

Debt by Democracy: Bond Referendum Requirements and Municipal Borrowing*

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Abstract

Local governments rely on the U.S. municipal bond market to finance critical infrastructure, yet little is known about how citizens—rather than investors—shape local public borrowing. We study bond referendum requirements, which mandate voter approval before municipalities issue bonds, as a central institutional channel linking democratic participation to public debt markets. Drawing on a political-agency framework of fiscal policymaking, we examine how these requirements shape municipal disclosure, investor responses, and financing choices. We assemble the first comprehensive dataset of state-level referendum laws for cities and document substantial cross-state variation. Cities subject to general obligation bond referendums provide more bond-related disclosures on their websites and receive greater bond-related media coverage. Consistent with a richer information environment for voters, these disclosures are associated with more successful bond elections. In addition, consistent with voter-oriented information spilling over to investors, bonds issued by cities requiring voter approval are more likely to trade in the secondary market, especially among retail investors. At the same time, cities in referendum states are more likely to rely on bond types that bypass voter approval, such as revenue or limited-tax bonds, consistent with officials seeking to retain greater discretion. These differences in debt composition are associated with higher aggregate borrowing costs, with yield spreads roughly 27-29 basis points higher in referendum states. Overall, our findings suggest that voter-approval laws are linked to a dual set of outcomes: enhanced transparency and market activity, but also greater use of costlier debt instruments and correspondingly higher borrowing costs.

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1 Introduction

Local governments rely on the \$4 trillion U.S. municipal bond market as a critical source of infrastructure funding ([Municipal Securities Rulemaking Board, 2025](#)). Although a large literature examines how investors and underwriters influence municipalities’ debt issuance decisions, far less is known about the role of local citizens—the ultimate beneficiaries of municipal spending. We study a central institutional mechanism through which citizens can shape the issuance process: bond referendum requirements, which mandate that local governments obtain voter approval before issuing bonds. These requirements are likely to shape municipalities’ incentives in two opposing ways. For bonds that must receive voter approval, referendums may encourage governments to engage with and persuade citizens, with potential implications for the amount of information available about the bonds in this notoriously opaque market. At the same time, because the referendum process is costly and voter rejection can delay projects and create political costs, these requirements may also incentivize municipalities to favor bonds that bypass voter approval. To understand how these phenomena relate to municipal bond markets, we ask two research questions: First, are bond referendum requirements associated with richer bond-related information environments, and if so, how are they linked to voter and investor behavior? Second, are these requirements associated with municipalities’ choice of bond types and aggregate borrowing costs?

Studying municipalities’ voter-facing incentives and the connection to bond-related information is particularly salient given the well-documented opacity of municipal bond markets from the perspective of investors. In this illiquid, over-the-counter market, broker-dealers exert substantial pricing power (e.g., [Harris and Piwowar, 2006](#); [Green et al., 2007a](#); [Cuny, 2018](#)), disclosure regulations are limited and difficult to enforce (e.g., [Cuny, 2016](#); [Maffett et al., 2024](#)), and investors react only weakly to formal financial disclosures ([Gillette et al., 2020](#); [Cuny et al., 2025](#)). Indeed, investor-facing disclosure is weakly enforced, so compliance is sparse and uneven ([Cuny \(2016\)](#); [Maffett et al. \(2024\)](#)), leaving the retail investors who dominate this market to bear high information costs (e.g., [Cuny, 2018](#)). As a result, prior research has focused almost exclusively on investors and intermediaries operating in a weak information environment.

Bond referendum requirements shift attention to a different audience. Such requirements give voters direct authority over individual borrowing decisions—a classic form of direct democracy in

which officials must persuade voters to approve their proposed actions ([Romer and Rosenthal, 1978, 1979](#)). When voter approval is required, citizens directly determine a municipality’s access to public debt markets, potentially creating strong incentives for governments to provide clear, accessible information about proposed bonds. These disclosures, while targeted at voters, may also be linked to spillovers to investors by improving the overall information environment. At the same time, because voter rejection constrains policymakers’ ability to finance projects, referendum requirements may lead municipalities to substitute toward bonds that bypass voter approval—such as revenue or limited-tax bonds—even when doing so entails higher borrowing costs. Studying bond referendums therefore offers a unique opportunity to assess whether and how democratic accountability relates to disclosure incentives, borrowing choices, and outcomes in municipal debt markets.

To study our research questions, we must first identify institutional variation in bond referendum requirements across U.S. states. Many of these laws emerged in response to historical municipal fiscal crises such as the Panic of 1873, when numerous municipalities defaulted on their debt payments, and the Great Depression, when falling land values and tax revenues led to widespread bond defaults ([Eddy, 1983](#); [Kiewiet and Szakaly, 1996](#); [Gillette, 2004](#)). These historical contingencies have contributed to substantial cross-state and within-state variation in whether cities are required to obtain voter approval before issuing municipal bonds.

To document this variation, we draw on a range of sources—including state constitutions and statutes, state treasury websites, and municipal league materials—to compile a novel and comprehensive dataset on state-level bond referendum laws for cities. Our dataset covers both general obligation (GO) bonds, which are backed by the full faith and credit of the issuing city and are typically repaid through general tax revenues, and revenue bonds, which are repaid from the income generated by the projects they finance. Among GO bonds, institutional rules often distinguish between unlimited-tax GO (UTGO) bonds, which allow cities to raise property taxes without limit to meet debt obligations, and limited-tax GO (LTGO) bonds, which cap the extent to which property taxes can be increased ([Municipal Research and Services Center, 2025b](#)).

As shown in [Figure 1](#), 28 states require all cities to hold referendums for GO bonds, and 11 of these states also require referendums for at least some revenue bonds. Fourteen states have GO bond referendum requirements that vary within-state depending on the city or project purpose, while seven states do not require referendums for any type of bond. These historical state-level

differences in referendum requirements likely contribute to meaningful variation in municipalities' disclosure incentives. Cities that must obtain voter approval should have stronger incentives to provide clear, timely, and accessible bond-related information to inform voters and potentially increase the likelihood of referendum success.

To assess whether referendum requirements are associated with the information available to voters, we begin by examining bond-related disclosures on city websites, which serve as a primary channel through which cities communicate with the public. We compare cities located in states with and without GO bond referendum requirements.¹ To strengthen identification, we restrict our sample to cities located near the borders of neighboring states that differ in their referendum rules. This border-discontinuity design helps mitigate concerns that unobserved geographic or economic characteristics drive differences in disclosure practices (Holmes, 1998; Gao et al., 2019), while keeping our resource-intensive web-scraping analyses tractable. Using the Wayback Machine, we collect historical snapshots of these cities' websites from 2015 to 2020. Consistent with our prediction, cities in states that require voter approval provide substantially more bond-related information online. In these cities, homepages tend to contain more links dedicated to bonds and fiscal issues; website text more frequently discusses these topics; and websites more often provide financial documents, relative to neighboring cities in non-referendum states.

We next examine media coverage as a complementary information channel through which bond-related information reaches voters. Newspapers can both amplify the dissemination of official bond campaign materials and provide independent reporting that helps voters assess proposed borrowing. Using news-article data from RavenPack from 2000 to 2020, we compare the volume of bond-related coverage in states with and without bond referendum requirements. Cities located in states with GO bond referendum requirements tend to receive significantly more bond-related media attention prior to an issuance, relative to those located in states without such requirements. The association persists after controlling for local economic conditions, bond project purpose, and time trends. Restricting the analysis to our border-city sample yields similar results, which is consistent with referendum rules coinciding with both greater quantity and visibility of municipal bond information.

¹We focus on GO bonds rather than revenue bonds because GO bonds have direct implications for property taxpayers, making voter approval requirements both more common and more salient. In addition, all revenue bond referendum requirements occur only in states that also require referendums for GO bonds. Throughout the analysis, we also exclude states with within-state variation in GO bond referendum laws, as it is difficult to determine which cities or bond issues are subject to which requirements.

To verify that this increased information reflects active bond campaigns rather than unobserved differences in cities, we focus on Texas, where detailed data on municipal bond elections are available. These data allow us both to directly test whether cities and newspapers provide more bond-related information around referendums and to examine whether this information has implications for voters. Exploiting the timing of UTGO bond proposals through a within-city design, we find that cities are more likely to increase bond-related website disclosure and to receive media coverage during bond referendums than at other times. This time-series evidence around bond election dates corroborates our cross-sectional evidence on increased website disclosure and media articles in referendum states. Moreover, both website disclosure and media coverage intensity are positively associated with voter approval rates and voter agreement. Together, these results illustrate that bond referendums are associated with voter-facing disclosure and localized media attention, which serve as salient information channels through which voters learn about and respond to municipal borrowing proposals.

Richer information generated during bond campaigns may also be relevant for investors. Campaign materials often include specific project descriptions, capital planning forecasts, and explanations of borrowing needs—information that aligns with best-practice guidance from municipal credit analysts but, according to our review, rarely appears in bond prospectuses ([National Federation of Municipal Analysts, 2017](#)). These disclosures therefore have the potential to provide incremental information to bond market participants. Prior research finds that improvements in information available to investors can reduce trading costs and enhance secondary-market liquidity by mitigating information asymmetry between dealers and investors ([Cuny, 2018](#); [Chalmers et al., 2021](#)).

Voter-facing campaign information may also matter in municipal bond markets because local residents and investors frequently overlap. Residents have strong incentives to hold locally issued bonds because interest income on municipal bonds is exempt from federal—and often state and local—taxes (e.g., [Galper et al. 2014](#); [Cuny 2016](#); [Babina et al. 2021](#)). When this occurs, disclosures intended to inform voters may simultaneously update investor beliefs, making it plausible that campaign-related transparency is related to differences in investor behavior.

However, in the municipal bond market, investor responses to new information can be limited. Formal financial disclosures routinely fail to generate substantial trading activity, reflecting both low investor attention and structural frictions in this illiquid, dealer-intermediated setting ([Gillette](#)

[et al., 2020](#); [Cuny et al., 2025](#)). These countervailing forces—potentially meaningful project-level disclosures, but muted investor reactions—imply that it is *ex ante* unclear whether voter-oriented transparency spills over to bond investors. We therefore examine whether referendum requirements are associated with observable differences in municipal bond market activity.

To address this question, we use secondary-market trading data from the Municipal Securities Rulemaking Board (MSRB) to examine whether UTGO bonds issued by cities with bond referendum requirements are more likely to trade. We find meaningful differences in trading activity across referendum regimes: bonds issued by cities that require voter approval are more likely to trade in the secondary market. Importantly, this spillover is concentrated among retail investors, consistent with voter-facing information being useful amid the higher information-acquisition costs they face ([Blankespoor et al., 2020](#)). This association is also incremental to responses to investor-focused continuing disclosures, such as subsequent annual financial reports available through the centralized Electronic Municipal Markets Access (EMMA) system. The results hold after controlling for bond characteristics, local economic conditions, project purpose, and time trends, as well as in our border-city sample, where bonds are 13.0 percentage points more likely to trade when a referendum is required. Together, the evidence suggests that voter-driven information flows extend beyond the electoral context and are associated with differences in investor behavior in municipal bond markets.

Although these findings highlight that referendum requirements are associated with richer information environments for both voters and investors, these rules may generate a second, distinct set of ramifications. Because referendums limit public officials’ discretion and expose borrowing plans to electoral risk, municipalities may respond strategically by altering the composition of the debt they issue. In this final part of our analysis, we examine whether referendum requirements are associated with cities’ financing choices and whether these choices coincide with differences in aggregate borrowing costs.

Beyond increasing transparency, bond campaigns impose procedural and political costs that may reduce officials’ control over borrowing decisions. To preserve discretion, local governments may prefer bond types that bypass voter approval, such as revenue or LTGO bonds, even when these alternatives entail higher borrowing costs. We test this mechanism by comparing cities’ public debt composition in states with and without bond referendum requirements. To isolate how cities substitute across debt types, we exclude states in which both GO and revenue bonds

require voter approval, since this environment would not incentivize substitution between the two instruments. Our findings are consistent with this substitution channel: cities facing GO bond referendum requirements issue revenue bonds at approximately three times the rate of cities not subject to voter approval, and when only UTGO bonds require referendums, these cities issue one-third as much UTGO debt and three times as much LTGO debt. Within cities subject to UTGO bond referendums, cities exhibit even more substitution away from UTGO bonds when supermajority approval is required, rather than a simple majority. These patterns are consistent with voter approval coinciding with differences in local governments' choice of debt instruments.

We next examine whether these shifts in financing choices are associated with higher borrowing costs. Because revenue and LTGO bonds rely on narrower or more uncertain revenue streams, they typically carry higher yields than UTGO bonds (Beglin, 2024; Municipal Research and Services Center, 2025b). If GO bond referendum requirements induce cities to substitute toward these costlier bond types, municipalities would face higher aggregate borrowing costs. Consistent with this prediction, we find that cities subject to GO bond referendum requirements exhibit average aggregate yield spreads approximately 27-29 basis points higher than those in states without such requirements, after controlling for local economic conditions and state-level debt policies. In our border-city sample, the presence of a GO bond referendum requirement is associated with aggregate yield spreads roughly 36 basis points higher. Taken together, these results suggest that, while voter-approval laws coincide with greater transparency, they are also associated with higher financing costs as municipalities prefer more expensive forms of debt.

This paper contributes to several strands of research. First, we add to a growing literature on bond referendums, which has largely taken voter-approval requirements as given and instead focused on the determinants and consequences of voter decisions. Prior studies examine whether referendum outcomes affect public spending or educational performance (e.g., Cellini et al., 2010; Boyson and Liu, 2025) and how voter demographics shape the likelihood of proposal and passage (Rugh and Trounstine, 2011). Related work suggests that elected officials facing political constraints may shift toward bond types that avoid direct voter scrutiny (Moszoro and Spiller, 2019). We advance this literature by systematically documenting the institutional variation in the referendum requirement itself—a dimension that has received limited empirical attention—and by describing how these rules are associated with cities' disclosure behavior, investor responses, and borrowing decisions.

Our findings reveal that referendum laws are associated with economically meaningful differences in information environments, secondary-market activity, and the composition of municipal debt.

Second, we contribute to research on municipal disclosure and information frictions in public debt markets. Prior work highlights pervasive limitations in investor-facing disclosure: municipal filings are often sparse, delayed, and unstructured, and investors react weakly to them (e.g., [Cuny, 2016, 2018](#); [Farrell et al., 2023](#); [Maffett et al., 2024](#); [Gillette et al., 2020](#); [Cuny et al., 2025](#)). By contrast, voter-facing disclosure remains largely unexplored, despite its central role in governmental accountability and its explicit recognition by GASB as a core purpose of municipal reporting.² By assembling new data on municipal websites and bond-related media coverage, we find that referendum requirements are associated with substantial voter-oriented information flows that appear to spill over to investors, as evidenced by increased secondary-market trading. Because these spillovers are concentrated among retail investors, who bear the highest disclosure-processing costs, we also speak to a growing literature on retail investors’ use of public information ([Blankespoor et al., 2020](#)). Our findings also extend classic theories of political agency and direct democracy (e.g., [Romer and Rosenthal, 1978, 1979](#); [Holmström, 1979](#); [Banks and Sundaram, 1993](#)) to the municipal bond market, and provide new evidence on how political participation shapes the flow of information in a setting long characterized by opacity (e.g., [Harris and Piwowar, 2006](#); [Green et al., 2007a](#); [Schultz, 2012](#)).

Finally, we contribute to the literature on fiscal constraints and public borrowing costs. Although prior research examines how state-level referendum rules affect spending or debt levels (e.g., [Kiewiet and Szakaly, 1996](#); [Feld and Matsusaka, 2003](#)), evidence on their implications for borrowing costs is limited, and studies using historical city-level data find no systematic relation ([Pogue, 1970](#); [Farnham, 1985](#); [Johnson and Kriz, 2005](#)). Using contemporary, granular data on municipal bond issuances, we find that cities facing GO bond referendum requirements are more likely to substitute toward revenue and limited-tax bonds, which typically carry higher yields, and consequently exhibit substantially higher aggregate borrowing costs. Together, these results suggest that voter-approval laws are linked to important informational benefits while simultaneously inducing shifts in debt structure that increase the fiscal cost of municipal borrowing.

²GASB identifies the citizenry, oversight bodies, and investors as primary users of municipal disclosure and emphasizes the principle that “the taxpayer has a right to know” ([Governmental Accounting Standards Board, 1987](#)).

2 Conceptual underpinnings

We ground our predictions in a political-agency framework of fiscal policymaking, in which voters delegate borrowing decisions to city officials who hold private information about project costs, benefits, and rent-extraction opportunities (e.g., [Holmström, 1979](#); [Banks and Sundaram, 1993](#); [Besley and Smart, 2007](#)). Municipal bonds are the primary source of financing for U.S. local governments’ long-term infrastructure projects ([Government Finance Officers Association, 2023](#)), funding schools, roads, public safety, and other public services. In states without bond referendum requirements, cities can issue these bonds with only approval from the city council or equivalent body. In states with such requirements, cities must additionally obtain voter approval before issuing certain bond types. These institutional differences create substantial heterogeneity in how much discretion local officials retain when financing public infrastructure.

Cities subject to bond referendum requirements fit naturally within an agenda-setter framework of direct democracy ([Romer and Rosenthal, 1978, 1979](#)): informed officials make a take-it-or-leave-it bond proposal to less-informed voters who must decide whether to approve it. The resulting asymmetry creates uncertainty for voters evaluating the proposal and, in turn, for officials over whether voters will authorize the borrowing. Observed rejection rates are consistent with such uncertainty: between 2001 and 2022, 11% of UTGO bond proposals in Texas were rejected ([Texas Bond Review Board, 2025b](#)), and between 2011 and 2023, 48% failed in Washington ([Municipal Research and Services Center, 2025a](#)).

