Local Government Transparency and Financing Costs*,†

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ABSTRACT

Each U.S. state has implemented an information openness law, commonly known as the Freedom of Information Act (FOIA), granting any person or organization the right to request access to any government agency records. However, the level of government transparency offered under the FOIA varies across states and over time. We contend that by providing access to government records, FOIA increases government transparency, which in turn mitigates moral hazard and adverse selection concerns, decreasing municipal borrowing costs. Using staggered FOIA revisions and a stacked regression design, we find that stronger (weaker) FOIA laws decrease (increase) municipal bond yields and yield spreads. The effect is more pronounced for municipalities with poorer financial reporting quality and riskier bonds. Additionally, municipal borrowing costs are negatively associated with the FOIA request success rate, suggesting an information channel. Our findings highlight the significant benefits of local transparency laws in public finance.

JEL Classifications: G12; G18; H11; H74; K4.

Keywords: Local government transparency; information openness law; Freedom of Information Act; public finance; municipal bonds; government financing costs.

I. INTRODUCTION

The municipal bond market in the U.S. has experienced impressive growth over the past two decades, expanding from approximately \$2.8 trillion in 2004 to approximately \$4.1 trillion by the end of March 2022 (MSRB 2022). Municipal bonds facilitate public services across the U.S.: these bonds not only benefit their holders but also generate broad societal benefits. Proceeds from municipal bonds are utilized to finance government projects, such as constructing roads, bridges, parks, and healthcare centers, which ultimately benefit the local communities (e.g., Adelino, Cunha, and Ferreira 2017).

Despite its magnitude and significance, the municipal bond market is generally perceived as informationally opaque relative to other financial markets for the following reasons (Chalmers, Liu, and Wang 2021; Cornaggia, Hund, and Nguyen 2022a; Cuny 2018; Green, Hollifield, and Schurhoff 2007). First, the disclosure of governmental information is not only scarce but also afflicted by significant reporting lags. Even with the introduction of the Electronic Municipal Market Access (EMMA) system by the Municipal Securities Rulemaking Board (MSRB) in 2009, the average reporting lag (i.e., the days between the fiscal-year-end date and the report filing date on EMMA) is approximately 234 days for municipal bond issuers in our sample, calculated for the period between 2010 and 2016. Second, compared to corporate managers, municipal officers are less motivated to enhance transparency because they have strong personal incentives to preserve reputational capital and political connections, particularly when short-term political incentives outweigh the perceived capital market benefits of information transparency or dissemination (Cuny 2016). Third, to protect state sovereignty, municipal bond issuers are largely exempt from federal regulations under the

¹ In response to this dearth of timely information, investors often resort to alternative external information sources such as the Bureau of Economic Analysis (BEA) or the U.S. Census Bureau, the economic data of which is, unfortunately, also delayed.

Securities and Exchange Acts of 1933 and 1934 (Chen, Hutchens, and Xia 2024), which further cast doubts on the disclosure quality. Due to these information frictions in the municipal bond market, information through alternative sources, if relevant and timely, can ease investors' concerns about moral hazard and adverse selection, which in turn reduces local government borrowing costs.

Similar to the Freedom of Information Act (FOIA) at the federal level, state-level government openness laws allow the general public to access any records held by state and local governments by filing data requests.^{2, 3} In this study, we examine whether the commitment to transparency through FOIA reduces local governments' financing costs. The FOIA typically mandates government agencies to provide the requested information within one month, if the data are available, reducing information asymmetry between municipal bond investors and the issuers. In addition, by allowing the public to access government information, the FOIA can deter government officials from engaging in corrupt or unethical behavior (Cordis and Warren 2014). Knowing that corruption is more likely to be detected and actions subjected to greater scrutiny, government officials may also become more accountable in their decision-making processes. Greater accountability and a lower information asymmetry would reduce moral hazard and adverse selection concerns, lowering financing costs for local governments. In addition, to the extent that investors anticipate enhanced accountability and transparency of municipalities following favorable FOIA revisions, they may perceive municipal bonds as less risky and start demanding lower risk premiums.⁴

² We use the terms "state-level government openness law" and "state-level FOIA" interchangeably.

³ Local governments generally include two tiers: counties, also known as boroughs in Alaska and parishes in Louisiana, and municipalities. As defined by state constitutions, municipalities can be structured in many ways and are called townships, villages, boroughs, cities, or towns. We refer to the structure of government from the White House: https://www.whitehouse.gov/about-the-white-house/our-government/state-local-government/.

⁴ Municipal bonds are initially allocated to institutional investors, and these investors may be able to access information through other means. However, ultimately their ability to resell municipal bonds at higher prices to retail investors will determine their demand for these bonds, which will in turn influence offering yields. Thus, retail investors' perception of risk and their ability to monitor and acquire information about local governments are important for government financing costs.

The above arguments are not without tension. First, different from the equity market, the municipal bond market is dominated by retail investors (MSRB 2022). Therefore, municipal bond investors may not be cognizant of the possible information acquisition through FOIA, especially because FOIA is not designed for municipal bond investors. Even if they are aware of FOIA as a tool and can acquire information with reasonable costs, they may lack the capacity to integrate such information into municipal bond purchasing decisions (Blankespoor, deHaan, and Marinovic 2020). Second, it is also unclear whether FOIA generates a monitoring effect that improves government efficiency. Cordis and Warren (2014) find that FOIA facilitates the identification of corruption and misconduct among local government officials. While reducing corruption and misconduct can improve efficiency, strong FOIA may also induce a sense of fear or caution among government officials, potentially discouraging them from making proactive and bold decisions. This may hinder effective governance and weaken responsiveness to evolving challenges, ultimately eroding government efficiency. Therefore, a priori, it is not clear whether and how state FOIA laws reduce public financing costs in the municipal bond market.

By leveraging the over-time revisions of state-level FOIA, we investigate the effect of state-level openness laws on the local government borrowing costs. Our sample includes 12 FOIA revisions in 11 distinct states across different years, which provides staggered treatments to the FOIA laws. We adopt FOIA scores developed by Cordis and Warren (2014) and Cordis, Hsu, and Zhang (2022), which capture various dimensions of the accessibility of government information to the public. A higher FOIA score signifies greater accessibility of government records with lower costs, and an increase (decrease) in FOIA scores represents an improvement (deterioration) in the openness laws. We verify all state-level FOIA revisions by reviewing the Open Government Guide, state-level FOIA regulations, and court cases, and summarize the primary reasons for such revisions in

Appendix A. We rely on a stacked regression design by examining the treatment effects across cohorts and estimating the average difference-in-differences (DiD) effects of the staggered FOIA law revisions. We use both a full stacked sample and a propensity-score-matched (PSM) stacked sample, accounting for differences in local social and economic conditions. We find robust results that municipal bond financing costs of local governments (county, city, town, and village governments) decrease (increase) following positive (negative) FOIA score revisions. In economic terms, a one-point change in the FOIA score leads to a 12-basis-point change in bond offering yield, which represents a 4.23 percent change from the sample mean. Similar results are obtained if we use bond offering spread (i.e., the difference between offering yield and risk-free rate).

Our results are robust to alternative measures of FOIA revisions (percentage change in FOIA scores) or financing costs (tax-adjusted yield or spread). The results are also robust to alternative samples, including a sample considering only municipalities in the neighboring states as controls, an entropy-balancing sample, and a Mahalanobis-distance-matched sample. The relation between FOIA revisions and public financing costs is significant for both upward and downward FOIA revisions. The results are more pronounced if the revisions pertain costs of FOIA requests. Considering that the costs of FOIA requests matter more for retail investors than institutional investors, the result suggests that retail investors' information acquisition and risk perception are important in public finance. We further estimate a panel regression, fully leveraging the cross-sectional and time-series variation in FOIA scores across all 50 states. We find a negative association between FOIA score and municipal bond borrowing costs across the entire panel data.

Cross-sectionally, we find that the effect of FOIA revisions on public financing costs is more pronounced for issuers located in states that do not mandate GAAP for financial reporting. These results suggest that counties with worse financial information quality benefit more when

local government transparency improves following FOIA revisions. We also find that the effect of state-level FOIA on public financing costs is more pronounced for bonds with lower credit ratings or longer maturity, consistent with the notion that FOIA benefits municipal bond issuers more when the bonds are perceived to be riskier.

To better understand the channel through which FOIA revisions affect government borrowing costs, we conduct a path analysis. While FOIA changes affect municipal bond yields and spread by reducing corruption as predicted, a substantial effect of FOIA revisions occurs through other channels. Through additional analyses, we show that local government borrowing costs are significantly and negatively associated with FOIA request success rates (the ratio of completed requests to the total requests) within the state. This evidence suggests investors' information acquisition through FOIA requests is another channel through which FOIA changes affect public financing costs.

One may suspect that other concurrent changes occurring within the same event window, rather than FOIA revisions, drive the results. To mitigate this concern, we examine the yields of municipal bonds traded in the secondary market within 90 or 120 days of FOIA revisions. Other concurrent changes are unlikely to affect municipal bond yields in a tight window around FOIA revisions. This short-window test also serves as a test of the third channel, investors' risk perception. Investors' information acquisition or government officers' behavior would not change immediately following FOIA revisions. So, any short-window change in the secondary market trading is likely to reflect changes in investors' risk perception. As we need to accurately identify the effective dates of FOIA revisions for the short-window test, we limit the sample for this analysis to 7 revisions due to FOIA legislation changes (see Appendix A for details). We then conduct a short window test centered around the effective dates of legislation changes. We find a significantly negative relation between the secondary market bond yields and positive FOIA revisions.

We also document that local government efficiency improves (deteriorates) following positive (negative) state-level FOIA revisions, confirming the path analysis results and supporting the governance channel. However, we do not find evidence suggesting that the FOIA revisions lead to more or timelier financial disclosures. Thus, our results are unlikely to be driven by changes in financial disclosures around FOIA revisions.

This paper joins the literature on the effect of disclosure in the municipal bond market (Baber and Gore 2008; Baber, Gore, Rich, and Zhang 2013; Cheng, Cuny, and Xue 2022; Cuny 2016, 2018; Cuny, Li, Nakhmurina, and Watts 2021; Farrell, Murphy, Painter, and Zhang 2023). Unlike disclosure of information that is directly relevant to municipal bond investors, such as real-time bond prices (Chalmers, Liu, and Wang 2021), financial disclosure (Cuny 2018; Cuny et al. 2021), and municipal credit rating information (Basu, Chen, and Naughton 2022; Zhang 2024) in EMMA, FOIA is not specifically designed to help municipal bond investors. Information requested and acquired under FOIA contains a broader information set that is not limited to financial reporting, tax revenues, and expenditures of the municipalities (see examples in Online Appendix Table O1). As such, documenting evidence that easier access to government records under FOIA reduces government financing costs is particularly interesting and adds to the discussion on whether municipal bond investors process information not intended to assist them.

Our study also adds to the literature that uses the municipal bond market to evaluate the effects of public policy (Gao, Lee, and Murphy 2019, 2022).⁵ Since retail investors tend to buy municipal bonds issued by their states and counties of residence to enjoy tax exemptions, and thus are unlikely to diversify away the idiosyncratic risks associated with different municipalities,

⁵ For example, Gao et al. (2019) find that municipal bond yields are higher in states with unconditional access to Chapter 9 bankruptcy policies, suggesting that state policies can affect local borrowing costs. Gao et al. (2022) examine the effect of the US Affordable Care Act on healthcare projects' borrowing costs, highlighting the effect of public policy on public financing.

studying the municipal bond market is particularly relevant for gauging the effect of the state-level transparency law. We show that a strong form of state-level FOIA helps reduce public financing costs, which is unlikely to be one of the original considerations of FOIA policy decisions. Our results suggest a positive spillover effect of the state-level FOIA on public financing costs, which may assist regulators in evaluating the cost-benefit trade-offs of FOIA (Department of Justice 1980).

Third, our study contributes to the emerging literature that examines the economic consequences of transparency laws at the state and local levels. While prior studies examine how FOIA at the federal level allows investors to obtain information from federal agencies, such as the SEC and FDA, for their investment and non-investment decisions (Gargano, Rossi, and Wermers 2017; Glaeser, Schonberger, Wasley, and Xiao 2023; Klein, Li, and Zhang 2020), relatively little attention has been paid to state-level FOIAs (Koningisor 2020). Our study fills this gap by documenting the positive spillover effects of FOIA revisions on public financing costs. Our study also complements concurrent studies that examine other economic consequences of state-level FOIA revisions (e.g., Gu, He, Huang, and Li 2024).

Finally, our study answers the call for research by Blankespoor, deHaan, Wertz, and Zhu (2018) and deHaan, Li, and Watts (2023), who encourage research that examines the effect of information disclosure on retail investors. We join a recent line of literature (Darendeli 2024; deHaan, Song, Xie, and Zhu 2021; Merkley, Pacelli, Piorkowski, and Williams 2024) that studies the effects of information disclosure in alternative markets outside the traditional equity and corporate bond markets, where retail investors are particularly constrained by the high information processing costs.

II. INSTITUTIONAL BACKGROUND OF FOIA

The FOIA, enacted at the federal level by Congress in 1967, provides the public with the right to access any records held by the federal government. Following or even preceding Congress's action, all 50 states in the U.S. have implemented similar open government regulations, although some states do not explicitly name their provisions as FOIA.⁶ The state-level FOIA serves as an important tool for promoting transparency and accountability of state and local government and deterring abuse of authority by government officials.

In recent years, some governments have tracked and made the requests online as FOIA log files. Unfortunately, many governments do not keep past request records, as we find out by filing FOIA requests ourselves. Online Appendix Table O1 presents examples of FOIA log files from some city and county governments published in recent years. These requests cover a wide range of topics, including but not limited to project expenditures, government efficiency, budget, tax revenue, employment discrimination within government agencies, and municipal bonds. Even though the public can obtain tax, revenue, and budget data from government financial reports disclosed on various government websites (e.g., EMMA, the BEA, or the U.S. Census Bureau), such information is available with a significant reporting lag. The FOIA also offers access to information not typically available from other sources, such as the government officers' email communications and details about employee salary and layoffs. Such non-financial information is relevant to evaluating the financial risk of local governments, especially in the presence of poor governance within the government. FOIA requesters are also dispersed. Using the FOIA Request Archive from Cook County, we find that around one-third of FOIA requests to its Treasurer's Office (697 out of 1,930)

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⁶ For example, Alabama and Nevada have the Open Meetings Law, and Pennsylvania has the Right to Know Law.

⁷ Online Appendix A provides more details about our attempts to obtain FOIA request logs. Only in recent years, some local government units begin to archive or publish the FOIA logs that contain the information acquired under FOIA, which prohibits us from analyzing the impact of changes in the intensity of FOIA requests around FOIA revisions on the public financing costs.

from 2018–2019 were made by individuals, and a significant proportion of requests came from organizations, consisting of law firms, accounting firms, financial institutions, and newspapers.

To measure the local government information transparency induced by the FOIA, Cordis and Warren (2014) and Cordis et al. (2022) develop a FOIA score by examining each state's FOIA law records and assigning one point for each of the 10 criteria. Online Appendix Table O2 presents the time series of FOIA scores across all 50 states during our sample period. We highlight the score when a FOIA revision occurs. A higher FOIA score indicates a stronger form of FOIA and a better local government information environment. This score enables us to quantify the public's ability to acquire government information across different states and periods. In Online Appendix B, we discuss evidence supporting the construct validity of FOIA scores used in this study. Specifically, we provide some evidence that a positive FOIA score change results in an increase in the number of FOIA requests and a higher success rate.

To verify and better understand the nature of the FOIA score changes used in our analyses, we review the Open Government Guide, 9 state-level FOIA regulations, and court cases for all FOIA score changes used in our sample. We confirm that these score changes are the results of revisions to the state openness law provisions or various court rulings. We summarize the details of the primary reasons for the FOIA score changes in <u>Appendix A</u>.

