Breaking the Bond: The Effect of Banker Turnover on Municipal Bonds*

Natasha Boreyko†

July, 2025

Abstract

This paper explores whether relationships with banks or individual bankers deliver greater value to municipal borrowers. A key identification strategy exploits the quasi-exogenous shock from the 2021 Texas underwriter ban, which barred five of the largest banks from underwriting municipal bonds in the state and triggered widespread banker departures. Using novel data on banker moves, I show that affected municipalities follow their banker at twice the rate of unaffected peers. Instrumenting the follow decision in an IV–DiD framework, I find that following the banker reduces yield spreads by 36 basis points, fully offsetting the ban's 4 basis-point spread increase. These improvements arise via three channels: an informational channel, where unrated issuers lacking public credit signals experience an extra 16 basis-point decline; a network channel, where institutional investors allocate $1 million more per quarter to the banker's new bank; and a banker-quality channel, where following an MBA-educated banker generates an additional 22 basis-point spread reduction. Overall, relationship-specific human capital significantly shapes municipal underwriting outcomes.

Keywords: Relationship Banking, ESG Policies, Public Finance, Municipal Bonds, Underwriters, Labor Market

*I am grateful to Snehal Banerjee, Sugato Bhattacharyya, Andreas Hagemann, Edward Kim, Victor Lyonnet, Andrey Malenko, Nadya Malenko, Amiyatosh Purnanandam, Uday Rajan, Kunal Sachdeva, Savitar Sundaresan, and seminar participants at the University of Michigan for their helpful comments and suggestions. I thank the Mitsui Life Financial Research Center for providing financial support for this research. All mistakes are my own.

†Stephen M. Ross School of Business, University of Michigan nboreyko@umich.edu

1 Introduction

Relationship banking plays a well-established role in traditional lending: banks develop relationships with borrowers, accumulating both hard information - through repeated credit evaluations - and soft information - through firm-specific information gathered by loan officers - that together reduce information asymmetry and secure better financing terms for borrowers (Petersen and Rajan, 1994; Berger and Udell, 2002). In consumer and syndicated lending, human capital plays a significant role as the banker's experience, reputation, and local knowledge help assess risk and allocate funds more accurately (Engelberg, Gao, and Parsons, 2012; Fisman, Paravisini, and Vig, 2017).

The setting is different for investment banks, and particularly for underwriters. They do not lend proprietary capital but instead intermediate between issuers and a broad investor base, earning fees rather than interest income. Existing research therefore analyzes the underwriter mainly at the institutional level, highlighting how bank reputation delivers distribution capacity, certification, and market access (Puri, 1996; Yasuda, 2005; Fang, 2005). What remains largely unexplored is the value created by the individual underwriting banker: while studies of M&A and equity underwriting document that individual bankers can materially affect financing outcomes (Chemmanur, Ertugrul, and Krishnan, 2019), comparable evidence for debt market is absent. Yet even when competitive order books ultimately set yields, a banker can influence investor outreach, information flow, and book quality—factors that may lower underwriting fees or tighten spreads. This paper therefore asks two questions: (i) Does the human capital of a relationship banker affect bond issuance outcomes? (ii) How does that effect compare with the institutional resources and reputation of the bank itself?

This paper fills that gap by isolating the causal contribution of relationship bankers to municipal bond pricing. I assemble a novel panel that links senior bankers' job moves to the bonds they underwrite and exploit an unexpected policy shock that severed established bank–borrower ties, thereby increasing the likelihood that issuers would follow their banker to a new institution. Using an instrumental-variables difference-in-differences (IV–DiD) design, I show that the marginal decision to follow a relocating banker lowers borrowing costs by 36 basis points on average. The gains are not uniform: they are largest for unrated issuers, whose dependence on bankers' soft information is greatest, and for issuers that follow bankers holding an MBA degree, which confers an additional 22 basis-point reduction in spreads. Con-

sistent with bankers retaining investor relationships, institutional investors channel roughly $1 million more in quarterly bond purchases to the banker's new bank. Together, these results underscore the critical role of relationship-specific human capital in municipal bond underwriting.

Two features make this setting uniquely suitable. First, unlike corporate bonds — where multiple banks often share underwriting duties and large banking departments obscure individual contributions — over 90% of municipal deals are underwritten by a single bank, and public finance teams can be as small as a single senior banker. Since a single bank typically serves as lead underwriter, and majority of borrowers retain the same lead underwriting bank for several years, the bank–borrower relationship is both highly visible and sticky.

Second, the level of valuing interpersonal relationships is potentially endogenous: unobserved borrower characteristics (e.g., credit quality) may correlate with the strength of banker ties. I exploit a quasi-exogenous shock — the September 2021 Texas underwriter ban — to disentangle these effects. Texas Senate Bills 13 and 19 barred Texas municipalities from contracting with banks that restrict funding to gas, oil, or firearms industries, barring five of the largest municipal underwriters. This policy induced substantial senior banker mobility: many affected borrowers, whose bank relationships were severed, had the opportunity to follow their individual banker to a new institution, thereby keeping their interpersonal relationship.

I collect novel data on senior municipal banker movements from The Bond Buyer. The Bond Buyer is an industry-leading newspaper and data provider previously employed in studies of government auctions (Garrett, Ordin, Roberts, and Suárez Serrato, 2023; Garrett, 2024; Garrett and Ivanov, 2024; Li, 2024). By analyzing news reports of banker relocations, I link each mover to their borrower relationships by bank and banker's specialization. I restrict the sample to the 81% of bond offerings (96,332 observations) whose relationship banker moved during the period of 2019-2024.

To establish the causal effect of following a relationship banker on municipal bond spreads, I employ an instrumental-variables difference-in-differences (IV-DiD) strategy centered on the 2021 Texas Underwriter Ban. By prohibiting the five largest underwriters from underwriting new municipal bonds, the ban created a sudden, externally imposed severance of borrower–bank ties and generated plausibly random variation in the attractiveness of the "follow the banker" option. This event lowers the relative cost of following the banker (borrowers keep soft information) while leaving the option of staying with the incumbent infeasible. This design identifies a Local

Average Treatment Effect (LATE) for those borrowers whose follow decision was induced by the ban. Relevance is satisfied by a strong first stage: the ban raises follow rates among affected issuers by 14 percentage points. The second stage compares followers and non-followers within the same bank $\times$ quarter, controlling for issuer and time fixed effects and relevant covariates. By differencing within bank $\times$ quarter, I absorb any direct pricing shifts from reduced competition, ensuring the instrument affects spreads only through the follow decision. Monotonicity holds because the ban cannot make following less attractive for any borrower who would otherwise follow pre-ban. This IV–DiD approach, by isolating exogenous shifts in decision incentives, delivers credible causal estimates of the value of individual bankers' human capital in municipal underwriting.

My findings demonstrate that municipalities indeed place substantial value on individual bankers. Affected issuers are three times more likely to follow their senior banker post-ban than before the ban or relative to unaffected peers. In an IV-DiD framework, I show that following the banker reduces borrowing yields by 36 basis points, fully offsetting the 4 basis point increase induced by losing access to a banned bank. These results suggest that, in municipal underwriting, individual human capital can be at least as valuable—if not more so—than the bank's institutional affiliation.

I next investigate the economic channels through which individual bankers may add value. First, I explore the informational channel where bankers gather borrower-specific "soft" information through repeated interactions. To test this mechanism, I focus on unrated municipalities, which lack public credit signals and thus face greater information asymmetry. In an IV–DiD specification, I find that unrated issuers following their banker experience significantly larger yield reductions than an average issuer, consistent with bankers' soft information mitigating informational frictions.

Second, I explore the investor network channel. Beyond relationships with issuers, bankers also develop ties with investors. Using bond-level holdings data, I document that, after a banker switch, institutional investors reallocate a greater share of their municipal bond purchases toward the banker's new bank.

Finally, I examine whether the value that relationship bankers deliver varies systematically with their human-capital quality, as proxied by formal education. Using Revelio data on individual bankers education, I construct an indicator for whether a relocating banker holds an MBA degree and augment the baseline IV–DiD specification with an interaction between this indicator and the instrumented follow decision. The estimates reveal that issuers who follow an MBA-educated banker benefit from

an additional 22-basis-point reduction in yield spreads relative to issuers who follow non-MBA bankers. This heterogeneous effect is economically meaningful—roughly two-thirds of the average follow premium—and suggests that advanced managerial training further amplifies the informational and network advantages that relationship bankers carry across banks.

Together, these findings demonstrate that individual human capital operates through both soft-information production and investor-network channels, reinforcing that banker relationships can be at least as important as, and potentially more valuable than, the bank's institutional affiliation in municipal underwriting.

This study contributes to the literature on relationship banking. Prior studies show that personal connections and interactions between bankers and borrowers significantly shape loan financing outcomes. For example, interpersonal linkages between CEOs and bankers can result in improved financing terms (Engelberg et al., 2012), while individual loan officers have substantial influence over loan spreads, covenants, and performance outcomes (Bushman et al., 2021). Similarly, Herpfer (2021) finds that strong banker relationships in the syndicated loan market lead to lower borrowing costs, especially benefiting unrated borrowers. Further, cultural proximity and common social background between loan officers and borrowers facilitate better credit outcomes (Fisman et al., 2017; Frame et al., 2025). Conversely, disruptions in borrower-banker relationships, such as a loan officer going on leave, adversely impact borrowers' ability to secure new financing and increase their default risk (Drexler and Schoar, 2014). My contribution builds upon these insights by providing evidence that relationships at the individual banker level may indeed matter more than institutional-level relationships, specifically in the context of municipal bond underwriting.

