during the pre-turnover period only in cities with a weak government-market relationship. The magnitude is 18.9 bps with statistical significance at the 5% level. Meanwhile, we do not observe any significant change in MCBs' pricing in cities with a medium or a strong government-market relationship.

One other interesting finding is that non-MCBs report higher pre-turnover issue spreads in cities with strong government-market relationship. We have a tentative explanation for this finding: investors acknowledge that the pricing of bonds is more likely affected by government power in cities in which the government is extensively involved in the market. In these markets, firms' business activities are more likely to be affected by the local government (or, more specifically, by the mayor), making firms more vulnerable to increased in political uncertainty risk in the period prior to an expected political turnover.

For robustness, we use cities' GDP per capita as an alternative measure of the level of local development (Jin et al., 2008). Cities with a higher GDP per capita are considered to be more advanced in their marketization development. We find consistent evidence of positive issue spreads for MCBs in the pre-turnover period only being present in cities with high GDP per capita, and the magnitude is at 11.7 bps (t -statistic = 1.72).

Overall, results in this subsection suggest that the impact of political turnovers on local MCB prices is more relevant in market economies with low government intervention. This finding also highlights China's development toward a market-oriented economy, in both real sectors and financial markets over the past few decades.

4.3.3 Local corporate bonds pricing and credit ratings

Corporate bond ratings play an important role in bond pricing. We are interested in whether the turnover-induced political uncertainty is perceived differently by investors of bonds with different credit ratings. We run multivariate regressions using MCBs and non-MCBs with four rating groups: AAA, AA+, AA, and below. Table VI reports the results. We find that the pattern of higher spreads for MCBs and the flight to non-MCBs in the pre-turnover period is the strongest for AA-rated bonds: the average increase in the MCB spread is 8.3% (t -statistic = 1.66), and the average decrease in the non-MCB spread is 10.1% (t -statistic = 2.57). For AA+ and the lowest-rated bonds, the pattern still holds, while the magnitude is much smaller and has no statistical significance. For AAA-rated bonds, the pattern is reversed but with a small magnitude and statistical insignificance. Overall, our credit-rating-based sub-sample analyses suggest that investors are more concerned about prefecture-level political turnovers and the associated heightened political risk for MCBs with lower ratings, which cause their issue spreads to increase more. Meanwhile, bonds with the highest rating seem to be unaffected by political turnovers.

4.4 Additional results

In this section, we present additional results for the secondary market with the trade spread as the dependent variable and provincial-level political turnover as an indicator for rising political uncertainty at the province level.

4.4.1 Trade spread

So far, our study has analyzed the impact of prefecture-level political turnovers on the cost of financing for MCBs and non-MCBs at issuance. In this section, we utilize the trading data to examine how secondary market investors view expected prefecture-level political turnovers in their pricing of corporate bonds. We test the baseline regression model using bonds' trade spreads as the dependent variable. We divide bonds into two sub-groups based on the type of market in which their secondary trading takes place: the interbank market

and the exchange market. These two markets have different market participants and trading rules.¹⁷ By separating bonds traded in these two markets, we are in a better position to clearly understand whether and how political uncertainty affects secondary market trading behaviors.

Table VII presents the results for the interbank market trading in Columns 1 and 2 and the results for the exchange market trading in Columns 3 and 4. We find that secondary market investors in both markets view prefecture-level political turnovers as a source of risk to be concerned with in corporate bond pricing. This finding is true for both MCBs and non-MCBs. In particular, investors in the interbank bond market demand a higher trade spread that is economically and statistically significant for both MCBs and non-MCBs in the six-month period prior to political turnover, with a magnitude of 4.8 bps (t -statistic = 1.96) and 6.1 bps (t -statistic = 2.29), respectively. Meanwhile investors participating in the exchange market before a political turnover demand 9 bps (t -statistic = 1.95) and 12.6 bps (t -statistic = 1.23) higher trade spreads for MCBs and non-MCBs, respectively.

The observation that the political uncertainty induced by prefecture-level political turnovers positively affects trade spreads in the secondary market can also help us rule out the possibility that our baseline results for issue spreads are driven by issuers' endogenous choice to finance high-risk projects using MCBs prior to prefecture-level political turnovers and delay the issuance of less-risky projects. Unlike in the primary market in which the timing of MCBs' issuance can be endogenously determined, secondary market MCB trading is not subject to endogenous issuance timing and thus only reflects investors' views about the pricing of outstanding MCBs already issued. Therefore, the risk associated with local MCBs is indeed heightened from the angle of bond investors before a prefecture-level political turnover.

One other interesting finding is that trade spreads of non-MCBs also increase during the 12-month window around a political turnover. Moreover, such an increase in the trade spread is more prominent post-turnover compared to pre-turnover. Specifically, non-MCBs from the interbank market traded in the post-turnover period have a trade spread increase of 11.5 bps

¹⁷For details on these two bond markets, see, for example, [Chen et al. \(2020a\)](#) and [Amstad and He \(2020\)](#).

(t -statistic = 3.35), while the increase is 6.1 bps (t -statistic = 2.29) in the pre-turnover period; the values are 37.1 bps (t -statistic = 2.03) and 12.6 (t -statistic = 1.23), respectively, for the exchange market. These economically large and statistically significant premia indicate that the appointment of a new city mayor imposes another source of risk for non-MCBs trading in the secondary markets, and the pricing impact of such risk lasts even after the turnover takes place.