Many states have revised the FOIA over time to strengthen openness due to pressure from nonprofit, nonpartisan journalism, media associations, and open government advocacy groups (Cordis et

⁸ The 10 criteria include the following: a provision that creates a presumption in favor of disclosure and identifies specific records as exempt from public access; a provision that limits the fees charged for processing requests; a provision that prohibits charging fees for the time spent searching and collecting records; a provision that waives the cost of searching or copying records if the disclosure is in the public interest; a provision for the award of attorneys' fees and costs to a successful plaintiff in a public records case; a provision for criminal penalties for an agency's noncompliance; a provision for civil penalties for an agency's noncompliance; a provision for administrative appeal of a decision to deny a request for public records; a provision that establishes that the response time to a request for records is 15 days or less; and the lack of a generic public-interest exemption provision.

⁹ Open Government Guide is available at https://www.rcfp.org/open-government-guide/.

al. 2022). Other FOIA changes are the results of government adaption to technology advancement in the last two decades. Furthermore, some revisions are determined by court cases, which set precedents for future use of FOIA laws and alter public perceptions toward government transparency. Thus, FOIA revisions are unlikely to be driven by local government financing needs. Nevertheless, we investigate whether FOIA revisions are significantly associated with economic, social, and political factors, which are potentially correlated with local government financing needs. Specifically, we consider following variables as determinants of state-level FOIA revisions: (1) the natural logarithm of state personal income (in dollars), (2) the natural logarithm of the state population (in thousands), (3) the state unemployment rate (in percent), (4) the state GDP growth (in percent), (5) the average of county daily newspaper coverage per thousand capita within the state, (6) the average of county social capital within the state, (7) the corruption level, (8) the change of state corruption level (in percent), (9) the political balance, which is defined as the fraction of a state's members in the U.S. House of Representatives that belong to the Democratic Party, and captures the political leaning in the state (Klasa, Ortiz-Molina, Serfling, and Srinivasan 2018), and (10) the change of state leadership. We also consider (11) the state total tax revenue to GDP ratio and (12) the state total outstanding debt to GDP ratio into the model to control for possible reverse causality that the needs of public financing cause the FOIA changes. The independent variables are lagged by one year.

Online Appendix Table O3 shows that the coefficients of most variables are insignificant with a trivial adjusted R-squared, suggesting that local economic conditions, social or political factors, and public financing needs are unlikely to be primary drivers of the FOIA changes. ¹⁰ We use this model for the propensity-score-matching in the later analysis. The FOIA regulations or FOIA

¹⁰ We also use alternative measures of FOIA score changes for the determinant model, including a dummy variable that equals 1 if the FOIA score increases, and 0 otherwise (*Inc. FOIA*), and a dummy variable that equals 1 if the FOIA score decreases, and 0 otherwise (*Dec. FOIA*). The results are reported in Online Appendix Table O4.

revisions are beyond the control of local governments because the decision to revise FOIA lies within state-level government. We do not find that the FOIA or FOIA revisions affect the municipal bond-issuance amount or the likelihood of bond issuance. This evidence further rules out the possibility that local governments lobby higher levels of government with legislative power to raise more funds at lower costs. Although local governments' financing needs are unlikely to drive policy decisions at the state level, state-level financing needs can be a consideration for state-level policy changes. To mitigate the concern that the state government financing needs lead to the FOIA revisions, we exclude bonds issued by state governments and focus on municipal bonds issued by lower-level local governments (i.e., counties, cities, towns, and villages) in all our analyses.

III. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Municipalities may choose underwriters through either negotiated or competitive offerings. In a competitive offering, multiple underwriters bid for the right to issue the bond, with the winning bid being the one that promises to issue the bonds at the highest price (or lowest yield) (Butler and Yi 2022; Schultz 2012). A negotiated offering occurs when the issuer and an underwriter come to a contractual agreement that the underwriter will have exclusive rights to distribute the issue. The bonds are then resold to investors in the when-issued market. Underwriters do not act as fiduciaries in a negotiated offering and can raise the interest rate on the bonds to clear the market, which minimizes risk for the underwriter. Investors then receive the bonds at closing (Schultz 2012). We focus on the primary market and study how state-level FOIA revisions affect the offering yield of municipal bonds. The offering yield will be determined, in part, based on the underwriters' assessment of investor demand, which is influenced by municipal bond investors' perceptions of the local government's transparency and accountability.

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¹¹ The results (untabulated for brevity) are available upon request.

The literature well documents that higher disclosure quality lowers the cost of capital for public companies (Aboody, Hughes, and Liu 2005; Easley and O'Hara 2004; Hughes, Liu, and Liu 2007; Sengupta 1998). Studies also suggest that these benefits extend to the municipal bond market. For example, municipalities in states imposing GAAP requirements enjoy lower municipal borrowing costs, and as a result, these states tend to rely more on public financing over private debt (Baber and Gore 2008). If the government restates the financial report, however, municipal bond investors ask for a higher risk premium for new issues (Baber, Gore, Rich, and Zhang 2013). After Moody's rating scale recalibration, disadvantaged municipal bond issuers enhance both the quantity and timeliness of their financial disclosures to compete for capital (Cheng, Cuny, and Xue 2022; Gillette, Samuels, and Zhou 2020).

Prior research suggests the federal-level FOIA broadens information sets and mitigates information asymmetry. Studies document that *equity market participants* use the FOIA to access *federal government records*, especially those maintained by the SEC and FDA to obtain information for their investment and non-investment decisions (Gargano et al. 2017; Glaeser et al. 2023; Klein et al. 2020). Regarding access to information at the local government, the FOIA request-log examples in Online Appendix Table O1 provide anecdotal evidence that the public uses the state-level FOIA to request information related to bond issuance, bond credit rating, bond re-payment, and spending of bond proceeds, as well as financial and non-financial information about municipalities. We thus contend that the state-level FOIA can mitigate the information asymmetry between bond investors and issuers in the municipal bond market by allowing the investors to access information about local governments' operating decisions and their financial status. If bond investors can obtain greater and more timely information acquired through the FOIA, they are less likely to price protect themselves and are more willing to pay higher prices (or demand lower yields) to purchase these bonds.

The broader information set and easier information acquisition under FOIA also foster government accountability. For example, Cordis and Warren (2014) find that switching from a weak to a strong form of FOIA reduces corruption and increases the probability that corruption is exposed. With the "disclose upon request" regulation, municipal officers are likely to act more responsibly if they know their actions will be subject to public scrutiny, leading to a more efficient operation. ¹² In such a case, the positive FOIA revisions can bolster investor confidence in the government, which allows municipalities to issue bonds at a lower yield (Gao, Lee, and Murphy 2020).

Even if bond investors are not actively acquiring information through FOIA and municipal officers do not change their behavior immediately, positive FOIA revisions to some extent signal the government's commitment to greater transparency, which in turn can change bond investors' perception of risks associated with municipal bond offerings. Bond investors' risk perception can change if they become more confident about public monitoring of local governments and their ability to acquire information following positive FOIA revisions. This change in perceived risk among municipal bond investors will influence underwriters' assessment of investor demand for municipal bonds and bond offering yield.

Based on these discussions, we present the main hypothesis in an alternative form, as follows: H1: Municipal bond offering yield decreases (increases) following positive (negative) FOIA amendments.

However, it is unclear whether municipal bond investors process information available through FOIA. Given that retail investors represent the single largest category of municipal bond owners (SEC 2012), often hold municipal bonds until maturity, and face much higher information processing costs, municipal bond investors may not utilize FOIA to access information or have

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¹² In the case of a "bad government," where inefficiencies or corruption exist, the disclosure of information through FOIA could indeed expose those issues and lead to public scrutiny. However, the disclosure creates an opportunity for corrective measures to be taken, leading to potential improvements in governance and overall efficiency in the long run.

only limited ability to process such information. In addition, the higher likelihood of corruption detection following the positive changes in state-level FOIA (Cordis and Warren 2014) does not necessarily mean improvements in government efficiency. As discussed earlier, greater scrutiny under FOIA may lead government officials to avoid taking risks and making bold decisions, which undermines government efficiency. Therefore, it is ultimately an empirical question whether positive (negative) FOIA changes result in a decrease (an increase) in public financing costs.

IV. SAMPLE AND RESEARCH DESIGN

Data and Sample

The sample period covers 2005–2016. We start the sample in 2005 because municipal bond transaction data are not accessible before 2005 via WRDS sourced from the Municipal Securities Rulemaking Board (MSRB). We end the sample in 2016 because the annual FOIA score, which is constructed by Cordis et al. (2022), is only available through 2016. Over our sample period, 18 instances of FOIA revisions occurred across 14 states. Except for Iowa in 2012, Illinois in 2011, and New York State in 2009, the states revised their FOIA to enhance their information openness to the public.

We obtain data on the municipal bond offerings from the Mergent Municipal Bond database, which provides the bond attributes including its CUSIP, issuance date, maturity date, offering yield, coupon type, coupon rate, issue amount, offering type (competitive or negotiated sale), the source of payment (general obligation, revenue, or double-barrelled), tax status, whether the bond is callable, insured, or pre-refunded, and bond ratings by S&P, Moody's, and Fitch. We obtain the information on the bond issuer's type and the county where the issuer is located from the Refinitiv Municipal

¹³ We use MSRB bond transaction data for the short-window secondary market test.

Bond Deals database via the Refinitiv Eikon terminal. Using the first six digits of bond CUSIPs, we identify the level of bond issuer and the issuer's county location. Finally, we identify each county's Federal Information Processing Standards (FIPS) code based on the 2010 Census county definition. The Mergent and Refinitiv datasets are merged by the bond's unique nine-digit CUSIP.

As discussed earlier, we restrict the sample to bonds issued by local governments (i.e., counties, cities, towns, and villages) and do not include state-issued bonds to mitigate the concern that statelevel legislation is influenced by state-level financing needs and costs. We do not include bonds issued by special districts, special-purpose government units organized to deliver specialized services to the community, and school districts because some states exempt these entities from FOIA and others do not, making it difficult to estimate the effect of FOIA changes on bonds issued by such entities. We only retain bonds if the source of payment is general obligation and drop revenue bonds as well as double-barrelled bonds because we lack data on project-specific characteristics that determine the credit risk of revenue bonds (Cornaggia, Hund, Nguyen, Ye, and Ramadorai 2022b; Schwert 2017). Following Green, Li, and Schürhoff (2010), we drop a bond if its coupon, maturity, or offering yield is missing and remove the bond if it has a variable coupon rate or if its maturity is more than 100 years. To ensure similar tax treatment, we further exclude taxable or alternative minimum tax (AMT)—eligible bonds from the sample, following Schwert (2017).¹⁴ Thus, our sample consists of only tax-exempt bonds. We use both the offering yield (Offering Yield) and offering yield spread (Offering Spread) as two proxies for the borrowing costs of municipalities. The raw offering yield we obtained from Mergent represents the borrowing costs of municipalities. We calculate the offering yield spread by subtracting the maturity-matched treasury rate, obtained from the U.S. Department of the Treasury in the bond issuance year, from the offering yield to control for macroeconomic factors. 15

¹⁴ Most municipal bonds are exempt from federal and state taxes. In our sample before this attrition, around 90% of municipal bonds are tax-exempt bonds.

¹⁵ The results (tabulated in <u>Table 3</u>, Panel B) are robust if we use tax-adjusted offering yield spread as in Schwert (2017).

Research Design

During our sample period, 18 FOIA revisions are made across 14 states. We use a DiD design to examine whether the change in local government transparency, proxied by changes in state-level FOIA score, leads to changes in municipal bond offering yield. To mitigate the potential bias in staggered DiD estimates arising from heterogenous treatment effects, we employ a stacked regression suggested by Baker, Larcker, and Wang (2022). More specifically, we treat each FOIA shock as one cohort and build "clean" control states that do not experience FOIA score changes within the treatment window (six years around the FOIA revision). These cohort-specific datasets are stacked together to form our sample. If a change occurs in the FOIA score, either a decrease or an increase, we define that year as an event year.

We take six years around the FOIA-revision year as an event window, namely, three years before and three years after the change. To construct a "clean" control group for each FOIA event (or revision), we remove state-year observations that also experience changes in FOIA scores within the event window from consideration. For example, as shown in Online Appendix Table O2, the FOIA score in Connecticut increased from 8 to 9 in 2009. For this revision, the event window is from 2006–2011. To meet the "clean" control requirement, we exclude from the control group municipal bonds issued between 2006 and 2011 by local governments in Delaware, Illinois, Iowa, Maine, Minnesota, Nevada, New York, Pennsylvania, South Dakota, Texas, and Wyoming. We further exclude the FOIA revision in 2005 because the municipal bond transaction data is not available before 2005 and exclude FOIA revisions in 2016 because we are not sure if there is another FOIA score change in the following year. After filtering out the event criteria, we have 12 FOIA shocks in 11 distinct states (Wyoming improved its FOIA in 2006 as well as 2013). ¹⁶

¹⁶ We drop three FOIA revisions in South Dakota because of overlaps in pre- and post-revision periods of these revisions and exclude FOIA revisions in Michigan and West Virginia because we cannot ensure that another revision

For states that made FOIA revisions, $Adj.FOIA_{s,t}$ takes the value of 0 in the three years before the event, and 1 (-1) if the state improves (weakens) its FOIA in the year of the revision and two subsequent years. For states without FOIA revision within the same six-year event window, $Adj.FOIA_{s,t}$ takes the value of 0. In Connecticut, for example, the FOIA score increased in 2009 from 8 to 9, so $Adj.FOIA_{s,t}$ takes the value of 0 for 2006-2008, the pre-event years, whereas it takes the value of 1 for 2009-2011, the post-event years. As another example, Illinois' FOIA score decreased in 2011 from 7 to 6, so $Adj.FOIA_{s,t}$ takes the value of 0 for 2008-2010, the pre-event years, whereas it takes the value of -1 for 2011-2013, the post-event years.

We then estimate the following stacked regression model:

$$Y_{i,j,s,t} = \alpha + \beta Adj. FOIA_{s,t} + \gamma' BondControls_{i,j,s,t} + \theta' CountyControls_{j,s,t} + State - Cohort FE + Year - Cohort FE + \varepsilon_{i,j,s,t},$$

$$(1)$$

where $Y_{i,j,s,t}$ denotes offering yield (*Offering Yield*) or offering yield spread (*Offering Spread*) for bond i issued by municipalities located in county j, state s in year t as defined earlier. $Adj.FOIA_{s,t}$ is the variable of interest, indicating the change in the accessibility of government records for state s in year t. If $Adj.FOIA_{s,t}$ is positive, the general public has easier access to government records after the FOIA revision, whereas if $Adj.FOIA_{s,t}$ is negative, the accessibility of government records worsens. $Adj.FOIA_{s,t}$ equals 0 for the control group because no change occurs in state-level FOIA. We hypothesize that easier information access will reduce moral hazard and adverse selection concerns, and in turn lower the required risk premium for municipal bonds. Thus, we predict a significantly negative coefficient on $Adj.FOIA_{s,t}$.

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is not made during the post-revision period, because these revisions were made in 2016, the last year for which FOIA score and revision data are available. We also drop FOIA revisions from Maine in 2005 because the municipal bond transaction data are not accessible before 2005 via WRDS sourced from the MSRB.

BondControls_{i,j,s,t} is a vector of bond characteristics including (1) the maturity of the bond, (2) the natural logarithm of issuance amount (in thousand dollars) of the bond, (3) an indicator variable that equals 1 if the bond is issued by competitive sale and 0 for negotiated sale, (4) an indicator variable for callable bonds, (5) an indicator variable for insured bonds, and (6) a numerical score for bond credit rating. We convert the credit rating into numerical ratings from 0 to 21, where 21 corresponds to the highest rating, 1 indicates the lowest rating, and 0 denotes that the bond is not rated at issuance or the rating is missing. When rating information is available from multiple rating agencies, we use ratings from S&P, Moody's, or Fitch, in the said order.

CountyControls_{j,s,t} is a vector of county characteristics for county j of state s in year t, including (1) the natural logarithm of county personal income (in dollars), (2) the natural logarithm of county population (in thousands), (3) the county unemployment rate (in percent), (4) the county GDP growth rate (in percent) (5) the number of county daily newspapers per thousand capita, and (6) the measure that captures social capital of the county, (7) the corruption level of the state where the issuers locate, and (8) the change of corruption level (in percent). Appendix B provides variable definitions and data sources in detail. We construct a sample of treatment and control observations around each FOIA revision, creating 12 cohorts, so we control for state-cohort fixed effects and year-cohort fixed effects, which capture the state-level time-varying heterogeneity for each event, and the standard errors are clustered by state-cohort.

