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

Natasha Boreyko

Darden School of Business,
University of Virginia

September, 2026

Frictions in Municipal Bond Market

UBS agrees to $10M penalty from SEC over suspect municipal activity

COMMUNITY NEWS

SEC alleges city of Rochester, former financial director misled investors

SEC Charges PNC Capital Markets LLC for Violating Municipal Bond Disclosure Law

Predatory JP Morgan Swap Deal Pushes Alabama County Into Largest Municipal Bankruptcy In US History

Frictions in Municipal Bond Market

UBS agrees to $10M penalty from SEC over suspect municipal activity

COMMUNITY NEWS

SEC alleges city of Rochester, former financial director misled investors

SEC Charges PNC Capital Markets LLC for Violating Municipal Bond Disclosure Law

Predatory JP Morgan Swap Deal Pushes Alabama County Into Largest Municipal Bankruptcy In US History

- **Corruption** (Butler, Fauver, and Mortal 2009)
- **Unequal access to credit ratings** (Cornaggia, Cornaggia, and Israelsen, 2018)
- **Unsophisticated borrowers** (Cestau, Green, Hollifield, and Schürhoff, 2020)
- **Search frictions** (Griffin, Hirschey, and Kruger, 2025; Brancaccio and Kang, 2025)
- **Information asymmetry** (Ivanov, Zimmermann, and Heinrich, 2025; Garrett, Gibbons, Shahrabi, 2025)
- **Non-pecuniary preferences** (Casey, Gao, Mayew, Parsons, 2019)

Frictions in Municipal Bond Market

UBS agrees to $10M penalty from SEC over suspect municipal activity

COMMUNITY NEWS

SEC alleges city of Rochester, former financial director misled investors

SEC Charges PNC Capital Markets LLC for Violating Municipal Bond Disclosure Law

Predatory JP Morgan Swap Deal Pushes Alabama County Into Largest Municipal Bankruptcy In US History

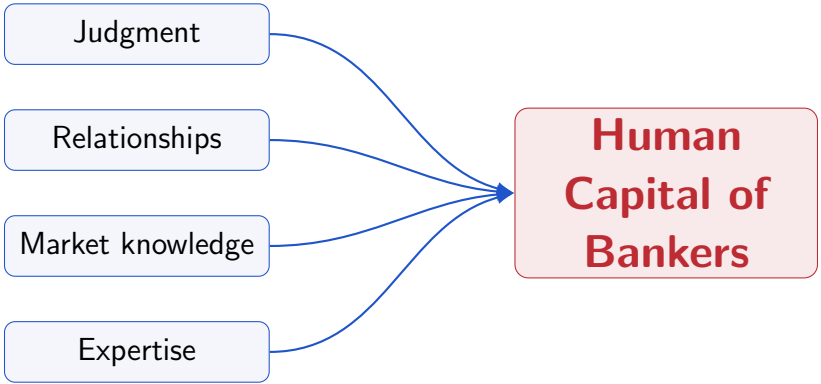
- **Corruption** (Butler, Fauver, and Mortal 2009)
- **Unequal access to credit ratings** (Cornaggia, Cornaggia, and Israelsen, 2018)
- **Unsophisticated borrowers** (Cestau, Green, Hollifield, and Schürhoff, 2020)
- **Search frictions** (Griffin, Hirschey, and Kruger, 2025; Brancaccio and Kang, 2025)
- **Information asymmetry** (Ivanov, Zimmermann, and Heinrich, 2025; Garrett, Gibbons, Shahrabi, 2025)
- **Non-pecuniary preferences** (Casey, Gao, Mayew, Parsons, 2019)



How to alleviate these frictions?

- Judgment
- Relationships
- Market knowledge
- Expertise

How to alleviate these frictions?



Evidence from Lending Literature:

Bushman, Gao, Martin & Pacelli (2021); Carvalho, Gao & Ma (2023); Dagostino, Gao & Ma (2023); Engelberg, Gao, & Parsons (2012); Fisman, Paravisini, & Vig (2017)...