4.4.2 Provincial-level effects

While our main analyses focus on political turnovers of prefecture-level mayors, political turnovers in provincial-level governor appointments could also potentially produce political uncertainty and thus affect the prices of bonds issued by the provincial government. After the 2014/10 release of “Document 43” by the State Council of China, provinces were authorized to issue municipal bonds that are fully backed by the provincial government (Chen et al., 2020b). In this section, we examine the price reactions of munis, MCBs, and non-MCBs around the turnover of provincial-level governors.

Under China’s top-down hierarchical administrative structure, political chiefs at the provincial level do not directly involve themselves in economic policy making at the prefecture level. They oversee the work carried out by the city mayors within their administrative division. In addition, provincial chiefs are responsible for the rotation and promotion of local mayors. For this reason, one could expect that investors in MCBs and non-MCBs could be concerned about provincial-level political turnovers.

Table VIII presents the regression results for the impact of provincial-level governor turnovers on the issue spreads of municipal bonds, MCBs, and non-MCBs. We find that, similar to prefecture-level political turnovers, provincial-level political turnovers raise the issue spread of municipal bonds by 3.6 bps with a t -statistic of 1.98. Meanwhile, provincial-level political turnovers have unimportant impacts on the issue spreads of MCBs and non-MCBs. Our results suggest that, although governors oversee the cities they administrate, their political turnovers do not cause additional uncertainty from the perspective of local MCB and non-MCB investors. This finding is possibly explained by provincial-level governors’ lack

of direct involvement in determining local economic policies at the prefecture level.

5 Conclusion

Political turnovers can induce substantial political uncertainty, which, in turn, prominently influences the cost of local public and private financing. Our paper investigates the pricing impacts of political uncertainty on municipal corporate bonds and local corporate bonds simultaneously by exploiting the expected turnover of prefecture-level mayors in China. The rise in risk induced by prefecture-level political turnover increases the issue spreads of municipal corporate bonds, which are believed to enjoy an implicit government guarantee, while inducing capital to crowd into other corporate bonds in the same local market and effectively reducing the financing costs of these other corporate bonds. We find evidence that changes in the preferences of local investors, that is, CCBs, toward local corporate bonds before a prefecture-level political turnover drives such pricing effects.

Our findings also shed light on the effect of economic and/or financial market development on bond price variations due to cyclical political uncertainty in China. In particular, the degree of marketization, the government-market relation, and local economic development all have pricing impacts on bonds as a result of prefecture-level political turnovers. The finding, which uses secondary market trading data, is consistent with our main results. Provincial-level political turnovers raise the issue spreads of munis, which are issued by the provincial government, but do not affect the issue spreads of MCBs or non-MCBs.

References

- Sumit Agarwal, Chunlin Liu, and S Ghon Rhee. Investor demand for ipos and aftermarket performance: Evidence from the hong kong stock market. *Journal of International Financial Markets, Institutions and Money*, 18(2):176–190, 2008.
- Marlene Amstad and Zhiguo He. Chapter 6: Interbank System. *Handbook of China’s Financial System*, 2020. edited by Marlene Amstad, Guofeng Sun and Xiong Wei.
- Heng An, Yanyan Chen, Danglun Luo, and Ting Zhang. Political uncertainty and corporate investment: Evidence from China. *Journal of Corporate Finance*, 36:174–189, 2016.
- Andrew Ang, Jennie Bai, and Hao Zhou. The great wall of debt: real estate, political risk, and Chinese local government financing cost. *Working paper*, 2019.
- Chong-En Bai, Chang-Tai Hsieh, and Zheng(Michael) Song. The long shadow of a fiscal expansion. *Brookings Papers on Economic Activity*, 60:309–327, 2016.
- Scott R Baker, Nicholas Bloom, and Steven J Davis. Measuring economic policy uncertainty. *The Quarterly Journal of Economics*, 131(4):1593–1636, 2016.
- Frederico Belo, Vito D Gala, and Jun Li. Government spending, political cycles, and the cross section of stock returns. *Journal of Financial Economics*, 107(2):305–324, 2013.
- Ioannis Branikas, Harrison Hong, and Jiangmin Xu. Location choice, portfolio choice. *Journal of Financial Economics*, 2020.
- Alexander W Butler. Distance still matters: Evidence from municipal bond underwriting. *The Review of Financial Studies*, 21(2):763–784, 2008.
- Dario Cestau, Burton Hollifield, Dan Li, and Norman Schürhoff. Municipal bond markets. *Annual Review of Financial Economics*, 11:65–84, 2019.
- Hui Chen, Zhuo Chen, Zhiguo He, Jinyu Liu, and Rengming Xie. Pledgeability and asset prices: Evidence from the Chinese corporate bond markets. *Working paper*, 2020a.
- Ting Chen and James Kai-sing Kung. Busting the “princelings”: The campaign against corruption in China’s primary land market. *The Quarterly Journal of Economics*, 134(1): 185–226, 2019.
- Ye Chen, Hongbin Li, and Li-An Zhou. Relative performance evaluation and the turnover of provincial leaders in China. *Economics Letters*, 88(3):421–425, 2005.
- Yunsen Chen, Deqiu Chen, Weimin Wang, and Dengjin Zheng. Political uncertainty and firms’ information environment: Evidence from China. *Journal of Accounting and Public Policy*, 37(1):39–64, 2018.
- Zhuo Chen, Zhiguo He, and Chun Liu. The financing of local government in China: Stimulus loan wanes and shadow banking waxes. *Journal of Financial Economics*, 137(1):42–71, 2020b.
- Francesca Cornelli and David Goldreich. Bookbuilding: How informative is the order book? *The Journal of Finance*, 58(4):1415–1443, 2003.