Although state-level FOIA revisions are unlikely to be motivated by municipal financing needs, and there is no evidence linking FOIA revisions to changes in local macroeconomic conditions or state-level political factors, as shown in Online Appendix Table O3, we cannot completely rule out the possibility that municipalities affected by FOIA revisions and those that are not affected by FOIA

¹⁷ All rated bonds in our sample are investment-grade bonds.

revisions are somehow different. To mitigate the concern that the results are driven by unknown differences between the treatment and control samples, we also conduct analyses using the sample constructed based on propensity score matching (PSM). Specifically, for each cohort, we use the logistic regression model to calculate the likelihood that the county the municipality belongs to is located in a state revising FOIA based on the county-level characteristics and corruption (*Income*, *Popluation*, *Unemployment*, *GDP Growth*, *Newspaper*, *Social Capital*, *Corruption*, and *Corruption Change*) one year before the FOIA changes. ¹⁸ For each county that belongs to a state undergoing FOIA revision, we identify five counties with the closest propensity scores and exclude unmatched counties. We then stack these cohort-specific observations together to form our PSM sample. ¹⁹ Online Appendix Table O5 presents the results of a covariate balance test for the PSM sample. No significant differences emerge in the matching variables between the treated and control groups, indicating the matching yields an acceptable covariate balance.

V. EMPIRICAL RESULTS

Descriptive Statistics

The final full sample and PSM sample include 598,891 and 68,074 cohort-specific bond observations stacked together for which data are available for all explanatory variables. All continuous variables are winsorized at 1 percent and 99 percent percentiles of their distributions in the sample to mitigate the influence of extreme values. Table 1 reports summary statistics of the

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¹⁸ We use the determinants of state-level FOIA revisions in Online Appendix Table O3, column 1 as covariates in the PSM model. This choice is made to retain more observations. Other determents additionally considered in columns 2 and 3 are insignificant and, therefore, do not materially affect matching. The results using the PSM sample considering all determinants examined in Online Appendix Table O3, column 3 as covariates provide similar results (untabulated for brevity and available upon request).

¹⁹ The caliper we use in the PSM model equals 0.2, which is 20% of the propensity score's standard deviation. Our results are robust to alternative values of caliper. The results are untabulated for brevity. We also test the robustness of our results using the Mahalanobis distance matching sample in Section V.

observations used in the main regression.²⁰ The municipal bonds in the full sample have an average offering yield of 2.93 percent and an offering yield spread of 0.04 percent, which are comparable to those in Butler and Yi (2022) and Painter (2020). The average offering yield in the PSM sample is 3.21 percent, and the average offering yield spread is -0.02 percent.

Main Results

To test the hypothesis that public financing costs decrease (increase) following positive (negative) FOIA revisions, we estimate Eq. (1). Table 2 reports the regression results on offering yield (*Offering Yield*) in columns (1) and (3) and offering yield spread (*Offering Spread*) in columns (2) and (4). The results based on the full sample are tabulated in columns (1) and (2) and the results based on the PSM sample are tabulated in columns (3) and (4). The coefficients on *Adj. FOIA* are -0.124, -0.088, -0.135, and -0.091, respectively, and significant at the 1 percent level (t-statistics = -3.93, -3.00, -4.59, and -2.92, respectively). The results based on the full sample suggest that for a one-point increase in the FOIA score, the average offering yield of municipal bonds will decrease by 12.4 basis points, and the offering yield spread will decrease by 8.8 basis points. The results support our hypothesis that the elevated accessibility of government records can reduce the risk premium of municipal bonds.

The coefficients of the control variables are generally consistent with those in prior studies. For example, offering yield and yield spread are higher for bonds with longer maturity and callable bonds. They are lower for bonds with a greater issuance amount (Painter 2020) and competitive offerings, as evidenced by the negative coefficient on *Offering Type* (Robbins 2002). In addition, the negative and significant coefficient on *Credit Rating* confirms that bonds with higher credit ratings have lower yields. Importantly, the coefficient on the variable of interest, *Adj. FOIA*, is

²⁰ The summary statistics are similar to those tabulated if we use the distinct municipal bonds and county-year observations.

significant even with the credit rating being included as a control, suggesting that the impact of FOIA is not fully assessed by third-party rating agencies, and credit rating in the municipal bond market might be too coarse to reflect all information available (Cornaggia, Cornaggia, and Israelsen 2018; Cornaggia et al. 2022b). Consistent with Gao et al. (2020), we find a negative and significant coefficient on local daily newspaper coverage (*Newspaper*).

Parallel-Trends Assumption

In this section, we examine the parallel-trends assumption of our stacked DiD design. Specifically, we replace *Adj. FOIA* in Eq. (1) with the following time indicators. *Adj. FOIA* (-2) is an indicator variable that equals 1 (-1) if the state where the bond-issuing local government is located improves (weakens) its FOIA two years after the bond-issuance year, and 0 otherwise. *Adj. FOIA* (-1) is an indicator variable that equals 1 (-1) if the state where the bond-issuing local government is located improves (weakens) its FOIA one year after the bond-issuance year, and 0 otherwise. *Adj. FOIA* (0), *Adj. FOIA* (1), and *Adj. FOIA* (2) are indicator variables that equal 1 (-1) if the state where the bond-issuing local government is located improves (weakens) its FOIA in the bond-issuance year, one year before bond issuance, or two years before bond issuance, and 0 otherwise. ²¹ We use year *t-3*, where year *t* is the year of the FOIA change, as the benchmark year.

We tabulate the results in Online Appendix Table O6 and plot the coefficients by year in Figure 1, based on the full sample in Panel A and the PSM sample in Panel B, respectively. Across both panels, we observe no significant changes in municipal bond borrowing costs in the pre-FOIA revision period. Thus, we find no evidence suggesting that the parallel trends assumption is violated.

²¹ We remove the FOIA revisions of Maine in 2008, Texas in 2006, and Wyoming in 2006 from the parallel-trends-assumption test because event windows for these revisions do not include all six years.

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Robustness Tests

In this section, we examine whether our results are robust to alternative measures and alternative samples. First, to account for the relative significance of FOIA changes, we alternatively measure FOIA changes as the percentage change from the existing FOIA score (*Pct. FOIA*). The percentage change would be greater if the FOIA score changes from 2 to 3 and smaller if the FOIA score changes from 8 to 9, although both represent a positive score change by one. We anticipate that a one-point change in the FOIA score will have a greater impact on borrowing costs when the initial accessibility of information is relatively low. As presented in <u>Table 3</u> Panel A, the coefficient on *Pct. FOIA* is negative and significant with both offering yield and yield spread as dependent variables, indicating that the effect of FOIA changes on public financing costs is stronger for relatively greater FOIA score improvement (i.e., 2 to 3 versus 8 to 9).

Second, we examine whether the results are robust to alternative measures of public financing costs. Specifically, following Schwert (2017), we measure the local government financing costs by municipal bond tax-adjusted yield and tax-adjusted yield spread. Table 3 Panel B shows the coefficients on *Adj. FOIA* remain negative and significant.

Third, we examine whether the results are robust to alternative samples. Although we controlled various macroeconomic factors in the main specification, to further mitigate the concern that local economic conditions may influence our main inference, we limit the control sample to bonds issued in neighboring states. These states experience similar economic fluctuations but differ in government openness. We also consider a sample constructed based on entropy balancing and a Mahalanobis distance-matched sample.²² We test the robustness of the results to the Mahalanobis

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²² We match the treated and control groups for each cohort in our full sample by entropy balancing all the control variables and then re-estimate Eq. (1). For some cohorts, the data do not converge for entropy balancing because the treated sample is too small. To make the sample composition consistent across the cohorts, we remove from the sample

distance-matched sample because none of the coefficients on the determinants, except for the country-level population, in the logistic regression of the PSM model is significant, potentially affecting the effectiveness of matching. Panel C of <u>Table 3</u> presents the results using the alternative samples for stacked regression estimation. The coefficients on *Adj. FOIA* remain significantly negative across columns (1) to (6), suggesting the robustness of our results.

Out of the 12 FOIA revision shocks in our sample, nine resulted in an increase in FOIA scores, whereas three led to a decrease in FOIA scores.²³ To examine whether the FOIA effect is symmetric between the increase and the decrease in FOIA scores, we split our observations based on whether the bond-issuing municipalities are located in states that experience increased or decreased FOIA scores. Panel A, Table 4 shows that offering yield and offering yield spread significantly decrease with positive FOIA revisions and significantly increase with negative FOIA revisions in both full and PSM samples. The coefficients on Adj. FOIA in even columns with the FOIA decreases are more negative than those in odd columns with FOIA score increases, and the difference is statistically significant at the 1 percent level. These results suggest that the effect of downward revisions is more pronounced than that of upward revisions, which is consistent with the prospect theory (Kahneman and Tversky 1979) that individuals are more sensitive to losses than gains and is also consistent with prior studies that bondholders care more about downside risks (Easton, Monahan, and Vasvari 2009; Cuny et al. 2021). We also split our sample based on the types of FOIA changes as described in Appendix A. Table 4 Panel B shows that the effects of FOIA revisions are more significant if the revisions pertain to FOIA request costs (Delaware in 2013, Minnesota in 2011, and New York in 2009).

municipalities in the states that prohibit issuing general obligation bonds (Colorado, Indiana, Nebraska, and North Dakota), states that require approval for issuing general obligation bonds (Idaho, Iowa, Wyoming, and Kentucky), and states that place a cap of general obligation bonds issuance (Arizona, Kanas, and South Dakota) (Schwert 2017). For this reason, the sample used in the test based on the entropy balancing is smaller than the full sample in <u>Table 2</u>. The results (untabulated for brevity) remain robust if we implement the entropy balancing without removing these states. ²³ The FOIA scores of Illinois in 2011, Iowa in 2012, and New York in 2009 decrease following revisions, and other revisions in our sample are associated with improved FOIA scores.

Although our stacked DiD based on FOIA revisions helps identify the causal effects of FOIA on offering yields, the treatment effect is estimated based on a relatively small number of FOIA revisions in a subset of US states (i.e., 12 FOIA revisions across 11 states). To fully leverage the cross-sectional and time-series variations in FOIA scores, we also estimate a panel regression including all municipal bond offerings across all 50 states with available data. We find the FOIA score is negatively and significantly associated with municipal bond offering yield and offering yield spread.²⁴ These results indicate that the negative association holds across the entire sample, further strengthening the inference that strong FOIA can lower the borrowing costs of public financing.

Cross-Sectional Tests

To gain further insights into the impact of the FOIA on public financing costs, we conduct cross-sectional tests based on the state regulations regarding financial disclosure. The Governmental Accounting Standard Board (GASB) is the primary body for setting generally accepted accounting practices (GAAP) for municipalities, and the state can decide whether to impose GAAP requirements on local governments. GAAP provides a standardized set of accounting principles, ensuring that financial statements are prepared consistently across municipalities. More consistent and transparent reporting also facilitates external monitoring, thus lowering financing costs (Baber and Gore 2008). To the extent that GAAP requirements lower government financing costs, we expect the role of the FOIA in reducing local governments' debt-financing costs to be weaker (stronger) for states that have (not) imposed GAAP regulations. We collect the GAAP adoption status from the National Association of Counties and partition our sample based on whether the state where the municipality is located has mandated local government to follow GAAP through statute when the municipal bonds

²⁴ The results are reported in Online Appendix Table O7. We use the same bond-level controls and county controls as in Eq. (1). We also control for state-fixed effects and year-fixed effects, and the standard errors are clustered at the state level. We use the same method to filter the municipal bond as described in Section IV. Our panel regression sample includes 191,384 bonds, which is comparable to the sample size in Gao et al. (2020) and Painter (2020).

are issued. Panel A, Online Appendix Table O8 shows the coefficients on *Adj. FOIA* are more negative in states without GAAP mandate, and the difference is statistically significant at the 1 percent level. These results indicate that FOIA's role in improving government transparency and monitoring is stronger when the disclosure regulation is relatively weak.

We further examine whether the FOIA effects vary by bond characteristics. We split our sample based on the median credit ratings. Panel A of Online Appendix Table O9 presents the results. Comparing the subsamples with high and low credit ratings, we find the FOIA effect is more pronounced for municipal bonds with lower credit ratings than those with higher credit ratings. The difference is statistically significant at the 1 percent level for both full and PSM samples. The results indicate that investors of riskier bonds are likely to benefit more from the FOIA.

Besides credit ratings, we also use bond maturity as a proxy for bond risks. Bonds with longer maturities are inherently riskier due to the extended duration of uncertainty (Cheng 2021). Therefore, investors of longer-maturity bonds are likely to benefit more from the FOIA. We split our sample based on the full sample median of bond maturity, which is 10 years. The results are reported in Panel B of Online Appendix Table O9. Although FOIA positive revisions significantly reduce the debt-financing costs for both short- and long-maturity bonds, the coefficient on *Adj*. *FOIA* is more negative for longer-maturity bonds than for shorter-maturity bonds. The difference is statistically significant at the conventional level for both the full and PSM samples.

Channels

We argue that a stronger form of FOIA lowers municipal borrowing costs by promoting accountability, reducing information asymmetry, and changing investors' risk perception. In this section, we provide evidence of these channels.

Corruption and Government Accountability

The FOIA establishes a legal mechanism for the general public to acquire government documents and information. This accessibility to information enhances transparency, facilitates greater scrutiny, and thereby reduces corruption and elevates government accountability (Cordis and Warren 2014). Given the evidence documented in Cordis and Warren (2014), we conduct a path analysis to examine whether corruption reduction is the primary or even the only channel through which FIOA revisions affect public financing costs. Panels A and B of Figure 2 summarize the results with the full and PSM sample, respectively. Consistent with Cordis and Warren (2014), we find that corruption decreases in response to positive FOIA revision, and a higher level of corruption is associated with higher financing costs. However, when comparing the magnitude of these effects, the direct effect, which could represent the effect of FOIA through other channels, is substantially larger. For example, in Figure A.1., the indirect effect through corruption is -0.00286 (= -0.055×0.052), and the direct effect is -0.014. So, the path analysis suggests that reduced corruption and associated improvements in government efficiency only partially explain the observed decrease in financing costs.

We also conduct analyses to examine the effect of FIOA revisions on government efficiency. Gao et al. (2020) suggest that local newspaper closures deteriorate government transparency and monitoring, lowering government efficiency. Similarly, higher transparency and elevated government accountability under stronger FOIA would help improve government efficiency. Following La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1999) and Gao et al. (2020), we measure government efficiency using the debt-to-GDP ratio, deficit-to-GDP ratio, relative wage of government employees, the relative size of government employees, and the efficiency of the local government's welfare programs. Because data on government efficiency measures are not available at the local government level, we conduct this analysis at the county level. The results tabulated in Table 5 suggest that local government efficiency improves following positive FOIA revisions, supporting the corruption and accountability channel.

Information Acquisition

To test the information channel, we would need to examine whether investors indeed access information through FOIA more frequently following positive FOIA revisions and whether this increased access affects government financing costs. Unfortunately, local government units have only recently begun to archive or publish the FOIA logs. ²⁵ Thus, data limitations prevent us from examining whether FOIA revisions influence public financing costs through their impact on investors' information acquisition captured in the intensity of FOIA requests. As an alternative approach, we examine the link between the FOIA request success rate and municipal bond offering yield. The higher FOIA success rate means easier access to information through FOIA requests. For this analysis, we extract the FOIA requests made through the MuckRock platform and calculate the success rate within each state. ²⁶ We first remove FOIA requests withdrawn by requesters. We then classify the remaining requests as successful if they are marked as "completed" and "partially completed," and other requests as unsuccessful. The success rate is the ratio of successful requests to the total requests. We match the previous year's FOIA success rate with the bond issuance year and estimate the following model:

$$Y_{i,j,s,t} = \alpha + \beta Succ_{s,t-1} + \gamma' BondControls_{i,j,s,t} + \theta' CountyControls_{j,s,t} + State FE + Year FE + \varepsilon_{i,j,s,t},$$
(2)

where $Succ_{s,t-1}$ denotes the state-year average success rate of FOIA requests made to local government agencies through MuckRock. We use the same bond and county control variables as in Table 2, and control for state- and year-fixed effects. The standard errors are clustered at the state level.