Complementing this, a growing body of research on human capital in financial intermediation emphasizes how an intermediary's individual expertise influences transaction outcomes through deal structuring, industry knowledge, and investor connections. For example, experienced investment bankers have been shown to positively affect M&A outcomes, emphasizing the value of individual advisor expertise (Chemmanur et al., 2019; Gao et al., 2024). Similarly, fund managers' human capital strongly shapes investor behavior, with greater managerial talent attracting higher investor flows and influencing fund size (Ibert et al., 2018). Human capital also impacts venture capital markets, where individual VC partners significantly influence startup success and valuation (Ewens and Sosyura, 2023). Furthermore, the private

information held by bankers about their borrowers can create hold-up problems, influencing borrowing costs (Santos and Winton, 2008), and the portability of client relationships is a critical determinant of financial advisers' career decisions (Gurun et al., 2021). My paper complements and extends these findings by assembling novel data on senior bankers in municipal bond underwriting, providing empirical evidence of how bankers' human capital directly shapes underwriting outcomes — a dimension previously unexplored in the bond market context.

This paper relates to Garrett and Ivanov (2024), who studies the effect of the Texas underwriter ban on municipal financing outcomes. My findings are consistent with their conclusion that affected borrowers incur additional costs due to the ban. This paper differs from Garrett and Ivanov (2024) in an important way. I shift the focus from institutional bank relationships to the role played by individual bankers. Unlike Garrett and Ivanov (2024), who analyzes the effects of severed institutional ties due to the Texas underwriter ban, my analysis explicitly uses banker-level mobility data to identify how individual bankers create value distinct from their institutional affiliation.

The rest of the paper is organized as follows. Section 2 discusses the institutional details of the Texas underwriter ban and unique features of the municipal bond market. Section 3 describes the data. Section 4 explains the methodology. Section 5 presents results of the main empirical analysis. Section 6 concludes.

2 Institutional Background

The municipal bond market is a major source for public sector financing in the U.S., supporting critical infrastructure projects such as schools, highways, sewer systems, and sports facilities. In 2024 alone, new issuances in municipal bond market totaled approximately $508 billion, with Texas emerging as one of the largest contributor, accounting for around $68 billion, or roughly 13% of total U.S. issuance[1].

The municipal bond market is notably characterized by stable, long-term relationships between borrowers and their underwriters. The summary statistics presented in Table 1 highlight that, on average, municipal borrowers in Texas issue bonds every 1.14 years and maintain about 2.28 bank relationships over a five-year horizon. Notably, around 60% of borrowers consistently engage with only a single bank over three-year period before the ban.

[1]Source: https://www.msrb.org/sites/default/files/2025-01/MSRB-2024-Municipal-Market-Year-in-Review.pdf

However, these stable borrower-underwriter relationships were significantly disrupted following the introduction of Texas Senate Bills 13 and 19. In March 2021, Texas Senate proposed SB 13, which barred banks that restrict credit to the oil and gas sector from participating in Texas public finance markets. Alongside SB 13, the legislature also implemented SB 19, which prohibits state and local governments in Texas from contracting with financial institutions that limit business with the firearms industry. Both measures became active on September 1, 2021. These anti-ESG laws effectively forced the five largest municipal bond underwriters—Citi, Bank of America, JPMorgan Chase, Goldman Sachs, and Fidelity—to exit the Texas municipal bond market. Before the ban, these underwriters jointly held approximately 40% of the market share, which fell to nearly zero in the aftermath, as illustrated in Figure 2.

Importantly, the ban was both unexpected and unrelated to borrower fundamentals, making it a plausibly exogenous shock for empirical analysis. Garrett and Ivanov (2024) study the broader consequences of the legislation and find that the observed deterioration in financing outcomes can be attributed to reduced market competition and the loss of information stemming from severed banking relationships. Building on this institutional setting, my analysis focuses on the value added by individual senior bankers, allowing me to isolate their contribution from that of the broader financial institution.

3 Conceptual Framework

To fix ideas, I introduce a simple discrete-choice framework that highlights the informational advantage of a relationship banker. In this setting, both the bank and the banker possess soft information about the borrower, and when the banker switches institutions, she takes her private knowledge with her. The central question is how a borrower weighs the option of following its relationship banker against the alternatives of remaining with its incumbent bank or moving to a completely new financial institution. This model helps motivate how the banker's soft-information value shapes the spreads observed in the data.

I consider a borrower who needs to issue a bond and chooses among one of three banks: $j \in \{A, B, C\}$, where Bank A is the borrower's incumbent bank, Bank B is a new entrant that hires the borrower's relationship banker away from A, and Bank C is an outside bank with no prior link to the borrower or her banker.

The borrower selects the bank that minimizes her final spread, which is defined as

$$\text{Spread}_j \;=\; \rho \;-\; \left[h + \lambda_j^{bank} + \lambda_j^{banker}\right] \;+\; k_j, \tag{1}$$

where ρ is the common investor-demand component (assumed equal across all banks), h is the public "hard" information value (also identical across banks), λ_j^{bank} is the soft information generated by bank j, λ_j^{banker} is the soft information carried by the relationship banker if she works at j, and k_j is a one-off switching cost. We assume $k_A = 0$ for the incumbent and $k_B > 0,\ k_C > 0$ for the two new banks.

To capture the idea that only the incumbent bank has an institutional relationship but only Bank B has the relationship banker, I impose: $\lambda_A^{bank} \neq 0, \quad \lambda_A^{banker} = 0; \qquad \lambda_B^{bank} = 0, \quad \lambda_B^{banker} \neq 0; \qquad \lambda_C^{bank} = 0, \quad \lambda_C^{banker} = 0.$

The underlying assumption in our framework is that soft information affects borrower outcomes asymmetrically: while both banks and bankers may learn borrower-specific positive and negative information, only favorable components are disclosed to investors. This assumption is supported by recent literature on issuer–underwriter relationships. For example, Garrett (2024) shows that dual-role municipal advisors—who simultaneously advise and underwrite—often withhold negative information to secure underwriting mandates, thereby harming borrower outcomes. In the corporate setting, Chemmanur and Fulghieri (1994) formalize a certification hypothesis in which underwriters use reputation to certify issuer quality, but may also suppress adverse information to maintain deal flow.

These findings motivate the structure of our framework: soft information is valuable to borrowers, yet selectively revealed by underwriters. In our setting, Bank A contributes institutional soft information, while Bank B, through the relocating banker, provides banker-specific soft information; both are assumed to reduce the borrower's spread when disclosed. The borrower thus faces a trade-off between remaining with Bank A to retain institutional knowledge, or following her banker to Bank B to preserve the personal relationship—net of any switching costs. Bank C, by contrast, lacks access to either form of soft information and therefore offers the least favorable terms under this informational structure.

Borrower's endogenous choice with Bank A available

The borrower chooses the bank that minimizes her final spread by solving

$$j^* \;=\; \arg \min_{j \in \{A,B,C\}} \text{Spread}_j$$

Bank A will be chosen over Bank B precisely when

$$\text{Spread}_A < \text{Spread}_B \quad \Longleftrightarrow \quad \lambda_A^{bank} > \lambda_B^{banker} - k_B$$

Thus, even though both banks benefit from the same hard information h, the borrower prefers Bank A only if its institutional soft information exceeds the banker's soft information at Bank B after accounting for the switching cost k_B.

Bank A is unavailable, borrowers should choose between B and C

Once the ban eliminates Bank A as an option, the borrower's choice set reduces to $\{B, C\}$. The borrower will choose Bank B (the "follow" option) when its spread is lower than that at Bank C:

$$\text{Spread}_B < \text{Spread}_C \quad \Longleftrightarrow \quad -\big[h+\lambda_B^{bank}+\lambda_B^{banker}\big]+k_B \;<\; -\big[h+\lambda_C^{bank}+\lambda_C^{banker}\big]+k_C.$$

Under our maintained assumptions $\lambda_B^{bank} = \lambda_C^{bank} = \lambda_C^{banker} = 0$, this condition simplifies to

$$\lambda_B^{banker} - k_B > -k_C,$$

Since

$$\frac{\partial\, \Delta\text{Spread}_{C\text{–}B}}{\partial \lambda_B^{banker}} = 1 > 0,$$

a larger banker-soft-information value λ_B^{banker} unambiguously increases the attractiveness of Bank B relative to Bank C once Bank A is no longer available.

Eliminating Bank A and the reallocation of choice probabilities

Under the logit choice rule derived in Appendix A, the probability of following the relationship banker is $\Pr_3(B) = \frac{X}{Z+X+Y}$ when all three banks (A, B, C) are available, and becomes $\Pr_2(B) = \frac{X}{X+Y}$ after Bank A is banned.