2.1 Referendums and voter-facing information

When voter approval is required, cities may seek to persuade voters by producing additional disclosures about the proposed project. Voter-approval requirements raise the marginal value of issuer disclosure along two dimensions. First, in this agenda-setter environment ([Romer and Rosenthal, 1978, 1979](#)), issuer disclosure is the natural means through which an informed proposer can reduce voters’ uncertainty about the project on the ballot. Second, because direct-democracy ballots lack the standard cues of candidate elections—such as party affiliation or incumbency—voters must rely on substantive disclosure from issuers or endorsements from informed participants to vote competently ([Lupia, 1992](#); [Lupia and McCubbins, 1998](#); [Garrett and McCubbins, 2008](#)). Both forces

predict that referendum cities will release more bond-related information than otherwise comparable non-referendum cities. Consistent with this prediction, bond campaigns often include detailed explanations of project benefits, implementation timelines, funding sources, and fiscal implications. For example, when Sun Valley, Idaho proposed a \$17.5 million UTGO bond to fund road repairs and other infrastructure improvements in 2017, the city relied on town halls, council meetings, and newspaper editorials to communicate tax implications, capital planning details, and expected credit outcomes. The bond passed with 67.1% approval, just above the required two-thirds threshold.

In addition to issuer-generated disclosures, the local media is an important component of the information environment surrounding bond elections. Political-economy models of media supply predict that coverage of a policy decision increases when readers care more about it. In [Besley and Prat \(2006\)](#)'s model, media outlets endogenously produce more news about policy actions when reader interest is high; a bond referendum, by putting a specific fiscal decision before voters, raises reader interest in bond-related news and thus the supply of such coverage. [Garrett and McCubbins \(2008\)](#) make a complementary point: because ballot questions lack the party-label and incumbency cues available in candidate elections, voters in referendum jurisdictions rely more heavily on newspapers for information about the proposed bond. Together, these arguments predict greater bond-related media coverage in referendum jurisdictions. Consistent with this expectation, regional outlets routinely cover local bond elections in detail. For example, when Dunwoody, Georgia proposed a \$60 million UTGO bond in 2023 to fund parks and recreation, outlets such as Appen Media, Rough Draft Atlanta, and The Champion reported on project details, community reactions, and political debates.

The implications for voting behavior, however, are theoretically ambiguous. Media outlets may disseminate issuer-provided information, present balanced accounts of project merits, or amplify community concerns. Which of these roles dominates likely depends on a range of context-specific factors, such as the type of project, the political environment, voters' baseline trust in local government, and the visibility of organized opposition. As illustrated by the Dunwoody case—where opponents framed the bond as a threat to police funding and voters ultimately rejected the proposal—greater coverage does not necessarily imply voter approval. Whether bond-related media coverage is associated with voter support or opposition is therefore an empirical question ([Garrett and McCubbins, 2008](#)).

2.2 Information spillovers to investors

A richer local information environment, generated through issuer disclosures or media coverage, may also affect investor behavior, particularly in the municipal bond market where opacity and limited investor attention often constrain price discovery. Although municipal issuers are technically required to provide continuing financial disclosures after major bond offerings, they are exempt from most federal securities regulation, so the SEC cannot directly mandate these filings. Continuing disclosure requirements arise only through underwriter-negotiated agreements that are difficult to enforce and that vary across issuers, with smaller offerings exempt and the committed content and timing differing by agreement (Maffett et al., 2024). As a result, compliance is sparse and uneven, with many issuers filing late or not at all (Cuny, 2016, 2018; Maffett et al., 2024). The market is therefore characterized by substantial information asymmetry, particularly between informed dealers and the retail investors who dominate it due to tax incentives, as interest income on municipal bonds is generally exempt from federal, and often state and local, taxes.³ These tax incentives give residents strong reason to hold locally issued bonds, making them the marginal investors in their state’s bonds (e.g., Galper et al. 2014; Cuny 2016; Babina et al. 2021), so that voters and investors substantially overlap.

Because retail investors bear the highest costs of becoming aware of and acquiring issuer information (Blankespoor et al., 2020), the project-level disclosure produced for voters should lower these costs, update the beliefs of the marginal bondholder, and in turn increase secondary-market trading and liquidity. Notably, the forward-looking details communicated during bond campaigns (capital planning forecasts, construction timelines, and explanations of borrowing needs) represent precisely the type of information emphasized in best-practice guidance for municipal credit analysts (National Federation of Municipal Analysts, 2017), yet rarely appear in official statements. Because prior work on municipal disclosure has focused almost exclusively on investor-facing channels such as EMMA filings and continuing disclosures, whether such voter-facing materials spill over to bond markets remains largely unexplored.

However, the extent to which voter-facing information reaches or influences investors is ex ante

³As of 2025, retail investors held over 66% of outstanding municipal securities — about 44% directly and 22% indirectly through mutual funds, money market funds, ETFs, and closed-end funds, according to the U.S. Flow of Funds Accounts quarterly data.

unclear. First, bond campaigns are designed to persuade voters, not to neutrally inform them. Campaign materials thus combine factual project details with persuasive content (i.e., “cheap talk”) that investors may discount ([Crawford and Sobel, 1982](#)), so their information value could be smaller than their volume suggests. Second, even formal investor-facing disclosures frequently elicit limited trading responses in this market ([Gillette et al., 2020](#); [Cuny et al., 2025](#)). Campaign materials, which are neither standardized nor disseminated through centralized investor platforms such as EMMA, could thus be even less likely to reach attentive investor audiences. Whether voter-oriented transparency translates into observable differences in bond trading is therefore an open question.

2.3 Debt substitution and borrowing costs

Finally, referendum requirements may affect not only the information environment but also municipalities’ financing strategies. In the agenda-setter framework ([Romer and Rosenthal, 1978, 1979](#)), officials whose preferred bond type requires voter approval may shift to alternatives that do not, even at higher cost. [Garrett and McCubbins \(2008\)](#) describe this substitution explicitly in the local-bond context: when voters become a binding constraint on general-obligation borrowing, “bonding authorities may exercise some creativity in an attempt to circumvent the requirement of voter approval for new bond issues, often through the use of revenue bonds” (see also [Moszoro and Spiller \(2019\)](#)). Voter rejection itself can also delay capital projects, raise project costs, and impose political consequences. For example, following multiple bond election failures in Laredo, Texas in 2025, local officials publicly acknowledged the need to “earn public trust” again ([Gomez, 2025](#)). Cities operating under referendum regimes may therefore prefer to issue debt that bypasses voter approval, either to move necessary projects forward more quickly or to pursue projects that voters might reject. Because revenue and LTGO bonds rely on narrower or more uncertain revenue streams ([Beglin, 2024](#); [Municipal Research and Services Center, 2025b](#)), such substitution should raise aggregate borrowing costs. Whether and to what extent cities substitute toward these alternatives, and how such substitution relates to aggregate borrowing costs, remain an open question.

3 Institutional variation in municipal bond referendum laws

Bond referendum requirements in the United States emerged largely in response to periods of municipal fiscal distress. Following the Panic of 1837, nine states and territories—including Arkansas, Florida, Indiana, Louisiana, and Michigan—defaulted on debts incurred to finance railroads, canals, and other infrastructure projects (Kiewiet and Szakaly, 1996). In the aftermath, many states adopted strict limits on their own borrowing, prompting local governments to take on a larger role in infrastructure provision, especially in railroad investment (Dove, 2014). A similar cycle repeated during the Panic of 1873, when cities and counties defaulted on nearly 20 percent of their outstanding debt, leading states to enact some of the earliest voter-approval requirements for local bonds (Dove, 2014).⁴ The Great Depression triggered another wave of defaults in approximately 2,000 cities and counties (Joffe, 2013) and again spurred new statutory constraints. Notably, after experiencing more municipal defaults than any other state, Florida amended its constitution in 1930 to require that local governments obtain voter approval before issuing bonds (Eddy, 1983). Across these historical events, the motivating rationale remained consistent: to contain local indebtedness and ensure that property taxpayers had a voice in decisions tied directly to future tax burdens.

To study the implications of bond referendum requirements, we first document their cross-state variation. Because referendum rules typically differ by type of local government, we focus on cities—the primary general-purpose local governments—which operate across a wide range of service areas and use the broadest set of financing instruments. Using state constitutions, statutes, treasury resources, and municipal league materials, we construct the first comprehensive, contemporary summary of state-by-state referendum requirements for cities’ GO and revenue bonds.⁵ The resulting dataset reveals that cities operate in a highly heterogeneous institutional environment, with substantial differences both across and within states. We first describe the cross-state patterns for GO bonds—which are directly tied to property taxes and public services—and later illustrate within-state nuances through a series of examples.

⁴Some states also introduced local debt limits during these periods. Based on early constitutional amendments, states generally adopted either a referendum requirement or a debt limit, but not both; see Table 2, columns 2 and 5 of Dove (2014). By 1993, local government debt limits existed in 48 states (Advisory Commission on Intergovernmental Relations, 1993).

⁵To our knowledge, no nationwide review has been available since the summary provided by the Advisory Commission on Intergovernmental Relations (1993), which did not differentiate between types of local governments or where referendum rules varied within-state.

As shown in Figure 1, states fall into five broad categories, detailed further in Figure 2. These groups include states where (i) cities have no referendum requirements for any bonds (7 states); (ii) cities must hold referendums for GO bonds but not revenue bonds (14 states); (iii) referendums are required only for unlimited-tax GO (UTGO) bonds but not limited-tax GO (LTGO) or revenue bonds (3 states); (iv) cities have referendum requirements for GO bonds and at least sometimes for revenue bonds (11 states); and (v) GO bond referendum rules vary within the state (14 states).⁶

Examples illustrate the range of approaches. In the first group, seven states impose no mandatory referendums. For instance, Massachusetts permits cities to issue bonds without voter approval ([Massachusetts Legislature, 2025](#)). In the second group, 14 states require referendums for all GO bonds but not for revenue bonds. Texas, for example, mandates voter approval for any bonds secured by ad valorem (i.e., property) taxes ([Texas Legislature, 2023](#)). In the third group, three states impose referendums only for UTGO bonds. As described in Washington, cities need 60% voter approval for UTGO bonds but can issue LTGO debt without voter approval, which the state classifies as “non-voted debt” ([Municipal Research and Services Center, 2025b](#)). In the fourth group, cities must hold GO bond referendums and may face additional requirements for revenue bonds. Idaho’s rules, for example, require a two-thirds majority for GO bonds and a simple or two-thirds majority for revenue bonds, depending on project purpose ([Idaho Legislature, 2024](#)). Finally, in the fifth group, referendum rules vary within states. Across these categories, the most common dividing lines are between UTGO, LTGO, and revenue bonds—three bond types that together account for over 80% of city issuance.

Additional examples highlight the institutional nuances within states. In Illinois, only cities with home-rule powers (i.e., those with broad powers unless explicitly barred by the state) may issue GO debt without voter approval ([Snyder et al., 2016](#)). Because home rule status is strongly correlated with population, this rule effectively allows the largest cities to issue GO debt without voter approval.⁷ In Kansas, referendum requirements depend on project type: parks and recreation projects require voter approval, whereas street repairs generally do not unless citizens petition for a referendum ([Kansas Legislature, 2023](#)). In Missouri, all cities must hold GO and revenue bond

⁶Totals sum to 49 because Hawaii is excluded; formally, it operates through state and county governments only.

⁷Although Illinois might appear to offer within-state variation suitable for empirical analysis, home rule status also confers a wide range of additional fiscal and administrative powers unrelated to bond referendums. These correlated institutional differences would make it difficult to isolate the effect of referendum requirements on bond-related outcomes.

referendums, but the required approval threshold for GO bonds depends on expected turnout. Bond proposals need four-sevenths support if placed on the ballot during a municipal, primary, or general election, but two-thirds support on any other date ([Missouri Legislature, 2025](#)). In 2026, any bond referendum can pass with the lower four-sevenths threshold unless held on February 3rd.

Overall, these examples highlight the institutional complexity that shapes bond referendum requirements, both across and within states.

4 Referendum requirements and information environments

We begin by examining whether bond referendum requirements are associated with richer local information environments. When cities must obtain voter approval before issuing a bond, officials engage in bond campaigns to persuade residents and reduce electoral uncertainty. These campaigns typically involve providing information about project scope, financing, and expected taxpayer implications on city websites, through public meetings, and via informational materials. Because bond elections attract public interest, they may also draw local media attention, further increasing transparency around the bond. To address our research question, we thus examine these two components of cities' information environments: (i) the amount of bond-related disclosure on city websites and (ii) the extent of bond-related media coverage. We expect both forms of information to be more prevalent in states that require referendums.

To test this prediction, we compare cities in the 28 states with comprehensive UTGO bond referendum requirements—the green-shaded states in [Figure 1](#)—with cities in the seven white-shaded states that do not require any referendum. We focus on UTGO bonds because they finance the broadest set of public services and impose the largest potential property-tax consequences for residents ([Municipal Research and Services Center, 2025b](#)). Throughout the analyses, we exclude states with within-state variation in GO bond referendum rules, as identifying which specific bonds or cities fall under the requirement is not feasible.

4.1 Website disclosure

We first examine city-level disclosure on municipal websites. Leading up to a bond election, cities may provide more detailed and accessible information than is typical for bonds issued without voter

approval. For example, when The Woodlands Township in Texas proposed raising \$30 million for its Fire and Parks & Recreation Departments in 2009, it published an extensive town-hall presentation outlining project details and five-year capital budget forecasts for both departments. Motivated by this and other examples described in Appendix B, we test whether cities in referendum states systematically provide more bond-related information on their websites.

4.1.1 Data and sample

We obtain historical records of city websites from the Wayback Machine, an online archive maintained by the Internet Archive. Because querying the Wayback Machine is resource-intensive and subject to API rate limits, we focus on a targeted sample of cities located near borders between states that differ in their UTGO bond referendum requirements (i.e., where green- and white-shaded states meet in Figure 1).⁸ Although this border-city sample is relatively small, the geographic proximity helps alleviate concerns that cities on either side of the border differ along unobservable dimensions unrelated to the referendum requirement. For instance, one concern might be that states enacting referendum requirements after the Panic of 1873 did so because of stricter cultural preferences for monitoring local governments, and these preferences may persist over time. If so, cities located close to one another geographically should share more similar monitoring preferences than cities farther apart. Based on this reasoning, any systematic differences in website disclosure between referendum and non-referendum states are less likely to be attributable to unobserved geographic characteristics (Holmes, 1998; Gao et al., 2019).

Our sample covers issuers located along 15 state pairs: Maine/New Hampshire, Vermont/New Hampshire, Vermont/Massachusetts, Michigan/Wisconsin, West Virginia/Kentucky, Ohio/Kentucky, North Carolina/Tennessee, Georgia/Tennessee, Missouri/Kentucky, Missouri/Tennessee, Arkansas/Tennessee, Arkansas/Mississippi, Alabama/Mississippi, Alabama/Tennessee, and Louisiana/Mississippi. In each pair, the first state requires voter approval for UTGO bonds, while the second state does not. Following Boulland et al. (2025), we scrape annual snapshots of each city’s website from 2015-2020, when available, yielding 1,870 website-years for 335 cities.⁹ After removing snapshots that

⁸We include cities within 100 kilometers of these borders and require that each city issued at least one bond between 2000-2020.

⁹We end the sample in 2020 to align with the availability of our Mergent municipal bond data (Section 4.2). We move backward five years to balance sample size considerations with the resource-intensive nature of the data collection.

lack sub-URLs (which prevents text scraping), the sample contains 1,599 unique website-years.¹⁰

For each website snapshot, we collect the URL names and full text of up to 50 sub-URLs accessible from the homepage. We prioritize URLs that contain at least one of the following terms: “finance,” “financial,” “bond,” “proposition,” “debt,” “credit,” “fiscal,” or “capital.” If fewer than 50 such URLs exist, we supplement with randomly selected sub-URLs from those linked on the homepage. For example, if a website contains 100 accessible URLs but only 30 include these terms, we scrape those 30 and then randomly select 20 additional URLs to reach 50.

To measure bond-related disclosure on city websites, we construct two variables. *Bond URLs* counts how many of the scraped sub-URLs contain the word “bond.” These URLs commonly include web pages dedicated to upcoming bond issuances, project updates financed by prior bonds, debt-service schedules, or credit rating reports. Appendix C.1 provides an example from Blowing Rock, North Carolina, which includes links to project spending updates, informational pamphlets, a detailed list of the projects financed, and city council presentation slides on the issuance. We also measure the number of times “bond” appears in the full text of the 50 scraped pages (*Bond Count*).

We also examine general financial disclosure on city websites. Cities can provide annual budgets, financial reports, credit rating reports, and other financial documents on their websites, which are often identified by fiscal-year labels. Appendix C.2 provides an example from the “financial information” page of Easton, Massachusetts, that links to ten years of annual budgets labeled “Fiscal Year YYYY.” We therefore proxy for financial disclosure using the number of sub-URLs whose titles include “fiscal” or “FY” (*Fiscal URLs*) and the number of such occurrences in the full text (*Fiscal Count*). Finally, we identify financial documents posted on city websites—such as annual budgets or comprehensive annual financial reports (CAFRs)—as PDF files with titles containing the terms “budget,” “financial,” “cafr,” “bond,” “debt,” and “tax” in their title across the 50 sub-URLs scraped per website. We count these as *Financial Docs*.¹¹

Panel A of Table 1 presents summary statistics at the city-year level. 38% of the sample consists of cities subject to UTGO bond referendum requirements. Consistent with expectations, cities disclose more general financial information than bond-specific content. On average, city websites contain 0.28 bond-related sub-URLs, 0.58 fiscal-related sub-URLs, 4.09 mentions of “bond” in website text,

¹⁰The total number of city-year observations is 1,656 because several cities lie on borders of more than one state pair.

¹¹All website disclosure variables are winsorized at the 1% and 99% levels to account for outliers.

12.97 mentions of “fiscal” or “FY,” and 2.14 financial documents.