²⁵ See Online Appendix A for more details.

²⁶ MuckRock is a non-government organization that was launched in 2010 and helps the public file, track, and share public records requests. The MuckRock FOIA requests are available at https://www.muckrock.com/foi/list/ and can be traced back to 2010. We remove observations if the total number FOIA requests made to local government agencies through MuckRock in a given state-year is less than 10, to mitigate the potential bias associated with small sample sizes. Therefore, we include all municipal bond offerings across all 50 states from 2011 to 2016 with available data to construct the panel regression sample. The average success rate in the sample is 42.72 percent.

<u>Table 6</u> presents the results. We find a negative and significant relation between FOIA request success rate and offering yield and yield spread. The findings suggest that investors' information acquisition through FOIA requests influences local government financing costs.

Investors' Risk Perception – Evidence from Trading in the Secondary Market

In our main analysis, we examine the bond offering yields as we are interested in the impact of FOIA revisions on public financing costs. Although we limit the event window to six years around FOIA revisions to minimize the influence of confounding events and control for the bond characteristics and local macroeconomic conditions, it is almost impossible to control for all possible confounding factors. To mitigate the concerns that confounding events during the long treatment window may influence the results, we also examine the municipal bond yield in the secondary market within a short window around the effective dates of FOIA revisions. Although the results based on the secondary market trading cannot directly speak to government borrowing costs, they help clarify the causal link between FOIA revisions and investors' information processing in the municipal bond market. The short-window test based on the secondary market trading also serves as a test of the third channel – investors' risk perception. Investors' information acquisition or government officers' behavior would not change immediately (e.g., within 90 or 120 days) following FOIA revisions. So any change in the secondary market trading is likely to reflect changes in investors' risk perception. Of course, changes in investors' risk perception would be influenced by their expectations about possible information acquisition through FOIA and monitoring improvements.

The short window test requires accurate identification of the timing of the events. Of the 12 FOIA changes in our sample, we are able to identify the exact effective dates of seven FOIA regulation changes, as summarized in <u>Appendix A</u>. We collect the secondary market trading details around these dates using a (-120, 120) or (-90, 90) day window centered on the effective dates of

these regulation changes. We first apply the same criteria to filter the municipal bonds issued by local governments as in Section IV. Next, we exclude the transactions if the par value traded is missing, if the yield is missing or greater than 50 percent, if the trades occur after the maturity of the bond, as these must be recording errors, or if the trades occur after the bond is pre-refunded, as these bonds are essentially risk-free after the refunding (Schwert 2017). Since we are interested in whether investors will lower their required risk premium in response to the greater accessibility of government records, we only retain the investors' transaction data, removing transactions between dealers. We further require each bond in the sample to have at least one investor transaction in both the pre-event period and post-event period so that each bond can act as its own control (Zhang 2024).

We use a stacked DiD regression to determine the effect of FOIA on municipal bond risk premiums by examining the yield reflected by investors' trading in the secondary market around FOIA revision shocks. Specifically, we estimate the following model:

$$Y_{i,s,t} = \alpha + \beta Chg. FOIA_{s,t} + \gamma * BondControls_{i,s,t} + Bond - Cohort FE + TradeDay - Cohort FE + \varepsilon_{i,s,t},$$
(3)

where $Y_{i,s,t}$ is the yield or yield spread of secondary market trading of bond i, issued by municipalities in state s, on day t. Chg. $FOIA_{s,t}$ is an indicator variable that equals 1 (or -1) if the transaction of municipal bond issued in state s happens in the 120 or 90 days after the FOIA score increase (decrease) and equals zero otherwise. Chg. $FOIA_{s,t}$ is the variable of interest. If investors lower their required risk premium following positive FOIA revisions, the coefficient on Chg. $FOIA_{s,t}$ will be significantly negative. We use the transactions of municipal bonds issued by states that do not experience any FOIA revisions within the same event window as controls to construct the full sample. We also build a PSM sample for the secondary market trading test using the bonds issued in treated and matched counties as in Section IV. We include credit ratings, the inverse of years to maturity, and the natural logarithm of

trading amounts as controls.²⁷ We control for bond-cohort fixed effects and trade day-cohort fixed effects. By including bond-cohort fixed effects, we ensure that each bond is used as its own control. Trade-day-cohort fixed effects control for macroeconomic conditions that affect all the bonds on a specific date. Eq. (3) estimates the average effect of FOIA revision on the municipal bond secondary market yield and spread. The standard errors are clustered at the bond-cohort level.

Table 7 reports the results of estimating Eq. (3). Columns (1) to (4) report the results with the full sample, and columns (5) to (8) report the results using the PSM sample. The increase (decrease) in FOIA score is associated with a significant decrease (increase) in secondary market yields and yield spreads. These results are similar to our long-window test results of offering yields and yield spreads reported in <u>Table 2</u>. Along with the effect of FOIA revisions materializing immediately (starting the year of the revision) in the long-window test (see <u>Figure 1</u>), these results also support the investors' risk perception channel.

Additional Analysis

In this section, we discuss a couple of alternative explanations and our attempts to rule out these explanations.

Other State-Level Policy Changes

The state-level fiscal monitoring policies and anticorruption campaigns might have influenced government transparency and efficiency (Nakhmurina 2024), potentially reducing municipal bond offering yield. If these other state-level policy changes and FOIA revisions occur concurrently, our results may be driven by these other state-level policy changes rather than by FOIA revisions. To mitigate this concern, we repeat our main analyses after excluding states that have adopted fiscal monitoring policies or enacted anticorruption laws during the sample period

²⁷ Credit ratings are not subsumed by bond-event fixed effects because they may change during the event window. The results are similar (untabulated for brevity) when we drop credit ratings from the set of controls.

and find our results remain robust.^{28, 29} Thus, the positive impact of FOIA in municipal bond markets is unlikely to be driven by other state-level policy changes.

FOIA Revisions and Disclosure

FOIA revisions may affect local government borrowing costs by changing their disclosure behavior. In particular, if more frequent FOIA requests following enhanced FOIA regulations lead local governments to consistently gather and organize fundamental information, the majority of information for continuing disclosures might be readily available. This could allow local governments to increase the frequency, timeliness, and length of disclosures filed on EMMA, which will, in turn, reduce information uncertainty and decrease government financing costs.

To test this potential channel, we obtain continuing disclosures filed on EMMA from MSRB. The continuing disclosure data starts from July 1, 2009. This data limitation restricts our disclosure behavior analysis to the FOIA revisions in Delaware and Wyoming in 2013 because we need a sixyear event window to conduct stacked DiD regressions. Following Gillette et al. (2020), we construct the following variables to capture disclosure behavior: (1) an indicator variable that equals 1 if at least one financial disclosure is filed on EMMA in a given year, and 0 otherwise (*FinReporting*); (2) the natural logarithm of 1 plus the number of financial disclosures filed in a given year (*FinReporting_Freq*); (3) an indicator variable that equals 1 if at least one event notice is filed on EMMA in a given year, and 0 otherwise (*EventNotices*); (4) the natural logarithm of 1 plus the number of event notices filed in a given year (*EventNotices_Freq*); (5) the number of days between the local government's fiscal year-end date and its first annual financial disclosure filing date for that fiscal year,

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²⁸ Colorado, Louisiana, Nevada, New Mexico, New York, Ohio, Oregon, Pennsylvania, Rhode Island, and Tennessee adopted fiscal monitoring policy, and Illinois, New Mexico, New York, Ohio, Oregon, and Pennsylvania, enacted anticorruption campaigns during our sample period.

²⁹ The results (untabulated for brevity) are available upon request.

³⁰ Government disclosures are filed untimely and are often sticky. We use a six-year window here to capture the potential variation in disclosure behavior. Our results are robust if using a four-year window centered on three FOIA revision events (i.e., Iowa in 2012, Delaware in 2013, and Wyoming in 2013).

multiplied by -1 (*Timeliness*); and (6) the number of pages of the annual financial disclosure (*Length*). Untabulated results provide no evidence that local governments improve (reduce) disclosure following positive (negative) FOIA revisions. While the data limitation makes it difficult to draw strong conclusions from this analysis, such results suggest that the disclosure channel is unlikely to explain the relation between FOIA revisions and government financing costs.

VI. CONCLUSION

This study examines the impact of state-level FOIA revisions on public financing costs. The greater access to government records improves transparency and reduces information asymmetry between municipal bond investors and issuers. The reduced information asymmetry and easier information acquisition also improve government accountability. Furthermore, investors may perceive municipal bonds issued following positive FOIA revisions as less risky and start demanding lower risk premiums. Thus, we predict lower municipal borrowing costs following positive FOIA revisions.

We find a statistically and economically significant decrease (increase) in municipal bond borrowing costs following FOIA amendments that lead to a stronger (weaker) form of FOIA. Specifically, a one-point revision in the FOIA score changes the offering yield by around 12 basis points and the offering yield spread by around 9 basis points. Given the trillion-dollar municipal bond market, a more transparent government can result in substantial savings in financing costs, ultimately benefiting taxpayers and the whole community. The findings in this paper provide important implications for regulators in evaluating the potential cost-benefit trade-offs of FOIA and help both researchers and policymakers better understand how municipal bond investors process information.

REFERENCES

- Aboody, D., J. Hughes, and J. Liu. 2005. Earnings quality, insider trading, and cost of capital. *Journal of Accounting Research* 43 (5):651-673. http://doi.org/10.1111/j.1475-679X.2005.00185.x
- Adelino, M., I. Cunha, and M. A. Ferreira. 2017. The economic effects of public financing: Evidence from municipal bond ratings recalibration. *Review of Financial Studies* 30 (9):3223-3268. http://doi.org/10.1093/rfs/hhx049
- Baber, W. R., and A. K. Gore. 2008. Consequences of GAAP disclosure regulation: Evidence from municipal debt issues. *The Accounting Review* 83 (3):565-591. http://doi.org/10.2308/accr.2008.83.3.565
- Baber, W. R., A. K. Gore, K. T. Rich, and J. X. Zhang. 2013. Accounting restatements, governance and municipal debt financing. *Journal of Accounting and Economics* 56 (2-3):212-227. http://doi.org/10.1016/j.jacceco.2013.08.003
- Baker, A. C., D. F. Larcker, and C. C. Y. Wang. 2022. How much should we trust staggered difference-in-differences estimates? *Journal of Financial Economics* 144 (2):370-395. http://doi.org/10.1016/j.jfineco.2022.01.004
- Basu, R., X. Chen, and J. Naughton. 2022. Municipal bond market effects of credit rating dissemination. *Working Paper*.
- Blankespoor, E., E. D. Dehaan, J. Wertz, and C. Zhu. 2018. Why do individual investors disregard accounting information? The roles of information awareness and acquisition costs. *Journal of Accounting Research* 57 (1):53-84. https://doi.org/10.1111/1475-679x.12248
- Blankespoor, E., E. deHaan, and I. Marinovic. 2020. Disclosure processing costs, investors' information choice, and equity market outcomes: A review. *Journal of Accounting & Economics* 70 (2-3). http://doi.org/10.1016/j.jacceco.2020.101344
- Butler, A. W., and H. Yi. 2022. Aging and public financing costs: Evidence from U.S. municipal bond markets. *Journal of Public Economics* 211:104665. http://doi.org/10.1016/j.jpubeco.2022.104665
- Chalmers, J., Y. S. Liu, and Z. J. Wang. 2021. The difference a day makes: Timely disclosure and trading efficiency in the muni market. *Journal of Financial Economics* 139 (1):313-335. http://doi.org/10.1016/j.jfineco.2020.07.015
- Chen, N. X., M. Hutchens, and J. Xia. 2024. The effects of tax clientele on disclosure: evidence from the municipal bond market. *Available at SSRN 4846382*. http://dx.doi.org/10.2139/ssrn.4846382
- Cheng, S. F. 2021. The information externality of public firms' financial information in the state-bond secondary market. *Journal of Accounting Research* 59 (2):529-574. http://doi.org/10.1111/1475-679x.12361
- Cheng, S. F., C. Cuny, and H. Xue. 2022. Disclosure and competition for capital. *Management Science* 69 (7):4312-4330. http://doi.org/10.1287/mnsc.2022.4525
- Cordis, A. S., P.-H. Hsu, and J. Zhang. 2022. Freedom of information and industrial pollution. *Available at SSRN 3995477*. http://dx.doi.org/10.2139/ssrn.3995477
- Cordis, A. S., and P. L. Warren. 2014. Sunshine as disinfectant: the effect of state freedom of information act laws on public corruption. *Journal of Public Economics* 115:18-36. http://doi.org/10.1016/j.jpubeco.2014.03.010
- Cornaggia, J., K. J. Cornaggia, and R. D. Israelsen. 2018. Credit ratings and the cost of municipal financing. *Review of Financial Studies* 31 (6):2038-2079.

- http://doi.org/10.1093/rfs/hhx094
- Cornaggia, K., J. Hund, and G. Nguyen. 2022a. Investor attention and municipal bond returns. *Journal of Financial Markets* 60:100738. http://doi.org/10.1016/j.finmar.2022.100738
- Cornaggia, K., J. Hund, G. Nguyen, Z. Ye, and T. Ramadorai. 2022b. Opioid crisis effects on municipal finance. *Review of Financial Studies* 35 (4):2019-2066. http://doi.org/10.1093/rfs/hhab066
- Cuny, C. 2016. Voluntary disclosure incentives: Evidence from the municipal bond market. *Journal of Accounting and Economics* 62 (1):87-102. http://doi.org/10.1016/j.jacceco.2016.04.004
- ——. 2018. When knowledge is power: Evidence from the municipal bond market. *Journal of Accounting and Economics* 65 (1):109-128. http://doi.org/10.1016/j.jacceco.2017.11.002
- Cuny, C., K. Li, A. Nakhmurina, and E. M. Watts. 2021. Muni disclosure. *Available at SSRN 4186418*. http://dx.doi.org/10.2139/ssrn.4186418
- Darendeli, A. 2024. How do retail investors respond to summary disclosure? Evidence from mutual fund factsheets. *Review of Accounting Studies*. https://doi.org/10.1007/s11142-024-09849-1
- deHaan, E., J. Li, and E. M. Watts. 2023. Retail bond investors and credit ratings. *Journal of Accounting and Economics*:101587. https://doi.org/10.1016/j.jacceco.2023.101587
- deHaan, E., Y. Song, C. Xie, and C. Zhu. 2021. Obfuscation in mutual funds. *Journal of Accounting and Economics* 72 (2-3). https://doi.org/10.1016/j.jacceco.2021.101429
- Easley, D., and M. O'Hara. 2004. Information and the cost of capital. *The Journal of Finance* 59 (4):1553-1583. http://doi.org/10.1111/j.1540-6261.2004.00672.x
- Easton, P. D., S. J. Monahan, and F. P. Vasvari. 2009. Initial evidence on the role of accounting earnings in the bond market. *Journal of Accounting Research* 47 (3):721-766. http://doi.org/10.1111/j.1475-679X.2009.00333.x
- Farrell, M., D. Murphy, M. Painter, and G. Zhang. 2023. Disclosure Complexity, Regulatory Burden, and the Cost of Capital. *Available at SSRN 4647066*. https://doi.org/10.2139/ssrn.4647066
- Gao, P., C. Lee, and D. Murphy. 2019. Municipal borrowing costs and state policies for distressed municipalities. *Journal of Financial Economics* 132 (2):404-426. http://doi.org/10.1016/j.jfineco.2018.10.009
- ———. 2020. Financing dies in darkness? The impact of newspaper closures on public finance. *Journal of Financial Economics* 135 (2):445-467. http://doi.org/10.1016/j.jfineco.2019.06.003
- ——. 2022. Good for your fiscal health? The effect of the Affordable Care Act on healthcare borrowing costs. *Journal of Financial Economics* 145 (2):464-488. http://doi.org/10.1016/j.jfineco.2021.09.003
- Gargano, A., A. G. Rossi, and R. Wermers. 2017. The Freedom of Information Act and the race toward information acquisition. *Review of Financial Studies* 30 (6):2179-2228. http://doi.org/10.1093/rfs/hhw035
- Gillette, J. R., D. Samuels, and F. S. Zhou. 2020. The effect of credit ratings on disclosure: Evidence from the recalibration of Moody's municipal ratings. *Journal of Accounting Research* 58 (3):693-739. http://doi.org/10.1111/1475-679x.12307
- Glaeser, S., B. Schonberger, C. E. Wasley, and J. J. Xiao. 2023. Private information acquisition via Freedom of Information Act requests made to the Securities and Exchange Commission. *The Accounting Review* 98 (3):229-255. http://doi.org/10.2308/Tar-2021-0146