- Yuping Deng, Yanrui Wu, and Helian Xu. Political turnover and firm pollution discharges: An empirical study. *China Economic Review*, 58:101363, 2019.
- Yi Ding, Wei Xiong, and Jinfan Zhang. Overpricing in China’s corporate bond market. *Working paper*, 2020.
- Longzhen Fan and Chu Zhang. Beyond segmentation: The case of China’s repo markets. *Journal of Banking & Finance*, 31(3):939–954, 2007.
- Hanming Fang, Zhe Li, Nianhang Xu, and Hongjun Yan. In the shadows of the government: Relationship building during political turnovers. *Working paper*, 2018.
- Hanming Fang, Yongqin Wang, and Xian Wu. The collateral channel of monetary policy: Evidence from China. *Working paper*, 2020.
- David Feldman, Jiaming Li, and Konark Saxena. Politically motivated corporate decisions: Evidence from China. *Working Paper*, 2017.
- Xunan Feng and Anders C Johansson. Political uncertainty and innovation in China. *Working paper*, 2017.
- Mark J Flannery, Claire Yurong Hong, and Baolian Wang. The effect of government reference bonds on corporate borrowing costs: Evidence from a natural experiment. *Working paper*, 2020.
- Kenneth R French and James Michael Poterba. Investor diversification and international equity markets. *American Economic Review*, 81(2):222–226, 1991.
- Mahmoud Gad, Valeri V Nikolaev, Ahmed Tahoun, and Laurence van Lent. Firm-level political risk and credit markets. *Working paper*, 2020.
- Fan Gang, Wang Xiaolua, and Ma Guangrongb. Contribution of marketization to China’s economic growth. *Economic Research Journal*, 9(002), 2011.
- Pengjie Gao, Chang Lee, and Dermot Murphy. Municipal borrowing costs and state policies for distressed municipalities. *Journal of Financial Economics*, 132(2):404–426, 2019a.
- Pengjie Gao, Dermot Murphy, and Yaxuan Qi. Political uncertainty and public financing costs: Evidence from US gubernatorial elections and municipal bond markets. *Working paper*, 2019b.
- Pengjie Gao, Chang Lee, and Dermot Murphy. Financing dies in darkness? the impact of newspaper closures on public finance. *Journal of Financial Economics*, 135(2):445–467, 2020.
- Zhe Geng and Jun Pan. Price discovery and market segmentation in China’s credit market. *Working paper*, 2019.
- Mariassunta Giannetti and Luc Laeven. Local ownership, crises, and asset prices: evidence from US mutual funds. *Review of Finance*, 20(3):947–978, 2016.
- Paul Goldsmith-Pinkham, Matthew T Gustafson, Ryan C Lewis, and Michael Schwert. Sea level rise exposure and municipal bond yields. *Working paper*, 2020.

- Lawrence E Harris and Michael S Piwowar. Secondary trading costs in the municipal bond market. *The Journal of Finance*, 61(3):1361–1397, 2006.
- Tarek A Hassan, Stephan Hollander, Laurence van Lent, and Ahmed Tahoun. Firm-level political risk: Measurement and effects. *The Quarterly Journal of Economics*, 134(4): 2135–2202, 2019.
- Jing-Zhi Huang, Bibo Liu, and Zhan Shi. Determinants of short-term corporate yield spreads: Evidence from the commercial paper market. *Working paper*, 2020a.
- Yi Huang, Marco Pagano, and Ugo Panizza. Local crowding-out in china. *The Journal of Finance*, 75(6):2855–2898, 2020b.
- Zoran Ivković and Scott Weisbenner. Local does as local is: Information content of the geography of individual investors’ common stock investments. *The Journal of Finance*, 60 (1):267–306, 2005.
- Candace E Jens. Political uncertainty and investment: Causal evidence from us gubernatorial elections. *Journal of Financial Economics*, 124(3):563–579, 2017.
- Furong Jin, Keun Lee, and Yee-Kyoung Kim. Changing engines of growth in China: From exports, FDI and marketization to innovation and exports. *China & World Economy*, 16 (2):31–49, 2008.
- Shuang Jin, Wei Wang, and Zilong Zhang. The real effects of implicit government guarantee: Evidence from Chinese SOE defaults. *Working paper*, 2019.
- Brandon Julio and Youngsuk Yook. Political uncertainty and corporate investment cycles. *The Journal of Finance*, 67(1):45–83, 2012.
- Mahsa S Kaviani, Lawrence Kryzanowski, Hosein Maleki, and Pavel Savor. Policy uncertainty and corporate credit spreads. *Journal of Financial Economics*, 2020.
- Bryan Kelly, L’uboš Pástor, and Pietro Veronesi. The price of political uncertainty: Theory and evidence from the option market. *The Journal of Finance*, 71(5):2417–2480, 2016.
- David S Kidwell and Charles A Trzcinka. Municipal bond pricing and the New York City fiscal crisis. *The Journal of Finance*, 37(5):1239–1246, 1982.
- Hongbin Li and Li-An Zhou. Political turnover and economic performance: the incentive role of personnel control in China. *Journal of public economics*, 89(9-10):1743–1762, 2005.
- Clark Liu, Shujing Wang, KC John Wei, and Ninghua Zhong. The demand effect of yield-chasing retail investors: Evidence from the Chinese enterprise bond market. *Journal of Empirical Finance*, 50:57–77, 2019.
- Laura Liu, Haibing Shu, Shujing Wang, and KJ Wei. The political cycle of corporate investments: new evidence from Chinese manufacturing firms. *Working paper*, 2018.
- Laura Xiaolei Liu, Yuanzhen Lyu, and Fan Yu. Implicit government guarantee and the pricing of Chinese LGFV debt. *Working paper*, 2017.
- Miles Livingston. The pricing of municipal bonds. *Journal of Financial and Quantitative Analysis*, 17(2):179–193, 1982.