4.1.2 Research design and results

To examine how cities’ website disclosures vary with bond referendum requirements, we begin by comparing mean website disclosure levels between cities in referendum and non-referendum states. Panel A of Table 2 reports the average values of our website disclosure measures, along with the cumulative number of bond issuances (*Num Issuances*). Cities in vote-requiring states have fewer bond issuances on average, yet—despite issuing bonds less frequently—exhibit higher levels of disclosure. Relative to cities without referendum requirements, cities in vote-requiring states mention “bond” 1.22 additional times on their websites (a 34% increase) and mention “fiscal” or “FY” 3.36 more times (a 29% increase). They have 86% more bond-related sub-URLs, nearly three times as many fiscal-related sub-URLs, and 65% more financial documents. All differences are statistically significant across disclosure measures.

To test these associations more formally, we use Poisson regressions, which are appropriate given that the website disclosure measures are weakly positive count variables (Cohn et al., 2022; Chen and Roth, 2024). For city i in county c in state s in year t , we estimate:

$$\begin{aligned} \text{Website Disclosure}_{it} = & \alpha + \beta_1 \text{Vote}_s + \beta_2 \text{Num Issuances}_i + \beta_3 \text{State Fiscal Monitor}_{st} \\ & + \beta_4 \text{County Economics}_{c,t-1} + \gamma_g + \theta_t + \epsilon_i \end{aligned}$$

Website Disclosure is one of our four disclosure measures defined above. *Vote* is an indicator variable equal to one if a state requires voter approval for UTGO bonds. State-border fixed effects γ_g restrict comparisons to cities located along the same border segment, while year fixed effects θ_t absorb macroeconomic or technological trends in website development. The key identifying assumption is that cities situated in close proximity on opposite sides of a border share similar observable and unobservable characteristics, apart from differences driven by the referendum requirement. Standard errors are clustered at the county level.

We include several controls that may influence a city’s website disclosure. First, we include *Num Issuances*, the cumulative number of bond issuances the city has made since 2000, because bond-related website pages and PDFs tend to be persistent (i.e., once posted, they tend not to be

removed). Second, we control for *State Fiscal Monitor*, an indicator variable equal to one once a state adopts a municipal fiscal monitoring program, as such programs have been found to improve municipal financial reporting quality (Nakhmurina, 2024). Finally, we include lagged county-year measures of economic conditions, including GDP, personal income, and population, using data from the Bureau of Economic Analysis.

Table 2 presents the regression results. Consistent with referendum requirements increasing information transparency, cities in vote-requiring states provide significantly more bond-related information on their websites. In columns 1 and 2, where the dependent variables are *Bond URLs* and *Bond Count*, the coefficients on *Vote* are positive and statistically significant at the 5% and 1% levels, respectively. These correlations reflect substantially higher bond-related disclosure in vote-requiring states: the coefficient of 0.892 in column 1 implies 0.30 additional bond-related URLs, and the coefficient of 0.778 in column 2 implies 4.05 additional mentions of “bond.”¹² Columns 3 and 4 show similarly strong patterns for general financial disclosure. The coefficient on *Vote* is 2.34 for *Fiscal URLs* (significant at 1%) and 0.736 for *Fiscal Count* (significant at 10%). Column 5 shows that cities in vote-requiring states provide more financial documents (*Financial Docs*), with a coefficient of 0.601 (significant at 5%).

In all cases, the heightened disclosure associated with referendum requirements is incremental to a city’s history of bond issuance and the presence of a state fiscal monitoring program, both of which are, unsurprisingly, positively related to disclosure. Altogether, these results suggest that bond referendum requirements are strongly associated with richer financial and bond-related information environments on city websites, even when comparing neighboring cities separated only by a state border.

4.2 Media coverage

In addition to city-initiated disclosure, the media is an important component of the information environment surrounding bond elections. Because referendums are civic events with broad public relevance, newspapers may increase coverage in response to heightened voter information demand. Accordingly, we expect that cities subject to bond referendum requirements generate more bond-

¹²In column 1: $(e^{0.892} - 1) \times 100 = 144.0\%$. Given a mean *Bond URLs* of 0.21 in non-vote states, this corresponds to $144.0\% \times 0.21 = 0.30$ additional bond-related URLs. In column 2: $(e^{0.778} - 1) \times 100 = 117.7\%$. Given a mean *Bond Count* of 3.62 in non-vote states, this corresponds to $117.7\% \times 3.62 = 4.05$ additional mentions of “bond.”

related media coverage.

4.2.1 Data and sample

To test this prediction, we focus on cities' issuance of UTGO bonds and exploit variation in UTGO bond referendum requirements, mirroring the design of the website-disclosure analysis. Unlike the website setting, where data constraints limited the analysis to border cities, we take advantage of the broader availability of media data and expand the sample to all cities in states shaded green or white in Figure 1. We thus compare bond-related media coverage for UTGO issues from all cities in vote-requiring states (green) and non-vote-requiring states (white) during the period leading up to issuance.¹³

We obtain municipal bond issuance data from Mergent for 2000-2020. Because our set of bond referendum requirements apply specifically to cities, we only use bonds issued by cities and exclude bonds issued by other types of issuers (e.g., states, counties, school districts, or special districts).¹⁴ Within cities' bonds, we exclude refunding bonds because refinancing does not change a city's debt position and therefore does not trigger referendum requirements; we also only include bonds that are exempt from federal tax and have fixed-rate coupons, similar to prior literature. Of the remaining bonds, we classify bond issuances as UTGO, LTGO, or revenue using Mergent's security code variable and keywords in issuance descriptions. Our final Mergent sample includes 8,427 UTGO issuances by 2,303 cities.

We merge these data with media coverage from RavenPack Global Macro (Web Edition). Issuers are matched to RavenPack entities using both issuer names and county FIPS (Federal Information Processing Standard) codes. Because RavenPack's coverage of smaller local outlets varies across time, we restrict the sample to cities with at least one media source producing any coverage (on any topic) about the city during the 12 months preceding issuance. This ensures that differences in bond-related coverage are not driven mechanically by the absence of local media. This filter results in 3,412 UTGO issues from 1,245 cities. For a sharper comparison, we also replicate the analysis within the border-city sample, yielding 937 UTGO issues from 264 border-sample cities.

¹³We exclude limited-tax GO bonds because not all vote-requiring states in Figure 1 require referendums for LTGO bonds.

¹⁴To address inconsistencies in issuer naming conventions, we identify unique city issuers using textual similarity methods.

To measure bond-related media coverage, we identify cities’ RavenPack articles with relevance scores of at least 90 and apply a keyword search to article headlines to detect bond-related content.¹⁵ We validate this approach by plotting monthly article counts relative to the month of issuance for cities with and without referendum requirements. As shown in Figure 3, both groups exhibit clear spikes in coverage around the issuance month, with substantially larger increases in vote-requiring cities—consistent with the view that referendum campaigns stimulate additional media attention.

For each bond issuance, we aggregate the number of bond-related articles over the twelve months leading up to and including the issuance month. This window captures the period in which cities prepare and promote bond campaigns.¹⁶ The resulting variable, *Total Articles - 12mo*, is winsorized at 1% and 99% to account for outliers. Panel B of Table 1 reports summary statistics: 40% of issues occur in vote-requiring states, the average issuance receives 1.88 bond-related articles over the prior year, issuers receive coverage from an average of 22 media outlets, and the mean issuance size is \$4.7 million.

4.2.2 Research design and results

Panel A of Table 3 shows striking differences in average media coverage across referendum regimes. UTGO issues in non-referendum states receive 1.43 bond-related media articles on average during the year before issuance. In referendum states, this figure rises to 2.55—a 78% difference that is statistically significant at the 1% level.

To formally test whether UTGO referendum requirements are associated with greater media coverage, we estimate the following Poisson regression at the bond issuance level for bond issuance b issued by city i in county c in year-month m :

$$\begin{aligned} Total\ Articles - 12mo_{b,i,m} = & \alpha + \beta_1 Vote_s + \beta_2 Bond\ Issuance - 12mo_{i,m} + \beta_3 Num\ Sources_{i,m} \\ & + \beta_4 Amount_b + \beta_5 County\ Economics_{c,m} + \mu_m + \delta_p + \epsilon_{b,i,m} \end{aligned}$$

Vote is an indicator equal to one in UTGO-vote-requiring states. Year-month fixed effects μ_m capture common shocks to media activity, and purpose fixed effects δ_p account for heterogeneity in

¹⁵The keywords include: bond, general obligation, tax-exempt, taxable, property tax, issuance, offering, yield, debt, underwriter, underwriting, credit rating, refunding, callable, coupon.

¹⁶The 12-month window aligns with evidence from bond election data from Texas, where the average lag between bond elections and issuance dates is nine months (Texas Bond Review Board, 2025b).

newsworthiness across project types. We cluster standard errors by county.

We control for several potential confounders. *Bond Issuance - 12 mo* is an indicator variable that equals one if the city issued a different GO or revenue bond during the prior year, which may itself attract media attention. *Num Sources* captures the number of media outlets covering the city on any topic, thereby adjusting for baseline media presence. *Amount* measures issuance size, reflecting the possibility that larger bonds draw more press attention. Finally, we include logged county-level measures of economic conditions, including GDP, population, and personal income.

Columns 1-2 of Table 3 Panel B indicate that cities in vote-requiring states indeed receive significantly more bond-related coverage. The coefficient on *Vote* is positive and statistically significant at the 1% level in column 1 and persists in column 2 after controlling for county-level measures of economic conditions. The column 2 coefficient of 0.274 implies that referendum requirements are associated with roughly 0.45 additional articles.¹⁷

Columns 3-4 restrict the analysis to the border-city sample and include state-border fixed effects, limiting comparisons to adjacent cities located on opposite sides of a state line. The coefficient on *Vote* remains positive and statistically significant ($\beta = 0.551$, p-value < 0.05 in column 4), reinforcing the interpretation that UTGO bond referendum requirements are associated with increased media coverage. This heightened coverage is consistent with the role of referendum campaigns in stimulating public interest and increasing the demand for information among voters.

4.3 Implications for voters

Next, we examine whether the elevated information environment around bond referendums is associated with voters' decisions. Because comprehensive bond election data are not available nationwide, we focus on Texas, which requires voter approval for GO bonds and provides systematic data on municipal bond elections. We obtain GO bond election data from the Texas Bond Review Board for 2000-2022, which provides election dates and outcomes for 872 GO bond elections at the proposition level for 151 Texas cities.

Before broaching voter behavior, we first use the Texas setting to verify that our earlier results on heightened information environments indeed reflect active bond campaigns rather than unrelated fiscal events. Because we have bond election dates for Texas, we can test whether cities and media

¹⁷ $(e^{0.274} - 1) \times 100 = 31.5\%$. With a baseline of 1.43 articles, this corresponds to 0.45 additional articles.

outlets respond to bond elections more directly than in our previous analysis, which relied on cross-sectional comparison across cities and measured media articles using bond issuance dates rather than election dates. To analyze Texas cities’ website disclosure, we construct a city-year panel from 2000-2022 and define *Increase in Bond Text* as an indicator variable equal to one if the city’s website increases mentions of the word “bond” relative to the year prior. For the media analysis, we construct a city-month panel and define *Bond Coverage* as an indicator variable equal to one if the city receives at least one bond-related news article in a given month.

Panel C of Table 1 presents descriptive statistics for the Texas sample. The website disclosure analyses include city-year observations with non-missing website data in year t and $t - 1$, and the media coverage analyses include city-month observations for cities with non-zero RavenPack media coverage in the year prior to the election. Cities experience an increase in bond-related website text in 27% of city-year observations and receive bond-related media coverage in 4% of city-month observations. Twelve percent of the 872 bond propositions fail, and the mean vote margin, calculated as the absolute vote difference scaled by total votes cast, is 40%.

To test whether cities increase bond-related website disclosure when holding bond elections, we regress *Increase in Bond Text* on *Election Year*, which equals one if city i holds a bond election in year t , on city-year data. We estimate the following OLS regression:

$$\begin{aligned} \text{Increase in Bond Text}_{i,t} = & \alpha + \beta_1 \text{Election Year}_{i,t} + \beta_2 \text{Bond Issuance Year}_{i,t} \\ & + \beta_3 \text{County Economics}_{c,t-1} + \mu_i + \delta_t + \epsilon_{i,t}. \end{aligned}$$

City fixed effects (μ_i) allow for comparisons of disclosure within-city over time, and year fixed effects (δ_t) control for Texas trends in a particular year. We also control for *Bond Issuance Year*, an indicator equal to one if the city issues a GO or revenue bond in year t , because website disclosure may also increase around issuance activity, and lagged county-year economic conditions. Standard errors are clustered at the county level.

For media coverage, we estimate city-month regressions in which the dependent variable is *Bond Coverage*. The key independent variable, *Election* $[0, +3]$, equals one if city i holds a bond election in month m or in the following three months. In other words, the variable captures the election month and the three months leading up to the election from the perspective of the focal observation.

We estimate the following OLS regression:

$$\begin{aligned} \text{Bond Coverage}_{i,m} = & \alpha + \beta_1 \text{Election } [0, +3]_{i,m} + \beta_2 \text{Bond Issuance } [0, +3]_{i,m} \\ & + \beta_3 \text{County Economics}_{c,y-1} + \mu_i + \delta_m + \epsilon_{i,m}. \end{aligned}$$

Similar to the website disclosure test, we include city fixed effects and month fixed effects. We also control for *Bond Issuance* $[0, +3]$ to separate election-related coverage from coverage around subsequent GO or revenue bond issuance, and we control for lagged county-year economic conditions. We again cluster standard errors by county.

Table 4 presents the results. Within the same city, websites are more likely to increase bond disclosure during bond election years than at other times. In Panel A, the coefficient on *Election Year* is 0.231 and 0.227 without and with controls, and both coefficients are statistically significant at the 1% level. These magnitudes indicate that cities are about 23 percentage points more likely to increase bond-related website text in election years. Relative to the unconditional mean of 27%, this represents an approximately 84% increase in the likelihood of expanding bond-related website disclosure. Panel B shows a similar pattern for media coverage. The coefficient on *Election* $[0, +3]$ is 0.033 in column 1 and 0.034 in column 2, both statistically significant at the 5% level, indicating that the same city is more likely to receive bond-related media coverage in the months leading up to bond elections, relative to other months. Compared to the unconditional mean of 4%, the column 2 estimate represents an approximately 85% increase in the likelihood of bond-related media coverage.

These results support the interpretation that the cross-sectional differences documented in Tables 2 and 3 reflect referendum-related information production, rather than broader differences across cities or bond issuance activity. Triangulating across the cross-sectional analyses, which capture a broader sample around the country, and Texas, which provides time-series evidence using election dates, we paint a more complete picture of a positive association between bond referendum requirements and local information environments.

Turning to whether this voter-facing information is associated with election outcomes, we again leverage the Texas data. We consider two outcomes: *Failed* indicates whether a bond proposition does not receive voter approval, and *Margin* measures the degree of voter agreement. Voter-facing information may reduce failure rates if it helps cities explain project needs, tax implications, and

implementation plans. At the same time, disclosure and media coverage may also draw attention to controversial features of a proposal or amplify opposition.

To test whether bond-related website disclosure or media coverage is associated with bond failure and voter agreement, we estimate election-level regressions for bond proposition b by city i in county c in year y :

$$\begin{aligned} \text{Election Outcome}_{eb} = & \alpha + \beta_1 \text{Information}_b + \beta_2 \text{Amount}_b + \beta_3 \text{County Economics}_{c,y-1} \\ & + \mu_y + \delta_p + \epsilon_{b,i,y}. \end{aligned}$$

For website disclosure, *Information* is *High Bond Text*, an indicator equal to one when the city has above-median mentions of the word “bond” on its website in the election year. For media coverage, *Information* is *Bond Coverage [-3, 0]*, an indicator equal to one if the city receives at least one bond-related media article in the election month or the three months prior. In both versions, we control for the proposed bond amount and county-level economic conditions. In the media regression, we also control for *Num Sources*, the number of media outlets covering the city in the year prior to the election. We include year fixed effects to absorb annual trends in Texas and purpose fixed effects to compare propositions within similar categories of projects, such as general purpose or public safety. Standard errors are clustered by county.

Table 5 Panel A presents the results for website disclosure. Elections with high bond-related website text are less likely to fail and are decided by larger margins. In column 2, the coefficient on *High Bond Text* is -0.111 ($p < 0.10$), indicating that high bond-related website text is associated with an 11.1 percentage-point lower probability of failure. In column 4, the coefficient is 0.070 ($p < 0.05$), indicating that high bond-related website text is associated with a 7.0 percentage-point larger vote margin. Similarly, as seen in Panel B, elections receiving bond-related articles are also less likely to fail and have larger vote margins. These results are of a similar economic magnitude to the website disclosure results. Media coverage is associated with a 12.3 percentage-point lower probability of bond failure ($\beta = -0.123$, $p < 0.01$ in column 2) and with a 4.6 percentage-point larger vote margin ($\beta = 0.046$, $p < 0.10$ in column 4).

Together, these results indicate that voter-facing information not only increases around bond elections but is also meaningfully associated with election outcomes – both reducing the likelihood

that proposals fail and increasing the degree of voter agreement. These findings are consistent with the view that information produced around referendum campaigns helps voters evaluate proposed borrowing (Garrett and McCubbins, 2008).

4.4 Implications for investors

Thus far, our results suggest that bond referendum requirements coincide with richer local information environments, as reflected in both city website disclosures and media coverage. We now examine whether these information flows also relate to municipal bond investors by studying secondary-market trading activity.

It is *ex ante* unclear whether increased transparency generated in referendum regimes should be associated with investor behavior. Because municipal bond interest is generally exempt from federal taxes and often receives favorable state tax treatment, in-state residents have strong incentives to hold locally issued municipal bonds (Galper et al., 2014; Cuny, 2016; Babina et al., 2021). To the extent that residents and potential bond investors overlap, voter-facing disclosure and media coverage during referendum campaigns may reduce information acquisition costs for the marginal investor. At the same time, while cities with referendum rules provide more bond and financial information, it is uncertain whether they materially improve investors' information environment beyond other sources, including what is available through the centralized EMMA system. Moreover, recent work shows that municipal financial disclosures often fail to produce meaningful trading responses, highlighting the limited attention and structural frictions that characterize this market (Cuny et al., 2025). Whether voter-oriented information relates to investor behavior is therefore ultimately an empirical question.