Because $X, Y, Z > 0$, the difference

$$\Pr_2(B) - \Pr_3(B) = \frac{XZ}{(X+Y)(Z+X+Y)} > 0 \tag{2}$$

is strictly positive: eliminating Bank A always raises the likelihood of choosing B.

The size of this increase depends on how attractive B is relative to C. Appendix A shows that the ratio of absolute gains satisfies

$$\frac{\Pr_2(B) - \Pr_3(B)}{\Pr_2(C) - \Pr_3(C)} = \frac{X}{Y} = \exp\big(\lambda_B^{\text{banker}} - k_B + k_C\big).$$

Hence Bank B captures a larger share of the clientele displaced from A precisely when

$$\lambda_B^{\text{banker}} > k_B - k_C, \tag{3}$$

that is, when the banker's soft-information advantage outweighs the difference in switching costs.

Hypotheses and empirical implications

This simple framework yields several implications that motivate the empirical design and provide the basis for testable hypotheses. First, it implies that when Bank A is exogenously removed by the ban, it mechanically boosts the probability of following the banker, and the magnitude of that boost is determined by the trade-off between the banker's informational value and the borrower's switching costs. The larger is $\lambda_B^{\text{banker}}$ relative to $k_B - k_C$, the greater the take-up of the follow option. In the data, this consideration underpins the instrument's relevance, which is verified by a positive and significant first-stage coefficient on the *Post* $\times$ *Affected* interaction.

Second, the framework yields an expression for the post-ban spread gap between following and not following,

$$S_C - S_B \;=\; \lambda_B^{\text{banker}} \;-\; (k_B - k_C),$$

so that borrowers obtain strictly lower yields when the banker's soft-information value exceeds the incremental switching cost. This observation leads to the central hypothesis of interest:

Hypothesis 1. Affected borrowers that follow their banker obtain lower borrowing

costs than affected borrowers that do not follow.

Because the decision to follow is attractive only when $\lambda_B^{\text{banker}} > k_B - k_C$, the compliers identified by the IV design—affected borrowers who switch to Bank B because Bank A is unavailable—are precisely those for whom the banker's information premium outweighs the added cost of moving. Empirically, such borrowers are expected to be firms that place a high value on soft information, for instance, unrated or infrequently issuing municipalities.

Hypothesis 2. Borrowers who place greater value on soft information should experience a larger benefit from following their banker.

4 Data

To examine the effect of following a banker on financing outcomes, I construct a dataset comprising three main components. The first and primary component involves novel data collection on senior banker job movements. The second component includes information on municipal bonds, along with details about the bond underwriters. The third component consists of data on investor holdings of municipal bonds.

4.1 Banker career movements

The crucial component of the empirical analysis is a newly compiled dataset detailing senior banker movements in public finance industry. I collect data on senior banker mobility from The Bond Buyer. The Bond Buyer is an industry-leading newspaper and data provider that comprehensively covers the U.S. public finance sector. It was previously employed in studies of government auctions (Garrett, Ordin, Roberts, and Suárez Serrato, 2023; Garrett, 2024; Garrett and Ivanov, 2024; Li, 2024). My primary contribution involves analyzing an underexplored feature of this data source — news articles published in the dedicated section titled "People on the move in public finance." This section provides rich details on senior bankers, including their previous and new job titles, associated bank names, market and geographic specializations, professional experience, and their respective team members.

To ensure accuracy and completeness of the collected data, I cross-reference each reported job transition using the LinkedIn profiles of individual bankers, thereby verifying key details such as date of movement, job titles, and areas of specialization.

The finalized dataset encompasses information on 220 senior bankers who changed positions during the period from 2019 to the third quarter of 2024. I restrict the sample to 2024:Q3 because, during that period, several banks began announcing the complete closure of their municipal underwriting departments. To avoid conflating banker mobility with broader organizational exits or industry-wide contractions, I truncate the sample in that quarter [2].

Subsequently, I establish banker-borrower relationships by merging banker profiles with borrowers based on the lead underwriter affiliation and market specialization. For instance, a banker specializing in education finance who joins an underwriter that serves school districts is matched with corresponding school borrowers. Analogous matching is executed for bankers and borrowers specializing in other sectors, including hospitals, airports, and similar specialized municipal entities.

4.2 Bond data

I collect data on all municipal bonds from the SDC Platinum database issued from 2019 to 2024. The analysis starts in 2019 to ensure enough observations before the Texas underwriter ban in September 2021. For each municipal bond deal, I collect information on issuer name, bond issuance date, maturity date, issuer type, bid type, security type, bond rating, use of proceeds, yield to maturity at issuance, coupon payment, and lead underwriters.

4.3 Investor Bond Holdings

I obtain data on institutional investors' holdings of municipal bonds from Thomson Reuters eMAXX. This database provides comprehensive quarterly data on fixed income holdings by insurance companies, mutual funds, and pension funds, which I collectively refer to as "institutional investors" or "investors". For prior studies that use eMAXX data, see Manconi et al. (2012); Becker and Ivashina (2015); Cai et al. (2019); Li et al. (2024), among others.

The eMAXX investor holdings data is available for 34,074 municipal bonds, which is approximately 30% of the full sample. A potential limitation of the eMAXX data is that it does not cover holdings by households, banks, or government entities. However, this limitation is mitigated by the fact that institutional investors account for an average of 58% of holdings in these bonds. Thus, while incomplete, the eMAXX data

[2] See Bloomberg (2024): "Citigroup, UBS Exit Munis After Market's Profits Plummet by 50%", June 21, 2024.

still provides meaningful coverage of the institutional investor bond holdings relevant for this analysis.

5 Empirical Strategy

In this section, I outline the empirical strategy for estimating how following a banker to a new bank affects financing outcomes for borrowers.

5.1 Simple OLS

I begin the analysis by examining how following the banker affects bond pricing using a simple OLS regression. I construct a bond-level sample in which each observation is a municipal bond issued in Texas between 2019 and 2024. The main variable of interest is *Spread*, defined as the difference between the yield-to-maturity at issuance and the maturity-matched yield on the Municipal Market Advisors (MMA) AAA-rated curve, measured on the dated date of issuance. This definition of spread follows standard practice in the literature (Dagostino and Nakhmurina, 2023). Calculating spreads in this way controls for the prevailing risk-free rate and the term structure at the time of issuance, isolating issuer-specific credit and liquidity effects. I estimate the following regression model:

$$Spread_{i,b,t} = \beta \times FollowBanker_{i,t} + \delta_i + \sigma_b + \gamma_t + u_{i,b,t}, \tag{4}$$

where $Spread_{i,b,t}$ is the spread on the bond issued by municipality i through bank b in period t. The variable $FollowBanker_{i,t}$ is a binary indicator equal to 1 if issuer i establishes a new banking relationship with the bank b that hired its prior relationship banker by quarter t. The relationship banker is defined as the banker whose specialization matches the municipality's type (e.g. school, hospital, airport). γ_t, δ_i, and σ_b denote quarter, issuer, and bank fixed effects, respectively.

The result of the estimation is presented in Table 3. The estimate in column (1) shows that issuers who follow their banker to a new bank experience a statistically significant reduction in bond yield spreads. Specifically, these borrowers see a 1 basis-point decrease—equivalent to a 3 percent reduction relative to the sample mean. Column 2 re-estimates the same specification on the subsample of issuers directly affected by the ban and shows an even larger spread decline of 3 basis points. Column (3) focuses on the subsample of issuers whose relationship banker moved and likewise finds that following the banker is associated with significantly lower yield spreads.

5.2 Instrumental-Variables Difference-in-Differences (IV–DiD)

The OLS estimates cannot be interpreted causally because the decision to follow a banker is endogenous and is likely driven by borrower-specific unobservable characteristics. For example, borrowers have private information about their credit quality and about the value of their relationship banker; both factors can lead to lower spreads and increase the likelihood of following. As a result, OLS conflates the unobservable soft-information banker's premium with borrower self-selection, biasing the estimated effect of following upward and understating the magnitude of the true borrowing-cost reduction.

The ideal empirical approach to isolate the causal effect of following the banker on bond prices would be to move the banker, randomly assign borrowers to following, and observe subsequent borrower outcomes. Since this exact experiment is not feasible in practice, I exploit a quasi-natural experiment—the Texas Underwriter Ban of September 2021—as an identifying.[3] This legislation prohibited the five largest municipal underwriters (Citi, JPMorgan, BofA, Goldman Sachs, and Fidelity) from underwriting new Texas issues due to their fossil-fuel and firearms policies. The ban abruptly severed incumbent borrower–bank relationships and forced senior public-finance bankers to relocate, requiring municipalities either to follow their banker (choose bank B in my setting) or establish entirely new underwriting relationships (choose bank C). Thus, this regulatory event exogenously altered the borrower's choice set, increasing the likelihood of following the banker and providing the exogenous variation needed to identify the effect of maintaining banker relationships.