- Green, R. C., B. Hollifield, and N. Schurhoff. 2007. Dealer intermediation and price behavior in the aftermarket for new bond issues. *Journal of Financial Economics* 86 (3):643-682. http://doi.org/10.1016/j.jfineco.2006.10.004
- Green, R. C., D. Li, and N. Schürhoff. 2010. Price discovery in illiquid markets: Do financial asset prices rise faster than they fall? *The Journal of Finance* 65 (5):1669-1702. http://doi.org/10.1111/j.1540-6261.2010.01590.x
- Gu, D., J. He, Y. Huang, and N. Li. 2024. The effect of government transparency on corporate tax avoidance: Evidence from state freedom of information laws. *Available at SSRN 4963399*. http://dx.doi.org/10.2139/ssrn.4963399
- Hughes, J. S., J. Liu, and J. Liu. 2007. Information asymmetry, diversification, and cost of capital. *The Accounting Review* 82 (3):705-729. http://doi.org/10.2308/accr.2007.82.3.705
- Kahneman, D., and A. Tversky. 1979. Prospect theory: An analysis of decision under risk. *Econometrica* 47 (2):263-292. http://hassler-i.iies.su.se/COURSES/NewPrefs/Papers/KahnemanTversky%20Ec%2079.pdf
- Kang, B. U., and J. S. Nam. 2022. Do local newspapers matter to institutional investors? *Working Paper*.
- Klasa, S., H. Ortiz-Molina, M. Serfling, and S. Srinivasan. 2018. Protection of trade secrets and capital structure decisions. *Journal of Financial Economics* 128 (2):266-286. http://doi.org/10.1016/j.jfineco.2018.02.008
- Klein, A., T. Li, and B. B. Zhang. 2020. Seeking out non-public information: Sell-side analysts and the Freedom of Information Act. *The Accounting Review* 95 (1):233-257. http://doi.org/10.2308/accr-52442
- Koningisor, C. 2020. Transparency Deserts. *Northwestern University Law Review* 114. 1461-1547. https://scholarlycommons.law.northwestern.edu/nulr/vol114/iss6/2/
- La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. Vishny. 1999. The quality of government. *Journal of Law, Economics, and Organization* 15 (1):222-279. http://doi.org/10.1093/jleo/15.1.222
- Merkley, K. J., J. Pacelli, M. Piorkowski, and B. Williams. 2024. Crypto-influencers. *Review of Accounting Studies* 29 (3):2254-2297. https://doi.org/10.1007/s11142-024-09838-4
- Municipal Securities Rulemaking Board (MSRB). 2022. Trends in Municipal Securities Ownership.

 Ownership.pdf

 Ownership.pdf
- Nakhmurina, A. 2024. Does Fiscal Monitoring Make Better Governments? Evidence from U.S. municipalities. *The Accounting Review* 99 (4):395-425. http://doi.org/10.2308/tar-2020-0251
- Painter, M. 2020. An inconvenient cost: The effects of climate change on municipal bonds. *Journal of Financial Economics* 135 (2):468-482. http://doi.org/10.1016/j.jfineco.2019.06.006
- Robbins, M. D. 2002. Testing the effects of sale method restrictions in municipal bond issuance: The case of New Jersey. *Public Budgeting & Finance* 22 (2):40-56. http://doi.org/10.1111/1540-5850.00072
- Schultz, P. 2012. The market for new issues of municipal bonds: The roles of transparency and limited access to retail investors. *Journal of Financial Economics* 106 (3):492-512. http://doi.org/10.1016/j.jfineco.2012.07.004
- Schwert, M. 2017. Municipal bond liquidity and default risk. *The Journal of Finance* 72 (4):1683-1721. http://doi.org/10.1111/jofi.12511

- Securities and Exchange Commission (SEC). 2012. Report on the Municipal Securities Market. https://www.sec.gov/files/munireport073112.pdf
- Sengupta, P. 1998. Corporate disclosure quality and the cost of debt. *The Accounting Review* 73 (4):459-474. http://www.jstor.org/stable/248186.
- U.S. Department of Justice. 1980. Costs and benefits -- FOIA. https://www.justice.gov/oip/blog/foia-update-costs-and-benefits-foia.
- Zhang, V. 2024. Municipal bond credit rating access and retail investors' transaction costs. *The Accounting Review* 99 (1):427-453. http://doi.org/10.2308/Tar-2022-0180

Descriptions of Revised Legislations or Court Rulings that Explain FOIA Score Changes¹ APPENDIX A

State	Year	FOIA Score	Description	FOIA Score Criteria	Effective Date ²
Connecticut	2009	Increased from 8 to 9	A series of court decisions has established specific exemptions. These exemptions include records compiled in connection with the detection or investigation of a crime, records related to witnesses, information used in a prospective law enforcement action, investigatory techniques not known to the general public, and the name and address of a victim of a sexual assault. But records such as a police report of a suicide, residential addresses for the purpose of preparing and disseminating a town's grand list of personal property, and records relating to peer review	A provision that creates a presumption in favor of disclosure and identifies specific records as exempt from public access.	Not Applicable
Delaware	2013	Increased from 5 to 6	Proceedings are not exempt from disclosure. The court ruled that fees higher than those stated in the Delaware Freedom of Information Act may only be charged if they have been approved by a formal legislative process, not by rules or regulations.	A provision that limits the fees charged for processing requests.	Not Applicable
Illinois	2011	Decreased from 7 to 6	The revised Illinois Freedom of Information Act allowed government bodies to delay responses for up to 21 days if the request is made by a "recurrent requester". ³ Without such modification, the governmental body was required to respond within 5 days or, under certain limited circumstances, request a 5-day extension	A provision that establishes that the response time to a request for records is 15 days or less.	Aug 26, 2011
Iowa	2012	Decreased from 5 to 4	The revised Iowa Open Record Law exempted the state government or any entity, officer, or employee of those branches, or the governor or the office of the governor from the Iowa Public Information Roard	The lack of a generic public-interest exemption provision.	May 3, 2012
Maine	2010	Increased from 6 to 7	The revised Maine Freedom of Access Act added a subsection that the court may award reasonable attorney's fees and litigation	A provision for the award of attorneys' fees and costs	Jan 1, 2010

specific records as exempt from public access," may improve the accessibility of government records to a lesser extent considering the nature of the changes. The ¹ The Connecticut 2009, Nevada 2008 and Wyoming 2006 changes, which were related to "a provision that creates a presumption in favor of disclosure and identify Iowa 2012 change primarily targeted state government rather than local government, which is not the main focus in the paper, and thus may not affect municipal bond yields much. Thus, we repeat our analyses after dropping these events and find that our results are robust to excluding these events (untabulated for brevity). ² The court rulings usually involve multiple dates so that we cannot identify the exact effective dates.

³ The "recurrent requester" is the person who (i) has filed 50 requests for records within the year, (ii) filed 15 requests for records within a 30-day period, or (iii) filed 7 requests for records within a 7-day period.

Jan 25, 2011	Not Applicable	Not Applicable	Jan 1, 2009	Jan 1, 2006	Not Applicable	Feb 8, 2013
to a successful plaintiff in a public records case. A provision for the award of attorneys' fees and costs to a successful plaintiff in a public	A provision that creates a presumption in favor of disclosure and identifies specific records as exempt from public access	A provision that prohibits charging fees for the time spent searching and collecting records.	A provision for civil penalties for an agency's noncompliance.	A provision for criminal penalties for an agency's noncompliance.	A provision that creates a presumption in favor of disclosure and identifies specific records as exempt from public access.	A provision for administrative appeal of a decision to deny a request for public records.
expenses to the substantially prevailing plaintiff who appealed the refusal. The revised Minnesota Government Data Practices Act allows for reasonable attorney fees, up to \$5,000, to be awarded to a prevailing complainant. However, the judge may deny the award if the violation is deemed technical or if there is genuine legal	The court ruled that the Open Meeting Law (OML) applies to various groups without formal appointments and beyond "committee" or "subcommittee" labels. It applies to all public body activities, except for statutory exceptions. Discussions not listed on a public body's agenda are not exempt from OMI	The court dismissed complaints about charging scanning time and duplication of electronic material and authorized that government agencies can charge the actual cost of reproducing records maintained electronically.	The revised Pennsylvania Right-to-Know Law introduced penalties for government agencies that willfully and intentionally violate the law. Agencies that wrongfully deny access to records or fail to comply with the law could be subject to civil penalties.	The revised Texas Public Information Act requires all public officials are subject to receive training in how to comply with the law, and the certificate of course completion is admissible as evidence in a criminal prosecution in case of violations of the act. 4	Court ruled that the identity of the requester or the purpose for which the records are sought are irrelevant as to whether the record is available for public access. The pertinent question is whether the record is available to the public.	The revised Wyoming Statutes added a subsection that individuals aggrieved by a governmental entity's failure to release records can either apply to the district court, seeking an order for record inspection and potential fee waivers, or file a complaint with the ombudsman, who can mediate disputes, set release timelines, and waive fees charged by the entity.
Increased from 5 to 6	Increased from 3 to 4	Decreased from 7 to 6	Increased from 8 to 9	Increased from 5 to 6	Increased from 2 to 3	Increased from 3 to 4
2011	2008	2009	2009	2006	2006	2013
Minnesota	Nevada	New York	Pennsylvania	Texas	Wyoming	Wyoming

⁴ For example, refusing to provide public information, releasing confidential information, or destroying government information may lead to fines of up to \$4,000 and up to six months in jail.

APPENDIX B Variable Definitions

Variable	Definition
ΔΕΟΙΑ	The change of state FOIA score. FOIA scores and score changes are from Cordis and Warren (2014) and Cordis et al. (2022). We verify score changes and identify the nature of each change by reviewing the Open Government Guide, state-level
Adj. FOIA	FOIA regulations, and court cases. For states with FOIA revision, <i>Adj. FOIA</i> equals 0 in the three years before the event, and 1 (-1) if the state improves (weakens) its FOIA in the three years since the event. For states without FOIA revision within the same six-year event window, <i>Adj. FOIA</i> equals 0.
Adj. FOIA (0)	An indicator variable that equals 1 (-1) if the state where the bond-issuing local government is located improve (weaken) its FOIA in the bond-issuance year, and 0 otherwise.
Adj. FOIA (1)	An indicator variable that equals 1 (-1) if the state where the bond-issuing local government is located improves (weaken) its FOIA one year before the bond-issuance year, and 0 otherwise.
Adj. FOIA (-1)	An indicator variable that equals 1 (-1) if the state where the bond-issuing local government is located improves (weakens) its FOIA one year after the bond-issuance year, and zero otherwise.
Adj. FOIA (2)	An indicator variable that equals 1 (-1) if the state where the bond-issuing local government is located improves (weaken) its FOIA two years before the bond-issuance year, and 0 otherwise.
Adj. FOIA (-2)	An indicator variable that equals 1 (-1) if the state where the bond-issuing local government is located improves (weakens) its FOIA two years after the bond-issuance year, and 0 otherwise.
Adjusted Spread	Tax-adjusted offering yield spread following Schwert (2017). Adjusted Yield = $\frac{Offering\ Yield}{(1-\tau^{fed})\ (1-\tau^{state})}$, where τ^{fed} reflects the marginal federal tax rate at the bond issuance year, and τ^{state} is the marginal state tax rate in bond issuance state and
Adjusted Yield	issuance year. Tax-adjusted offering yield, measured as the tax-adjusted offering yield minus the maturity-matched Treasury yield in the municipal bond issuance year. The Treasury yield is obtained from the U.S. Department of the Treasury.
Callable	An indicator variable that equals 1 if the issuer has the option to redeem the bond before its scheduled maturity date. The data is obtained from the Mergent Municipal Bond database.
Chg. FOIA	For states with FOIA revision, <i>Chg. FOIA</i> equals 0 in the 90 or 120 days before the event, and 1 (-1) if the state improves (weakens) its FOIA in the 90 or 120 days since the event. For states without FOIA revision within the same event window, <i>Chg. FOIA</i> equals 0.
Corruption	The number of public corruption conviction cases in each state, scaled by state population in thousand. The conviction data is obtained from the Report to Congress on the Activities and Operations of the Public Integrity Section issued by the U.S. Department of Justice.
Corruption Change	The percentage change in state corruption from the previous year.
Credit Rating	The municipal bond's credit rating at issuance by S&P, Moody's, and Fitch. The character ratings are converted into numeric ratings with 21 corresponding to the highest credit quality and 1 the lowest, and 0 indicates the bond is not rated or the

rating is missing. When rating information is available from multiple rating agencies, we use rating from S&P, Moody, or Fitch, in the said order. The data is

obtained from the Mergent Municipal Bond database.

Debt The total state or county debt outstanding, scaled by the total state or county GDP.

The debt data is collected from the U.S. Census Bureau's Annual Survey of State

and Local Government Finance.

Dec. FOIA An indicator variable that equals 1 if Adj. FOIA is negative, and 0 otherwise.

Deficit The county deficit, scaled by the total GDP, where county deficit is defined as the

> total county expenses minus the total county tax revenues. The data is obtained from the U.S. Census Bureau's Annual Survey of State and Local Government

Finance.

EMPThe number of government employees to the number of total county population.

The data is obtained from the U.S. Bureau of Labor Statistics' Quarterly Census

of Employment and Wages.

FOIA scores obtained from Cordis and Warren (2014) and Cordis et al. (2022). FOIA Score

We verify score changes and identify the nature of each change by reviewing the

Open Government Guide, state-level FOIA regulations, and court cases.

GDP Growth The growth rate of state or county GDP, in percentage. The data is obtained from

the U.S. Bureau of Economic Analysis.

Inc. FOIA An indicator variable that equals 1 if Adj. FOIA is positive, and 0 otherwise.

Insured An indicator variable equals 1 if the municipal bond is insured, and 0 otherwise.

The data is obtained from the Mergent Municipal Bond database.

Issuance Amount The natural logarithm of the bond issuance amount, in thousand dollars. The data

is obtained from the Mergent Municipal Bond database.

An indicator variable that equals 1 if the state governor changes in the year, and 0 Leadership Change

otherwise. The data is obtained from the National Governors Association website.

Years between the issue date and the maturity date of the bond. The data is Maturity

obtained from the Mergent Municipal Bond database.

The number of county daily newspapers per thousand capita. The newspaper data Newspaper

is obtained from the Editor and Publisher Yearbook and the UNC's Center for

Innovation and Sustainability in Local Media's Database.

Offering yield spread, which is the offering yield minus the maturity-matched Offering Spread

Treasury yield in the municipal bond issuance year. The Treasury yield is obtained

from the U.S. Department of the Treasury.

An indicator variable that equals 1 if the municipal bond is issued through Offering Type

competitive sales, and 0 if through negotiated sales. The data is obtained from the

Mergent Municipal Bond database.

Yield to maturity at the time of issuance, based on the coupon and any discount or Offering Yield

premium to par value at the time of sale. The data is obtained from the Mergent

Municipal Bond database.

Pct. FOIA For states with FOIA revision, Pct. FOIA equals 0 in the three years before the

> event, and 1 (-1) divided by the previous FOIA score if the state improves (weakens) its FOIA in the three years since the event. For states without FOIA

revision within the same six-year event window, Pct. FOIA equals 0.

Pension Fund Ratio

The state pension fund ratio. The data is obtained from the Federal Reserve.