4.4.1 Data and sample

To assess whether bond referendum requirements are associated with differences in secondary-market trading, we continue to focus on UTGO bonds and compare bonds issued by cities in referendum states (green-shaded states in Figure 1) with those issued by non-referendum states (white-shaded). For our set of UTGO bonds identified in Mergent, we obtain transaction-level secondary market data for these bonds from MSRB for 2005-2023, yielding a sample of 50,467 bonds.¹⁸

¹⁸We restrict the sample to bonds issued after 2004 to ensure complete MSRB data coverage.

Following prior literature, we isolate secondary market activity by excluding trades occurring within 30 days of issuance, which generally reflect the distribution of primary offerings (Gillette et al., 2020; Green et al., 2007b).

We use three measures of secondary-market trading. *Trade* is an indicator variable equal to one if a bond has at least one secondary-market customer transaction between 30 days after issuance and maturity or the end of the MSRB sample period. We then distinguish between retail and institutional trading. Retail investors are especially relevant in our setting, where they hold approximately 44% of municipal bonds directly. Due to state tax privileges on locally-issued municipal bond interest, retail investors are likely to be local residents who encounter voter-facing bond information through city websites or local media. Compared to institutional investors, retail investors may be more influenced by these voter-facing disclosures because they face higher information processing costs (Blankespoor et al., 2020) and have less access to other sophisticated or private sources of information. We classify trades below \$100,000 as retail and trades above \$100,000 as institutional, consistent with established proxies (Cuny, 2018; Schultz, 2012). We define *Retail Trade* and *Inst. Trade* as indicator variables equal to one if a bond has at least one trade in the respective category.

Panel D of Table 1 reports descriptive statistics. Across all bonds, 47% trade at least once prior to maturity or the end of our sample period, consistent with prior literature (Gillette et al., 2020). 40% of bonds have at least one retail trade, and 28% have at least one institutional trade. The higher incidence of retail trading is consistent with high household ownership of municipal bonds. In addition, 85% of bonds file at least one continuing disclosure document, such as a subsequent annual financial report, on EMMA during the relevant post-issuance period (i.e., between 30 days after issuance and maturity or the end of our sample period).

4.4.2 Research design and results

To test whether referendum requirements are associated with secondary-market trading, we estimate the following OLS regression at the bond level for bond b by city i in county c in state s :

$$\begin{aligned} Trade_b = & \alpha + \beta_1 Vote_s + \beta_2 High\ Tax\ Priv._s + \beta_3 Continuing\ Disclosure_b \\ & + \beta_4 Bond\ Characteristics_b + \beta_5 County\ Economics_{c,y-1} + \mu_y + \delta_p + \epsilon_{b,i,y}. \end{aligned}$$

Vote indicates whether the issuing city is in a state requiring voter approval for UTGO bonds. We control for *High Tax Priv.*, an indicator variable for states with stronger in-state tax privileges for municipal bond interest, and *Continuing Disclosure*, an indicator variable for having subsequent regulated disclosure on EMMA. We also control for bond characteristics, county-year economic conditions, issuance-year fixed effects, and bond-purpose fixed effects. Standard errors are clustered at the issuance level.

Panel A of Table 6 presents the full-sample results. Column 1 examines whether a bond trades at all before maturity. The coefficient on *Vote* is equal to 1.5 percentage points and is statistically significant at the 10% level, suggesting that in vote-requiring states, bonds are 1.5 percentage points more likely to trade in the secondary market. When we examine retail and institutional trades separately in columns 2-3, the pooled-sample association is clearly concentrated among retail: bonds issued in vote-requiring states are 3.3 percentage points more likely to be traded by retail investors in the secondary market ($p < 0.01$), while the relation between *Vote* and institutional trading is statistically indistinguishable from zero. Among retail trading, the association with *Vote* is incremental to both *High Tax Priv.* and *Continuing Disclosure*; in particular, the coefficient magnitude on *Vote* is one-quarter the magnitude as on *Continuing Disclosure*, suggesting that referendum-related transparency complements the investor-facing reporting available to retail investors.

Panel B replicates the analysis within the border-city sample and includes state-border fixed effects. The retail pattern remains strong in this more localized comparison. Bonds issued in vote-requiring states are significantly more likely to trade overall ($\beta = 0.130$, $p < 0.01$) and are more likely to have retail trades ($\beta = 0.142$, $p < 0.01$). By contrast, the association with institutional trading, while positive, continues to be statistically insignificant. These results reinforce the interpretation that referendum-related information flows are most closely associated with retail investor activity.

Collectively, the results suggest that voter-facing information generated in referendum regimes spills over to the secondary municipal bond market, primarily through retail trading. The pronounced retail results are consistent with the idea that voter-facing information is most useful to investors who are more likely to be local residents exposed to cities' disclosure and media coverage and who face otherwise high information acquisition costs.

5 Implications for debt choice and borrowing costs

The preceding sections suggest that bond referendum requirements are associated with richer information environments for both voters and investors. Yet these informational benefits may impose meaningful political and administrative costs on local officials. As our website analyses and anecdotal examples suggest, preparing for a referendum requires cities to develop voter-facing materials, engage in public outreach, and expose borrowing plans to heightened scrutiny. Placing a bond on the ballot also introduces procedural delays that can push projects into later budget cycles, during which construction costs may rise, priorities may shift, and political risks may intensify. Faced with these frictions, it is not obvious how cities will respond. Officials might absorb these costs and continue issuing referendum-required bonds, or they might instead avoid referendums by substituting into alternative bonds—even if those alternatives are more expensive. Whether such substitution occurs and whether associated fiscal consequences exist is theoretically ambiguous and an empirical question. In this section, we examine whether cities shift away from referendum-required bonds and whether these choices coincide with differences in borrowing costs.

5.1 Data and sample

To assess whether cities choose different types of bonds depending on their referendum regime, we compare cities in states with only GO bond referendum requirements and no revenue bond referendum requirements (light green solid or striped states in Figure 1) to cities in states without any referendum requirements (white states). We exclude states requiring referendums for both GO and revenue bonds (dark green) because such regimes would not incentivize as much substitution across bond types. We also exclude states with within-state variation in GO bond referendum laws (dotted), where it is not feasible to identify which issuers face which rules. This approach yields a comparison across 25 states shaded light green, light green-striped, or white in Figure 1. Across these states, 2,803 cities issued 155,830 UTGO, LTGO, and revenue bonds from 2000-2020.

We begin with descriptive evidence on the composition of bond types across referendum regimes. If cities prefer to issue bonds without referendums, we should observe a greater reliance on non-referendum bonds in states where referendums apply. Figure 4 illustrates these patterns for three regimes: (i) white states without any referendum requirement (Panel A), (ii) light-green states requiring refer-

endums for all GO bonds (Panel B), and (iii) light-green striped states requiring referendums only for UTGO bonds, meaning LTGO bonds are exempt (Panel C).

Panel A shows that in states without vote requirements, cities rely heavily on UTGO bonds: 66% of issuances are UTGO, 18% LTGO, and 16% revenue. Panels B and C reveal two clear substitution patterns. In Panel B, where all GO bonds require voter approval, revenue bonds constitute 52% of issuances—more than triple the benchmark share—while UTGO bonds fall to 31%. In Panel C, where only UTGO bonds require voter approval, UTGO usage declines sharply to 23%, while LTGO usage rises to 54%. Because LTGO and UTGO bonds finance similar types of projects, this shift is consistent with cities substituting from referendum-requiring UTGO bonds into LTGO bonds that avoid voter approval. Together, these patterns strongly suggest that referendum requirements shape cities’ public debt portfolios.

Panel B helps rule out the concern that these patterns simply reflect cities in referendum states issuing less debt overall. Cities in *GO Vote* states make up 62% of cities in the sample and account for 58% of total bond issuances, indicating that they remain active issuers of municipal debt. The difference is in the composition of that debt: these cities account for only 37% of UTGO issuances but 78% of revenue bond issuances. This distribution reinforces the interpretation from Panel A: referendum requirements are associated with a shift in the composition of debt, rather than a broad reduction in borrowing activity.

5.2 Research design and results

5.2.1 Debt choice

Although Figure 4 provides descriptive evidence that cities substitute between bond types when faced with referendum requirements, debt choice may also reflect underlying economic or institutional differences across states. To test whether the substitution patterns persist after accounting for these factors, we examine cities’ borrowing compositions in a multivariate setting. For each city, we calculate the total dollar amounts of UTGO, LTGO, and revenue bonds issued from 2000–2020 and construct *Pct Bond Type* as the share of each category relative to the city’s total borrowing over this period.

We structure the analysis to mirror the referendum regimes depicted in Figure 4. In the first

set of regressions, we compare cities in states with no referendum requirements (white) to those in states where any GO bond requires voter approval (light green), captured by the indicator *GO Vote*. In the second set, we compare states without referendum requirements (white) to those where LTGO and revenue bonds are exempt and only UTGO bonds require voter approval (striped), using the indicator *Only UTGO Vote*.¹⁹ These two comparisons allow us to isolate how borrowing choices shift when referendum requirements apply to all GO bonds versus when cities can avoid referendums by substituting from UTGO to LTGO bonds.

Specifically, we estimate the following cross-sectional OLS regressions at the issuer level (i.e., city level) for city i in county c and state s :

$$Pct\ Bond\ Type_i = \alpha + \beta_1 Vote\ Requirement_s + \beta_2 County\ Controls_c + \beta_3 State\ Policy\ Controls_s + \epsilon_i$$

where *Pct Bond Type* is one of *Pct UTGO*, *Pct LTGO*, or *Pct Revenue*.

County controls include county-level GDP, personal income, and population, all measured at the beginning of the sample period. We also control for $\ln(Non\text{-}issuer\ county\ debt)$, the log total amount of municipal debt issued by other governmental entities in the same county over the sample period. This control helps address the possibility that city debt choices are affected by borrowing activity of overlapping local governments, such as counties, school districts, or special districts. For example, if infrastructure financing shifts from cities to other local entities in referendum states, city-level debt composition could partly reflect broader county-level public borrowing patterns rather than only cities' own substitution across bond types.

Because our dependent variable captures a city's overall mix of bond types over two decades, we also incorporate state-level municipal finance policies that may shape borrowing choices. These include *Proactive State*, which identifies states with legal authority to intervene in financially distressed municipalities (Gao et al., 2019); *LTGO Allowed*, which captures whether cities may issue limited-tax GO bonds; *State GO Vote*, which accounts for whether state-level GO debt requires voter approval; and *High Tax Priv.*, which captures states with stronger in-state tax privileges for municipal bond interest (Babina et al., 2021).

Panel E of Table 1 summarizes these characteristics. Roughly 37% of cities operate in states

¹⁹By construction, *GO Vote* and *Only UTGO Vote* identify mutually exclusive sets of states.

where any GO bond requires voter approval (*GO Vote*), and 25% are in states where only UTGO bonds require approval (*Only UTGO Vote*). Average borrowing across all cities consists of 49% UTGO, 23% LTGO, and 27% revenue debt. In addition, one-third of cities are in proactive states, 60% are in states permitting LTGO issuance, and 59% are in states where state-issued GO bonds require referendums.

Table 7 Panel A compares cities in states where any GO bond requires voter approval to cities in states without referendum requirements. Cities in *GO Vote* states issue 37.9 percentage points less UTGO debt than cities in benchmark states without controls. The estimate remains similar after adding county-level controls, including non-issuer county debt, and after adding state policy controls: in column 3, cities in *GO Vote* states issue 34.8 percentage points less UTGO debt. Columns 4 and 5 show that this reduction in UTGO debt is accompanied by 6.9 percentage points less LTGO debt, which is also subject to referendum requirements, and 41.1 percentage points more revenue debt. These results indicate substantial substitution away from GO debt and toward revenue bonds when GO issuance requires voter approval.

Panel B compares states where only UTGO bonds require voter approval to states without referendum requirements. Cities in *Only UTGO Vote* states issue 46.7 percentage points less UTGO debt without controls and 41.2 percentage points less UTGO debt after adding county and state policy controls. Because LTGO bonds are exempt in these states, the substitution pattern differs from Panel A: cities issue 8.4 percentage points more LTGO debt and 30.6 percentage points more revenue debt. This pattern is consistent with cities avoiding referendum-required UTGO debt by shifting into alternative debt instruments, including LTGO bonds that retain a GO pledge but do not require voter approval.

We also examine whether the stringency of referendum approval rules affects debt choice. Among states with GO bond referendum requirements, some require only a simple majority while others require a supermajority for voter approval (see Figure 2). If referendum costs influence borrowing choices, cities should shift more strongly away from UTGO debt when voter approval is more difficult to obtain. For this test, we pool the two referendum regimes analyzed separately in Panels A and B of Table 7: states where any GO bond requires voter approval and states where only UTGO bonds require voter approval. We compare these referendum states ($Vote = 1$) to states without city bond referendum requirements. We then interact *Vote* with *Supermajority State*, an indicator for states

requiring more than a simple majority to approve GO bond referendums.

Table 8 reports the results. The coefficient on *Vote* is negative and significant, indicating that cities in referendum states issue less UTGO debt than cities in non-referendum states. The interaction term, $Vote \times Supermajority\ State$, is also negative and significant. In column 2, the interaction coefficient is -0.117, indicating that supermajority approval requirements are associated with an additional 11.7 percentage point reduction in UTGO debt among cities subject to GO bond referendum requirements. This cross-sectional evidence strengthens the interpretation that cities' debt choices respond not only to the presence of voter approval requirements, but also to their stringency.

5.2.2 Borrowing costs

These substitution patterns have direct implications for the cost of municipal borrowing. Compared to UTGO bonds, LTGO and revenue bonds typically have weaker credit pledges and therefore carry higher yields (Municipal Research and Services Center, 2025b; Beglin, 2024).²⁰ Consequently, cities that substitute toward these bonds may incur higher borrowing costs.

To evaluate this possibility, we compute issuer-level borrowing costs using *Wtd. Avg. Yield Spread*, constructed by taking a par-value-weighted average of the offering yield spread across all bonds issued by each city. Offering yield spreads are calculated by adjusting the bond offering yield for a coupon-equivalent risk-free rate based on the zero-coupon curves constructed in (Gürkaynak et al., 2007), following Gao et al. (2020).²¹

Replacing *Pct Bond Type* with this measure in the above regression yields strong and consistent results. Table 9 Panel A indicates that cities in *GO Vote* states exhibit 27–35 basis point higher aggregate yield spreads than cities in states without referendum requirements *Wtd. Avg. Yield Spread*. In Panel B, cities in *Only UTGO Vote* states face similarly elevated financing costs: average yield spreads are 18–29 basis points higher than cities without referendum requirements. These positive associations between referendum requirements and aggregate borrowing costs align with the preference for costlier debt instruments documented above.

²⁰Although revenue bonds can finance general purposes, in practice they fund specific purposes more often. For example, in Texas—one of the largest municipal markets—44% of cities' new-money revenue bonds fund water projects, 20% fund utility projects, 9% fund general-purpose projects, and 27% fund other projects. By contrast, within new-money GO bonds, 55% fund general-purpose projects, 29% fund water projects, and 16% fund other projects (Texas Bond Review Board, 2025a).

²¹In the municipal bond market, negative yield spreads relative to Treasuries is not uncommon because of the state and federal tax exemptions on municipal bond interest income.

5.2.3 Border-city sample

Although our design controls for observable economic and institutional factors, unobserved state-level attributes could still influence both referendum rules and borrowing choices. To strengthen identification, we return to the border-city sample, restricting to state pairs where GO bond referendum rules differ but revenue bond rules do not. Specifically, we compare light-green solid states where any GO bond requires a referendum (*GO Vote* equals one) to adjacent white states that do not require a referendum. We include state-border fixed effects to compare adjacent cities operating under different referendum regimes.²²

Table 10 indicates that even within this narrow geographic comparison, cities in vote-requiring states issue less UTGO debt and face higher aggregate yield spreads than neighboring cities without vote requirements. These patterns mirror the full-sample results and reinforce the interpretation that in aggregate, referendum requirements are associated with both debt composition and borrowing costs.

Taken together, our findings suggest that cities systematically shift toward more expensive debt instruments when GO bonds require voter approval. This substitution allows cities to retain control over project financing and avoid the delays and uncertainty associated with referendums, but it comes at the cost of higher borrowing expenses. Although we do not take a position on the welfare implications of this behavior—evaluating whether these choices ultimately benefit or disadvantage residents would require evidence on project timing, service quality, and voter preferences beyond the scope of this study—our results highlight an important trade-off inherent in referendum requirements. While such requirements enhance transparency and democratic oversight, they can also raise the fiscal cost of public investment.

6 Conclusion

This paper examines how voter approval requirements shape municipal bond issuance by influencing cities' information environments, financing choices, and borrowing costs. Using a novel dataset that documents state laws governing whether cities must obtain voter approval before is-

²²Among the four state-level variables, only *State GO Vote* and *High Tax Priv.* varies within these border segments and is therefore included.

suing GO or revenue bonds, we document that these requirements vary meaningfully across states and forms of debt. Because GO bonds directly affect property taxes and finance a wide range of public projects, they are most frequently subject to voter approval, creating significant institutional variation in cities' discretion over borrowing.

We begin by studying how referendum requirements affect the flow of bond-related information available to voters. Cities preparing for referendums generate project descriptions, financial materials, and other disclosures targeted at residents, which, in turn, shape the broader information environment surrounding municipal borrowing. Using data from city websites and media outlets, we find that cities in referendum states provide substantially more bond-related information and receive significantly more bond-related media coverage than cities in non-referendum states. We then show that these voter-focused disclosures are also associated with more active secondary-market trading, consistent with the information produced during bond campaigns spilling over to investors.