Human Capital in Municipal Bond Market

Improve bond terms:

- Understands the issuers
- Reduces uncertainty
- Knows investor demand
- Matches investors and issuers

Human Capital in Municipal Bond Market

Improve bond terms:

- Understands the issuers
- Reduces uncertainty
- Knows investor demand
- Matches investors and issuers

Hold-up problem:

- Bargaining power
- Conflict of interest
  (Garrett, 2024)
- Rent Extraction
  (Garrett, Ordin, Roberts, Serrato, 2023)

Human Capital in Municipal Bond Market

Improve bond terms:

- Understands the issuers
- Reduces uncertainty
- Knows investor demand
- Matches investors and issuers

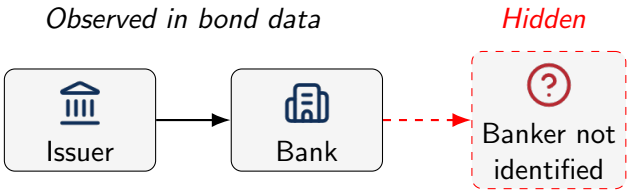
Hold-up problem:

- Bargaining power
- Conflict of interest
  (Garrett, 2024)
- Rent Extraction
  (Garrett, Ordin, Roberts, Serrato, 2023)

Do relationship bankers help overcome market frictions?

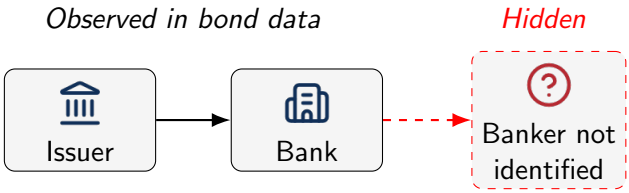
Challenges: Human Capital in Bond Underwriting

1 Banker-level deal assignments are private



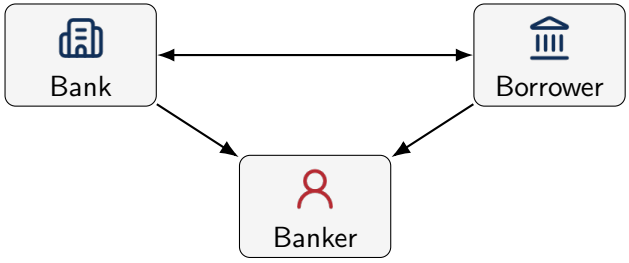
Challenges: Human Capital in Bond Underwriting

1 Banker-level deal assignments are private



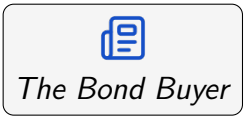
---

2 Relationships with bankers are endogenous



This Paper

1 Novel data on banker job transitions

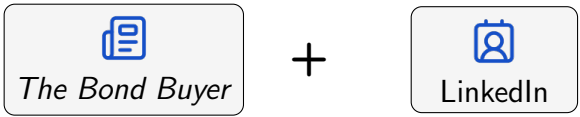


+



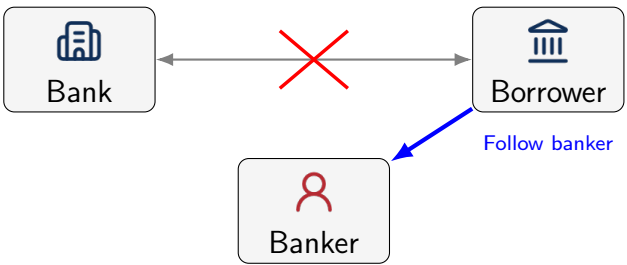
This Paper

1 Novel data on banker job transitions



---

2 Policy shock to relationships



Main Results

A. Bankers add value to borrowers:

- When the banker moves to a different bank, following the banker lowers spreads by **19 bps** relative to not following $\approx$ \$0.4M per issuer.