- Brian Lucey, Wang Xiaoxue, Wang Yanfang, and Xu Ying. Can financial marketization mitigate the negative effect of exchange rate fluctuations on exports? Evidence from Chinese regions. *Finance Research Letters*, 34:101250, 2020.
- N Gregory Mankiw and James M Poterba. Stock market yields and the pricing of municipal bonds. *Working paper*, 1996.
- Lubos Pastor and Pietro Veronesi. Uncertainty about government policy and stock prices. *The Journal of Finance*, 67(4):1219–1264, 2012.
- L’uboš Pástor and Pietro Veronesi. Political uncertainty and risk premia. *Journal of Financial Economics*, 110(3):520–545, 2013.
- L’uboš Pástor and Pietro Veronesi. Political cycles and stock returns. *Journal of Political Economy*, 128(11):000–000, 2020.
- Christo Pirinsky and Qinghai Wang. Does corporate headquarters location matter for stock returns? *The Journal of Finance*, 61(4):1991–2015, 2006.
- Veronika K Pool, Noah Stoffman, and Scott E Yonker. No place like home: Familiarity in mutual fund manager portfolio choice. *Review of Financial Studies*, 25(8):2563–2599, 2012.
- James M Poterba and Kim Rueben. State fiscal institutions and the US municipal bond market. *Fiscal Institutions and Fiscal Performance*, pages 181–208, 2008.
- Hong Ru. Government credit, a double-edged sword: Evidence from the China development bank. *The Journal of Finance*, 73(1):275–316, 2018.
- Hong Ru and Kunru Zou. How do individual politicians affect privatization? Evidence from China. *Working paper*, 2020.
- Michael Schwert. Municipal bond liquidity and default risk. *The Journal of Finance*, 72(4):1683–1722, 2017.
- Mark S Seasholes and Ning Zhu. Individual investors and local bias. *The Journal of Finance*, 65(5):1987–2010, 2010.
- Jeffrey L Skelton. Relative risk in municipal and corporate debt. *The Journal of Finance*, 38(2):625–634, 1983.
- Charles Trzcinka. The pricing of tax-exempt bonds and the miller hypothesis. *The Journal of Finance*, 37(4):907–923, 1982.
- Selale Tuzel and Miao Ben Zhang. Local risk, local factors, and asset prices. *The Journal of Finance*, 72(1):325–370, 2017.
- Maya Waisman, Pengfei Ye, and Yun Zhu. The effect of political uncertainty on the cost of corporate debt. *Journal of Financial Stability*, 16:106–117, 2015.
- Chunyang Wang. Crony banking and local growth in China. *Working paper*, 2017.
- Shujing Wang, Hongjun Yan, Ninghua Zhong, and Yizhou Tang. The indirect effects of trading restrictions. *Working paper*, 2020.

Richard West. New issue concessions on municipal bonds: A case of monopsony pricing. *The Journal of Business*, 38(2):135–148, 1965.

Jing Wu, Hao Li, and Keyang Li. Local political chief turnover and economic growth: Evidence from China. *Economics of Transition and Institutional Change*, 2020.

Chenggang Xu. The fundamental institutions of China's reforms and development. *Journal of Economic Literature*, 49(4):1076–1151, 2011.

Nianhang Xu, Qinyuan Chen, Yan Xu, and Kam C Chan. Political uncertainty and cash holdings: Evidence from China. *Journal of Corporate Finance*, 40:276–295, 2016.

Table I: Summary statistics

This table presents summary statistics for municipal corporate bonds (MCBs) and non-municipal corporate bonds (non-MCBs). Bond-level variables include issue spread (%), maturity, guarantee covenant indicator, and issue amount (RMB billions); issuer-level variables include issuer size (RMB billions), leverage, and ROA; and issuer city characteristics include GDP growth (%) and fiscal deficit scaled by GDP. All issuer and city variables are merged to individual bonds with a lag of six months to account for the delay in data release. Summary statistics include the number of observations, the mean, the standard deviation, the median, and the 10th and 90th percentiles. The sample period is from 2009 to 2019.

	MCBs					Non-MCBs				
	N = 12,493					N = 16,180				
	Mean	SD	P10	Median	P90	Mean	SD	P10	Median	P90
Issue spread (%)	1.886	1.024	0.713	1.702	3.399	2.119	1.327	0.645	1.787	4.084
Maturity	3.904	2.534	0.740	4.000	7.000	2.293	1.843	0.729	1.000	5.000
Guarantor	0.133	0.339	0.000	0.000	1.000	0.147	0.354	0.000	0.000	1.000
Issue amount (RMB billions)	0.908	0.624	0.300	0.800	1.660	0.889	0.865	0.200	0.600	2.000
Issuer size (RMB billions)	54.85	75.70	7.700	28.49	136.5	69.66	117.9	4.83	26.21	203.8
Leverage	0.557	0.153	0.336	0.584	0.728	0.628	0.148	0.430	0.650	0.800
ROA	1.573	1.908	0.270	1.091	3.443	3.239	3.685	0.168	2.398	7.392
Δ GDP (%)	9.399	2.623	7.000	8.800	13.00	9.221	2.846	6.700	8.600	13.09
Fiscal deficit	0.052	0.062	0.002	0.036	0.124	0.041	0.065	0.000	0.030	0.090