Income

The natural logarithm of the annual per-capita personal income in the state or county, in dollar. The data are obtained from the U.S. Bureau of Economic

Analysis' Personal Income by County and Metropolitan Area.

Income Change The percentage change in annual per-capita personal income in the state or county

from the previous year.

Political Balance The fraction of a state's members in the U.S. House of Representatives that belong

to the Democratic Party (Klasa et al. 2018). The data is obtained from the MIT

Election Data and Science Lab.

Population The natural logarithm of the state or county population, in thousand. The data is

obtained from the U.S. Census Bureau's Annual Estimates of the Population for

Counties.

Population Change Secondary Spread The percentage change in state or county population from the previous year.

The yield spread of the trade in the secondary market, which is calculated as raw

secondary yield minus the maturity-matched Treasury yield in the transaction

year.

Secondary Yield The yield of the trade in the secondary market. The data is obtained from MRSB

Municipal Securities Transaction Data via WRDS.

Social Capital The first principal component of Pvote, Respn, Assn, and Nccs. The data are

obtained from the Northeast Regional Center for Rural Development (NRCRD) at the Pennsylvania State University. *Pvote* is the voter turnouts in presidential elections; *Respn* is the response rate to U.S. census surveys; *Assn* is the total number of 10 types of social organizations; and *Nccs* is the total number of non-profit organizations in the county. NRCRD provides data for 2005, 2009, and 2014. Our sample period is 2005–2016, so we fill in the data for missing years using the social capital index in the most recent year in which data are available.

Succ The state-year average success rate of FOIA requests made to the local

government agencies through MuckRock. The data is obtained from the

MuckRock website.

Tax The total state or county tax revenues, scaled by the state or county total GDP. The

tax revenue data is collected from the U.S. Census Bureau's Annual Survey of

State and Local Government Finance.

Unemployment The annual unemployment rate of the county, in percentage. The data are obtained

from the U.S. Bureau of Labor Statistics' Unemployment in States and Local

Areas.

Wage The ratio of the total wages of all county government employees to the total wages

of all employees in the county. The data is obtained from the U.S. Bureau of Labor

Statistics' Quarterly Census of Employment and Wages.

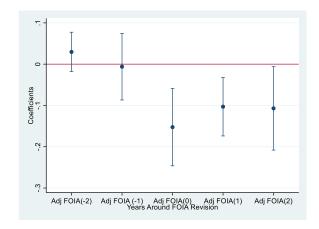
Welfare The ratio of government welfare spending to total government spending in the

county. The data is obtained from the U.S. Census Bureau's Annual Survey of

State and Local Government Finance.

FIGURE 1 Parallel-Trends Assumption

Panel A Full Sample



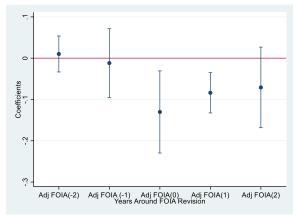
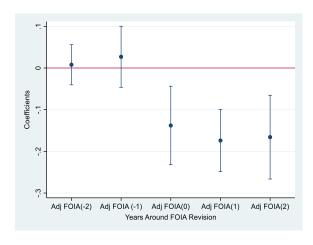


Figure A.1 Offering Yield

Figure A.2 Offering Spread

Panel B PSM Sample



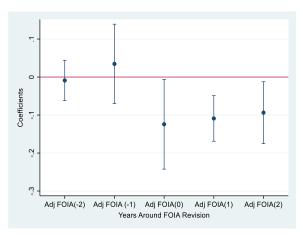


Figure B.1 Offering Yield

Figure B.2 Offering Spread

Panels A and B examine the parallel-trends assumption using the full sample and the PSM sample as in Online Appendix Table O6, columns (1) and (2), columns (3) and columns (4), receptively. We plot the incremental effect of FOIA revisions on municipal bond offering yield and offering yield spread by year in event time. The dots represent the estimated coefficients, and the vertical lines represent 90% confidence intervals.

FIGURE 2 Path Analysis

Panel A Full Sample

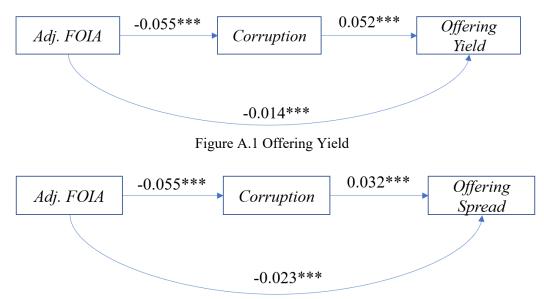


Figure A.2 Offering Spread

Panel B PSM Sample

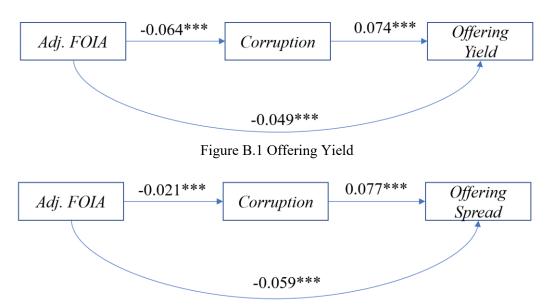


Figure B.2 Offering Spread

***, **, and * indicate statistical significance at 1%, 5%, and 10% levels, respectively. This figure describes the corruption (*Corruption*) path through which FOIA changes (*Adj. FOIA*) affects the municipal bond financing cost (*Offering Yield* and *Offering Spread*) using full sample and matched sample, respectively. All path coefficients in this figure are standardized. All variables are defined in <u>Appendix B</u>.

TABLE 1
Summary Statistics

	Full S	Full Sample (No. 0	of Observations =		598,891)	PS	PSM Sample (No. of Observations = 68,074)	o. of Observ	ations = 68,0	74)
Variable	Mean	Std Dev	01	Median	03	Mean	Std Dev	Q1	Median	Q3
Adi. FOIA	0.011	0.177	0.000	0.000	0.000	0.042	0.448	0.000	0.000	0.000
Pct. FOIA	0.002	0.028	0.000	0.000	0.000	0.008	0.070	0.000	0.000	0.000
Offering Yield	2.931	1.132	2.100	3.050	3.890	3.211	1.093	2.440	3.450	4.070
Offering Spread	0.037	0.596	-0.376	0.064	0.435	-0.018	0.632	-0.512	0.002	0.409
Adjusted Yield	4.851	1.844	3.491	5.070	6.372	5.291	1.772	4.051	5.686	6.671
Adjusted Spread	1.956	0.984	1.259	1.909	2.596	2.061	0.993	1.392	2.007	2.688
Maturity	10.888	5.004	7.000	10.000	14.000	11.413	4.895	8.000	11.000	15.000
Issuance Amount	6.211	1.254	5.438	6.153	7.003	6.058	1.309	5.247	5.991	6.872
Offering	0.751	0.432	1.000	1.000	1.000	0.744	0.436	0.000	1.000	1.000
Callable	0.526	0.499	0.000	1.000	1.000	0.577	0.494	0.000	1.000	1.000
Insured	0.207	0.405	0.000	0.000	0.000	0.279	0.448	0.000	0.000	1.000
Credit Rating	16.372	6.075	17.000	19.000	19.000	16.195	6.173	17.000	18.000	19.000
Income	10.698	0.256	10.517	10.678	10.868	10.691	0.246	10.518	10.659	10.848
Population	5.554	1.427	4.572	5.835	6.644	5.562	1.397	4.696	5.704	989.9
Unemployment	6.971	2.373	5.100	008.9	8.600	6.700	2.332	4.800	0.600	8.300
GDP Growth	3.415	4.730	1.368	3.401	5.417	3.298	4.691	1.109	3.330	5.250
Newspaper	0.005	0.008	0.001	0.002	900.0	0.005	0.008	0.000	0.002	900.0
Social Capital	-0.326	1.203	-0.934	-0.324	0.283	-0.318	0.966	-0.852	-0.282	0.234
Corruption	0.003	0.002	0.002	0.003	0.005	0.003	0.002	0.002	0.003	0.004
Corruption Change	9.653	73.506	-30.138	-4.288	31.288	7.384	71.009	-30.753	-3.758	27.884

The table reports the summary statistics for the full sample and propensity-score-matched (PSM) samples, respectively. In the full sample, there are 598,891 observations. In the PSM sample, there are 68,074 observations. All variables are defined in <u>Appendix B</u>.

TABLE 2
FOIA Changes and Municipal Bond Yield

	Full	Sample	PSM	Sample
Dependent Variable	Offering Yield	Offering Spread	Offering Yield	Offering Spread
•	(1)	(2)	(3)	(4)
Adj. FOIA	-0.124***	-0.088***	-0.135***	-0.091***
J	(-3.93)	(-3.00)	(-4.59)	(-2.92)
Maturity	0.130***	0.026***	0.118***	0.027***
•	(54.99)	(40.58)	(22.34)	(26.64)
Issuance Amount	-0.016***	-0.013***	-0.010	-0.008
	(-6.23)	(-5.81)	(-1.54)	(-1.62)
Offering	-0.143***	-0.140***	-0.110***	-0.112***
	(-21.12)	(-23.13)	(-6.77)	(-7.56)
Callable	0.173***	0.052***	0.205***	0.035***
	(21.29)	(7.13)	(11.07)	(3.46)
Insured	0.015	0.034***	0.018	0.033
	(1.62)	(3.87)	(0.84)	(1.49)
Credit Rating	-0.012***	-0.010***	-0.018***	-0.016***
	(-13.46)	(-9.57)	(-4.23)	(-4.18)
Income	-0.083***	-0.098***	-0.135***	-0.145***
	(-5.91)	(-6.71)	(-5.45)	(-5.53)
Population	0.003	-0.005*	0.002	-0.004
	(1.25)	(-1.76)	(0.14)	(-0.40)
Unemployment	0.019***	0.019***	0.013	0.014
	(8.86)	(8.37)	(1.55)	(1.58)
GDP Growth	0.001**	0.001***	0.001	0.001
	(2.26)	(3.22)	(0.50)	(0.84)
Newspaper	-1.111***	-1.060***	-1.155**	-1.054*
	(-4.91)	(-4.62)	(-2.04)	(-1.67)
Social Capital	0.000	-0.001	0.003	0.002
	(0.13)	(-0.48)	(0.20)	(0.12)
Corruption	-3.163	-1.823	-8.171	-6.159
	(-1.33)	(-0.72)	(-1.48)	(-1.08)
Corruption Change	0.000	0.000	-0.000	-0.000
	(0.62)	(1.28)	(-0.35)	(-0.17)
Constant	2.564***	1.017***	3.551***	1.529***
	(17.00)	(6.32)	(11.21)	(4.68)
State-Cohort FE	Yes	Yes	Yes	Yes
Year-Cohort FE	Yes	Yes	Yes	Yes
Observations	598,891	598,891	68,074	68,074
Adjusted R ²	0.858	0.616	0.842	0.663

***, **, and * indicate statistical significance at 1%, 5%, and 10% levels, respectively. This table reports the regression results from Eq. (1) for estimating the relation between FOIA revisions and local government municipal bonds' issuance costs. Columns (1) and (2) report the results when regressing on the offering yield (Offering Yield) and offering yield spread (Offering Spread) using the full sample. Columns (3) and (4) report the results using the PSM sample. Cohort refers to a group of observations within each treatment window (six years around each FOIA revision). Our sample includes 12 FOIA revisions across 11 distinct states. Thus, we have 12 cohorts. We construct a sample of treatment and control observations around each FOIA revision, creating 12 cohorts. We then stack 12 cohorts of the samples to construct the final sample of 598,891 observations for the full sample and 68,074 observations for the PSM sample. The t-statistics are reported in parentheses, and standard errors are clustered by state-cohort. All variables are defined in Appendix B.

TABLE 3 Robustness Tests

Panel A: Alternative Measure of FOIA Change

	Full	Sample	PSM	Sample
Dependent Variable	Offering Yield	Offering Spread	Offering Yield	Offering Spread
	(1)	(2)	(3)	(4)
Pct. FOIA	-0.723***	-0.524***	-1.004***	-0.776***
	(-3.43)	(-2.95)	(-4.36)	(-3.59)
Bond Controls	Yes	Yes	Yes	Yes
County Controls	Yes	Yes	Yes	Yes
State-Cohort FE	Yes	Yes	Yes	Yes
Year-Cohort FE	Yes	Yes	Yes	Yes
Observations	598,891	598,891	68,074	68,074
Adjusted R ²	0.858	0.616	0.842	0.663

Panel B: Alternative Measures of Financing Costs

	Full	Sample	PSM	Sample
Dependent Variable	Adjusted Yield	Adjusted Spread	Adjusted Yield	Adjusted Spread
	(1)	(2)	(3)	(4)
4 In FOX 4	0.000	0.000	0.04.64444	0.05.00
Adj. FOIA	-0.238***	-0.202***	-0.316***	-0.276***
	(-3.29)	(-2.91)	(-4.72)	(-4.16)
Bond Controls	Yes	Yes	Yes	Yes
County Controls	Yes	Yes	Yes	Yes
State-Cohort FE	Yes	Yes	Yes	Yes
Year-Cohort FE	Yes	Yes	Yes	Yes
Observations	598,891	598,891	68,074	68,074
Adjusted R ²	0.849	0.612	0.831	0.616

Panel C: Alternative Samples

	Neighboring	Neighboring States Sample	Entropy Bal	Entropy Balancing Sample	Mahalanobis Dista	Mahalanobis Distance-Matched Sample
Dependent Variable Offering Yield Offering Spread	Offering Yield	Offering Spread	Offering Yield	Offering Spread	Offering Yield	Offering Spread
	(1)	(2)	(3)	(4)	(5)	(9)
Adj. FOIA	-0.139***	***620.0-	-0.113***	-0.101***	-0.135***	-0.091***
s.	(-4.81)	(-3.46)	(-3.34)	(-2.76)	(4.59)	(-2.92)
Bond Controls	Yes	Yes	Yes	Yes	Yes	Yes
County Controls	Yes	Yes	Yes	Yes	Yes	Yes
State-Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes
Year-Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	133,834	133,834	339,645	339,645	86,887	86,887
Adjusted R ²	0.830	999.0	0.830	0.674	0.840	0.658

costs by tax-adjusted offering yield (Adjusted Yield) and tax-adjusted offering yield spread (Adjusted Spread) following Schwert (2017). In Panel C, we conduct robustness tests using alternative samples. Columns (1) and (2) show the results by only retaining bonds from FOIA revision (1) with Pct. FOLA, which captures the relative magnitude of the FOIA revisions. In Panel B, we alternatively measure the municipal bond financing ***, **, and * indicate statistical significance at 1%, 5%, and 10% levels, respectively. Panel A reports the results when replacing Adj. FOIA in Eq. we report the results using the Mahalanobis distance-matched sample. For each county located in states with FOIA revisions, we matched the 5 nearest counties in states without FOIA revisions by the county controls (Income, Population, Unemployment, GDP Growth, Newspaper, Social Capital, Corruption, and Corruption Change) in one year before the FOIA changes. Cohort refers to a group of observations within each states and their neighboring states in each cohort. Columns (3) and (4) report the results using the entropy balancing sample. In columns (5) and (6), treatment window (six years around each FOIA revision). The t-statistics are reported in parentheses and standard errors are clustered by state-cohort. All variables are defined in Appendix B.