Despite these informational benefits, we find that cities tend to avoid referendum-required bonds when possible. Cities in states with GO bond referendums make greater use of revenue bonds and reduce their reliance on UTGO and LTGO bonds relative to cities in non-referendum states. Similarly, when only UTGO bonds trigger voter approval, cities substitute toward LTGO and revenue bonds. These patterns indicate that referendum requirements meaningfully alter the composition of municipal debt by encouraging cities to issue instruments that provide greater autonomy over the timing and implementation of capital projects.

Because LTGO and revenue bonds generally carry higher yields than UTGO bonds, this substitution has implications for municipal borrowing costs. Consistent with this expectation, we find that cities facing GO bond referendum requirements experience materially higher aggregate borrowing costs, as reflected in larger weighted average yield spreads. Although we cannot speak to the welfare implications of these financing choices, the results highlight an underlying economic trade-off: although referendum requirements enhance transparency and voter oversight, they can also increase the fiscal cost of public investment by inducing cities to rely on more expensive forms of debt.

Overall, our study suggests that voter approval requirements have two distinct and economically meaningful effects on municipal borrowing. They expand the supply of voter-facing information—spillovers that also reach bond investors—while simultaneously pushing cities toward more discre-

tionary but costlier forms of debt. By documenting how these rules shape both information flows and financing decisions, the paper highlights the importance of referendum institutions in municipal capital markets and the dual role of voters as both consumers of disclosure and constraints on local borrowing. More broadly, by extending classic theories of political agency and direct democracy to municipal bond markets, our paper offers a framework for studying how citizen participation shapes public borrowing.

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Figures and tables

Figure 1: City bond referendum requirements by state

This figure maps the distribution of city bond referendum laws across the 49 states with independent city governments. White-shaded states do not require cities to hold referendums for any type of bond. Light-green-shaded states require cities to hold referendums for GO bonds but not for revenue bonds. Within these states, striped states' referendum requirements exempt limited-tax GO bonds. Dark green-shaded states require cities to hold referendums for GO bonds and either sometimes or always also require referendums for revenue bonds. In all dotted states, GO bond referendum requirements vary within-state; in some dotted states, the revenue bond referendum requirement also varies.

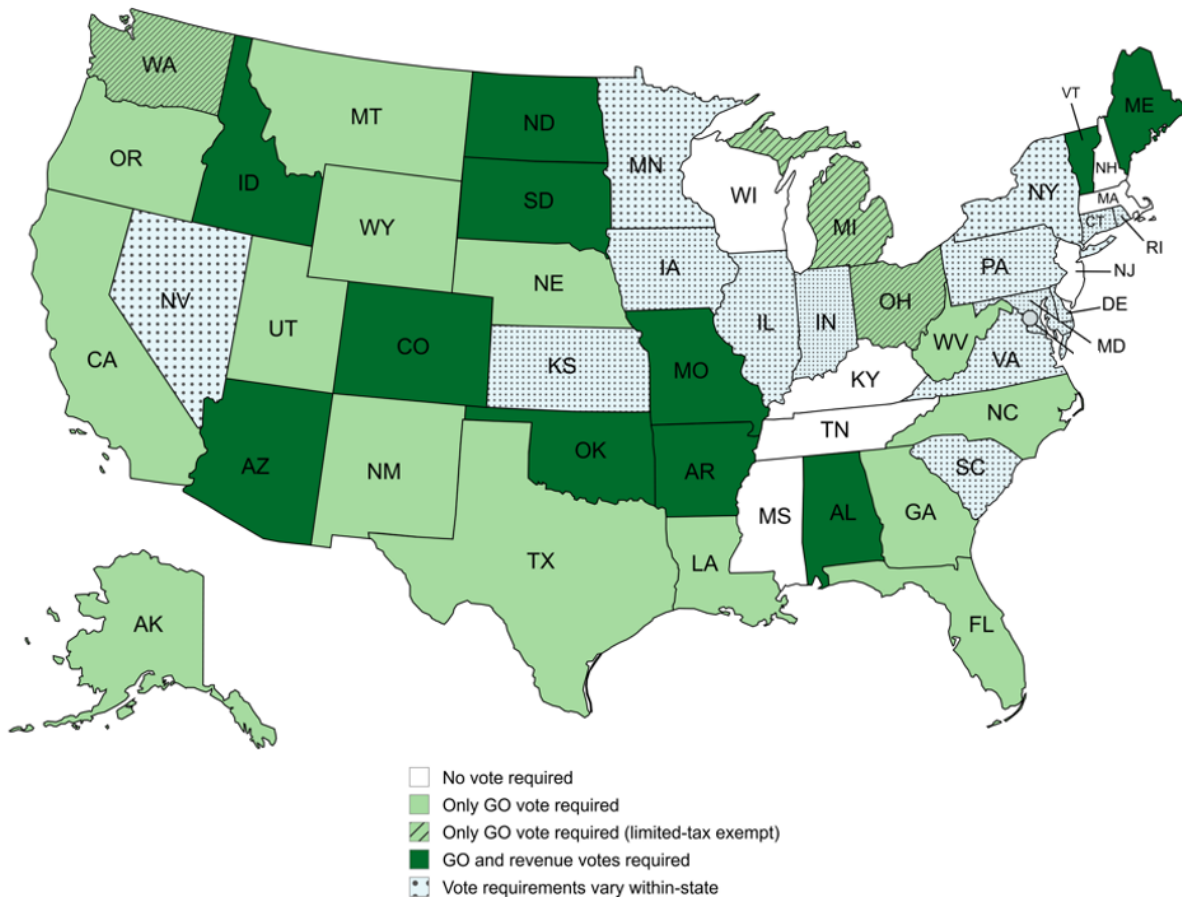


Figure 2: Detailed city bond referendum requirements by state

This figure describes bond referendum requirements for cities' general obligation and revenue bonds. The details are sourced from state statutes, constitutions, treasury websites, and municipal league websites.

| State | GO | Revenue | Sources | State | GO | Revenue | Sources |
|-------|-------------------|------------------------|---|-------|-------------------|----------|---|
| AL | Majority | Depends | AL Const, Article XII, S222, S222.01 AL League of Municipalities (2024) | MT | Majority | None | MT Code § 7-7-4221 (2023) |
| AK | Majority | None | AK Stat § 29.47.190 (2023) AK Stat § 29.47.250 (2023) | NE | Majority | None | NE Rev Stat § 18-506.01 (2023) |
| AZ | Majority | Depends | AZ Rev Stat § 35-452 (2023) AZ Rev Stat § 9-523 (2023) AZ Rev Stat § 9-441.03 (2023) | NV | Depends | None | NV Rev Stat § 350.020 (2023) |
| AR | Majority | Majority | AR Const, Amendment 62 AR Code § 14-72-808 (2023) | NH | None | None | NH Rev Stat § 33:3 (2023) |
| CA | 2/3 | None | CA Govt Code § 43608 (2023) CA Govt Code § 43614 (2023) CA Govt Code § 54380 (2023) | NJ | None | None | NJ Rev Stat § 40A:2-17 (2023) NM Const, Article IX NM Stat § 3-30-06 (2023) |
| CO | Majority | Majority | CO Rev Stat § 31-15-302 (2023) | NM | Majority | None | NM Stat § 3-30-06 (2023) |
| CT | Depends | Depends | CT Gen Stat § 7-369. (2023) | NY | Depends | Depends | NY Loc Fin L § 34.00 (2023) |
| DE | Depends | None | DL Code (2023) | NC | Majority | None | NC Const, Article 5, Section 4 |
| FL | Majority | None | FL Const, Article XII, Section 12 FL Stat § 100.201 (2023) FL Revenue Bond Act of 1953 | ND | 60% | Majority | ND Century Code § 21-03-04 2 ND Century Code § 21-03-07 |
| GA | Majority | None | GA Code § 36-82-1 (2023) GA Code § 36-82-3 (2023) GA Code § 36-82-63 (2023) | OH | Majority for UTGO | None | OH Revised Code § 5705.51 (2023) 11 OK Stat § 22-128 (2023) 11 OK Stat § 22-155 (2023) |
| HI | N/A | N/A | N/A | OK | 60% | Depends | OR State Treasury OR Const, Article XI, Section 11b |
| ID | 2/3 | Depends | ID Const Art VIII § 3 | OR | Majority | None | OR Const, Article XI, Section 11b |
| IL | Depends | None | 65 ILCS 5/8-4-1 (2023) IL Municipal Bond Reform Act 65 ILCS 5/8-5-16 (2023) | PA | Depends | Depends | PA Cons Stat Title 53 ch 81 (2023) |
| IN | Depends | None | IN Code § 36-4-6-19 (2023) IN Code § 6-6-1.1-20-3.5 (2023) IN Code § 5-1.4-4-5 (2023) | RI | Depends | Depends | RI Gen L § 45-12-2.1 (2024) RI Gen L § 45-12-20 (2024) |
| IA | Depends | None | IA Code § 384.25 (2023) IA Code § 384.26 (2023) | SC | Depends | None | SC Const, Article X, Section 14 |
| KS | Depends | Depends | KS Stat § 10-120 (2023) KS Stat § 10-1212 (2023) | SD | 60% | 60% | SD Codified L § 6-8B-2 (2023) |
| KY | None | None | KY Rev Stat Ch 66 (2024) KY League of Cities (2019) KY Rev Stat § 96.640 (2024) | TN | None | None | TN Code § 9-21-108 (2023) |
| LA | Majority | None | LA Const, Article VI, Section 33 LA Rev Stat § 39:521 (2023) LA Rev Stat § 39:524 (2023) | TX | Majority | None | TX Govt Code § 1251.001 (2023) |
| ME | Majority | Depends | ME Rev Stat 30-A § 5772 (2023) ME Rev Stat 30-A § 5404 (2023) | UT | Majority | None | UT Code § 11-14-201 (2023) |
| MD | Depends | Depends | MD Local Gov Code § 19-304 (2023) MD Local Gov Code § 19-302 (2023) | VT | Majority | Majority | 24 V.S.A. § 1755 |
| MA | None | None | MA Gen L ch 44 § 8a (2023) | VA | Depends | None | VA Const, Article VII, Section 10 WA Rev Code § 84.52.056 (2023) WA Rev Code § 35.41.050 (2023) |
| MI | Majority for UTGO | None | Michigan Municipal League | WA | 60% for UTGO | None | WV Code § 8-18-16 (2023) WV Code § 8-13C-14 (2023) |
| MN | Depends | None | League of Minnesota Cities | WI | None | None | WI Stat § 67.05 (2023) |
| MS | None | None | MS Code § 21-33-301 (2023) | | | | |
| MO | 2/3 or 4/7 | Yes, threshold depends | MO Rev Stat § 95.115 (2024) MO Rev Stat § 95.130 (2024) MO Rev Stat § 250.070 (2024) MO Const, Article VI, Section 28(b) | WY | Majority | None | WY Stat § 22-21-103 (2023) |

Figure 3: Bond article counts relative to GO debt issuance

This figure plots the number of news articles about cities in event-time around the month of an unlimited-tax GO bond issuance. We include news articles about cities where the article headlines mention bond or debt-related keywords.

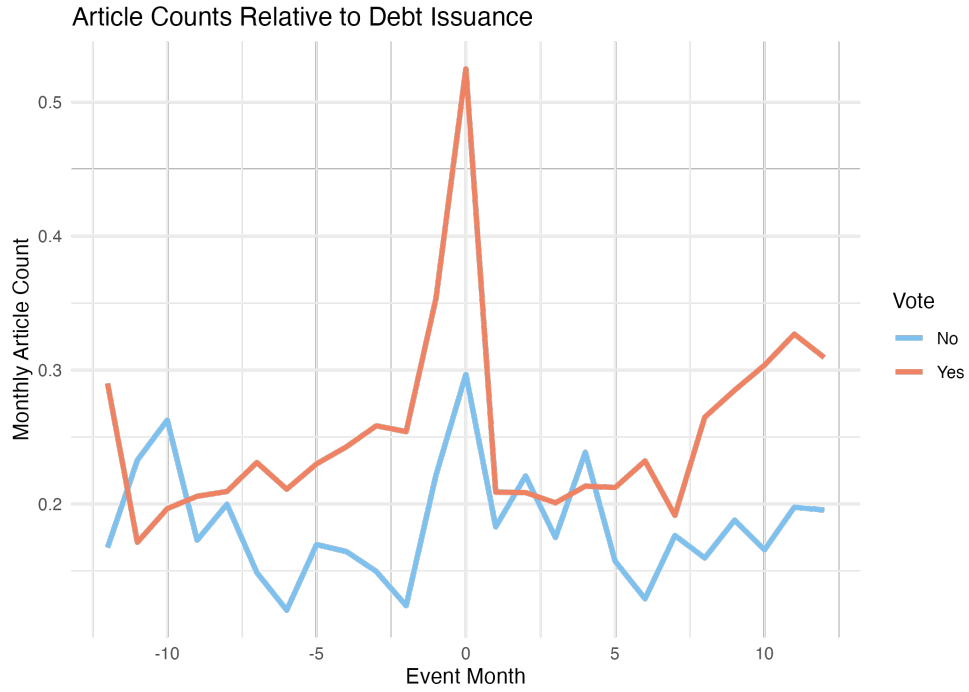
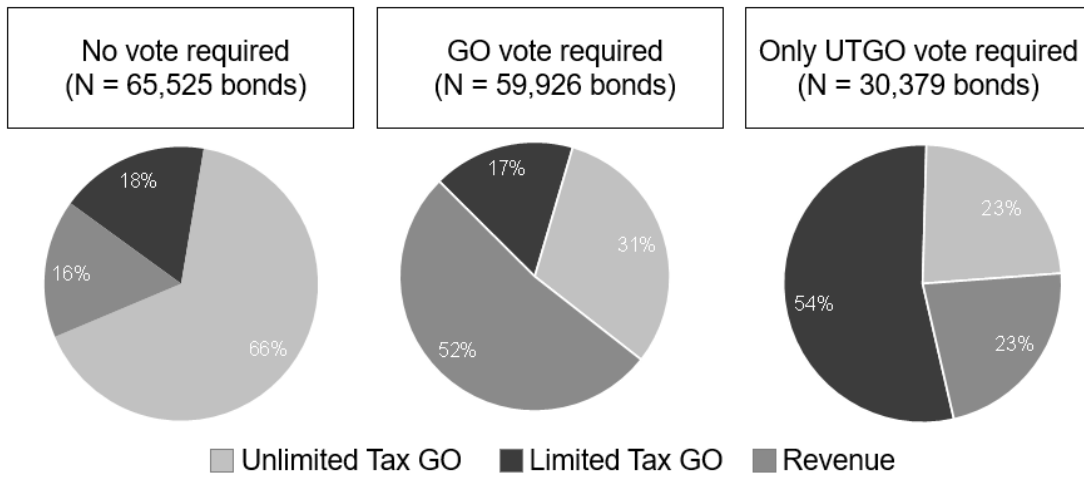


Figure 4: City and bond composition

This figure presents two visualizations of the composition of cities and bonds. The sample includes cities in light green (solid and striped) and white states in Figure 1 and bonds issued from 2000-2020 in Mergent data. **Panel A** shows the proportion of cities' bonds that are unlimited-tax general obligation, limited-tax general obligation, and revenue in different referendum regimes. Each pie chart covers a different set of states: the first covers states without a referendum requirement for any type of bond; the second covers states where a referendum is required for any GO bond but not for a revenue bond; and the third covers states where a referendum is required for UTGO bonds, but LTGO bonds are exempt, and a referendum is not required for revenue bonds. Unlike Panel A, **Panel B** shows the distribution of cities and bonds broadly *across* regimes with all pie charts covering white and light green states. The first two charts show the number of cities and all bonds (UTGO, LTGO, and revenue) states with and without GO vote requirements. The last two charts focus on UTGO and revenue bonds separately.

Panel A: Bond composition in different referendum regimes



Panel B: City and bond distribution across referendum regimes

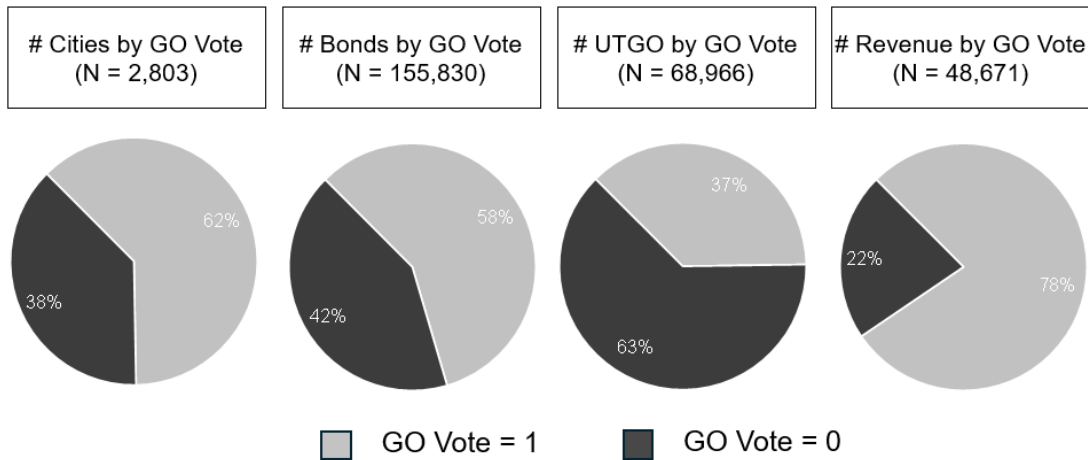


Table 1: Descriptive statistics

This table presents descriptive statistics for the main variables used in our analyses of website disclosure in **Panel A**, media coverage in **Panel B**, Texas election outcomes in **Panel C**, secondary market trading in **Panel D**, and debt choice in **Panel E**. All variables are defined in *Appendix A*.