Table II: Impacts of prefecture-level political turnover on issue spreads

This table presents the estimated effects of prefecture-level political turnovers on MCBs and non-MCBs issue spreads and subscription ratios. *Pre* is an indicator variable that equals one if the bond is issued in the six months preceding a prefecture-level political turnover, and *Post* is an indicator variable that equals one if the bond is issued in the six months immediately following the turnover. Columns 1 and 2 (3 and 4) present results using issue spreads (subscription ratios) as the dependent variable. Control variables include bond maturity; the log value of issuance size; rating dummies; a guarantor indicator; issuer size, leverage, and ROA; an SOE indicator; GDP growth; and fiscal deficit. Year-quarter and province fixed effects are included. The sample period is 2009 to 2019. Heteroskedasticity-consistent *t*-statistics, clustered by year-quarter, are reported in parentheses. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

	Issue spread		Subscription ratio	
	MCBs (1)	Non-MCBs (2)	MCBs (3)	Non-MCBs (4)
<i>Pre</i>	0.089** (2.14)	-0.140*** (-2.60)	-0.119** (-2.31)	0.052 (1.42)
<i>Post</i>	0.020 (0.42)	0.038 (0.84)	0.045 (0.61)	-0.010 (-0.28)
Maturity	0.026*** (4.09)	0.003 (0.24)	0.006 (0.43)	0.036* (2.03)
ln(amount)	-0.061*** (-3.06)	-0.279*** (-8.52)	0.000 (0.00)	-0.033* (-1.76)
DummyAAA	-1.874*** (-17.33)	-1.793*** (-12.87)	0.574*** (5.31)	0.524*** (7.26)
DummyAA+	-1.308*** (-17.02)	-1.187*** (-11.01)	0.649*** (6.65)	0.454*** (8.36)
DummyAA	-0.625*** (-9.48)	-0.675*** (-9.57)	0.359*** (4.27)	0.271*** (7.20)
Guarantor	-0.058 (-1.03)	0.434*** (4.24)	0.304** (2.41)	0.223*** (3.26)
Δ GDP	-0.033*** (-3.36)	-0.027*** (-4.25)	0.018 (1.54)	0.005 (0.79)
Fiscal deficit	1.825*** (6.37)	0.862*** (3.38)	0.123 (0.27)	0.297 (1.46)
Issuer size	-0.003 (-0.13)	0.108*** (3.26)	-0.097*** (-4.27)	-0.028 (-1.71)
Leverage	0.162* (1.96)	0.266* (1.71)	-0.091 (-0.63)	-0.378*** (-6.46)
ROA	0.001 (0.19)	-0.027*** (-5.45)	0.005 (0.36)	0.025*** (5.14)
SOE		-0.674*** (-13.74)		0.315*** (8.04)
Constant	2.852*** (30.78)	2.927*** (25.91)	1.570*** (9.69)	1.176*** (10.15)
Clause controls	Yes	Yes	Yes	Yes
Year-qtr FE	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes
Obs.	12,493	16,180	4,859	7,582
Adj. R^2	0.530	0.582	0.122	0.123

Table III: The effects of investors' preferences on pre-/post-turnover issue spreads

This table presents the impact of a prefecture-level political turnover on issue spreads for bonds issued in cities with different investor preferences for local investment. Sub-groups are formed based on whether bonds are issued in cities with and without city commercial banks. Panels A and B report the regression coefficients for issue spreads and subscription ratios for prefecture-level political turnovers across the two sub-samples with and without a CCB. Columns 1 and 2 (3 and 4) present results for cities with (without) a CCB. *Pre* is an indicator variable that equals one if the bond is issued in the six months preceding a prefecture-level political turnover, and *Post* is an indicator variable that equals one if the bond is issued in the six months immediately following the turnover. Control variables include bond maturity; the log value of issuance size; rating dummies; a guarantor indicator; issuer size, leverage, and ROA; an SOE indicator; GDP growth; and fiscal deficit. Year-quarter and province fixed effects are included. The sample period is 2009 to 2019. Heteroskedasticity-consistent *t*-statistics, clustered by year-quarter, are reported in parentheses. **p* < 0.1; ***p* < 0.05; ****p* < 0.01.

Panel A: Effect on issue spreads				
	With CCB		Without CCB	
	MCBs (1)	Non-MCBs (2)	MCBs (3)	Non-MCBs (4)
Pre	0.088* (1.65)	-0.203*** (-2.88)	0.105* (1.82)	0.054 (0.84)
Post	0.063 (1.01)	0.007 (0.16)	-0.006 (-0.12)	0.051 (0.56)
Control	Yes	Yes	Yes	Yes
Year-qtr FE	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes
Obs.	8,048	12,339	4,445	3,840
Adj. R^2	0.534	0.590	0.505	0.599

Panel B: Effect on subscription ratios				
	With CCB		Without CCB	
	MCBs (1)	Non-MCBs (2)	MCBs (3)	Non-MCBs (4)
Pre1	-0.109*** (-2.68)	0.098** (2.26)	-0.169 (-1.44)	-0.108 (-1.36)
Post1	-0.023 (-0.27)	-0.013 (-0.29)	0.134 (1.18)	0.062 (0.68)
Control	Yes	Yes	Yes	Yes
Year-qtr FE	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes
Obs.	3,364	5,845	1,493	1,735
Adj. R^2	0.133	0.122	0.146	0.162

Table IV: The effects of LGFV leverage on pre-/post-turnover issue spreads

This table presents the impact of a prefecture-level political turnover on issue spreads for bonds issued in cities with different LGFV leverages. We focus on three sub-samples of cities with high, medium, or low LGFV leverage sorted using the 30th and 70th percentiles of LGFV leverage each year. *Pre* is an indicator variable that equals one if the bond is issued in the six months preceding a prefecture-level political turnover, and *Post* is an indicator variable that equals one if the bond is issued in the six months immediately following the turnover. Control variables include bond maturity; the log value of issuance size; rating dummies; a guarantor indicator; issuer size, leverage, and ROA; an SOE indicator; GDP growth; and fiscal deficit. Year-quarter and province fixed effects are included. The sample period is 2009 to 2019. Heteroskedasticity-consistent *t*-statistics, clustered by year-quarter, are reported in parentheses. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