B. ... through two channels:

- **Certifying** opaque borrowers
- Providing access to **investor networks**

C. Banker's value is distinct from the bank

$\Rightarrow$ Bankers help overcome frictions, beyond bank's effect

Institutional Setting

Municipal Bond Underwriting

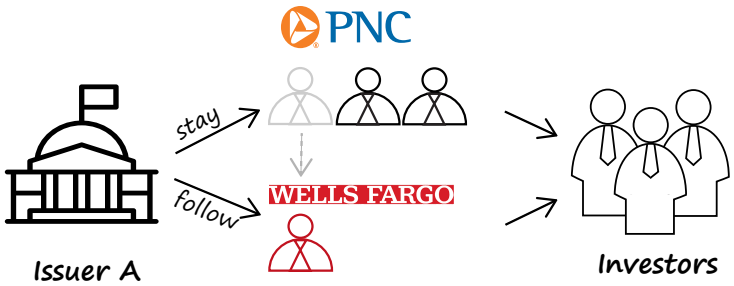


Example of bond prospectus

Specific features:

- 99% of deals are underwritten by a single underwriter
- Sticky relationships

When Banker Moves



$\rightarrow$ How much of the banker's client-specific value travels with the banker after the move?

Data

Novel Data: Tracking Bankers

- Data from **The Bond Buyer**

→ Focus on senior banker career moves

→ Match using **LinkedIn** and **Revelio Labs**.

→ Link bankers with municipalities by their specialization.

≡ THE BOND BUYER

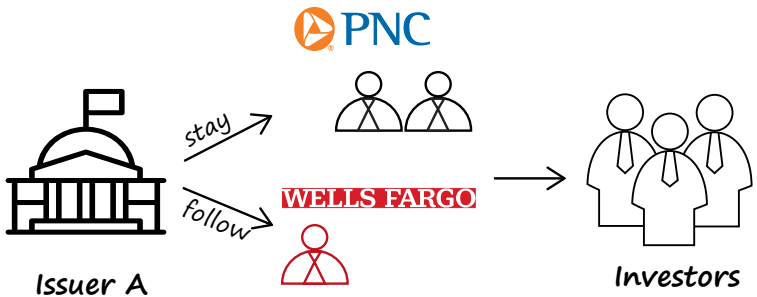
CAREER MOVES

People on the move in public finance



Lee White — Veteran public finance investment banker has joined D.A. Davidson & Co. as a managing director. He has participated in deals for student housing and higher education.

Endogenous Choice



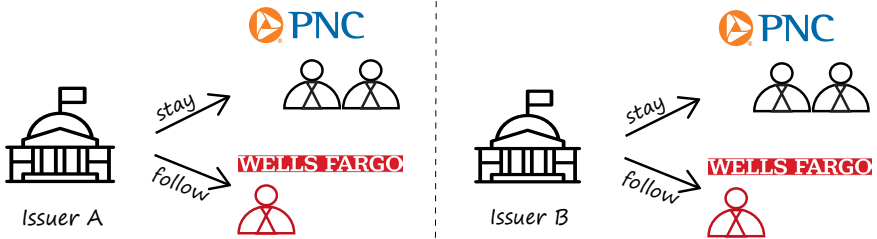
Endogenous choice:
(i) the banker may leave a poorly performing bank;
(ii) low- (high-) quality borrower is willing to follow;
(iii) borrower-banker mutual decision