TABLE 4
FOIA Effects by Change Types

Panel A: States with FOIA Score Increases or Decreases

		Full S	Full Sample			PSM Sample	ample	
	FOIA	FOIA	FOIA	FOIA	FOIA	FOIA	FOIA	FOIA
Dependent Variable	Increase Offerin	ease Decrease Offering Yield	Increase Offering	rease Decrease Offering Spread	Increase Decr Offering Yield	Decrease g Yield	Increase Offering	rease Decrease Offering Spread
	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)
Adj. FOIA	***610.0-	-0.190***	-0.051	-0.146***	-0.104***	-0.250***	**080'0-	-0.195***
,	(-2.68)	(-5.66)	(-1.59)	(-4.28)	(-2.82)	(-5.00)	(-1.98)	(-3.93)
Coefficient Diff	0.11	0.111***	0.09	0.095***	0.146***	% ***	0.11	0.115***
p-value	0.0	0.000	0.0	0.000	0.000	000	0.0	0.000
Bond Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year-Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	492,950	105,941	492,950	105,941	36,480	31,594	36,480	31,594
Adjusted R^2	0.863	0.832	0.616	0.617	0.857	0.823	0.672	0.658

Panel B: Types of FOIA Changes

		Full S	Full Sample			S WSd	PSM Sample	
	Cost	Others	Cost	Others	Cost	Others	Cost	Others
Dependent Variable	Offering Yield	g Yield	Offering Spread	Spread	Offering Yield	g Yield	Offering Spread	Spread
	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)
Adj. FOIA	-0.163***	-0.046	-0.130***	-0.004	-0.196***	-0.032	-0.165***	0.013
S	(-5.22)	(-0.87)	(-4.92)	(-0.07)	(-5.33)	(-0.75)	(-4.29)	(0.35)
Coefficient Diff	-0.118***	* * * *	-0.126***	***9	-0.164***	4 **	-0.177***	***
p-value	0.000	000	0.000	000	0.000	00	0.000	00
Bond Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year-Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	234,521	364,370	234,521	364,370	42,050	44,837	30,949	37,125
Adjusted R^2	0.856	0.858	0.573	0.637	0.845	0.836	0.681	0.653

for estimating the relation between FOIA revisions and local government municipal bonds offering yield (Offering Yield) and offering yield or decreased. In Panel B, we split our sample based on the type of FOIA revisions. Coefficient Diff indicates the coefficient between the two spread (Offering Spread) across different FOIA change types. In Panel A, we split our sample based on whether the state FOIA score is increased subsamples. The p-value of the difference is reported below the coefficient difference. Cohort refers to a group of observations within each treatment window (six years around each FOIA revision). The t-statistics are reported in parentheses and standard errors are clustered by state-cohort. All ***, **, and * indicate statistical significance at 1%, 5%, and 10% levels, respectively. This table reports the stacked regression results from Eq. (1) variables are defined in Appendix B.

TABLE 5
FOIA Effects on Government Inefficiency

			Full Sample				1	SM Sample		
Dependent Variable	Debt	Deficit	Welfare	Wage	EMP	Debt		Welfare	Wage	EMP
	(1)	(2)	(3)	(4)	(5)	(9)		(8)	(6)	(10)
Adj. FOIA	-0.003***	-0.001*	0.009**	-0.003*	-0.001	-0.002*	-0.001*	0.011***	***900.0-	-0.002***
	(-3.43)	(-1.68)	(2.10)	(-1.95)	(-1.14)	(-1.96)		(4.18)	(-3.09)	(-3.35)
Income Change	-0.000**	-0.000	**000.0-	-0.000	*000.0	-0.000		-0.000	0.001***	0.000***
	(-3.13)	(-0.67)	(-2.59)	(-0.01)	(1.73)	(-1.18)		(-1.64)	(3.40)	(3.83)
Population Change	0.000**	-0.001***	-0.001***	-0.004***	-0.001***	0.001*	~	-0.000	-0.003***	-0.001***
1	(3.38)	(-13.87)	(-4.76)	(-15.74)	(-15.39)	(1.87)		(-0.88)	(-4.43)	(-7.28)
Newspaper	-0.056***	-0.034**	-0.002	-0.718***	-0.004	-0.080**		-0.092	-0.486***	0.042
	(-5.16)	(-2.41)	(-0.11)	(-20.98)	(-0.26)	(-2.35)		(-0.80)	(-4.50)	(1.42)
Social Capital	0.002***	-0.000	-0.004***	-0.000	0.002***	0.001		-0.003	0.011*	0.006***
	(4.78)	(-0.05)	(-3.81)	(-0.32)	(4.05)	(1.05)		(-0.72)	(1.93)	(4.29)
Coincident Index	-0.000	-0.000	-0.001***	0.000	0.000	0.000		-0.000	0.000	-0.000
	(-0.61)	(-0.36)	(-5.70)	(0.68)	(0.45)	(0.59)		(-0.35)	(0.54)	(-0.10)
Pension Fund Ratio	0.000	0.000	-0.000***	0.000	0.000	-0.000		-0.000	*000.0-	*0000-
	(1.10)	(0.13)	(-3.57)	(1.19)	(1.12)	(-0.67)		(-0.44)	(-1.83)	(-1.66)
Constant	0.026***	0.028***	0.129***	0.148***	0.047***	0.019		0.082**	0.151***	0.056***
	(3.36)	(6.91)	(10.71)	(6.80)	(6.52)	(1.04)		(2.20)	(4.22)	(4.36)
State-Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Year-Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Observations	94,564	99,287	99,463	150,599	150.606	7,232		7,434	10,522	10,522
Adjusted R ²	0.200	0.360	989.0	0.141	0.225	0.306		0.752	0.235	0.366

inefficiency, which is measured by the county debt scaled by total GDP (Debt), the county deficit scaled by total GDP (Deficit), the ratio of government welfare spending to total government spending in the county (Welfare), the ratio of total government wages to total wages in the county (Wage), and the number of government employees per capita in the county (EMP). Cohort refers to a group of observations within each treatment ***, **, and * indicate statistical significance at 1%, 5%, and 10% levels, respectively. The table reports the effects of FOIA on government window (six years around each FOIA revision). The t-statistics are reported in parentheses, and standard errors are clustered by state-cohort. All variables are defined in Appendix B.

TABLE 6
FOIA Request Success Rate and Municipal Bond Yield

Dependent Variable	Offering Yield	Offering Spread	Adjusted Yield	Adjusted Spread
	(1)	(2)	(3)	(4)
Succ	-0.124**	-0.140***	-0.237**	-0.252***
	(-2.34)	(-3.31)	(-2.38)	(-2.87)
Bond Controls	Yes	Yes	Yes	Yes
County Controls	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	64,172	64,172	64,172	64,172
Adjusted R ²	0.835	0.359	0.834	0.708

***, **, and * indicate statistical significance at 1%, 5%, and 10% levels, respectively. This table reports the regression results from Eq. (2) for estimating the relation between the FOIA request success rate and municipal bond financing costs. The MuckRock FOIA requests can be traced back to 2010 and we require at least 10 observations for each state-year to avoid small sample bias. So, the sample used in this analysis is limited to municipal bond offerings across 50 states from 2011 to 2016. The t-statistics are reported in parentheses, and standard errors are clustered by state. All variables are defined in Appendix B.

TABLE 7

Trading in the Secondary Market

		Full Sample	ample			PSM Sample	ample	
	(-90, 90) Days Event Window	90) Days Event Window	(-120, 120) Days Event Window	(20) Days Event Window	(-90, 90) Days Event Window	0) Days Event Window	(-120, 120) Days Event Window	20) Days Event Window
Dependent Variable	Secondary Yield	Secondary Spread	Secondary Yield	Secondary Spread	Secondary Yield	Secondary Spread	Secondary Yield	Secondary Spread
	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)
Chg. FOIA	**960.0-	-0.094**	-0.118***	-0.110***	-0.109**	-0.117***	-0.111***	-0.116***
	(-2.17)	(-2.35)	(-3.10)	(-3.25)	(-2.50)	(-2.89)	(-3.01)	(-3.37)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bond-Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TradeDay-Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	127,860	127,860	178,653	178,653	13,430	13,430	18,874	18,874
Adjusted R ²	0.927	0.839	0.924	0.836	0.941	0.848	0.938	0.842

(-90,90) days event window. Columns (3), (4), (7), and (8) present the results using (-120, 120) days event window. We include the inverse of years to maturity, the most recent bond credit rating, and the natural logarithm of par value traded as controls. Cohort refers to a group of observations estimating the relation between FOIA revision and secondary yield and secondary yield spread. Columns (1), (2), (5), and (6) report the results using within each treatment window (180 or 240 days around each FOIA revision). The t-statistics are reported in parentheses, and standard errors are ***, **, and * indicate statistical significance at 1%, 5%, and 10% levels, respectively. This table reports the regression results from Eq. (3) for clustered by bond-cohort. All variables are defined in Appendix B.

Online Appendix A. Descriptions of Our Attempts to Obtain Non-Public FOIA Request Logs

We sent 53 FOIA requests asking for FOIA logs from 2005 to 2023 to 33 large cities in 11 states that have revised the FOIA and included in our final sample. If the city does not have a central FOIA office, we send the FOIA requests to its city clerk, Mayor's office, and finance department (or departments with similar functions). We received 38 replies (38/53=71.7%). Among these replies, 10 departments responded that they do not keep the records, 4 departments in Delaware rejected us because the data is not available for out-of-state entities, and 5 departments asked for fees for records maintained after 2016, which is out of our sample period. Only 19 departments sent us the FOIA requests. Among them, only 4 departments provided FOIA logs before 2016, and these FOIA logs are brief. Due to the limited sample, we could not perform meaningful analysis. We mentioned in Page 8, footnote 7 that "Only in recent years, some municipalities and their government units begin to publish the FOIA logs that contain the information acquired under FOIA, which prohibits us from analyzing the impact of the intensity of FOIA requests on the public financing costs."

We also extracted FOIA requests from MuckRock, a non-government organization launched in 2010 that helps the public to file, track, and share public records requests. We calculated the success rate of FOIA requests made from MuckRock and documented the negative and significant relation between FOIA request success rate and offering yield as well as offering yield spread.

Online Appendix B. Construct Validity of FOIA Scores

We offer several pieces of anecdotal evidence suggesting that the FOIA scores indeed capture the accessibility of government records. First, we use the data from MuckRock, a non-government organization that was launched in 2010 and helps the public file, track, and share public records requests. Alabama consistently had the lowest average FOIA score of 1 from 2012 to 2016, with a success rate of FOIA requests at 19.5 percent, while Connecticut and Pennsylvania had the highest average FOIA score of 9, with an average success rate of FOIA requests at 40.5 percent during the same period. The comparison between these states indicates that it is easier for the public to acquire information from states with higher FOIA scores. To shed light on the FOIA score variation over time, we find that in late 2016, a Michigan court ruling determined that meetings, emails, and phone logs involving government bodies were subject to FOIA, significantly increasing the amount of information available to the public. Consequently, the average growth rate of FOIA requests in Michigan reached 70.9 percent from 2017 to 2020, surpassing the average growth rate of FOIA requests to other state and local governments, which was 30.8 percent. Reflecting such changes, Michigan experienced an increase in FOIA score from 7 to 8 in 2016.

Besides data from MuckRock, we also find evidence from local government FOIA logs that supports the construct validity of FOIA scores. On May 9, 2011, the state of Illinois approved a revision to its FOIA, extending the allowable response time for recurrent requests from 5 working days to 21 working days.² Using the summaries of FOIA requests obtained from The Department of Finance in the City of Chicago, Illinois,³ we find that, before the regulatory adjustment, the

¹ MuckRock's earliest FOIA requests can be traced back to 2010 (https://www.muckrock.com/). To mitigate the potential bias in calculating the success rate due to the limited amount of FOIA requests, we remove the observations if the state and local government agencies receive fewer than 10 FOIA requests within one year.

² The "recurrent requester" is the person who (i) has filed 50 requests for records within the year, (ii) filed 15 requests for records within a 30-day period, or (iii) filed 7 requests for records within a 7-day period.

³ https://www.chicago.gov/city/en/depts/fin/dataset/foialog.html.

average response time was 7.5 days, with none of the requests exceeding the 21-working-day limit. However, in the year following the regulatory change, the average response time increased to 8.5 days, and 15.97 percent (14 out of 119) of requests took longer than 21 working days to receive a response. The longer response time hinders timely information acquisition and fails to protect nuisance requesters. Consistently, the Illinois' FOIA score decreased from 7 to 6 in 2011.

Table O1 Examples of FOIA Requests Obtained from Published FOIA Logs

Request Date	Close Date	Request Summary	Data Source
Jul 6, 2022	Jun 28, 2022	Request reports, memos, and emails pertaining to the Rock Run Crossing-Cullinan Development general obligation bond including the following: pro forma documents, economic impacts, economic analysis of bond re-payment, market studies, bond counsel opinion, sales tax projections, property tax projections, other tax projections, staff	City of Joliet, IL
Aug 8, 2022	Aug 15, 2022	Please provide a copy of any financial analysis identifying the ability to pay back the debt service for this, or any subsequently amended amount related to this Rock Run Crossing general obligation bond in the amount of \$102.890.362	City of Joliet, IL
Sep 28, 2018	N.A. ²	Show all correspondences between the City of Dallas and Moody's Investors Service bond credit rating business between the City of Dallas and Fire pension fund regarding Moody's Investors Service bond credit rating business related to the pension fund between January 2015 through June 2018. All correspondences between the City of Dallas and Moody's Investors Service bond credit rating business regarding the Triple A.A.A. Bond rating and all or any Downgrading for any and all reasons given by Moody's Investors Service Bond	City of Dallas, TX
Dec 13, 2016	N.A.	Credit Kating Business. Request for any and all paper or electronic documents the City of Dallas generated and or maintained between January 1, 2008, and December 31, 2008, relating to the bond	City of Dallas, TX
Apr 20, 2023	N.A.	A list of all projects approved in the 2006, 2012, and 2017 bond programs. Can the list please be in an Excel spreadsheet format and include the project name, council district it is located in, project category, current project status, bond value, date completed, or planned completion date?	City of Dallas, TX
May 12, 2021 Sep 21, 2010 May 19, 2021	May 19, 2021 Sep 28, 2010 N.A.	Request to inspect the 2020 Comprehensive Annual Financial Report (CAFR) in person. Request a job description for the mayor, Alderman, as well as a job description and salary for the chief of staff, Aldermanic Aide. How many employees who were terminated from the Department of Revenue from January 1, 2010, through December 31, 2019, were African American and how many	City of Chicago, IL City of Chicago, IL Cook County, IL

¹ City of Joliet, IL issued The Rock Run Crossing general obligation bond on Sep 28, 2022. The official statement was posted on EMMA on Sep 22, 2022, around two months later than the FOIA request disclosure date.