Relevance Condition

An instrument must be strongly correlated with the endogenous treatment variable so that it injects exogenous variation into that variable and allows its causal effect to be identified. To operationalize this strategy, I use the interaction term $PostBan_t \times Affected\ Issuer_i$ as an instrument, exploiting the quasi-exogenous nature

[3] Our identification strategy follows the logic of Hu (2017), who shows that when a regressor is endogenous in every group of the observations, an exogenous partition can still identify its causal effect if the partition shifts the latent variable but is conditionally independent of the outcome shock. In our setting, the follow decision is endogenous for both "affected" and "unaffected" issuers, yet the Texas underwriter ban shifts the probability of following only through the borrower's exposure to the policy, leaving idiosyncratic pricing shocks untouched once we condition on banker quality and fixed effects. Thus, the interaction $PostBan \times Affected\ Issuer$ plays the same instrumental role as Hu's grouping variable: it generates quasi-random variation in the endogenous follow choice that is orthogonal to unobserved spread determinants.

of this regulatory shock. Specifically, I estimate the following first-stage regression:

$$\textit{Follow Banker}_{ibt} = \pi\,(\textit{PostBan}_t \times \textit{Affected Issuer}_i) + X'_{it}\phi + \rho\, HHI_t + \gamma_t + \delta_i + \sigma_{b*t} + u_{ibt}. \tag{5}$$

Table 4 indicates that the interaction instrument raises the probability of following by 14 percentage points—a 74 percent increase over the mean follow rate of 0.19—and generates a first-stage F-statistic of 22, satisfying the relevance condition.

Identification Assumptions

It is important to note that target selection is independent from characteristictis that can confound our estimates. Specifically, panel A of Table 2 documents that, in the quarter immediately preceding the ban, banned and non-banned underwriters were statistically indistinguishable in their Texas market presence and in the average yields paid by their municipal clients. Because the legislation targeted banks' ESG policies—a dimension orthogonal to municipal credit fundamentals—the timing and assignment of treatment are plausibly exogenous to borrower quality and to the banker's private information.

This evidence supports the instrument's exogeneity, still it remains necessary to rule out alternative pathways— beyond banker mobility —through which the ban might affect borrowing costs, lest the exclusion restriction be violated. An example of the violation of the exclusion restriction is that lower underwriting competition could raise spreads for all affected borrowers. To neutralize this channel, the second stage includes bank × quarter fixed effects, so identification comes from price differences between followers and non-followers served by the same underwriter in the same quarter. Any level shift in that bank's pricing is absorbed by the fixed effects, leaving only the differential effect attributable to retaining the banker. Moreover, the suggested violation of exclusion restriction pushes spreads upward while the following decision pulls them downward, the direct-price channel biases my IV estimate toward zero. The negative IV coefficient should therefore be interpreted as a conservative lower bound on the true benefit of retaining one's relationship banker.

Further, the instrument satisfies the monotonicity condition by ruling out defiers—borrowers who would follow absent the ban but would not follow once it takes effect. The ban cannot make following less attractive for borrowers who would otherwise follow their banker pre-ban.

Second Stage

In the second stage, the outcome variable is $Spread_{it}$, the yield-to-maturity at issuance relative to the maturity-matched yield from the Municipal Market Advisors (MMA) AAA-rated curve. To align with this identifying variation, I restrict the sample to the 83% of bonds (96,332 observations) whose relationship banker moved during 2019–2024.

$$Spread_{it} = \beta \widehat{Follow\ Banker}_{ibt} + X'_{it}\phi + \rho\, HHI_t + \zeta_t + \eta_i + \tau_{b*t} + \epsilon_{ibt}. \tag{6}$$

Because the instrument shifts the follow decision only for affected issuers after the ban, β is a Wald estimator that recovers the Local Average Treatment Effect for compliers: those borrowers induced by the ban to follow their banker. In other words, the coefficient measures the causal reduction in borrowing costs observed for municipalities that would not have followed absent the shock but do so when their incumbent bank is banned.

Summary of Identification

The Texas Underwriter Ban offers a quasi-experimental shock that is (i) unrelated to borrower credit risk, (ii) strong enough to predict the follow decision, (iii) monotonic in its effect on following, and (iv) rendered orthogonal to price-level shifts by the within bank and quarter research design. These features together satisfy the IV assumptions, allowing equation (6) to deliver a credible causal estimate of the value of retaining one's relationship banker.

5.3 General Effect of the Ban: Reduced Form

To estimate the reduced-form effect, I examine how the Texas underwriter ban affected borrowing costs for exposed municipalities. Following Garrett and Ivanov (2024), I estimate a difference-in-differences (DiD) specification, regressing *Spread* on the interaction term *Post* × *Affected Issuer*, where $AffectedIssuer_i$ is an indicator equal to one for municipalities whose historical reliance on the banned banks exceeded 10%, and $Post_t$ equals one for bonds issued after September 2021.

The results in Table 5, column (1) show that affected issuers pay 4 bps higher spreads post-ban relative both to their own pre-ban levels and to unaffected peers. This aligns with Garrett and Ivanov (2024) and suggests that losing a banking relationship imposes a measurable cost on borrowers.

Next, I focus on the subsample of municipalities whose relationship banker moved to another bank and not moved. Table 5, columns (2) report DiD estimates for issuers whose relationship banker moved to a non-banned institution. Column (3) reports the estimate for the issuers whose relationship banker did not move. In the banker-mover subsample (column 2), the coefficient remains 0.04 and statistically significant, implying a 4 bps increase in spreads. Given an average spread of roughly 58 bps, this represents a 7% rise in borrowing costs. In contrast, issuers whose banker did not move (column 3) show no significant post-ban change in spreads.

6 Results

6.1 Main Result

This section presents the main empirical findings from the IV-DiD framework, which estimates the effect of following a banker on municipal bond pricing induced by the Texas underwriter ban. The omitted category throughout the analysis consists of "non-followers"—issuers who did not follow their relationship banker to a new institution.

Table 4 presents estimates from the instrumental variables difference-in-differences (IV-DiD) specification outlined in equations (3) and (4), along with the reduced-form specification from equation (1). Column (2) reports the first-stage estimate, where the excluded instrument is the interaction term *Post* × *Affected Issuer*. The first-stage F-statistic is 22.57, indicating that the instrument is sufficiently strong. The estimated coefficient of 0.14 suggests that affected issuers are significantly more likely to follow their relationship banker to a new bank after the implementation of the ban.

Column (3) reports the second-stage estimate of the effect of following a banker on borrowing costs. The dependent variable is the yield spread, measured as the yield at issuance relative to the benchmark municipal bond curve. The coefficient of -0.36 is statistically significant at the 5% level, implying that following a relationship banker is associated with a substantial reduction in borrowing costs. This result represents the central finding of the paper, as it underscores the economic value embedded in relationships with an individual banker. Specifically, the evidence suggests that relationship-specific human capital held by individual bankers plays a critical role in lowering borrowing costs, even when broader institutional ties are severed. This finding contributes to the literature on financial intermediation by emphasizing the importance of personal rather than purely institutional relationships, and it highlights

the banker-specific nature of borrower-underwriter value creation in municipal bond markets.

6.2 Suggestive Evidence for Economic Mechanisms

The results presented thus far demonstrate that relationships with individual bankers play a significant role in reducing borrowing costs. I now turn to the question of what makes these relationships so valuable. There are two potential channels through which bankers may add value: an informational channel and an investor relationship channel.

The first is an informational channel, which reflects the banker's ability to reduce information asymmetry between borrowers and the market. In the lending literature, it is well established that bankers can acquire soft information about borrowers and use it to improve loan terms for borrowers (Fisman et al., 2017; Frame et al., 2025). It is plausible that a similar mechanism operates in the municipal bond market, where soft information may help underwriters better price risk and match borrowers with suitable investors. To explore this channel, I examine a subsample of borrowers without credit ratings, for whom asymmetric information is likely to be more severe, and assess whether the effect of following a banker has a larger effect on bond pricing in this group.

Table 6 presents IV-DiD estimates for the subsample of unrated borrowers. Column (1) reports the first-stage estimate, with a Kleibergen–Paap F-statistic of 10.58, indicating a sufficiently strong instrument. Column (2) reports the second-stage coefficient of -0.52, which is statistically significant at the 10% level. This effect magnitude exceeds the corresponding estimate for the full sample (-0.36), suggesting that, for unrated borrowers who face greater information asymmetry following their relationship banker yields larger savings in borrowing costs. In other words, bankers appear to add relatively more value when public information on borrower quality is limited.

The second channel through which individual bankers may add value relates to their ability to maintain relationships with investors. Unlike in the lending market, where banks use their own balance sheets to extend credit and investor relationships are largely irrelevant, the bond market involves a distinct intermediation role, as bankers simultaneously interact with both the demand and supply sides of the market. In this setting, bankers develop relationships not only with issuers but also with investors.

To investigate whether bankers preserve their investor networks when switching to a new institution, I examine changes in investor behavior following banker job transitions. Using detailed data on institutional holdings of municipal bonds, I analyze whether investors shift their allocations toward banks that hire their prior relationship banker. Specifically, I test whether investors initiate new relationships with the banker's new bank and whether they reallocate flows measured through changes in holdings toward bonds underwritten by the new bank of the banker. This analysis provides insight into whether the informational and relational capital held by bankers extends beyond borrowers to the investor side of the market.