OLS results

Methodology

Ideal Experiment: Simplified Version

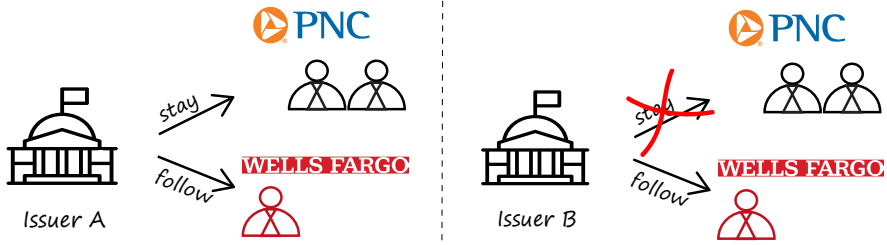
Goal: disentangle value of the banker



Not-follow options

Ideal Experiment: Simplified Version

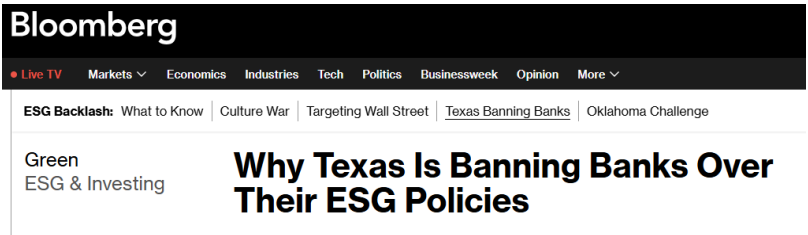
Goal: disentangle value of the banker



Not-follow options

Shock to Banks: Texas Underwriter Ban

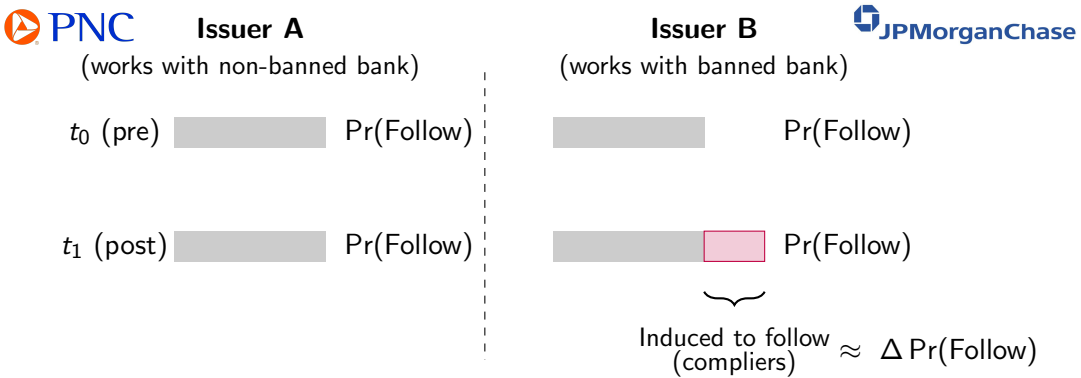
- Use quasi-exogenous shock from September 2021 that shifts propensity to follow.



- Banned underwriters: **Citi, JP Morgan, BofA, Goldman Sachs, and Fidelity.**

Market share of banned banks

Ban and Exogenous Variation in Decision to Follow

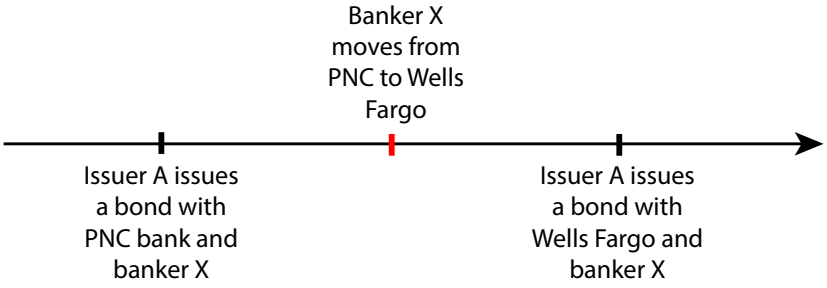


→ **Instrumental variable (IV) approach** ▸ Pre-trends

Timeline

Sample: Municipal bonds issued in Texas between 2019 and 2024

Borrower follows the banker:



Approach: IV combined with DiD

Focus: Marginal decision to follow relative to not-follow options

Not-follow options

Intent-to-Treat (instrument Z): *Post Ban*$_t$ $\times$ *Affected Issuer*$_i$

Treatment (D): *Follow Banker*$_{i,b,t}$

IV Approach in detail

Approach: IV combined with DiD

Focus: Marginal decision to follow relative to not-follow options

Not-follow options

Intent-to-Treat (instrument Z): *Post Ban*$_t$ × *Affected Issuer*$_i$

Treatment (D): *Follow Banker*$_{i,b,t}$

1st stage:

$$Follow\ Banker_{ibt} = \pi\,(PostBan_t \times Affected\ Issuer_i) + X'_{it}\phi + \rho\,HHI_t + FE + u_{ibt},$$

2nd stage:

$$Spread_{ibt} = \beta\,\widehat{Follow\ Banker}_{it} + X'_{it}\phi + \rho\,HHI_t + FE + \epsilon_{ibt}.$$

- Fixed effects: time, issuer, bank × quarter
- Controls: market concentration (HHI), bond volume

IV Approach in detail

Exclusion restrictions

1. Reduced market competition:



$\Rightarrow$ Identification arises from within the bank $\times$ quarter differences

Exclusion restrictions

1. Reduced market competition:



$\Rightarrow$ Identification arises from within the bank $\times$ quarter differences