	High LGFV leverage		Medium LGFV leverage		Low LGFV leverage	
	MCBs (1)	Non-MCBs (2)	MCBs (3)	Non-MCBs (4)	MCB (5)	Non-MCBs (6)
<i>Pre</i>	0.113** (2.03)	-0.072** (-2.03)	-0.040 (-0.76)	0.046 (0.67)	0.217** (2.42)	-0.027 (-0.20)
<i>Post</i>	0.002 (0.04)	0.020 (0.46)	-0.007 (-0.11)	0.103 (1.14)	0.080 (0.72)	0.119 (0.91)
Control	Yes	Yes	Yes	Yes	Yes	Yes
Year-qtr FE	Yes	Yes	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	9,398	11,128	2,009	2,322	503	1,320
Adj. R^2	0.516	0.576	0.546	0.555	0.515	0.469

Table V: The effect of the local market's environment on pre-/post-turnover issue spreads

This table presents the impact of a prefecture-level political turnover on the issue spreads of bonds with different local market environments. Sub-samples are formed in accordance with the issuing city's National Economic Research Institute's marketization index, the sub-index on the relationship between government and market, and the GDP per capita, in Panels A, B, and C, respectively. The sample period is 2009 to 2019. Heteroskedasticity-consistent t -statistics, clustered by year-quarter, are reported in parentheses. $*p < 0.1$; $**p < 0.05$; $***p < 0.01$.

Panel A: Sub-samples formed on cities' marketization level

	High		Medium		Low	
	MCBs (1)	Non-MCBs (2)	MCBs (3)	Non-MCBs (4)	MCBs (5)	Non-MCBs (6)
<i>Pre</i>	0.160** (2.04)	-0.034 (-0.71)	0.033 (0.54)	-0.013 (-0.17)	-0.031 (-0.45)	0.066 (0.97)
<i>Post</i>	0.039 (0.53)	-0.063 (-1.56)	-0.043 (-0.91)	0.081 (1.20)	0.032 (0.31)	0.187 (1.46)
Control	Yes	Yes	Yes	Yes	Yes	Yes
Year-qtr FE	Yes	Yes	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	5,771	7,550	3,826	3,890	2,333	3,611
Adj. R^2	0.520	0.609	0.558	0.537	0.531	0.488

Panel B: Sub-samples formed on cities' government-market relation

	Weak		Medium		Strong	
	MCBs (1)	Non-MCBs (2)	MCBs (3)	Non-MCBs (4)	MCBs (5)	Non-MCBs (6)
<i>Pre</i>	0.189** (2.34)	-0.056 (-1.16)	0.014 (0.26)	-0.006 (-0.07)	-0.033 (-0.45)	0.142** (2.10)
<i>Post</i>	0.051 (0.71)	-0.069 (-1.65)	-0.023 (-0.48)	0.169* (2.00)	-0.007 (-0.07)	0.195 (1.60)
Control	Yes	Yes	Yes	Yes	Yes	Yes
Year-qtr FE	Yes	Yes	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	5,852	8,072	3,773	3,403	2,305	3,576
Adj. R^2	0.520	0.594	0.559	0.529	0.531	0.535

Panel C: Sub-samples formed on cities' GDP per capita

	High		Medium		Low	
	MCBs (1)	Non-MCBs (2)	MCBs (3)	Non-MCBs (4)	MCBs (5)	Non-MCBs (6)
<i>Pre</i>	0.117* (1.72)	-0.052 (-1.29)	0.081 (1.39)	-0.054 (-0.89)	-0.096 (-1.03)	0.139 (1.11)
<i>Post</i>	-0.015 (-0.27)	0.019 (0.67)	0.064 (1.03)	0.040 (0.39)	-0.081 (-0.79)	0.154 (0.84)
Control	Yes	Yes	Yes	Yes	Yes	Yes
Year-qtr FE	Yes	Yes	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	7,388	10,321	3,363	3,471	1,017	1,107
Adj. R^2	0.515	0.578	0.539	0.522	0.502	0.554

Table VI: The effect of credit ratings on pre-/post-turnover issue spreads

This table presents the impact of prefecture-level political turnovers on issue spreads for bonds with different credit ratings. MCBs and non-MCBs are sorted into four groups based on the following credit ratings: AAA, AA+, AA, and below. *Pre* is an indicator variable that equals one if the bond is issued in the six months preceding prefecture-level political turnover, and *Post* is an indicator variable that equals one if the bond is issued in the six months immediately following the turnover. Control variables include bond maturity; the log value of issuance size; rating dummies; a guarantor indicator; issuer size, leverage, and ROA; an SOE indicator; GDP growth; and fiscal deficit. Year-quarter and province fixed effects are included. The sample period is 2009 to 2019. Heteroskedasticity-consistent *t*-statistics clustered by year-quarter are reported in parentheses. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