Panel A: Website disclosure descriptive statistics

| Variable | Unit | Mean | Std | Min | P1 | Median | P99 | Max | N |
|----------------------|-----------|-------|-------|------|------|--------|--------|--------|-------|
| Vote | City-Year | 0.38 | 0.49 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1,656 |
| Bond URLs | City-Year | 0.28 | 1.21 | 0.00 | 0.00 | 0.00 | 8.20 | 8.45 | 1,656 |
| Bond Count | City-Year | 4.09 | 11.66 | 0.00 | 0.00 | 0.00 | 67.22 | 68.70 | 1,656 |
| Fiscal URLs | City-Year | 0.58 | 2.82 | 0.00 | 0.00 | 0.00 | 20.41 | 20.90 | 1,656 |
| Fiscal Count | City-Year | 12.97 | 37.61 | 0.00 | 0.00 | 0.00 | 238.42 | 240.15 | 1,656 |
| Financial Docs | City-Year | 2.14 | 5.61 | 0.00 | 0.00 | 0.00 | 31.00 | 31.00 | 1,656 |
| Num Issuances | City-Year | 4.24 | 5.21 | 0.00 | 0.00 | 2.00 | 25.45 | 43.00 | 1,656 |
| State Fiscal Monitor | City-Year | 0.49 | 0.50 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1,656 |

Panel B: Media coverage descriptive statistics

| Variable | Unit | Mean | Std | Min | P1 | Median | P99 | Max | N |
|-----------------------|----------|-------|------|-------|-------|--------|-------|-------|-------|
| Vote | Issuance | 0.40 | 0.49 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 3,412 |
| Total Articles - 12mo | Issuance | 1.88 | 6.42 | 0.00 | 0.00 | 0.00 | 39.67 | 57.07 | 3,412 |
| Bond Issuance - 12mo | Issuance | 0.22 | 0.42 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 3,412 |
| Num Sources | Issuance | 3.11 | 1.68 | 0.69 | 0.69 | 3.22 | 6.93 | 8.54 | 3,412 |
| Amount | Issuance | 15.36 | 1.19 | 10.20 | 12.23 | 15.38 | 18.76 | 19.93 | 3,412 |
| County ln(GDP) | Issuance | 16.33 | 1.60 | 10.05 | 12.34 | 16.52 | 19.16 | 20.23 | 3,412 |
| County ln(Pop) | Issuance | 12.37 | 1.39 | 6.35 | 8.61 | 12.52 | 15.13 | 16.11 | 3,412 |
| County ln(Pers. Inc) | Issuance | 16.10 | 1.50 | 10.19 | 12.26 | 16.25 | 18.80 | 19.92 | 3,412 |

Panel C: Texas election descriptive statistics

| Variable | Unit | Mean | Std | Min | P1 | Median | P99 | Max | N |
|-----------------------|------------|-------|--------|------|------|--------|--------|--------|--------|
| Increase in Bond Text | City-Year | 0.27 | 0.44 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1,530 |
| Election Year | City-Year | 0.10 | 0.30 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1,530 |
| Bond Issuance Year | City-Year | 0.23 | 0.42 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1,530 |
| Bond Coverage | City-Month | 0.04 | 0.20 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 32,208 |
| Election [0, +3] | City-Month | 0.04 | 0.19 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 32,208 |
| Bond Issuance [0, +3] | City-Month | 0.02 | 0.14 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 32,208 |
| Failed | Election | 0.12 | 0.32 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 872 |
| Margin | Election | 0.40 | 0.28 | 0.00 | 0.00 | 0.36 | 1.00 | 1.00 | 872 |
| Bond Count | Election | 43.44 | 108.16 | 0.00 | 0.00 | 4.00 | 374.00 | 892.00 | 558 |
| Bond Coverage [-3, 0] | Election | 0.27 | 0.44 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 700 |

Panel D: Secondary market trading descriptive statistics

| Variable | Unit | Mean | Std | Min | P1 | Median | P99 | Max | N |
|-----------------------|------|-------|------|------|------|--------|-------|-------|--------|
| Vote | Bond | 0.42 | 0.49 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 50,467 |
| Trade | Bond | 0.47 | 0.50 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 50,467 |
| Retail Trade | Bond | 0.40 | 0.49 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 50,467 |
| Inst. Trade | Bond | 0.28 | 0.45 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 50,467 |
| High Tax Priv. | Bond | 0.30 | 0.46 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 50,467 |
| Continuing Disclosure | Bond | 0.85 | 0.35 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 | 50,467 |
| Amount | Bond | 12.82 | 1.19 | 7.60 | 9.90 | 12.77 | 15.94 | 18.17 | 50,467 |
| Maturity | Bond | 4.47 | 0.79 | 0.69 | 2.30 | 4.62 | 5.66 | 6.01 | 50,467 |
| Callable | Bond | 0.45 | 0.50 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 50,467 |
| Sinkable | Bond | 0.06 | 0.23 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 50,467 |
| Insured | Bond | 0.22 | 0.42 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 50,467 |
| Rating | Bond | 5.56 | 6.84 | 0.00 | 0.00 | 0.00 | 16.00 | 16.00 | 50,467 |

Panel E: Debt choice descriptive statistics

| Variable | Unit | Mean | Std | Min | P1 | Median | P99 | Max | N |
|----------------------------|--------|-------|------|-------|-------|--------|-------|-------|-------|
| GO Vote | Issuer | 0.37 | 0.48 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 2,780 |
| Only UTGO Vote | Issuer | 0.25 | 0.43 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 2,780 |
| Pct UTGO | Issuer | 0.49 | 0.45 | 0.00 | 0.00 | 0.44 | 1.00 | 1.00 | 2,780 |
| Pct LTGO | Issuer | 0.23 | 0.38 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 2,780 |
| Pct Revenue | Issuer | 0.27 | 0.40 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 2,780 |
| Wtd. Avg. Yield Spread | Issuer | -0.05 | 0.67 | -1.69 | -1.08 | -0.12 | 2.62 | 6.32 | 2,753 |
| ln(Non-issuer county debt) | Issuer | 19.59 | 3.37 | 0.00 | 0.00 | 20.26 | 23.26 | 24.23 | 2,780 |
| Proactive State | Issuer | 0.33 | 0.47 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 2,780 |
| LTGO Allowed | Issuer | 0.60 | 0.49 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 | 2,780 |
| State GO Vote | Issuer | 0.59 | 0.49 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 | 2,780 |
| High Tax Priv. | Issuer | 0.37 | 0.48 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 2,780 |

Table 2: GO bond referendums and city website disclosure along state borders

This table examines whether an unlimited-tax GO bond referendum requirement is associated with bond-related disclosure on city websites. Observations are at the city-year level. The analysis compares cities located along state borders, where one state requires a UTGO bond referendum (green states in Figure 1) and the adjacent state does not (white states in Figure 1). Dependent variables are counts of “bond,” “fiscal,” and “FY” in URLs and website text, as well as the number of financial PDFs on the website. **Panel A** reports tests of differences in mean values across states with and without referendum requirements. **Panel B** reports regression analyses. All specifications include fixed effects for the year and state-border pair. t-statistics are reported in parentheses, and standard errors are clustered at the county level. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels. All variables are defined in *Appendix A*.

Panel A: Mean values by vote requirement

| Variable | Mean (Vote = 0) | Mean (Vote = 1) | Difference |
|----------------|-----------------|-----------------|-----------------|
| Num Issuances | 4.73 | 3.46 | -1.28*** (5.04) |
| Bond URLs | 0.21 | 0.39 | 0.18*** (2.69) |
| Bond Count | 3.62 | 4.84 | 1.22** (1.97) |
| Fiscal URLs | 0.35 | 0.95 | 0.59*** (3.63) |
| Fiscal Count | 11.68 | 15.04 | 3.36* (1.70) |
| Financial Docs | 1.72 | 2.83 | 1.11*** (3.61) |

Panel B: Regression analyses

| | Bond URLs (1) | Bond Count (2) | Fiscal URLs (3) | Fiscal Count (4) | Financial Docs (5) |
|-----------------------|-------------------|--------------------|--------------------|---------------------|-----------------------|
| Vote | 0.892** (2.16) | 0.778*** (2.80) | 2.34*** (2.60) | 0.736* (1.65) | 0.601** (2.36) |
| Num Issuances | 0.151 (0.52) | 0.290* (1.82) | 0.240 (0.71) | 0.795*** (3.33) | 0.446** (2.40) |
| State Fiscal Monitor | 0.182 (0.36) | 0.705** (2.41) | 1.91* (1.87) | 0.703* (1.94) | 0.302 (1.07) |
| County ln(GDP) | 0.251 (0.27) | 0.439 (0.91) | 0.935 (0.96) | -0.253 (-0.54) | 1.11*** (2.97) |
| County ln(Pop) | 2.52 (1.50) | -0.865 (-0.85) | 2.69* (1.92) | 1.44 (1.56) | 0.569 (0.63) |
| County ln(Pers. Inc) | -2.31 (-1.16) | 0.457 (0.45) | -3.43** (-1.97) | -1.27 (-1.22) | -1.73* (-1.76) |
| N | 1,572 | 1,656 | 1,442 | 1,656 | 1,627 |
| Pseudo R ² | 0.103 | 0.150 | 0.211 | 0.229 | 0.158 |
| State-Border FE | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes |
| Cluster | County | County | County | County | County |

Table 3: GO bond referendums and bond-related media coverage

This table tests whether an unlimited-tax GO bond referendum requirement is associated with media coverage of an issuance. *Total Articles - 12mo* is a city’s number of bond-related articles in the 12 months leading up to the bond issuance. **Panel A** reports the difference in means of *Total Articles - 12mo* by referendum requirement. **Panel B** reports regression analyses. Columns 1-2 report analyses comparing cities in states with a UTGO bond referendum requirement (green states in Figure 1) to cities in states with no GO bond referendum requirement (white states in Figure 1). In columns 3-4, we limit the analysis to cities located along the border of states with and without GO bond referendum requirements. All columns include fixed effects for the issuance month and project purpose. Columns 3-4 include state-border fixed effects. t-statistics are reported in parentheses, and standard errors are clustered at the county level. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels. All variables are defined in *Appendix A*.

Panel A: Mean values by vote requirement

| Variable | Mean (Vote = 0) | Mean (Vote = 1) | Difference |
|-----------------------|-----------------|-----------------|----------------|
| Total Articles - 12mo | 1.43 | 2.55 | 1.13*** (4.70) |

Panel B: Regression analyses

| | Total Articles - 12mo | | | |
|-----------------------|-----------------------|---------------------|--------------------|-------------------|
| | Full Sample | | Border-City Sample | |
| | (1) | (2) | (3) | (4) |
| Vote | 0.316*** (2.71) | 0.274** (2.53) | 0.581** (2.57) | 0.551** (2.23) |
| Bond Issuance - 12mo | 0.260*** (2.99) | 0.260*** (3.13) | 0.229 (1.25) | 0.098 (0.64) |
| Num Sources | 0.907*** (17.40) | 0.802*** (16.10) | 1.02*** (7.82) | 1.04*** (7.44) |
| Amount | 0.220*** (4.70) | 0.171*** (4.54) | 0.002 (0.01) | -0.081 (-0.61) |
| County ln(GDP) | | 0.531** (2.12) | | -0.538 (-0.91) |
| County ln(Pop) | | -0.041 (-0.18) | | 0.913 (0.84) |
| County ln(Pers. Inc) | | -0.329 (-0.98) | | 0.118 (0.10) |
| N | 2,727 | 2,727 | 568 | 568 |
| Pseudo R ² | 0.611 | 0.621 | 0.512 | 0.524 |
| Year-Month FE | Yes | Yes | Yes | Yes |
| Purpose FE | Yes | Yes | Yes | Yes |
| State-Border FE | No | No | Yes | Yes |
| Cluster | County | County | County | County |

Table 4: Texas GO bond referendums, website disclosure, and media coverage over time

This table examines time series changes in bond-related website disclosure and bond-related media coverage around elections for a sample of 872 city bond elections in Texas. **Panel A** examines website disclosure and reports regressions at the city-year level. City and year fixed effects are included. *Increase in Bond Text* is an indicator variable equal to one for city c in year t if $Bond\ Count_t > Bond\ Count_{t-1}$. **Panel B** examines media coverage and reports regressions at the city-month level. *Bond Coverage* is an indicator equal to one for city c in month m if there was at least one bond-related media article written about city c in month m . City and year-month fixed effects are included. In both panels, t-statistics are reported in parentheses, and standard errors are clustered by county. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels. All variables are defined in *Appendix A*.

Panel A: Elections and website disclosure over time

| | Increase in Bond Text | |
|----------------------|-----------------------|--------------------|
| | (1) | (2) |
| Election Year | 0.231*** (4.21) | 0.227*** (4.15) |
| Bond Issuance Year | | 0.014 (0.49) |
| County ln(GDP) | | -0.057 (-0.41) |
| County ln(Pop) | | -0.236 (-0.82) |
| County ln(Pers. Inc) | | 0.619*** (2.71) |
| N | 1,440 | 1,440 |
| Adj. R ² | 0.073 | 0.076 |
| City FE | Yes | Yes |
| Year FE | Yes | Yes |
| Cluster | County | County |

Panel B: Elections and media coverage over time

| | Bond Coverage | |
|-----------------------|-------------------|--------------------|
| | (1) | (2) |
| Election [0, +3] | 0.033** (2.16) | 0.034** (2.19) |
| Bond Issuance [0, +3] | | 0.051*** (3.38) |
| County ln(GDP) | | 0.022 (1.09) |
| County ln(Pop) | | 0.053 (1.19) |
| County ln(Pers. Inc) | | -0.057 (-1.37) |
| N | 32,208 | 32,208 |
| Adj. R ² | 0.209 | 0.211 |
| City FE | Yes | Yes |
| Year-Month FE | Yes | Yes |
| Cluster | County | County |

Table 5: Texas GO bond referendum outcomes, website disclosure, and media coverage

This table examines the association between bond-related information on city websites and in media coverage and election outcomes for a sample of 872 city bond elections in Texas. Regressions are at the election level. In **Panel A**, the variable of interest is *High Bond Text*, an indicator variable equal to one for cities with above median *Bond Count* on city websites. In **Panel B**, the variable of interest is *Bond Coverage [-3, 0]*, an indicator variable equal to one if at least one bond-related media article was written about the city in the month of or in the three months prior to the election. Year and bond purpose fixed effects are included. t-statistics are reported in parentheses, and standard errors are clustered by county. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels. All variables are defined in *Appendix A*.

Panel A: Website disclosure and election outcomes

| | Failed | | Margin | |
|----------------------|---------------------|--------------------|--------------------|-------------------|
| | (1) | (2) | (3) | (4) |
| High Bond Text | -0.128** (-2.02) | -0.111* (-1.79) | 0.091*** (3.44) | 0.070** (2.62) |
| Amount | | 0.004 (0.36) | | 0.012 (0.95) |
| County ln(GDP) | | 0.065 (0.77) | | -0.049 (-1.02) |
| County ln(Pop) | | -0.141* (-1.74) | | 0.056 (0.88) |
| County ln(Pers. Inc) | | 0.026 (0.25) | | 0.022 (0.42) |
| N | 561 | 549 | 561 | 549 |
| Adj. R ² | 0.098 | 0.124 | 0.270 | 0.297 |
| Year FE | Yes | Yes | Yes | Yes |
| Purpose FE | Yes | Yes | Yes | Yes |
| Cluster | County | County | County | County |

Panel B: Media coverage and election outcomes

| | Failed | | Margin | |
|----------------------|----------------------|----------------------|-------------------|-------------------|
| | (1) | (2) | (3) | (4) |
| Bond Coverage[-3, 0] | -0.127*** (-3.60) | -0.123*** (-2.81) | 0.065** (2.19) | 0.046* (1.90) |
| Amount | | 0.020* (1.86) | | 0.0010 (0.09) |
| Num Sources | | -0.000 (-0.33) | | -0.000 (-0.82) |
| County ln(GDP) | | 0.090 (1.16) | | 0.000 (0.00) |
| County ln(Pop) | | -0.113 (-0.96) | | -0.005 (-0.05) |
| County ln(Pers. Inc) | | -0.036 (-0.27) | | 0.030 (0.34) |
| N | 699 | 699 | 699 | 699 |
| Adj. R ² | 0.141 | 0.172 | 0.289 | 0.303 |
| Year FE | Yes | Yes | Yes | Yes |
| Purpose FE | Yes | Yes | Yes | Yes |
| Cluster | County | County | County | County |

Table 6: GO bond referendums and secondary market trading

This table examines the relation between UTGO bond referendum requirements and the likelihood of secondary market trading by maturity using data from MSRB. We measure trading beginning 30 days after issuance and extending to either maturity or the end of the MSRB sample period in 2023. Only bonds issued after 2004 are included to ensure available trade data. **Panel A** reports regression analyses for the full sample, comparing cities in states with a UTGO bond referendum requirement (green states in Figure 1) to cities in states with no GO bond referendum requirement (white states in Figure 1). Column 1 examines any trading activity, column 2 examines trading activity by retail investors, and column 3 examines trading activity by institutional investors. All columns control for bond characteristics and local economic conditions and include year and bond purpose fixed effects. **Panel B** reports results from the same analyses in the border-city sample and includes a state-border fixed effect. t-statistics are reported in parentheses, and standard errors are clustered by bond issuance. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels. All variables are defined in *Appendix A*.