2. Quality of relocating bankers

$\Rightarrow$ Bankers who move are observably similar to those who do not:

	Non-moving bankers	**Moving bankers**	**Difference (t-stat)**
Experience (Years)	15.62	16.38	-0.71
Highest Degree	Master	Bachelor	1.94*
Has MBA degree	0.22	0.21	0.86
Pr(female)	0.22	0.19	0.85
Job title	MD	MD	-
Compensation ($)	386,236.20	393,332.50	-0.39

Results

First Stage: DiD

Bond-level data: $Follow_{i,b,t} = \pi(Post\ Ban_t \times Affected\ Issuer_i) + \gamma_t + \delta_i + \sigma_{b \times q} + u_{i,b,t}$

	Propensity to Follow
Post Ban × *Affected Issuer*	0.14***
	(0.03)
Controls	Y
Issuer, County FE	Y
Rating, Date FE	Y
Use of proceeds, Security FE	Y
Bank x Quarter FE	Y
Observations	96,332
F-stat	22.57

- Increases by 14 percentage points → a 74% increase over the mean follow rate of 0.19.

▸ Heterogeneity in following

Second Stage: IV

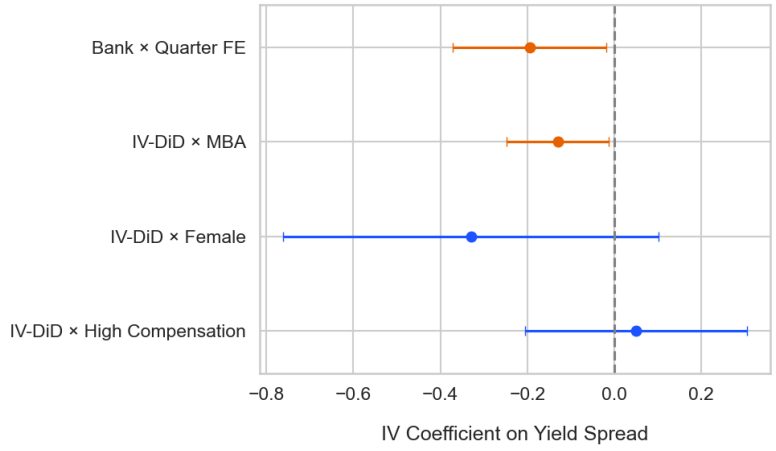
- The marginal decision to follow the banker brings a 19 bps reduction in borrowing costs.

	First Stage (Follow_Banker) **(1)**	**IV-DiD** (Spread) **(2)**
Post × *Affected Issuer*	0.14***	
	(0.03)	
Follow_Banker (IV)		-0.195**
		(0.08)
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
F-stat	22.57	

Economic significance: $\sim$ \$400K saved per issuer

Who adds the most value?

- Bankers with MBA degrees bring a 13.5 bps reduction in spreads.



Economic Mechanism 1:

Do bankers provide information about borrowers?

Economic Mechanism 1: Information Asymmetry

- Do bankers transfer information about the borrower to the new bank?
- Significant effect for non-rated borrowers. ▸ Revenue bonds test

	First Stage, (Follow_Banker) **(1)**	**IV-DiD,** (Spread) **(2)**
Post × *Affected Issuer*	0.093***	
	(0.02)	
Follow_Banker (IV)		-0.35*
		(0.18)
Controls	Y	Y
Issuer FE	Y	Y
Bank x Quarter FE	Y	Y
Other FE	Y	Y
Observations	82,378	82,378
F-stat	10.58	

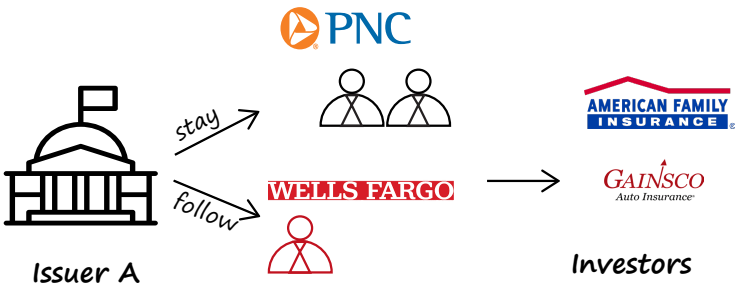
Economic Mechanism 2

Do bankers provide access to their investor networks?