	AAA		AA+		AA		Below AA	
	MCBs (1)	Non-MCBs (2)	MCBs (3)	Non-MCBs (4)	MCBs (5)	Non-MCBs (6)	MCBs (7)	Non-MCBs (8)
<i>Pre</i>	-0.042 (-0.69)	0.068 (1.18)	0.068 (0.75)	-0.038 (-0.77)	0.083* (1.66)	-0.101** (-2.57)	0.024 (0.31)	-0.039 (-0.77)
<i>Post</i>	-0.013 (-0.20)	0.240* (1.92)	-0.089 (-1.43)	0.088 (1.17)	0.085 (1.38)	-0.047 (-0.72)	-0.070 (-0.57)	-0.006 (-0.07)
Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year-qtr FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	2,233	4,466	3,881	3,775	5,449	5,371	721	1,654
Adj. R^2	0.493	0.457	0.340	0.460	0.435	0.431	0.511	0.578

Table VII: Impacts of prefecture-level political turnover on trade spreads

This table presents the impact of prefecture-level political turnover on trade spreads in the interbank and exchange markets, respectively. The dependent variable is the trade spread, measured as bond trading yield minus the yield of a synthetic China Development Bank bond with matching maturity as of the day of trade. *Pre* is an indicator variable that equals one if the trade is issued in the six months preceding a prefecture-level political turnover, and *Post* is an indicator variable that equals one if the trade is issued in the six months immediately following the turnover. Control variables include bond maturity; the log value of issuance size; rating dummies; a guarantor indicator; issuer size, leverage, and ROA; an SOE indicator; GDP growth; and fiscal deficit. Year-quarter and province fixed effects are included. The sample period is 2009 to 2019. Heteroskedasticity-consistent *t*-statistics clustered by year-quarter are reported in parentheses. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

	Interbank market		Exchange market	
	MCBs (1)	Non-MCBs (2)	MCBs (3)	Non-MCBs (4)
<i>Pre</i>	0.048** (1.96)	0.061** (2.29)	0.090* (1.95)	0.126 (1.23)
<i>Post</i>	0.029 (1.38)	0.115*** (3.35)	0.078 (1.34)	0.371** (2.03)
Control	Yes	Yes	Yes	Yes
Year-qtr FE	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes
Obs.	386,870	321,728	196,130	233,476
Adj R^2	0.527	0.447	0.463	0.336

Table VIII: Impacts of provincial governor turnover on issue spreads

This table presents the impact of provincial governor turnover on the issue spreads of municipal bonds, municipal corporate bonds, and other corporate bonds, respectively. *Pre* is an indicator variable that equals one if the bond is issued in the six months preceding the provincial governor expected turnover, and *Post* is an indicator variable that equals one if the bond is issued in the six months immediately following the turnover. Control variables include bond maturity; the log value of issuance size; rating dummies for MCBs and non-MCBs; guarantor indicator for MCBs and non-MCBs; issuer size, leverage, and ROA; an SOE indicator for MCBs and non-MCBs; GDP growth; and fiscal deficit. Year-quarter and province fixed effects are included. The sample period is 2009 to 2019. Heteroskedasticity-consistent *t*-statistics clustered by year-quarter are reported in parentheses. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

	Muni (1)	MCBs (2)	Non-MCBs (3)
<i>Pre</i>	0.036** (1.98)	-0.025 (-0.65)	-0.011 (-0.27)
<i>Post</i>	-0.002 (-0.12)	-0.009 (-0.28)	0.02 (0.41)
Control	Yes	Yes	Yes
Year-qtr FE	Yes	Yes	Yes
Province FE	Yes	Yes	Yes
Obs.	9,577	14,633	24,320
Adj. R^2	0.574	0.551	0.629

Table A1: Variable definitions

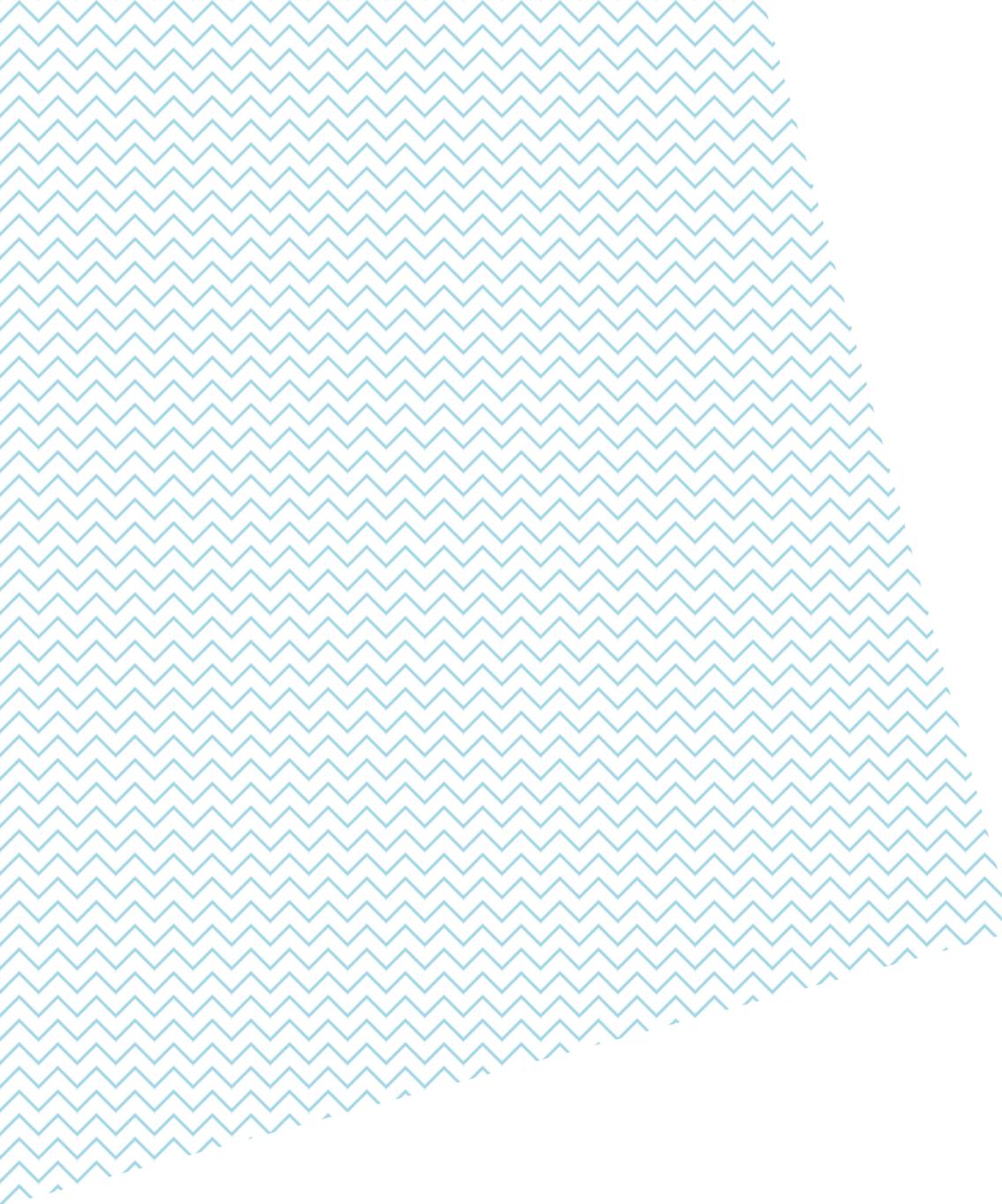
This table defines each variable. Dependent variables include the issue spread, trade spread, and subscription ratio. Other variables include a series of bond-, issuer-, and city-level characteristics.