To examine the role of bankers in maintaining investor relationships, I construct an investor-bank-quarter panel that captures all possible interactions between institutional investors and banks. The unit of observation is an investor–bank pair in each quarter during which the investor is active in the municipal bond market. I employ a triple difference-in-differences specification to analyze both the formation of new investor–bank relationships and the reallocation of capital flows toward banks that hire a relationship banker. The coefficient of interest on the triple interaction term, *Post* × *Affected Investor* × *Bank Hired Banker*, reflects how investors exposed to the Texas underwriter ban change their behavior following the disruption, specifically in response to banker movements.

Table 7 presents the results of this estimation. Column (1) examines whether affected investors are more likely to initiate new relationships with banks that hire their former relationship banker. Here, *Affected Investor* is defined as an investor with at least 50% of its historical underwriting activity concentrated among the banned banks. Under this criterion, approximately 21% of investors are classified as affected. The estimated coefficient in column (1) is not statistically significant, suggesting that investors do not systematically form new relationships with the hiring bank. One possible explanation for this insignificant result is that institutional investors already maintain broad and overlapping networks with underwriters; as a result, there may be limited scope for new relationship formation if the investor already transacts with the hiring bank.

Columns (2) and (3) report estimates of the effect of banker mobility on capital flows to the hiring bank. Specifically, these columns assess whether institutional investors increase their allocations to banks that employ their prior relationship banker. The estimate in Column (2) suggests that affected investors allocate, on average, an additional $1.05 million to the bank that hired their relationship banker following

the ban. When investor-quarter fixed effects are included to absorb time-varying investor-level shocks, the estimate in column (3) yields a more conservative, but still economically meaningful, effect of $798,000. These results suggest that investors reallocate capital toward banks that acquire their relationship banker, consistent with the interpretation that bankers carry valuable buy-side relationships with them when they switch financial institutions. This evidence supports the existence of an investor relationship channel through which bankers can add value in the municipal bond market.

Together, these results provide robust evidence that individual bankers play a significant role in shaping financing outcomes for municipal borrowers.

6.3 Banker Quality: MBA Credential

Previous analysis suggests that relationship bankers generate positive financing advantages for their clients, likely through the transmission of soft information and investor networks. I now examine whether the value added varies systematically with banker characteristics. Banker's education is observable ex-ante and verifiable by both issuers and investors. Consequently, an MBA credential serves as a tractable proxy for banker quality, enabling me to examine heterogeneous human-capital effects.

Extensive evidence across executives and financial intermediaries links advanced degrees to superior decision-making. Studies of corporate executives show that MBA-educated CEOs are associated with stronger operating performance and valuation multiples (Chevalier and Ellison, 1999; King et al., 2016; Li et al., 2011). Similar evidence at the intermediary level demonstrates that analysts with specific educational credentials issue more accurate earnings forecasts (De Franco and Zhou, 2009; Cao et al., 2022).

This literature motivates my investigation of whether similar educational advantages emerge in the bond underwriting markets. I examine whether issuers who follow a banker holding an MBA degree realize larger reductions in the primary-market yield spreads than those who follow non-MBA bankers. To identify this heterogeneous treatment effect, I extend the baseline IV-DiD framework by interacting both the endogenous follow decision and its instrument with a binary indicator has_MBA. Specifically, I estimate

$$Spread_{ibt} = \beta_0 \widehat{Follow}_{ibt} + \beta_1 \left(\widehat{Follow}_{ibt} \times has\_MBA_b \right) + \theta\, has\_MBA_b + X'_{it}\phi + \rho\, HHI_t + \zeta_t + \eta_i + \tau_{b*t} + \varepsilon_{ibt}. \quad (7)$$

where has_MBA_b equals 1 if banker b held an MBA at the time of the move. Here, β_1 captures the incremental spread reduction attributable to following an MBA banker.

Column (2) of Table 8 reports the result: following an MBA banker reduces yield spreads by an additional 22 basis points (SE = 0.11) relative to following a non-MBA banker.

This finding is consistent with the two economic channels proposed earlier. First, MBA education can enhance the banker's capacity to screen projects, sharpening the banker's ability to convey valuable soft information. Second, MBA degree extends banker's network and can enable the banker to secure stronger investor support, consistent with evidence that social ties boost capital-market outcomes (Engelberg et al., 2012). Taken together, the results suggest that banker's education is an important source of the financing advantage conveyed by relationship banking. This reinforces the view that human capital—not merely institutional reputation—drives value creation in municipal underwriting.

7 Discussion

7.1 Comparing Bank and Banker Value

The results from my analysis suggest that relationships with individual bankers add value. A natural follow-up question is how this value compares with the value created by the banking institution itself. Using the empirical moments already estimated, I can infer the relative importance of bankers versus banks.

Earlier results show that retaining a relationship banker lowers yield spreads by 36 bps. The 2021 Texas ban, on average, raised spreads by 4 bps. To decompose this average effect, let λ^{banker} denote the spread change from keeping the banker and $-\lambda^{bank}$ be the cost of losing the bank. Under the additive framework (see Appendix A for assumptions), the reduced-form effect satisfies

$$\text{AverageEffect} \;=\; \rho_f\big(\lambda^{\text{banker}} - \lambda^{\text{bank}}\big) \;+\; (1-\rho_f)\big(-\lambda^{\text{bank}}\big). \quad (8)$$

where ρ_f is the share of issuers who followed their banker post-ban. Plugging in $\rho_f = 0.56$, $\lambda^{\text{banker}} = -36$ bps, and AverageEffect $= +4$ bps into (8) gives

$$\hat{\lambda}^{\text{bank}} = -24 \text{ bps}.$$

Hence, losing the bank raises yields by 24 bp, whereas keeping the banker reduces them by 36 bps. Therefore, the magnitude of the banker effect is about ≈ 1.5 times the bank effect.

8 Conclusion

This paper examines the value added by individual bankers in the municipal bond market, using the unexpected and institutionally-driven shock the 2021 Texas underwriter ban. Using a novel dataset of senior banker movements and an IV-DiD strategy instrumented by the exogenous shock, I estimate the effect of following a relationship banker on municipal bond yield spreads. The findings consistently show that issuers who follow their banker to a new institution after the ban benefit from significantly lower borrowing costs—on average, 36 basis points relative to otherwise similar non-followers. Compared with the 4 basis point increase in borrowing costs due to the underwriter ban, these results suggest that maintaining relationships with individual bankers helps mitigate the adverse effects of losing a connection to the bank.

I investigate two channels through which individual bankers can create additional value. First, I provide evidence that bankers mitigate information asymmetry more effectively for unrated borrowers. This finding is consistent with the notion that bankers accumulate soft information about a borrower's creditworthiness and use it to improve bond pricing. Second, I examine the investor side of the municipal bond market and show that institutional investors follow their relationship banker when that banker switches to a new bank. This finding suggests that bankers serve as intermediaries who develop and maintain relationships on both sides of the market, facilitating the matching of borrowers with investors. Together, these results highlight the dual role of individual bankers in transmitting private information and mobilizing investor demand, underscoring their importance as relationship-specific assets in financial intermediation.

References

Becker, Bo, and Victoria Ivashina, 2015, Reaching for yield in the bond market, *The Journal of Finance* 70, 1863–1902.

Berger, Allen N, and Gregory F Udell, 2002, Small business credit availability and relationship lending: The importance of bank organisational structure, *The Economic Journal* 112, F32–F53.

Bushman, Robert, Janet Gao, Xiumin Martin, and Joseph Pacelli, 2021, The influence of loan officers on loan contract design and performance, *Journal of Accounting and Economics* 71, 101384.

Cai, Fang, Song Han, Dan Li, and Yi Li, 2019, Institutional herding and its price impact: Evidence from the corporate bond market, *Journal of Financial Economics* 131, 139–167.

Cao, Sheng, Shuang Xue, and Hongjun Zhu, 2022, Analysts' knowledge structure and performance, *Accounting & Finance* 62, 4727–4753.

Chemmanur, Thomas J, Mine Ertugrul, and Karthik Krishnan, 2019, Is it the investment bank or the investment banker? A study of the role of investment banker human capital in acquisitions, *Journal of Financial and Quantitative Analysis* 54, 587–627.

Chemmanur, Thomas J, and Paolo Fulghieri, 1994, Investment bank reputation, information production, and financial intermediation, *The Journal of Finance* 49, 57–79.

Chevalier, Judith, and Glenn Ellison, 1999, Are some mutual fund managers better than others? Cross-sectional patterns in behavior and performance, *The Journal of Finance* 54, 875–899.

Dagostino, Ramona, and Anya Nakhmurina, 2023, Risk sharing in a political union, *Available at SSRN 4480061* .

De Franco, Gus, and Yibin Zhou, 2009, The performance of analysts with a cfa designation: The role of human-capital and signaling theories, *The Accounting Review* 84, 383–404.

Drexler, Alejandro, and Antoinette Schoar, 2014, Do relationships matter? Evidence from loan officer turnover, *Management Science* 60, 2722–2736.

Engelberg, Joseph, Pengjie Gao, and Christopher A. Parsons, 2012, Friends with money, *Journal of Financial Economics* 103, 169–188.