Economic Mechanism 2: Investor Network

Do bankers have their own investor networks?

- eMaxx data: bond-level investor holdings
- Covers about 30% of the sample



Investor Networks Test

- Bankers bring their investor networks to the new bank
- Hiring of relationship banker brings $\sim$ \$1 million in assets per investor quarterly.

	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 ***

Bank or Banker?

Spread Variance Decomposition

- Use an AKM-style model to decompose pricing variation

$$\text{Spread}_{ibkt} = \alpha + \phi_b + \theta_k + X'_{it}\beta + \varepsilon_{ibkt}$$

ϕ_b: bank fixed effects $\quad$ θ_k: banker fixed effects

Banks
$\approx 3\%$



Spread Variance Decomposition

- Use an AKM-style model to decompose pricing variation

$$\text{Spread}_{ibkt} = \alpha + \phi_b + \theta_k + X'_{it}\beta + \varepsilon_{ibkt}$$

ϕ_b: bank fixed effects $\quad$ θ_k: banker fixed effects

Banks
$\approx 3\%$

Bankers
$\approx 3\%$



Spread Variance Decomposition

- Use an AKM-style model to decompose pricing variation

$$\text{Spread}_{ibkt} = \alpha + \phi_b + \theta_k + X'_{it}\beta + \varepsilon_{ibkt}$$

ϕ_b: bank fixed effects $\quad$ θ_k: banker fixed effects

Banks
$\approx 3\%$

Bankers
$\approx 3\%$



$\Rightarrow$ **Takeaway:** Bankers add about as much explanatory power beyond banks as banks add beyond baseline controls.

What This Paper Shows

Q: Do individual bankers reduce frictions in the muni bond market?

Approach: Novel data on banker mobility + Exogenous shock

$\Rightarrow$ **Takeaway:** Bankers add value through market knowledge and investor networks

What This Paper Shows

Q: Do individual bankers reduce frictions in the muni bond market?

Approach: Novel data on banker mobility + Exogenous shock

$\Rightarrow$ **Takeaway:** Bankers add value through market knowledge and investor networks

Contribution:

- Human capital in financial intermediation Bushman et al. (2021); Dagostino et al. (2023); Ibert et. al. (2018); Cahn et al. (2024); Giannetti et al., (2017); Santos and Winton (2008); Schenone (2010), Ewens and Sosyura (2023)...

$\star$ Bankers matter in bond underwriting.

- Search and information frictions in muni bond market: Butler (2007); Li and Schürhoff (2019); Garrett and Ivanov (2025)...

$\star$ Role of bankers in alleviating frictions.

Thank you!

Literature + Contribution

Human capital in financial intermediation:

- Ibert et. al., 2018; Cahn et al., (2024); Giannetti et al., (2017); Santos and Winton (2008); Schenone (2010), Ewens and Sosyura (2023)...

⋆ In bond underwriting, banker human capital is portable.

Relationships with banks and bankers:

- Engelberg et al., (2012); Drexler and Schoar (2014); Fisman et al. (2017); Karolyi (2018); Bushman et al. (2021); Herpfer (2021); Papoutsi (2024); Even-Tov et al. (2024), Tuft and Yimfor (2024), Chemmanur, Ertugrul, and Krishnan (2019), Guo et al. (2020), Wan et al. (2021)...

⋆ Disentangling banker value from bank value.

Municipal bonds:

- Search and information frictions: Butler (2007); Li and Schürhoff (2019); Garrett and Ivanov (2025)...

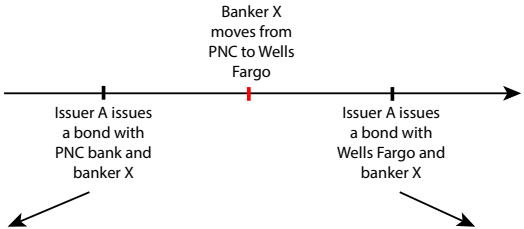
⋆ Role of bankers in alleviating frictions.