Variable	Definition
<u>Dependent variables</u>	
Issue spread	The coupon rate at issuance minus the yield of a synthetic China Development Bank bond with matching maturity as of the day of issue
Trade spread	The trading yield minus the yield of a synthetic China Development Bank bond with a matching maturity as of the day of trade
Subscription ratio	The subscribed amount divided by the issue amount
<u>Bond-level variables</u>	
<i>Pre</i>	An indicator that equals one if the bond is issued in the six months preceding prefecture-level political turnover (i.e., months [-6, -1]) in the city where the issuer is located and zero otherwise
<i>Post</i>	An indicator that equals one if the bond is issued in the six months immediately following prefecture-level political turnover (i.e., months [0, 5]) in the city where the issuer is located and zero otherwise
Maturity	Bond maturity as of the day of issue/trade
ln(amount)	The natural log value of bond issuance size in RMB billions
DummyAAA/AA+/AA	Bond rating indicators as of the day of issue/trade
Guarantor	An indicator that equals one if a bond has a guarantor
Covenant indicators	Covenant indicators as of the day of issue, including adjustable, callable, extendable, putable, and sinkable
Exchange	An indicator variable for bond issued in the exchange market
<u>Issuer-level variables</u>	
log(Issuer size)	The log value of the issuing firm's total assets in RMB billions
Leverage	The issuing firm's total liabilities over total assets
ROA	The issuing firm's net profit in fiscal year t over its average assets in years t and $t - 1$
SOE	An indicator variable for the type of state-owned enterprise issuer
<u>City-level variables</u>	
Δ GDP	Real GDP growth in percentage
Fiscal deficit	Fiscal expenditure minus fiscal revenue scaled by GDP
GDP ^{capita}	GDP per capita in RMB thousands
LGFV leverage	Sum of all LGFVs' short- and long-term liabilities within a city scaled by the GDP of that city

Table A2: Summary statistics for the secondary trading market

This table presents summary statistics for the secondary trading market for municipal corporate bonds (MCBs) and non-municipal corporate bonds (non-MCBs). Bond-level variables include the trade spread (%), maturity as of the day of trade, a guarantee covenant indicator, and bond value outstanding (RMB billions); issuer-level variables include issuer size (RMB billions), leverage, and ROA; and issuer city characteristics include GDP growth (%) and fiscal deficit scaled by GDP. All issuer and city variables are merged to bond trades with a lag of six months to account for the delay accompanying the release of data. Summary statistics include the number of observations, the mean, the standard deviation, the median, and the 10th and 90th percentiles. The sample period is from 2009 to 2019.

	MCBs					Non-MCBs				
	N = 700,059					N = 664,747				
	Mean	SD	P10	Median	P90	Mean	SD	P10	Median	P90
Trade spread (%)	1.888	1.042	0.726	1.749	3.226	2.472	2.447	0.702	1.864	4.535
Maturity	4.075	2.345	0.679	4.304	6.781	2.299	1.892	0.249	2.005	4.841
Guarantor	0.347	0.476	0.000	0.000	1.000	0.223	0.416	0.000	0.000	1.000
Issue amount (RMB billions)	1.279	0.785	0.500	1.000	2.000	1.414	1.284	0.400	1.000	3.000
Issuer size (RMB billions)	47.42	67.11	8.10	23.31	119.2	82.47	144.80	5.54	32.21	218.3
Leverage	0.509	0.156	0.295	0.517	0.699	0.637	0.140	0.447	0.657	0.799
ROA	1.727	1.869	0.303	1.286	3.515	2.856	4.150	-0.133	2.176	7.181
Δ GDP (%)	10.17	3.216	7.100	9.850	14.10	9.362	3.284	6.400	8.900	13.50
Fiscal deficit	0.064	0.071	0.005	0.043	0.153	0.045	0.062	0.003	0.033	0.097



fbe.unimelb.edu.au/finance