Ewens, Michael, and Denis Sosyura, 2023, Irreplaceable venture capitalists, Technical report, Working paper.

Fang, Lily Hua, 2005, Investment bank reputation and the price and quality of underwriting services, *The Journal of Finance* 60, 2729–2761.

Fisman, Raymond, Daniel Paravisini, and Vikrant Vig, 2017, Cultural proximity and loan outcomes, *American Economic Review* 107, 457–492.

Frame, W Scott, Ruidi Huang, Erica Xuewei Jiang, Yeonjoon Lee, Will Shuo Liu, Erik J Mayer, and Adi Sunderam, 2025, The impact of minority representation at mortgage lenders, *The Journal of Finance* 80, 1209–1260.

Gao, Janet, Wenyu Wang, and Yufeng Wu, 2024, Human capital portability and careers in finance, *The Review of Financial Studies* 37, 2732–2778.

Garrett, Daniel, and Ivan Ivanov, 2024, Gas, guns, and governments: Financial costs of anti-esg policies, *Jacobs Levy Equity Management Center for Quantitative Financial Research Paper* .

Garrett, Daniel, Andrey Ordin, James W Roberts, and Juan Carlos Suárez Serrato, 2023, Tax advantages and imperfect competition in auctions for municipal bonds, *The Review of Economic Studies* 90, 815–851.

Garrett, Daniel G, 2024, Conflicts of interest in municipal bond advising and underwriting, *The Review of Financial Studies* 37, 3835–3876.

Gurun, Umit G, Noah Stoffman, and Scott E Yonker, 2021, Unlocking clients: The importance of relationships in the financial advisory industry, *Journal of Financial Economics* 141, 1218–1243.

Herpfer, Christoph, 2021, The role of bankers in the US syndicated loan market, *Journal of Accounting and Economics* 71, 101383.

Hu, Yingyao, 2017, The econometrics of unobservables: Applications of measurement error models in empirical industrial organization and labor economics, *Journal of Econometrics* 200, 154–168.

Ibert, Markus, Ron Kaniel, Stijn Van Nieuwerburgh, and Roine Vestman, 2018, Are mutual fund managers paid for investment skill?, *The Review of Financial Studies* 31, 715–772.

King, Timothy, Abhishek Srivastav, and Jonathan Williams, 2016, What's in an education? Implications of CEO education for bank performance, *Journal of Corporate Finance* 37, 287–308.

Li, Haitao, Xiaoyan Zhang, and Rui Zhao, 2011, Investing in talents: Manager characteristics and hedge fund performances, *Journal of Financial and Quantitative Analysis* 46, 59–82.

Li, Renping, 2024, When the thin bench gets thinner: The effects of investment bank consolidation on municipal finance, *Available at SSRN 4687748* .

Li, Yi, Maureen O'Hara, and Xing Zhou, 2024, Mutual fund fragility, dealer liquidity provision, and the pricing of municipal bonds, *Management Science* 70, 4802–4823.

Manconi, Alberto, Massimo Massa, and Ayako Yasuda, 2012, The role of institutional investors in propagating the crisis of 2007–2008, *Journal of Financial Economics* 104, 491–518.

Petersen, Mitchell A, and Raghuram G Rajan, 1994, The benefits of lending relationships: Evidence from small business data, *The Journal of Finance* 49, 3–37.

Puri, Manju, 1996, Commercial banks in investment banking: Conflict of interest or certification role?, *Journal of Financial Economics* 40, 373–401.

Santos, João A. C., and Andrew Winton, 2008, Bank loans, bonds, and information monopolies across the business cycle, *The Journal of Finance* 63, 1315–1359.

Yasuda, Ayako, 2005, Do bank relationships affect the firm's underwriter choice in the corporate-bond underwriting market?, *Journal of Finance* 60, 1259–1292.

9 Figures and Tables

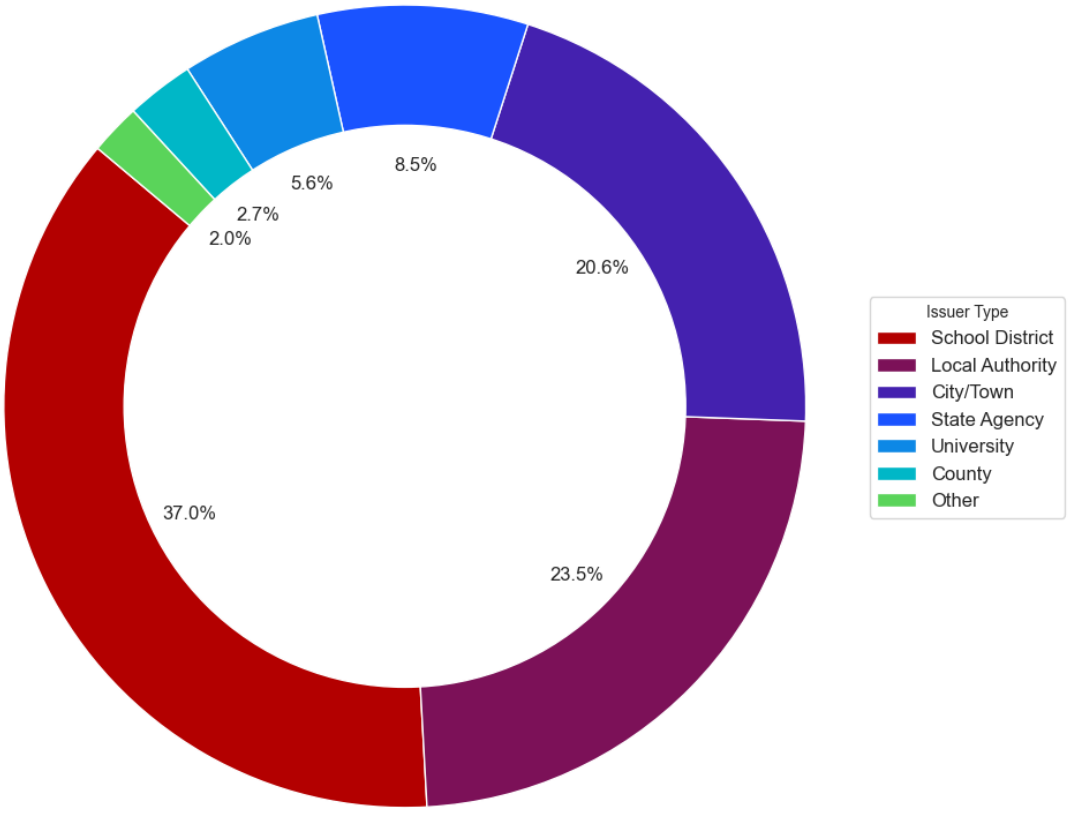

Figure 1: Distribution of Municipal Bond Issuance Amounts by Issuer Type

This figure reports the distribution of total issuance amounts across different types of municipal bond issuers in Texas. The chart is based on the aggregated amount at maturity (in USD millions) for municipal bonds issued between 2019 and 2024. Data are sourced from the SDC Platinum.

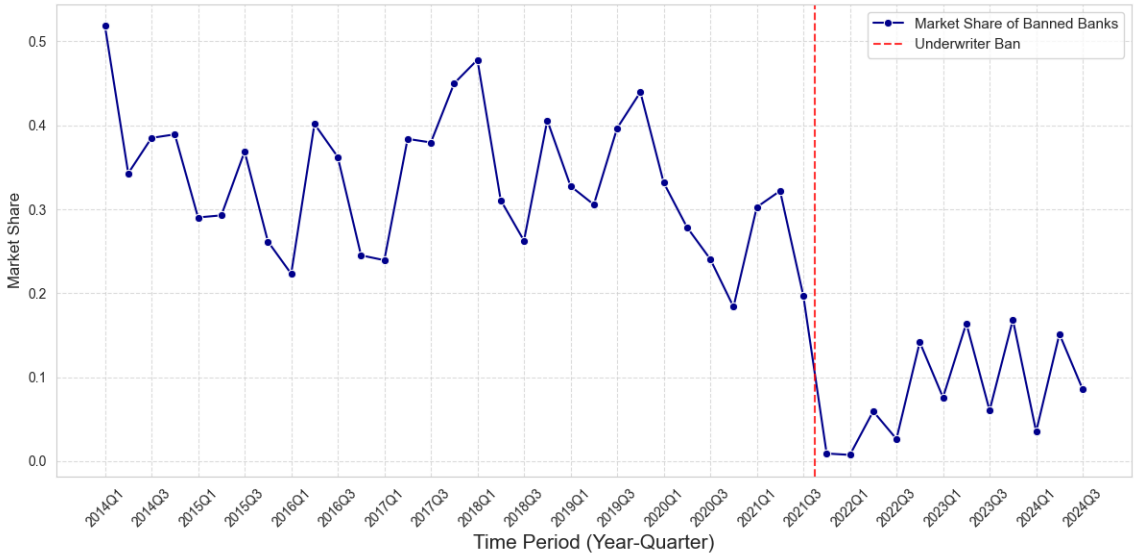

Figure 2: Market Share of Banned Underwriters in Texas

This figure reports the market share of banned underwriters in municipal bond underwriting in Texas. The line plot illustrates the quarterly market share of banned underwriters from 2014 to 2024, highlighting a significant drop in 2021Q3. A vertical dashed line marks the implementation of the underwriter ban in Texas. Data for this analysis are sourced from the SDC Platinum.