Timeline and Definitions

Sample: Municipal bonds issued in Texas between 2019 and 2024

- Only issuers whose banker moved [including moves from non-banned to non-banned].

Borrower follows the banker:



- *Affected Issuer*$_i$: Relied on banned underwriters for at least 10% of their deals in the last 5 years before the ban.
  - $\rightarrow$ 12% of municipalities in Texas are
- *Follow*$_{i,b,t}$: Issuer switches to the bank that hired their relationship banker.
  - $\rightarrow$ 44% of affected issuers follow their banker to a new bank.
  - $\rightarrow$ 56% of affected issuers do not follow

Municipal Bond Prospectus

NEW ISSUES
BOOK-ENTRY ONLY

Ratings: See "RATINGS" herein.



$369,750,000
WAYNE COUNTY AIRPORT AUTHORITY
Airport Revenue Bonds
(Detroit Metropolitan Wayne County Airport), Series 2023A-E
consisting of:

$105,200,000
Airport Revenue Bonds
Series 2023A (Non-AMT)

$78,205,000
Airport Revenue Bonds
Series 2023B (AMT)

$139,115,000
Airport Revenue Refunding Bonds
Series 2023C (Non-AMT)

$18,520,000
Airport Revenue Refunding Bonds
Series 2023D (AMT)

$28,710,000
Airport Revenue Refunding Bonds
Series 2023E (AMT)

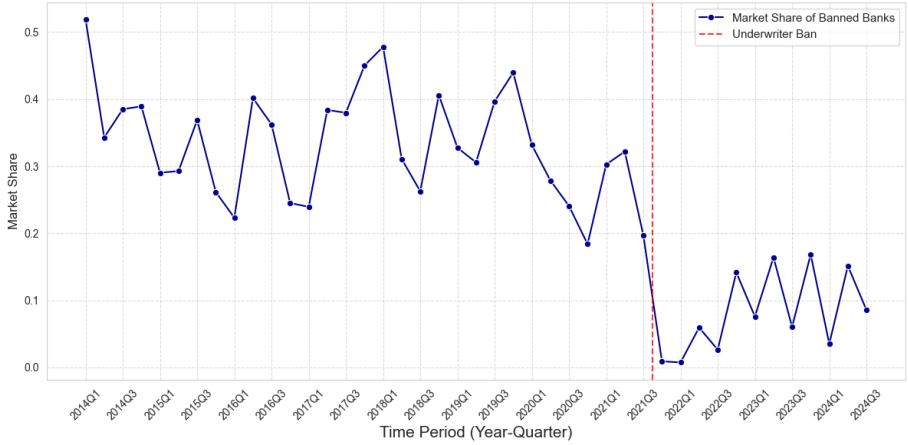
Dated: Date of Delivery

Due: December 1, as shown on the inside cover page

Back to Main Slide

Market Share of Banned Underwriters

- Banned underwriters exit the market:



Back to Main Slide

Appendix: Banned Banks Quit Net Zero Alliance



Back to Main Slide

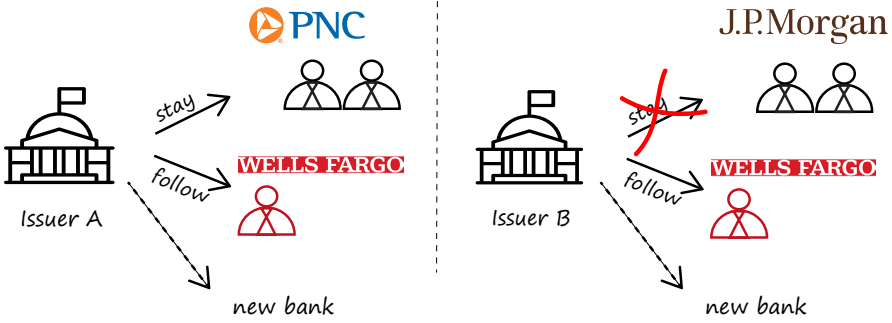
Source: The Bond Buyer, January 2025

Appendix: Heterogeneity in Following

	Baseline First Stage (1)	First Stage with Heterogeneity (2)
PostBan × Affected Issuer	0.14***	0.13***
	(0.03)	(0.03)
× log(Volume)		-0.006
		(0.007)
×Rating		0.012***
		(0.004)
Issuer FE	Y	Y
Date FE, County × Year FE	Y	Y
log(Volume), Rating, HHI	Y	Y
Use-of-Proceeds FE	Y	Y
Bank × Quarter FE	Y	Y
Observations	96,332	96,332
R-sq		0.77