Panel A: Full sample

| | Trade (1) | Retail Trade (2) | Inst. Trade (3) |
|-----------------------|-----------------------|-----------------------|----------------------|
| Vote | 0.015* (1.90) | 0.033*** (3.84) | 0.004 (0.68) |
| High Tax Priv. | 0.086*** (10.60) | 0.103*** (11.56) | 0.034*** (5.12) |
| Continuing Disclosure | 0.169*** (15.82) | 0.123*** (12.17) | 0.066*** (8.17) |
| Amount | 0.119*** (36.56) | 0.114*** (32.54) | 0.140*** (54.22) |
| Maturity | 0.152*** (27.11) | 0.152*** (27.65) | 0.084*** (18.79) |
| Callable | -0.122*** (-16.66) | -0.140*** (-19.67) | -0.033*** (-4.93) |
| Sinkable | -0.134*** (-12.15) | -0.160*** (-15.11) | -0.050*** (-5.09) |
| Insured | 0.073*** (7.35) | 0.061*** (5.66) | 0.022*** (2.81) |
| Rating | 0.001** (2.14) | 0.001* (1.93) | -0.001*** (-2.86) |
| N | 50,467 | 50,467 | 50,467 |
| Adj. R ² | 0.241 | 0.229 | 0.202 |
| County Controls | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes |
| Purpose FE | Yes | Yes | Yes |
| Cluster | Issue | Issue | Issue |

Panel B: Border-city sample

| | Trade (1) | Retail Trade (2) | Inst. Trade (3) |
|-----------------------|--------------------|---------------------|--------------------|
| Vote | 0.130*** (3.18) | 0.142*** (3.04) | 0.031 (1.08) |
| High Tax Priv. | -0.074 (-1.50) | -0.120** (-2.17) | 0.026 (0.73) |
| Continuing Disclosure | 0.157*** (6.19) | 0.123*** (5.22) | 0.066*** (4.02) |
| N | 14,501 | 14,501 | 14,501 |
| Adj. R ² | 0.240 | 0.235 | 0.170 |
| Bond Controls | Yes | Yes | Yes |
| County Controls | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes |
| Purpose FE | Yes | Yes | Yes |
| State-Border FE | Yes | Yes | Yes |
| Cluster | Issue | Issue | Issue |

Table 7: GO bond referendum requirements and debt choice

This table examines whether a GO bond referendum requirement is associated with cities' choice of bond type. To isolate substitution across debt types, we exclude states that require referendums for both GO and revenue bonds (dark-green states in Figure 1). **Panel A** compares states where any GO bond must be approved by referendum (light-green states) to states with no bond referendum requirement (white states). **Panel B** compares states where only unlimited-tax GO bonds have a referendum requirement and limited-tax GO bonds are exempt (light-green striped states) to states with no bond referendum requirement (white states). In both panels, columns 1-3 examine the percent of issued debt that is UTGO, column 4 examines the percent of issued bonds (by amount) that is LTGO, and column 5 examines the percent of issued bonds that is through revenue bonds. t-statistics are reported in parentheses, and standard errors are clustered at the county level. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels. All variables are defined in *Appendix A*.

Panel A: GO vote required

| | Pct UTGO | | | Pct LTGO | Pct Revenue |
|----------------------------|-----------------------|-----------------------|----------------------|----------------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) |
| GO Vote | -0.379*** (-10.60) | -0.359*** (-11.30) | -0.348*** (-9.52) | -0.069*** (-3.41) | 0.411*** (11.70) |
| County ln(GDP) | | 0.117** (2.02) | 0.045 (1.18) | -0.006 (-0.24) | -0.036 (-0.94) |
| County ln(Pop) | | -0.426*** (-5.64) | -0.202*** (-3.64) | -0.022 (-0.52) | 0.222*** (4.21) |
| County ln(Pers. Inc) | | 0.229** (2.47) | 0.099* (1.65) | 0.055 (1.15) | -0.152*** (-2.69) |
| ln(Non-issuer county debt) | | 0.007* (1.69) | 0.005 (1.40) | 0.003** (2.10) | -0.009** (-2.53) |
| Proactive State | | | 0.127*** (2.63) | 0.003 (0.10) | -0.133*** (-2.80) |
| LTGO Allowed | | | -0.030 (-0.98) | 0.266*** (11.80) | -0.234*** (-9.79) |
| State GO Vote | | | -0.085** (-2.46) | 0.048** (2.25) | 0.028 (0.83) |
| High Tax Priv. | | | 0.274*** (8.64) | -0.131*** (-5.20) | -0.119*** (-3.71) |
| N | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 |
| Adj. R ² | 0.181 | 0.228 | 0.332 | 0.285 | 0.278 |
| Cluster | County | County | County | County | County |

Panel B: Only UTGO vote required

| | Pct UTGO | | | Pct LTGO | Pct Revenue |
|----------------------------|-----------------------|-----------------------|----------------------|----------------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) |
| Only UTGO Vote | -0.467*** (-13.10) | -0.454*** (-12.80) | -0.412*** (-8.43) | 0.084* (1.89) | 0.306*** (11.10) |
| County ln(GDP) | | 0.058 (0.82) | 0.024 (0.59) | -0.021 (-0.54) | 0.011 (0.28) |
| County ln(Pop) | | -0.232** (-2.13) | -0.133** (-2.20) | 0.102* (1.94) | 0.057 (1.33) |
| County ln(Pers. Inc) | | 0.132 (1.07) | 0.090 (1.42) | -0.062 (-1.12) | -0.064 (-1.34) |
| ln(Non-issuer county debt) | | 0.014*** (2.91) | 0.014*** (3.10) | -0.0007 (-0.43) | -0.014*** (-3.48) |
| Proactive State | | | 0.244*** (6.33) | 0.027 (0.66) | -0.265*** (-7.41) |
| LTGO Allowed | | | -0.248*** (-5.35) | 0.444*** (11.60) | -0.176*** (-7.34) |
| State GO Vote | | | 0.043* (1.78) | -0.068*** (-3.19) | 0.040* (1.82) |
| High Tax Priv. | | | -0.095** (-2.53) | 0.045 (1.26) | 0.054* (1.93) |
| N | 1,746 | 1,746 | 1,746 | 1,746 | 1,746 |
| Adj. R ² | 0.269 | 0.282 | 0.375 | 0.421 | 0.154 |
| Cluster | County | County | County | County | County |

Table 8: GO bond referendum requirements and debt choice cross-sectional analyses

This table reports cross-sectional issuer-level regressions examining whether GO bond referendum requirements and supermajority approval rules are associated with municipal debt choice. To isolate substitution across debt types, we remove states that require referendum for both GO and revenue bonds (dark-green states in Figure 1). The sample includes all remaining states with any GO bond referendum requirements (light-green and light-green striped states) and with no referendum requirement (white states). The dependent variable is the percentage of an issuer's debt issued as unlimited tax general obligation (UTGO) debt. *Supermajority State* is an indicator equal to one for cities in state with supermajority approval requirements for general obligation bonds. t-statistics are reported in parentheses, and standard errors are clustered at the county level. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels. All variables are defined in *Appendix A*.

| | Pct UTGO | |
|----------------------------|-----------------------|-----------------------|
| | (1) | (2) |
| Vote | -0.404*** (-12.20) | -0.391*** (-12.20) |
| Vote * Supermajority State | -0.086** (-2.34) | -0.117*** (-3.25) |
| County ln(GDP) | | 0.052 (1.33) |
| County ln(Pop) | | -0.262*** (-4.38) |
| County ln(Pers. Inc) | | 0.152** (2.28) |
| ln(Non-issuer county debt) | | 0.008* (1.91) |
| Proactive State | | 0.012 (0.43) |
| LTGO Allowed | | -0.098*** (-3.54) |
| State GO Vote | | 0.103*** (4.57) |
| High Tax Priv. | | 0.166*** (6.43) |
| N | 2,780 | 2,780 |
| Adj. R ² | 0.202 | 0.297 |
| Cluster | County | County |

Table 9: GO bond referendum requirements and aggregate cost of debt

This table examines whether a GO bond referendum requirement is associated with cities' aggregate cost of debt. To isolate substitution across debt types, we remove states that require referendum for both GO and revenue bonds (dark-green states in Figure 1). **Panel A** compares states where any GO bond must be approved by referendum (light-green states) to states with no bond referendum requirement (white states). **Panel B** compares states where only unlimited-tax GO bonds have a referendum requirement and limited-tax GO bonds are exempt (light-green striped states) to states with no bond referendum requirement (white states). The dependent variable is a city's weighted average yield spread across general obligation and revenue bonds. t-statistics are reported in parentheses, and standard errors are clustered at the county level. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels. All variables are defined in *Appendix A*.

Panel A: GO vote required

| | Wtd. Avg. Yield Spread | | |
|----------------------------|------------------------|---------------------|----------------------|
| | (1) | (2) | (3) |
| GO Vote | 0.354*** (8.45) | 0.326*** (7.36) | 0.271*** (4.64) |
| County ln(GDP) | | -0.128 (-1.18) | -0.127 (-1.29) |
| County ln(Pop) | | 0.227** (2.17) | 0.098 (0.89) |
| County ln(Pers. Inc) | | -0.093 (-0.63) | 0.032 (0.21) |
| ln(Non-issuer county debt) | | -0.014** (-2.00) | -0.010 (-1.43) |
| Proactive State | | | -0.383*** (-4.94) |
| LTGO Allowed | | | -0.178*** (-4.44) |
| State GO Vote | | | 0.155*** (3.01) |
| High Tax Priv. | | | -0.031 (-0.48) |
| N | 2,072 | 2,072 | 2,072 |
| Adj. R ² | 0.069 | 0.086 | 0.110 |
| Cluster | County | County | County |

Panel B: Only UTGO vote required

| | Wtd. Avg. Yield Spread | | |
|----------------------------|------------------------|----------------------|----------------------|
| | (1) | (2) | (3) |
| Only UTGO Vote | 0.185*** (4.87) | 0.154*** (4.47) | 0.294*** (8.13) |
| County ln(GDP) | | 0.138** (2.04) | 0.104 (1.56) |
| County ln(Pop) | | 0.291*** (3.27) | 0.228** (2.56) |
| County ln(Pers. Inc) | | -0.472*** (-5.25) | -0.375*** (-4.28) |
| ln(Non-issuer county debt) | | -0.009 (-1.19) | -0.009 (-1.19) |
| Proactive State | | | -0.267*** (-4.98) |
| State GO Vote | | | 0.004 (0.12) |
| High Tax Priv. | | | 0.131** (2.44) |
| N | 1,727 | 1,727 | 1,727 |
| Adj. R ² | 0.025 | 0.087 | 0.103 |
| Cluster | County | County | County |

Table 10: GO bond referendum requirements, debt choice, and aggregate yields in border cities

This table examines whether a referendum requirement on any GO bond is associated with city debt choice and aggregate cost of debt within the sample of issuers close to the borders of adjacent states, where one state requires a GO bond referendum (light green solid states in Figure 1) and the adjacent state does not (white states). Column 1 examines the percent of issued debt that is UTGO, and column 2 examines the city's weighted average yield spread. State-border fixed effects are included. t-statistics are reported in parentheses, and standard errors are clustered at the county level. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels. All variables are defined in *Appendix A*.

| | Pct UTGO (1) | Wtd. Avg. Yield Spread (2) |
|----------------------------|----------------------|-------------------------------|
| Vote | -0.302*** (-2.94) | 0.357** (2.08) |
| County ln(GDP) | 0.128 (0.94) | 0.032 (0.14) |
| County ln(Pop) | 0.389* (1.72) | -0.536 (-1.62) |
| County ln(Pers. Inc) | -0.503* (-1.96) | 0.365 (0.90) |
| ln(Non-issuer county debt) | -0.0001 (-0.02) | 0.009 (0.97) |
| State GO Vote | 0.192 (1.26) | 0.028 (0.09) |
| High Tax Priv. | -0.062 (-0.38) | -0.262 (-0.84) |
| N | 427 | 425 |
| Adj. R ² | 0.124 | 0.206 |
| State-Border FE | Yes | Yes |
| Cluster | County | County |

Appendix A: Variable definitions

| Variable | Source | Description |
|-------------------------------|-----------------------------------|---|
| State level variables: | | |
| <i>Vote</i> | State constitutions, statutes | An indicator equal to one if a state requires cities to hold referendums in order to issue unlimited tax GO bonds and zero otherwise |
| <i>State Fiscal Monitor</i> | Nakhmurina (2024) | An indicator equal to one for state s in year t if state s adopted a fiscal monitoring policy for local governments during or before year t , where adoption dates are taken from Nakhmurina (2024) |
| <i>Proactive State</i> | Gao et al. (2019) | An indicator equal to one if a state has statutes allowing them to provide assistance to a municipality and intervene in the event of local financial distress, as identified in Table 1 of Gao et al. (2019) |
| <i>LTGO Allowed</i> | Fidelity | An indicator equal to one if cities are allowed to issued limited-tax GO bonds and zero otherwise |
| <i>State GO Vote</i> | Pew Trusts | An indicator equal to one if state-level GO debt requires voter approval |
| <i>Supermajority State</i> | State constitutions, statutes | An indicator equal to one if a state requires more than a simple majority to approve general obligation bond referendums and zero otherwise |
| <i>High Tax Priv.</i> | State tax laws | An indicator equal to one if a state provides a high level of state tax privilege for in-state municipal bond interest (in the top two quintiles as measured by Babina et al. (2021)) and zero otherwise |
| County-year level variables: | | |
| <i>County ln(GDP)</i> | Bureau of Economic Analysis | The log-adjusted county GDP |
| <i>County ln(Pers. Inc)</i> | BEA | The log-adjusted county personal income |
| <i>County ln(Pop)</i> | BEA | The log-adjusted county population |
| Website-year level variables: | | |
| <i>Bond URLs</i> | Wayback Machine | The count of sub-URLs that contain the the word “bond” in the sub-URLs processed, winsorized at 1% and 99% |
| <i>Bond Count</i> | Wayback Machine | The count of mentions of the words “bond” in the scraped website text, winsorized at 1% and 99% |
| <i>Fiscal URLs</i> | Wayback Machine | The count of sub-URLs that contain the the word “fiscal” or “fy” in the sub-URLs processed, winsorized at 1% and 99% |
| <i>Fiscal Count</i> | Wayback Machine | The count of mentions of the words “fiscal” or “fy” in the scraped website text, winsorized at 1% and 99% |

| | | |
|------------------------------|-----------------|---|
| <i>Financial Docs</i> | Wayback Machine | The count of sub-URLs linking PDF documents mentioning a list of financial terms, including “budget”, “financial”, “cafr”, “bond”, “debt”, and “tax” in their title, winsorized at 1% and 99% |
| <i>Num Issuances</i> | Mergent | The cumulative number of GO bond issuances by a city until year t ; log-adjusted in regression analyses |
| <i>Increase in Bond Text</i> | Wayback Machine | An indicator equal to one if <i>Bond Count</i> for city c in year t is greater than <i>Bond Count</i> for city c in year $t - 1$, and zero otherwise |
| <i>Election Year</i> | Texas BRB | An indicator equal to one if city c held a bond election in year t and zero otherwise |
| <i>Bond Issuance Year</i> | Texas BRB | An indicator equal to one if city c issued any type of bond in year t and zero otherwise |
| Issuance level variables: | | |
| <i>Total Articles - 12mo</i> | RavenPack | The count of bond-related articles written about the city in the $[-12, 0]$ month window relative to issuance, winsorized at 1% and 99% |
| <i>Bond Issuance - 12mo</i> | Mergent | An indicator equal to one if a city issued a different GO or revenue bond in the 12 months prior to the bond issuance |
| <i>Num Sources</i> | RavenPack | The log-adjusted count of media outlets that write at least one article about the city in the 12 months prior to issuance |
| <i>Amount</i> | Mergent | The log-adjusted size of the total issuance |
| City-month level variables: | | |
| <i>Bond Coverage</i> | Ravenpack | An indicator equal to one if there was at least one bond-related media article written about city c in month m |
| <i>Election [0, +3]</i> | Texas BRB | An indicator equal to one if city c held a bond election in month m or in months $m + 1$ to $m + 3$ |
| <i>Bond Issuance [0, +3]</i> | Texas BRB | An indicator equal to one if city c issued any type of bond in month m or in months $m + 1$ to $m + 3$ |
| Election level variables: | | |
| <i>Failed</i> | Texas BRB | An indicator equal to one if the bond election failed |
| <i>Margin</i> | Texas BRB | The absolute value of the vote margin, calculated as total votes for less total votes against, scaled by total votes cast |
| <i>High Bond Text</i> | Wayback Machine | An indicator equal to one if the city’s bond-related website text count is above the sample median in the election period and zero otherwise |
| <i>Bond Coverage [-3, 0]</i> | Ravenpack | An indicator equal to one if at least one bond-related media article was written about the city in the month of or in the three months prior to the election |
| Bond level variables: | | |
| <i>Trade</i> | MSRB | An indicator equal to one if the bond has at least one customer trade between 30 days after issuance and maturity |

| | | | |
|---------------------------------|----------------|---------|---|
| <i>Retail Trade</i> | | MSRB | An indicator equal to one if the bond has at least one retail customer trade between 30 days after issuance and maturity. Retail trades are defined by trade sizes below \$100,000 |
| <i>Inst. Trade</i> | | MSRB | An indicator equal to one if the bond has at least one institutional customer trade between 30 days after issuance and maturity. Institutional trades are defined by trade sizes above \$100,000 |
| <i>Continuing Disclosure</i> | <i>Disclo-</i> | MSRB | An indicator equal to one if the issuer of the bond filed at least one continuing disclosure document on EMMA from 30 days after issuance to maturity |
| <i>Maturity Amount Callable</i> | | Mergent | The log adjusted maturity of the bond in months |
| | | Mergent | The log adjusted size of the bond |
| | | Mergent | An indicator equal to one if the bond is callable and zero otherwise |
| <i>Sinkable</i> | | Mergent | An indicator equal to one if the bond is sinkable and zero otherwise |
| <i>Insured</i> | | Mergent | An indicator equal to one if the bond is insured and zero otherwise |
| <i>Rating</i> | | Mergent | A categorical variable that takes on a different value for each credit rating. A rating of “Aaa”/“AAA” is coded as 16, a rating of “Aa1”/“AA+” is coded as 15, and so on. Unrated bonds are coded as 0. |