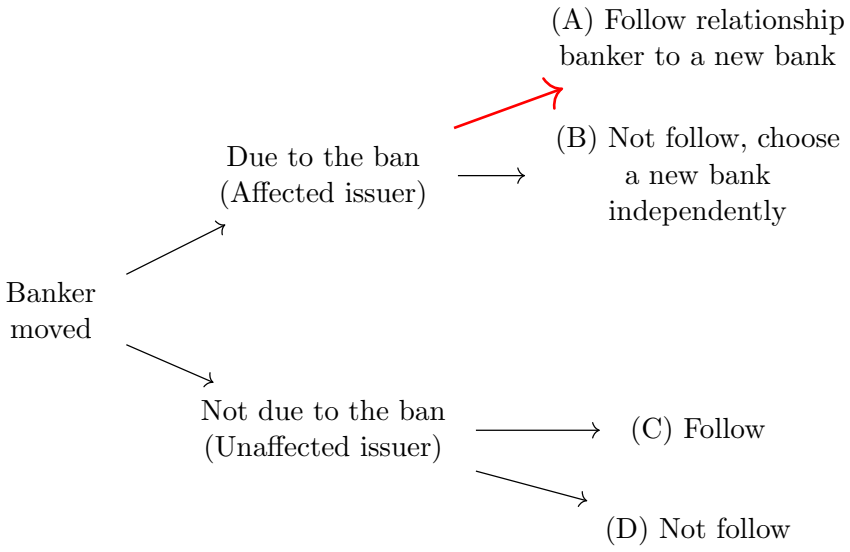

Figure 3: Borrower Options Following Banker Movement

This figure presents the decision structure following a relationship banker's move. Both affected and unaffected borrowers face the choice of whether to follow the banker to a new institution. The diagram distinguishes between four borrower types based on their exposure to the regulatory shock (affected vs. unaffected) and their follow decision (follow vs. not follow).

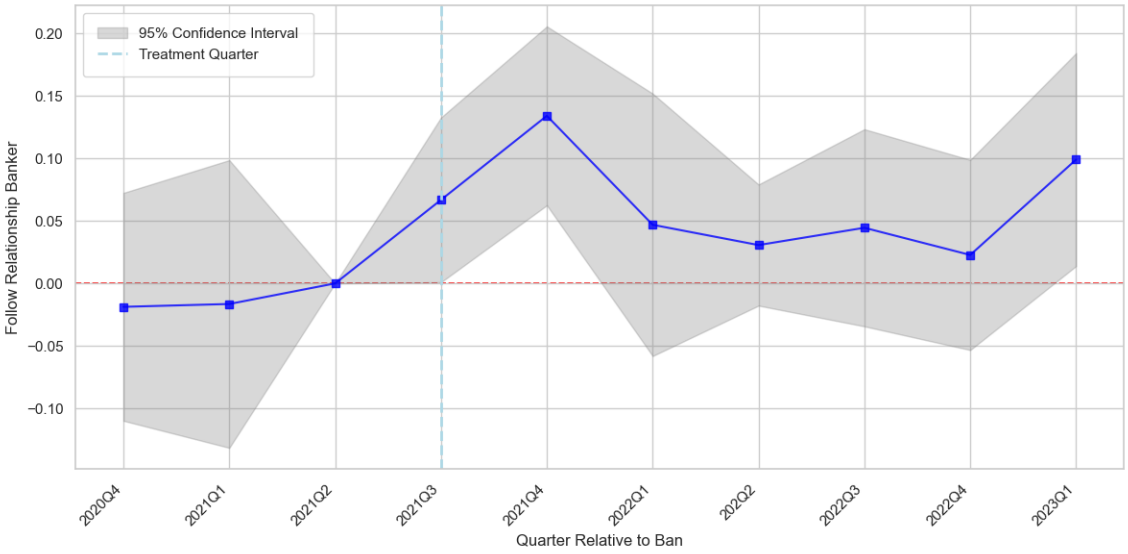

Figure 4: Following Banker Around Underwriter Ban

This figure plots coefficients from a triple-difference specification, where the dependent variable is *Follow Banker*, an indicator for whether a municipality establishes a new relationship with a bank that hired its former relationship banker. The horizontal axis represents event time relative to the quarter preceding the implementation of the underwriter ban. The estimated coefficients and their 95% confidence intervals illustrate the dynamic effect of the underwriter ban on the likelihood of following the banker. The vertical dashed line indicates the quarter when the underwriter ban was implemented in Texas. Data are sourced from SDC Platinum and The Bond Buyer.

Table 1: Summary Statistics

This table presents summary statistics for issuer-quarter level, bond-level, and issuer-level characteristics. Panel A provides statistics at the issuer-quarter level, where the unit of observation is a municipality each quarter from 2019 to 2024. Panel B presents transaction-level statistics, where each observation corresponds to an individual bond. Panel C describes issuer-level characteristics, where the unit of observation is a municipality that issues a bond in the period from 2019 to 2024. Variable definitions are reported in the Appendix. The sample period covers the years 2019 to 2024. Data source: SDC Platinum adn The Bond Buyer.

	N	Mean	Std. Dev.	25%	50%	75%
Panel A: Issuer-Quarter Panel						
Bond Issuance	56,328	0.12	0.32	0.00	0.00	0.00
Volume of Issuance ($ Mil)	56,328	4.26	33.86	0.00	0.00	0.00
Affected Issuer	56,328	0.12	0.33	0.00	0.00	0.00
Bank relationships pre-ban	56,328	1.17	1.19	0.00	1.00	2.00
Panel B: Transaction-Level Statistics						
Yield (%)	96,332	2.58	1.22	1.60	2.65	3.50
Yield Spread (%)	96,332	0.58	0.45	0.26	0.53	0.84
Amount at Maturity ($ Mil)	96,332	2.42	9.20	0.24	0.52	1.59
Amount per Underwriter ($ Mil)	96,332	2.24	7.78	0.24	0.52	1.58
Maturity Term (Years)	96,332	10.82	6.89	5.09	9.76	15.79
Underwriters per Deal	96,332	1.01	0.16	1.00	1.00	1.00
Post-Follow rate	96,332	0.19	0.39	0.00	0.00	0.00
Follower (%)	96,332	34.29	47.47	0.00	0.00	100.00
Affected Issuer (%)	96,332	29.42	45.57	0.00	0.00	100.00
Institutional Ownership (%)	34,074	58.13	43.797	25.10	50.00	94.90
Panel C: Issuer-Level Characteristics						
Relationships with Banks (N)	2,492	2.28	1.95	1.00	1.00	2.00
Frequency of Issuance (Years)	2,492	1.14	0.97	0.56	0.92	1.39
Affected Issuer (%)	2,492	12.14	32.66	0.00	0.00	0.00
Panel D: Investor-Bank-Quarter Panel						
New Relationships (%)	168,116	2.44	15.42	0.00	0.00	0.00
Capital Allocated ($ thousand)	168,116	409.76	5253.80	0.00	0.00	0.00
Affected Investor (%)	168,116	29.94	45.80	0.00	0.00	100.00

Table 2: Ex-Ante Characteristics, Banned vs. Non-Banned Underwriters

This table compares pre-period characteristics of banned banks (N = 5) vs. non-banned banks (N = 44) as of 2021:Q2. The difference column reports the t-statistic for the mean difference between the two groups. Significance levels are indicated by * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$.

Panel A: Banned Underwriters vs. Non-Banned Underwriters			
	Banned	**Non-Banned**	**Difference (t-stat)**
	(1)	(2)	(3)
Market Share in Texas (%)	0.06	0.02	1.61
Relationships with Municipalities in Texas	11.6	16.86	-0.97
Market Share in the US	0.07	0.01	2.94**
Share of Texas in Bank Portfolio	0.08	0.24	-3.11***
Yield (%)	1.24	1.25	-0.68
Amount Underwritten ($ Mil)	1,016.31	333.17	1.53

Table 3: Effect of Following on Bond Price (Simple OLS)

This table reports the estimates from the simple OLS from equation (1). Column (1) reports the estimation for the full sample. Column (2) reports the estimation for the sample of affected borrowers. Column (3) restricts the sample to borrowers whose relationship banker moved. The variable $Follow\_Banker_{it}$ equals 1 if issuer i follows its relationship banker to the banker's new bank by period t. Robust standard errors are in parentheses. The outcome variable, *Spread*, is measured as the difference between the bond's yield-to-maturity and the benchmark municipal bond curve. ***, **, and * denote significance at the 1%, 5%, and 10% levels.