² The City of Dallas, TX, and Cook County, IL only provide the request status, but not the close date of FOIA requests. The current status of all the FOIA requests in this table is "Full Release" or "Completed".

		were Caucasian? What were the titles for each of those positions that were terminated and	
		what were the salaries for each position?	
Oct 27, 2022	N.A.	Request the annual budget from 1992 until the present (2022) of the Cook County Circuit Cook County, II	Cook County, II
		and the Chancery Division.	
Jan 27, 2023	N.A.	Request Amusement Tax revenue from the Cook County Department of Revenue; from	Cook County, II
		companies and venues in Cook County from January 1, 2014 to December 31, 2022.	
Mar 27, 2023	N.A.	Request a list of names of individuals who have recently joined a government-assisted	Cook County, II
		living facility. The requester is conducting independent research on how we can better	
		improve the facility and how we can improve the elderly community	

Table O2 FOIA Scores from 2005-2016

State	05	06	07	08	09	10	11	12	13	14	15	16
Alabama	1	1	1	1	1	1	1	1	1	1	1	1
Alaska	4	4	4	4	4	4	4	4	4	4	4	4
Arizona	2	2	2	2	2	2	2	2	2	2	2	2
Arkansas	8	8	8	8	8	8	8	8	8	8	8	8
California	5	5	5	5	5	5	5	5	5	5	5	5
Colorado	7	7	7	7	7	7	7	7	7	7	7	7
Connecticut	8	8	8	8	9	9	9	9	9	9	9	9
Delaware	5	5	5	5	5	5	5	5	6	6	6	6
Florida	5	5	5	5	5	5	5	5	5	5	5	5
Georgia	6	6	6	6	6	6	6	6	6	6	6	6
Hawaii	5	5	5	5	5	5	5	5	5	5	5	5
Idaho	6	6	6	6	6	6	6	6	6	6	6	6
Illinois	7	7	7	7	7	7	6	6	6	6	6	6
Indiana	8	8	8	8	8	8	8	8	8	8	8	8
Iowa	5	5	5	5	5	5	5	4	4	4	4	4
Kansas	5	5	5	5	5	5	5	5	5	5	5	5
Kentucky	5	5	5	5	5	5	5	5	5	5	5	5
Louisiana	8	8	8	8	8	8	8	8	8	8	8	8
Maine	6	6	6	6	6	7	7	7	7	7	7	7
Maryland	5	5	5	5	5	5	5	5	5	5	5	5
Massachusetts	6	6	6	6	6	6	6	6	6	6	6	6
Michigan	7	7	7	7	7	7	7	7	7	7	7	8
Minnesota	5	5	5	5	5	5	6	6	6	6		6
	5	5	<i>5</i>	5	<i>5</i>	5	5	5	5	5	6 5	5
Mississippi Missouri			<i>3</i> 7							<i>3</i> 7		
	7	7		7	7	7	7	7	7		7	7
Montana	3	3	3	3	3	3	3	3	3	3	3	3
Nebraska	6	6	6	6	6	6	6	6	6	6	6	6
Nevada	3	3	3	4	4	4	4	4	4	4	4	4
New Hampshire	5	5	5	5	5	5	5	5	5	5	5	5
New Jersey	7	7	7	7	7	7	7	7	7	7	7	7
New Mexico	6	6	6	6	6	6	6	6	6	6	6	6
New York	7	7	7	7	6	6	6	6	6	6	6	6
North Carolina	4	4	4	4	4	4	4	4	4	4	4	4
North Dakota	7	7	7	7	7	7	7	7	7	7	7	7
Ohio	5	5	5	5	5	5	5	5	5	5	5	5
Oklahoma	6	6	6	6	6	6	6	6	6	6	6	6
Oregon	5	5	5	5	5	5	5	5	5	5	5	5
Pennsylvania	8	8	8	8	9	9	9	9	9	9	9	9
Rhode Island	7	7	7	7	7	7	7	7	7	7	7	7
South Carolina	6	6	6	6	6	6	6	6	6	6	6	6
South Dakota	1	1	1	1	2	5	5	6	6	6	6	6
Tennessee	4	4	4	4	4	4	4	4	4	4	4	4
Texas	6	7	7	7	7	7	7	7	7	7	7	7
Utah	7	7	7	7	7	7	7	7	7	7	7	7
Vermont	6	6	6	6	6	6	6	6	6	6	6	6
Virginia	5	5	5	5	5	5	5	5	5	5	5	5
Washington	6	6	6	6	6	6	6	6	6	6	6	6
West Virginia	6	6	6	6	6	6	6	6	6	6	6	7
Wisconsin	5	5	5	5	5	5	5	5	5	5	5	5
Wyoming	2	3	3	3	3	3	3	3	4	4	4	4

Table O3 Determinants of State FOIA Changes

Dependent Variable		$\Delta FOIA$	
-	(1)	(2)	(3)
Income	0.032	0.010	0.048
meome	(0.53)	(0.13)	(0.62)
Population	-0.017*	-0.016	-0.030***
Topinumon	(-1.71)	(-1.66)	(-2.74)
Unemployment	-0.006	-0.007	-0.004
e nemproyment	(-0.57)	(-0.63)	(-0.33)
GDP Growth	0.002	0.002	0.002
<i>321 3.6.7.</i>	(0.84)	(0.93)	(1.01)
Newspaper	-2.441	-2.325	-2.090
z.cap sap si	(-0.62)	(-0.60)	(-0.56)
Social Capital	0.013	0.011	0.007
T. C.	(0.57)	(0.52)	(0.38)
Corruption	8.625	8.937	9.820
7	(1.15)	(1.17)	(1.30)
Corruption Change	-0.000	-0.000	-0.000
1 3	(-0.65)	(-0.64)	(-0.74)
Political Balance		0.035	0.060
		(0.79)	(1.27)
Leadership Change		-0.001	-0.000
1 0		(-0.03)	(-0.01)
Tax		, ,	-1.185
			(-1.13)
Debt			-0.000
			(-1.42)
Constant	-0.162	0.058	-0.178
	(-0.25)	(0.07)	(-0.20)
Year FE	Yes	Yes	Yes
Observations	600	600	600
Adjusted R^2	0.015	0.015	0.020

^{***, **,} and * indicate statistical significance at 1%, 5%, and 10% levels, respectively. This table reports the OLS regression results for estimating the determinants of state FOIA score changes ($\Delta FOIA$). The sample includes all states from 2005 to 2016. The t-statistics are reported in parentheses, and standard errors are clustered by state. All variables are defined in Appendix B of the manuscript.

Table O4 Determinants of State FOIA Increase or Decrease

Dependent Variable		Inc. FOLA	1		Dec. FOIA	
	(1)	(2)	(3)	(4)	(5)	(6)
Income	0.048	0.031	0.072	0.000	-0.009	-0.007
	(1.09)	(0.59)	(1.24)	(0.02)	(-0.36)	(-0.40)
Population	-0.011	-0.011	-0.022**	0.006*	0.006*	0.005
	(-1.29)	(-1.22)	(-2.35)	(1.77)	(1.81)	(1.43)
Unemployment	-0.003	-0.004	-0.000	-0.002	-0.003	-0.003
	(-0.46)	(-0.64)	(-0.03)	(-0.72)	(-0.83)	(-0.87)
GDP Growth	0.002	0.002	0.002	-0.000	-0.000	-0.000
	(0.86)	(0.96)	(0.94)	(-0.45)	(-0.32)	(-0.29)
Newspaper	-0.949	-0.874	-0.661	0.045	0.075	0.083
	(-0.34)	(-0.31)	(-0.25)	(0.06)	(0.10)	(0.11)
Social Capital	0.005	0.004	0.001	0.001	0.001	0.001
	(0.35)	(0.27)	(0.08)	(0.21)	(0.13)	(0.11)
Corruption	5.101	5.373	6.180	-0.350	-0.203	-0.176
	(1.06)	(1.12)	(1.27)	(-0.54)	(-0.36)	(-0.33)
Corruption Change	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
	(-0.55)	(-0.57)	(-0.70)	(-1.27)	(-1.28)	(-1.23)
Political Balance		0.025	0.049		0.011	0.012
		(0.83)	(1.59)		(1.10)	(0.98)
Leadership Change		0.027	0.028		0.026	0.026
		(1.10)	(1.16)		(1.25)	(1.25)
Tax			-0.698			-0.047
			(-1.03)			(-0.35)
Debt			-0.000			-0.000
			(-1.66)			(-0.15)
Constant	-0.398	-0.224	-0.534	-0.029	0.058	0.053
	(-0.86)	(-0.41)	(-0.88)	(-0.12)	(0.23)	(0.24)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	600	600	600	600	600	600
Adjusted R ²	0.004	0.006	0.012	-0.013	-0.006	-0.009

^{***, **,} and * indicate statistical significance at 1%, 5%, and 10% levels, respectively. This table reports the OLS regression results for estimating the determinants of state FOIA changes, including the indicator variable that equals 1 if the FOIA score increases and 0 otherwise (*Inc_FOIA*), and the indicator variable that equals 1 if the FOIA score decreases and 0 otherwise (*Dec_FOIA*). The sample includes all states from 2005 to 2016. All variables are defined in Appendix B of the manuscript.

Table O5 Covariance Balance Test of PSM Sample

Variable	Unmatched(U)	M	ean	0/ h: a a	t-T	est
Variable	Matched (M)	Treated	Control	%bias	t	p > t
Income	U	10.393	10.397	-1.700	-0.360	0.718
	M	10.393	10.394	-0.500	-0.090	0.930
Population	U	3.422	3.621	-13.500	-2.940	0.003
	M	3.422	3.494	-4.900	-0.860	0.391
Unemployment	U	6.468	6.791	-11.800	-2.410	0.016
	M	6.468	6.385	3.000	0.570	0.568
GDP Growth	U	8.105	6.845	10.600	2.240	0.025
	M	8.105	7.914	1.600	0.290	0.771
Newspaper	U	0.009	0.010	-2.500	-0.540	0.591
	M	0.009	0.011	-5.900	-1.000	0.316
Social Capital	U	0.013	-0.002	1.500	0.330	0.742
	M	0.013	-0.024	3.700	0.620	0.535
Corruption	U	0.003	0.003	-7.400	-1.390	0.165
-	M	0.003	0.003	4.600	0.880	0.380
Corruption Change	U	20.924	10.356	12.600	2.560	0.010
	M	20.924	19.413	1.800	0.290	0.772

This table reports the covariance balance of the county characterises of the PSM sample. All variables are defined in Appendix B of the manuscript.

Table O6 Parallel-Trends Assumption

-	Full	Sample	PSM	Sample
Dependent Variable	Offering Yield	Offering Spread	Offering Yield	Offering Spread
	(1)	(2)	(3)	(4)
Adj. FOIA (-2)	0.030	0.010	0.008	-0.009
	(1.13)	(0.38)	(0.27)	(-0.28)
Adj. FOIA (-1)	-0.006	-0.012	0.027	0.035
	(-0.14)	(-0.24)	(0.61)	(0.55)
Adj. FOIA (0)	-0.153**	-0.130**	-0.138**	-0.124*
	(-2.95)	(-2.16)	(-2.42)	(-1.74)
Adj. FOIA (1)	-0.103**	-0.084***	-0.174***	-0.109***
	(-2.63)	(-2.84)	(-3.87)	(-3.01)
Adj. FOIA (2)	-0.107*	-0.071	-0.166***	-0.094*
	(-1.92)	(-1.20)	(-2.73)	(-1.91)
Bond Controls	Yes	Yes	Yes	Yes
County Controls	Yes	Yes	Yes	Yes
State-Cohort FE	Yes	Yes	Yes	Yes
Year-Cohort FE	Yes	Yes	Yes	Yes
Observations	515,987	515,987	60,133	60,133
Adjusted R ²	0.857	0.600	0.840	0.649

***, **, and * indicate statistical significance at 1%, 5%, and 10% levels, respectively. This table reports the regression results when replacing Adj. FOIA in Eq. (1) with Adj. FOIA (-2), Adj. FOIA (-1), Adj. FOIA (0), Adj. FOIA (1), and Adj. FOIA (2) to test the parallel-trends assumption. Columns (1) and (2) report the results on offering yield and offering yield spread, respectively, using the full sample. Columns (3) and (4) report the results using the PSM sample. Cohort refers to a group of observations within each treatment window (six years around each FOIA revision). The t-statistics are reported in parentheses, and standard errors are clustered by state-cohort. All variables are defined in Appendix B of the manuscript.

Table O7 FOIA Score and Municipal Bond Yield

Dependent Variable	Offering Yield	Offering Spread	Adjusted Yield	Adjusted Spread
	(1)	(2)	(3)	(4)
	0.000 thinks	o o = chihir	0.4.62.4444	0.4.450000
FOIA Score	-0.092***	-0.076***	-0.163***	-0.147***
	(-4.14)	(-3.83)	(-2.96)	(-2.76)
Bond Controls	Yes	Yes	Yes	Yes
County Controls	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	191,384	191,384	191,384	191,384
Adjusted R ²	0.877	0.592	0.863	0.633

^{***, **,} and * indicate statistical significance at 1%, 5%, and 10% levels, respectively. This table reports the panel regression results for municipal bond financing costs and *FOIA Score* in the bond-issuance year. We use the same bond control and county control variables as in Eq. (1). We include state-fixed effects and year-fixed effects. The t-statistics are reported in parentheses and standard errors are clustered by state. All variables are defined in Appendix B of the manuscript.

Table O8 FOIA Effects by State GAAP Mandate

		Full Sample	ample			PSM Sample	ample	
	With GAAP	Without GAAP	With GAAP	Without GAAP	With GAAP	Without GAAP	With GAAP	Without GAAP
Dependent Variable	Offerin	Offering Yield	Offering	Offering Spread	Offering Yield	g Yield	Offering	Offering Spread
	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)
Adi. FOIA	-0.092***	-0.237***	-0.053	-0.160***	-0.111***	-0.316***	-0.074	-0.229***
.	(-2.97)	(-9.17)	(-1.62)	(-5.06)	(-2.66)	(-8.69)	(-1.51)	(-6.36)
Coefficient Diff	0.14	0.145***	0.10	0.107***	0.205).205***	0.15	0.155***
p-value	0.0	0.000	0.0	0.000	0.000	00	0.0	0.000
Bond Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year-Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	387,355	211,536	387,355	211,536	41,739	26,335	41,739	26,335
Adjusted R ²	0.865	0.847	0.629	0.594	0.853	0.829	0.675	0.656

counties to follow GAAP through statute when the municipal bonds are issued. Cohort refers to a group of observations within each treatment window (six years around each FOIA revision). The t-statistics are reported in parentheses, and standard errors are clustered by state-cohort. Coefficient Diff indicates the coefficient difference on Adj. FOIA between two subsamples. The p-value of the difference is reported below the for estimating the relation between FOIA revisions and local government municipal bonds offering yield (Offering Yield) and offering yield spread (Offering Spread) across different subsamples. We split our sample based on whether the state where the municipality locates has required ***, **, and * indicate statistical significance at 1%, 5%, and 10% levels, respectively. This table reports the stacked regression results from Eq. (1) coefficient difference. All variables are defined in Appendix B of the manuscript.

Table O9 FOIA Effects by Bond Characteristics

Panel A: Credit Rating

		Full S	Full Sample			PSM Sample	ample	
Denendent Variable	High Rating Offerin	High Rating Low Rating Offering Yield	High Rating Low Rating Offering Suread	Rating Low Rating Offering Spread	High Rating Low F Offering Vield	High Rating Low Rating Offering Yield	High Rating Low Rating Offering Suread	Rating Low Rating Offering Spread
	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)
4dj. FOIA	-0.059*	-0.167***	-0.031	-0.125***	-0.059	-0.224***	-0.052	-0.190***
.	(-1.71)	(-3.45)	(-1.02)	(-3.10)	(-1.58)	(-4.89)	(-1.54)	(-3.87)
Coefficient Diff	0.10).108***	0.094	***	0.165**	***	0.138***	***
p-value	0.000	00	0.000	00	0.000	00	0.000	00
Bond Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year-Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	308,256	290,635	308,256	290,635	44,622	42,261	42,549	25,523
Adjusted R^2	0.882	0.843	0.635	0.631	0.869	0.822	0.682	0.683
djusted R ²	0.882	0.843	0.635		0.631		0.869	0.869 0.822

Panel B: Maturity

		Full Sample	ımple			PSM Sample	ample	
	Short	Long	Short	Long	Short	Long	Short	Long
	Maturity	Maturity	Maturity	Maturity	Maturity	Maturity	Maturity	Maturity
Dependent Variable	Offerin	Offering Yield	Offering	Offering Spread	Offering 1	g Yield	Offering	Offering Spread
	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)
Adj. FOIA	**990'0-	-0.115***	-0.064**	-0.101***	-0.114***	-0.148***	-0.110***	-0.133***
	(-2.52)	(-3.34)	(-2.40)	(-3.30)	(-3.37)	(-4.07)	(-3.25)	(-3.94)
Coefficient Diff	0.049	0.049***	0.03	0.037***		0.034**	_	0.023*
p-value	0.000	00	0.000	00	0.0	0.020	0.0	0.070
Bond Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year-Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	264,522	334,369	264,522	334,369	27,158	40,907	27,158	40,907
Adjusted R ²	0.864	0.749	0.613	0.656	0.856	0.73	0.647	0.701

spread (*Offering Spread*) across different subsamples. In Panel A, we test the effects of FOIA revisions on high- or low-rating bonds (whether the credit rating is above the median of credit ratings in the full sample, which is 19). In Panel B, we test the effects of FOIA revisions on short or for estimating the relation between FOIA revisions and local government municipal bonds offering yield (Offering Yield) and offering yield long maturity (whether the maturity is greater than the median maturity in the full sample, which is 10 years). Cohort refers to a group of observations within each treatment window (six years around each FOIA revision). The t-statistics are reported in parentheses, and standard errors are clustered by state-cohort. Coefficient Diff indicates the coefficient difference on Adj. FOIA between two subsamples. The p-value of the difference is reported ***, **, and * indicate statistical significance at 1%, 5%, and 10% levels, respectively. This table reports the stacked regression results from Eq. (1) below the coefficient difference. All variables are defined in Appendix B of the manuscript.