Issuer-level variables:

| | | | |
|-------------------------|--------------|-------------------------------|--|
| <i>GO Vote</i> | | State constitutions, statutes | An indicator equal to one if a state requires cities to hold referendums in order to issue any type of GO bonds and zero otherwise |
| <i>Only UTGO Vote</i> | | State constitutions, statutes | An indicator equal to one if a state requires cities to hold referendums in order to issue unlimited-tax GO bonds and not limited-tax GO or revenue bonds, and zero otherwise |
| <i>Pct UTGO</i> | | Mergent | Total dollar amount of UTGO bonds issued over the sample period, divided by the total dollar amount of all bonds issued over the sample period |
| <i>Pct LTGO</i> | | Mergent | Total dollar amount of LTGO bonds issued over the sample period, divided by the total dollar amount of all bonds issued over the sample period |
| <i>Pct Revenue</i> | | Mergent | Total dollar amount of revenue bonds issued over the sample period, divided by the total dollar amount of all bonds issued over the sample period |
| <i>Wtd. Avg. Spread</i> | <i>Yield</i> | Mergent | The weighted average yield spread across all bonds issued over the sample period, where bond yield spreads are calculated as the bond offering yield less the yield on the coupon-equivalent risk-free bond, following Gao et al. (2020) |

*ln(Non-issuer county
debt)* Mergent

the natural logarithm of one plus total municipal debt issued in the city's county by issuers other than the city itself

Appendix B: Campaigns for bond referendums

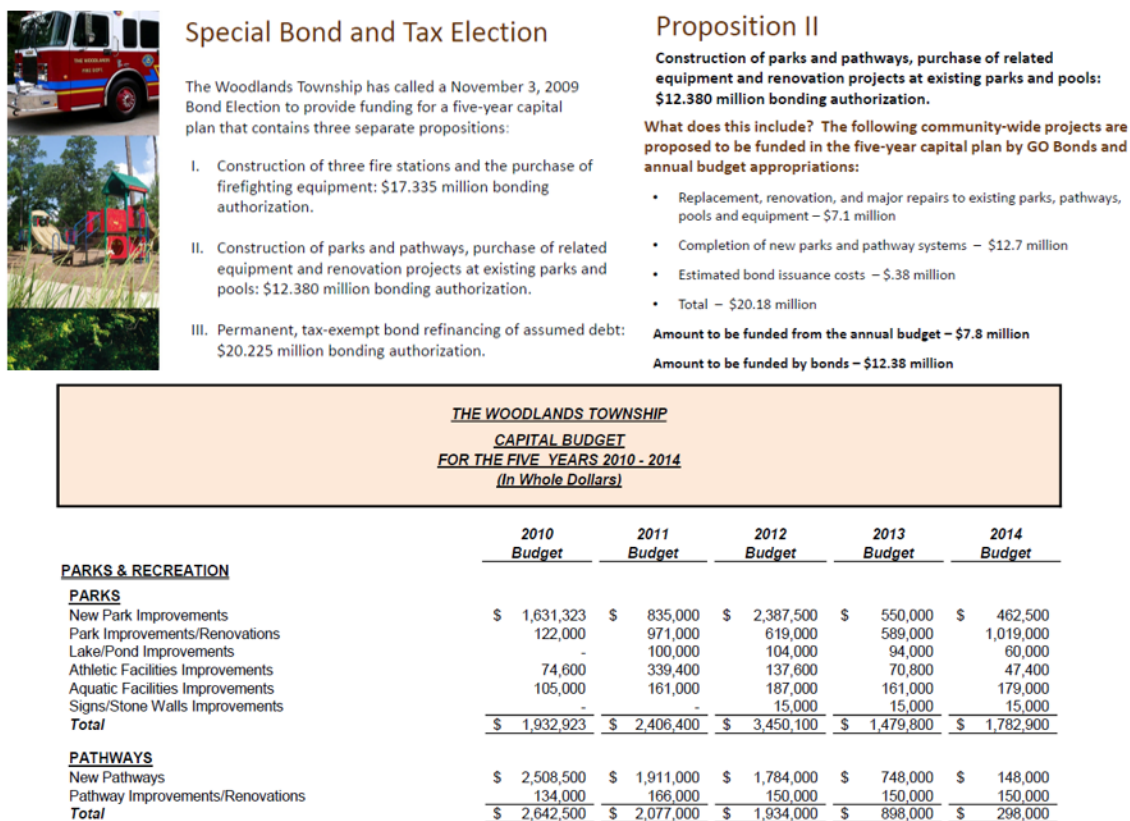
This section describes cities' campaign efforts and news coverage for three anecdotes of GO bond referendums: a Woodlands, Texas bond that passed comfortably; a Sun Valley, Idaho bond that barely passed; and a Dunwoody, Georgia bond that failed.

B.1 Woodlands, Texas 2009

On November 3, 2009, the Woodlands Township, Texas held a general obligation bond referendum. The referendum included three propositions: (1) \$17,335,000 for fire safety infrastructure and equipment, (2) \$12,380,000 for parks and recreation, and (3) \$20,225,000 for refinancing existing debt. Each proposition needed a simple majority to pass, and they passed with 75%, 67%, and 74% of the vote, respectively, per the bond issuance's official statement.

Leading up to the referendum, the township posted bond-related information on its website, including (i) slides from a town hall, (ii) internal documents of the township's Board of Directors, and (iii) five-year capital budget forecasts for the Fire Department and the Parks & Recreation Department. These campaign materials were intended to persuade citizens to approve the bond, but they also contained information that was not in the official statement, which became available to investors in March 2010.²³ For example, the five-year capital budget forecasts or details on where the bond proceeds would be spent were only posted on the township's website. Figure B1 shows extracts from the city's town hall presentation and capital budgets.

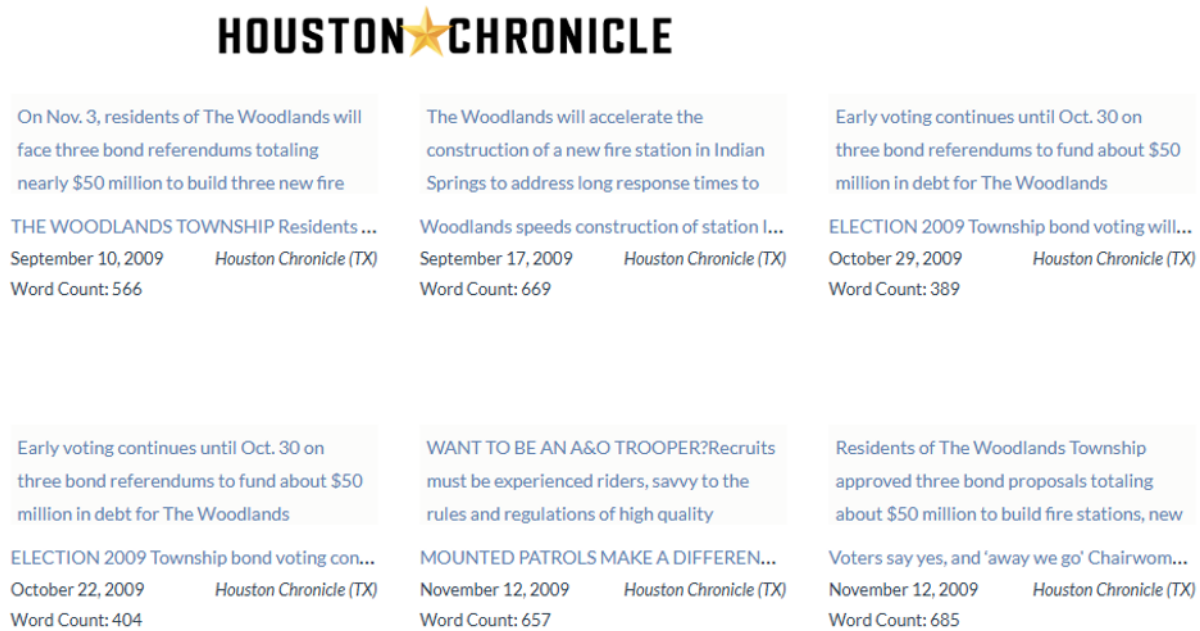
Figure B1: City campaign materials from Woodlands Township bond referendum



²³The official statement can be accessed here: <https://emma.msrb.org/EA383120-EA294195-EA689794.pdf>

As a net result of the township’s promotion of the bond proposal and local residents’ demand for news about the event, the *Houston Chronicle* reported consistently around the bond referendum. As shown in Figure B2, reporters wrote about the referendum occurring, the fire safety infrastructure needs addressed by the bond proceeds, and the election result.

Figure B2: News coverage of Woodlands Township bond referendum



B.2 Sun Valley, Idaho 2017

On November 7, 2017, the city of Sun Valley, ID held a general obligation bond referendum to raise \$17,500,000 in bonds for transportation-related infrastructure. The referendum needed a 2/3 majority to pass and received 67.1% Yes votes, allowing the bond to barely pass, per the issuance's official statement.

Leading up to the referendum, the city posted bond-related information on its website, including (i) slides from a town hall, (ii) city council meeting minutes and internal emails, and (iii) general reminders about the referendum. These materials were intended to persuade citizens to approve the bond, but they also contained information that was not in the official statement, which became available in February 2018.²⁴ This extra information included details about project timing, project implementation (e.g., the engineering firm selected to plan road repairs), and property tax implications for different levels of home values. Figure B3 shows extracts from the city's town hall presentation held in October 2017, one month before the bond election, as well as a portion of city council meeting minutes from November 2, 2017 where contractor costs were discussed.

Figure B3: City campaign materials from Sun Valley bond referendum



²⁴The official statement can be accessed here: <https://emma.msrb.org/ES1115121-ES871861-ES1273161.pdf>

11. [CH2MHill Task Order No. 350794.16.BR](#)

Betsy Roberts, CH2M Hill, City Engineer, spoke. She stated this was just an extension of the design work that we put together for Bitterroot Road from last year. She discussed the changes and the additional new areas of work as outlined in the Task Order.

Conard had questions about the costs and asked for clarification to be sure we aren't being double-charged, to which Roberts mentioned what we would be paying for and went over the potential costs.

Mayor Hendricks mentioned that this is a task order that will be impacted by the votes on Tuesday. He would like us to go ahead with this and if the bond measure doesn't pass, we will table and discuss it in December. We should call it a contingency approval.

The *Idaho Mountain Express* provided continuous coverage around the bond referendum and issuance. Reporters covered city council meetings, publicized the bond-related town hall, and wrote stories about the election outcome, the bond's eventual credit rating, and progress on the road repair projects after the bond was issued. Figure B4 shows an example set of headlines written by the *Idaho Mountain Express* around the bond election and issuance.


Figure B4: News coverage of Sun Valley bond election

The figure displays five news snippets from the Idaho Mountain Express, arranged vertically. Each snippet includes a headline, a sub-headline, a date, and a brief lead sentence. The first snippet is dated August 9, 2017, and discusses the city council's discussion of a ballot measure. The second snippet is dated August 11, 2017, and reports on the council's decision to move forward with the bond measure. The third snippet is dated October 19, 2017, and announces an open house for the bond measure. The fourth snippet is dated October 27, 2017, and reports on the voters' approval of the bond measure. The fifth snippet is dated February 16, 2018, and reports on Moody's giving the city a 3rd-highest rating. The fourth snippet includes a small photograph of the Sun Valley City Hall building.

SUN VALLEY
Sun Valley debates road bond measure
Peter Jensen Aug 9, 2017
The Sun Valley City Council and Mayor Peter Hendricks last Thursday discussed the prospect of sending a ballot measure to voters this fall...

Sun Valley moves forward with November roads bond measure
Peter Jensen Aug 11, 2017
The Sun Valley City Council is moving ahead with a bond measure to pay for roads projects that will be before voters on Nov. 7.

SUN VALLEY
Learn about Sun Valley roads bond Wednesday
Express staff Oct 19, 2017
The city of Sun Valley will host an open house Wednesday about its \$17.5 million bond measure to fund roads projects.

 SUN VALLEY
Sun Valley voters will decide \$17.5 million roads bond
Peter Jensen Oct 27, 2017
Voters in the city of Sun Valley last approved a bond measure funding roads projects in 1995.

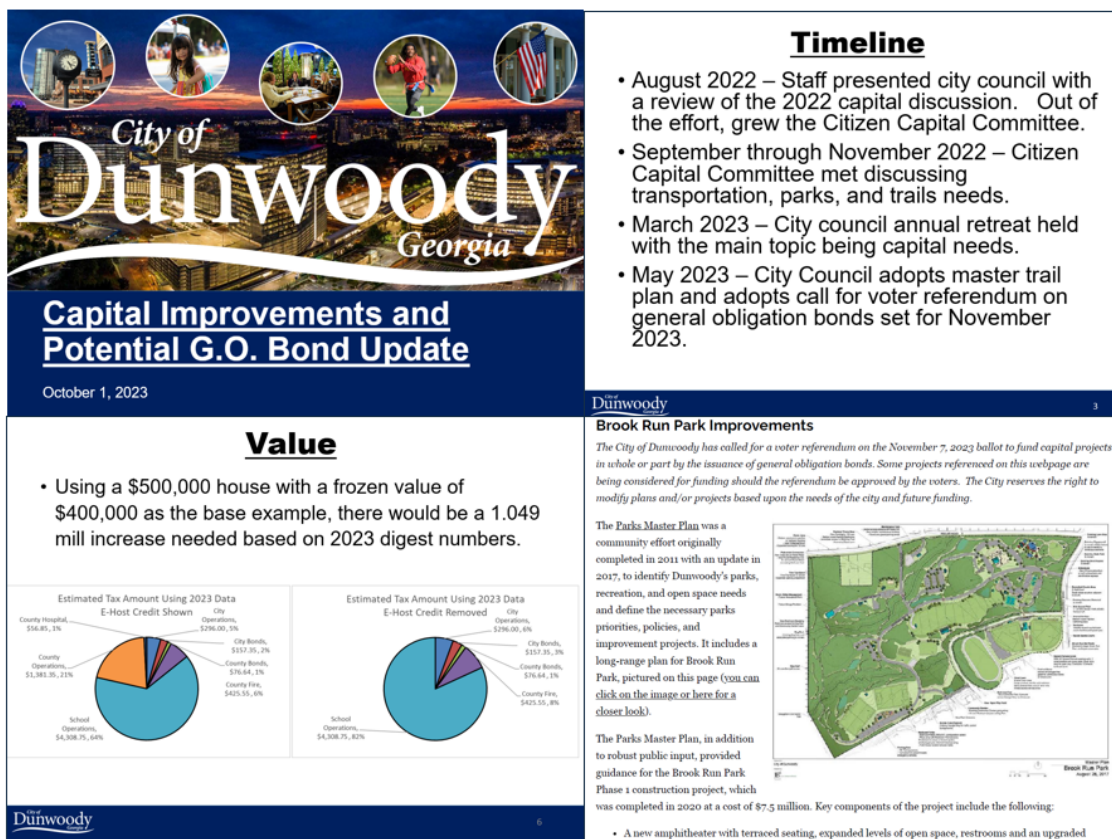
Sun Valley scores well with bond rating
Moody's gives city 3rd-highest rating
Peter Jensen Feb 16, 2018 0

B.3 Dunwoody, Georgia 2023

On November 7, 2023, the city of Dunwoody, Georgia held a general obligation bond referendum to raise \$60,000,000 in bonds for infrastructure related to parks & recreation. The referendum needed a simple majority to pass, but citizens denied the bond, voting 57% against the proposal (City of Dunwoody, 2023).

In the two months leading up to the referendum, the city ran a public campaign. In an effort to persuade voters, the city hosted town halls and posted bond-related information on its website, including (i) slides on the proposal and timeline, (ii) a list of frequently asked questions, and (iii) documents with planned phases of park projects. The city argued that while property taxes would increase, only a small percentage of a home’s tax bill would go towards debt-service. Figure B5 shows extracts from the city’s materials.

Figure B5: City campaign materials from Dunwoody bond referendum




Although the city’s campaign was supported by some local resident groups, the bond proposal proved controversial. Pro-bond groups argued that the city had long gone without substantial improvements, and the bond represented a “great chance to advance our commons” (Cobbs, 2023). However, opponents argued that the increased debt and parks renovations would not benefit the majority of residents; opponents also drew a link to police department funding, arguing that the bond should fail because “we are running the city at a deficit and we are underfunding our police department” (Cobbs, 2023). Due to the bond’s significance and controversy, local media continually covered the referendum process; see Figure B6 for excerpts from news articles.

Figure B6: News coverage of Dunwoody bond referendum

Supporters and opponents of Dunwoody's parks bond referendum take to the streets

by Cathy Cobbs
September 18, 2023 | 12:56 pm



Sigs supporting and opposing Dunwoody's upcoming bond referendum vote are showing up on Dunwoody's streets.

The “[Vote No on Dunwoody Bonds](#)” committee is comprised of five members, led by Tom Simon, a longtime resident of Stephen's Walk who has been specifically opposed to the location of a proposed multiuse trail on Tilly Mill Road.

However, the “Vote No” website arguments expand its opposition beyond the trail locations. It claims that passage of the bond referendum will result in streets becoming unsafe and congested during times of construction. It also says that the city's police department is in greater need of financial support.

“We are running the city at a deficit and we are underfunding our police department,” Simon said. “Why would we have a bond that will raise our taxes 50% when we have so many other needs?”

Dunwoody officials refute claims parks bond would defund police

by Cathy Cobbs
October 13, 2023 | 5:09 pm

On November 7, 2023, the bond fell short by 7%, reaching only 43% Yes votes. As a result, some of the planned projects would be postponed or dropped entirely (Sumlin, 2023). In a post-mortem city council meeting, prominent local residents blamed the failure on the city not providing enough information about the bond: a former city councilman argued that “the bond referendum failed because communication was ‘terrible’ and there was no specificity about the projects” (Sumlin, 2023). These sentiments suggest that in addition to the opposition campaign, insufficient disclosure played a role in the election outcome.

Appendix C: Examples of website URLs and word counts

The following snapshot was scraped from the 2017 historical pull of www.townofblowingrocknc.gov/government/2014-community-investment-bonds.

Figure C1: Blowing Rock, NC 2014 Community Bonds URL



The following URL was scraped from the 2017 historical pull of https://www.easton.ma.us/easton_residents/financial_information/.

Figure C2: Easton, MA 2014 Financial Information URL