	Spread (Full Sample) (1)	**Spread (Among Affected Issuers) (2)**	**Spread (Banker Moved) (3)**
Follow_Banker	-0.01**	-0.03**	-0.02***
	(0.004)	(0.01)	(0.00)
Controls	Y	Y	Y
Issuer, County FE	Y	Y	Y
Rating, Date FE	Y	Y	Y
Proceeds, Security FE	Y	Y	Y
Bank x Quarter FE	Y	Y	Y
Observations	114,919	29,186	96,332
R-sq	0.70	0.53	0.70

Table 4: Instrumented Difference-in-Differences: Impact on Yield Spread (Sample of borrowers whose banker moves)

This table reports the estimates from the instrumented difference-in-differences (DDIV) regression. Column (1) reports the first-stage regression for the endogenous indicator $Follow\_Banker_{it}$, which equals 1 if issuer i follows its pre-ban relationship banker to the banker's new bank in year t. The excluded instrument is $Post_t \times Affected\ Issuer_i$, equal to 1 for issuers whose incumbent underwriter was barred from underwriting municipal bonds in Texas after the 2021 ban. Column (2) shows the second-stage estimates for the bond yield spread at issuance. Robust standard errors clustered at the quarter and bank level are in parentheses. The first-stage F-statistic on the excluded instrument is reported at the bottom of the table. ***, **, and * denote significance at the 1%, 5%, and 10% levels.

	First Stage (Follow_Banker) **(1)**	**IV-DiD** (Spread) **(2)**
Post × *Affected Issuer*	0.14***	
	(0.03)	
Follow_Banker (IV)		-0.36**
		(0.18)
HHI	Y	Y
Controls	Y	Y
Issuer, County FE	Y	Y
Rating, Date FE	Y	Y
Bank x Quarter FE	Y	Y
Use of Proceeds FE	Y	Y
Observations	96,332	96,332
R-sq / F-stat	22.57	

Table 5: The effect of the ban on the yield spread (three samples)

This table reports the estimates from the estimates from the difference-in-differences regression of spread on the underwriter ban. The dependent variable is the bond spread, measured as the yield at issuance relative to the benchmark municipal bond curve. The key explanatory variable is the interaction term *Post* × *Affected Issuer*, where *Post* is equal to one for bonds issued after September 2021, and *Affected Issuer* is equal to one for issuers exposed to the ban. Column (1) reports results for the full sample. Column (2) restricts the sample to issuers whose relationship banker moved to another bank, while Column (3) includes only issuers whose relationship banker did not move. Robust standard errors clustered at the quarter and bank level are in parentheses. The first-stage F-statistic on the excluded instrument is reported at the bottom of the table. ***, **, and * denote significance at the 1%, 5%, and 10%

	Spread (1)	**Spread (2)**	**Spread (3)**
Post × *Affected Issuer*	0.04**	0.04**	-0.11
	(0.02)	(0.02)	(0.08)
Controls	Y	Y	Y
Issuer, County FE	Y	Y	Y
Rating, Date FE	Y	Y	Y
Bank x Quarter FE		Y	Y
Use of proceeds FE	Y	Y	Y
Security Type FE	Y	Y	Y
Sample	Full	Banker movers	No movement
Observations	115,744	96,716	19,027
R-sq	0.58	0.57	0.65

Table 6: Instrumented Difference-in-Differences: Impact on Yield Spread (Sample of Not Rated Borrowers)

This table reports the estimates from the first and second stages of the instrumented difference-in-differences (DDIV) regression estimates for the subsample of not rated borrowers. Column 1 reports the first-stage regression for the endogenous indicator $Follow\_Banker_{it}$, which equals 1 if issuer i follows its pre-ban relationship banker to the banker's new bank in year t. The excluded instrument is $Post_t \times Affected\ Issuer_i$, equal to 1 for issuers whose incumbent underwriter was barred from underwriting municipal bonds in Texas after the 2021 ban. Column 2 shows the second-stage estimates for the bond yield spread at issuance. Robust standard errors clustered at the quarter and bank level are in parentheses. The first-stage F-statistic on the excluded instrument is reported at the bottom of the table. ***, **, and * denote significance at the 1%, 5%, and 10%

	First Stage, (Follow_Banker) **(1)**	**IV-DiD,** (Spread) **(2)**
Post × Affected Issuer	0.096***	
	(0.03)	
Follow_Banker (IV)		-0.52*
		(0.30)
Controls	Y	Y
HHI	Y	Y
Issuer, County FE	Y	Y
Rating, Date FE	Y	Y
Use of proceeds, Security FE	Y	Y
Bank x Quarter FE	Y	Y
Observations	82,378	82,378
F-stat	10.58	

Table 7: Impact of Relationship Banker Hiring on Investor-Bank Relationship Formation and Capital Allocation (Triple Difference)

This table presents the effect of hiring a relationship banker on relationship formation and capital allocation from institutional investors to municipal bond underwriters. The dependent variable in columns (2) and (3) is the total capital (measured by par value) allocated by an investor to a bank in a given quarter. Column (1) reports the probability of establishing a new investor-bank relationship. The variable *Post* is a binary indicator equal to one for quarters following the underwriter ban. *Affected Investor* is an indicator for investors whose existing relationships were impacted by the ban. *Bank Hired Banker* is a dummy equal to one if the bank hired a relationship banker who had previously worked with the investor's borrowers. The triple interaction *Post* × *Affected Investor* × *Bank Hired Banker* captures the change in investor allocation to banks that hired relationship bankers during the post-ban period, relative to unaffected investors and banks without such hires. Standard errors are clustered at the investor and quarter level. ***, **, * denote significance at the 1%, 5%, and 10% levels, respectively.

	New Relationship With Bank (1)	**Capital Allocated (2)**	**Capital Allocated (3)**
Post × *Affected Investor*	0.002	-63.88	22.91
	(0.002)	(104.86)	(127.71))
Post × *Bank Hired Banker*	-0.01	304.72**	304.48**
	(0.01)	(138.76)	(389.91)
Post × *Affected Investor* ×	0.005	1,054.35***	798.06**
× *Bank Hired Banker*	(0.003)	(284.34)	(389.91)
Year-quarter FE	Y	Y	Y
Investor FE	Y	Y	
Bank FE	Y	Y	
Bank × Investor FE			Y
Observations	168,116	168,116	168,116
R-squared	0.03	0.08	0.23
Const	0.03***	305.32***	313.23 ***

Table 8: IV-DiD Estimates: Impact of Following an MBA Banker on Yield Spreads

This table reports estimates from an instrumental variables difference-in-differences (IV-DiD) specification that examines whether the effect of retaining a relationship banker on municipal bond spreads varies depending on the banker's educational background. Column 1 reports the first-stage regression for the endogenous indicator $Follow\_Banker_{it}$, which equals 1 if issuer i follows its pre-ban relationship banker to the banker's new bank by period t. The excluded instrument is $Post_t \times Affected\ Issuer_i$, equal to 1 for issuers whose incumbent underwriter was barred from underwriting municipal bonds in Texas after the 2021 ban. Column 2 shows the second-stage estimates for the bond yield spread at issuance. The binary variable *has_MBA* is equal to 1 if the banker held an MBA degree at the time of the move. The coefficient on the interaction term captures how the effect of following a banker differs for those with an MBA. Robust standard errors clustered at the quarter and bank level are in parentheses. The first-stage F-statistic on the excluded instrument is reported at the bottom of the table. ***, **, and * denote significance at the 1%, 5%, and 10%

	First Stage, (Follow_Banker) **(1)**	**IV-DiD,** (Spread) **(2)**
Post × *Affected Issuer*	0.17***	
	(0.03)	
Follow_Banker (IV) × *has_MBA*		-0.22**
		(0.11)
Follow_Banker (IV)		-0.13
		(0.13)
has_MBA		0.1***
		(0.30)
Controls	Y	Y
HHI	Y	Y
Issuer FE	Y	Y
Rating, Date FE	Y	Y
Use of proceeds, Security FE	Y	Y
Bank x Quarter FE	Y	Y
Observations	96,332	96,332
F-stat	20.59	

Table 1: Summary Statistics

This table presents summary statistics for issuer-quarter level, bond-level, and issuer-level characteristics. Panel A provides statistics at the issuer-quarter level, where the unit of observation is a municipality each quarter from 2019 to 2024. Panel B presents transaction-level statistics, where each observation corresponds to an individual bond. Panel C describes issuer-level characteristics, where the unit of observation is a municipality that issues a bond in the period from 2019 to 2024. Variable definitions are reported in the Appendix. The sample period covers the years 2019 to 2024. Data source: SDC Platinum adn The Bond Buyer.

	N	**Mean**	**Std. Dev.**	**25%**	**50%**	**75%**
Panel A: Transaction-Level Statistics (full sample)						
Yield (%)	115,795	2.55	1.22	1.59	2.60	3.50
Yield Spread (%)	115,795	0.58	0.45	0.26	0.52	0.83
Amount at Maturity ($ Mil)	115,795	2.30	9.06	0.23	0.50	1.45
Maturity Term (Years)	115,773	10.71	6.89	5.00	9.59	15.63
Underwriters per Deal	115,795	1.01	0.15	1.00	1.00	1.00
Affected Issuer (%)	115,795	25.26	43.45	0.00	0.00	1.00
Affected × Follower (%)	115,795	13.76	34.45	0.00	0.00	0.00
Affected × Non-Follower (%)	115,795	8.63	28.07	0.00	0.00	0.00