Back to Main Slide

Appendix: Follow vs. Not Follow Options



▸ Back to Main Slide

Appendix: Complier Characteristics

	Proportion of Compliers Above the Sample Median (%) (1)	**Ratio: Compliers to Sample)** (2)
Amount at Maturity	46.4	0.93
Rating	22.3	1.54
Maturity	48.6	0.97
Amount per Underwriter	46.4	0.93
Size (pre-ban)	31.8	1.11
Spread	43.4	0.87
Yield	39.4	0.79

▸ Back to Main Slide

IV Approach

Treatment: $D(z) = 1$ if Follow; $D(z) = 0$ otherwise
Instrument: $Z = 1$ if Affected; $Z = 0$ otherwise

Compliance groups:

- Compliers (C): $D(1) = 1,\ D(0) = 0$ — follow only when encouraged
  Complier Characteristics
- Always-takers (AT): $D(1) = D(0) = 1$ — follow regardless
- Never-takers (NT): $D(1) = D(0) = 0$ — never follow

Share of compliers: $\rho_C = 1 - \rho_{AT} - \rho_{NT}$

Local Average Treatment Effect:
Effect of following relative to not following for the complier group whose follow status is shifted by the post-ban treatment. LATE in detail

Back to Main Slide

Appendix: IV details

Local Average Treatment Effect (LATE):

$$\widehat{\beta}^{IV} \;=\; E[Y(D=1) - Y(D=0) \,\big|\, D(1)=1, D(0)=0]$$

AT and NT cancel out:

- For **AT**: $D(1) = D(0) = 1 \;\Rightarrow\; Y(D(1)) - Y(D(0)) = Y(1) - Y(1) = 0.$
- For **NT**: $D(1) = D(0) = 0 \;\Rightarrow\; Y(0) - Y(0) = 0.$
- For **C**: $D(1) = 1,\; D(0) = 0 \;\Rightarrow\; Y(1) - Y(0)$ (non-zero).

Back to Main Slide

Target Selection

Banned Underwriters vs. Non-Banned Underwriters	**Banned** (1)	**Non-Banned** (2)	**Difference (t-stat)** (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
Issuers' Credit Rating	AA+	AA	0.58
Non-Rated Issuers (N)	7.80	15.23	-1.56

▸ Back to Main Slide

Mechanism 1.2: Information Asymmetry in Revenue Bonds

- Do bankers certify the credibility of the bond?
- No differential effect between revenue and general obligation bonds.

	First Stage, (Follow_Banker) **(1)**	**IV-DiD,** (Spread) **(2)**
Post × *Affected Issuer*	0.14***	
	(0.03)	
Follow_Banker (IV)×*RevenueBond*		-0.13
		(0.15)
Follow_Banker (IV)		-0.29*
		(0.17)
Controls	Y	Y
Issuer FE	Y	Y
Bank x Quarter FE	Y	Y
Other FE	Y	Y
Observations	96,332	96,332
F-stat	23.33	

Back to Main Slide

Mechanism 2.2: LinkedIn Connections and Investor Network

- Capital inflow impact: +$59K per quarter for a 1 SD increase

	Capital Allocated
Post × *Affected Investor* × *Bank Hired Banker* × *LinkedIn_Conns*	11.37**
	(5.21)
Year FE	Y
Bank FE	Y
Investor FE	Y
Observations	46,134
R-sq	0.12

▸ Back to Main Slide

Competitive vs. Negotiated Bidding

- No differential effect between competitive and negotiated bidding.

	First Stage, (Follow_Banker) **(1)**	**IV-DiD,** (Spread) **(2)**
Post × *Affected Issuer*	0.14***	
	(0.03)	
Follow_Banker (IV)×*CompetitiveBid*		0.15
		(0.12)
Follow_Banker (IV)		-0.42*
		(0.18)
Controls	Y	Y
Issuer FE	Y	Y
Bank x Quarter FE	Y	Y
Other FE	Y	Y
Observations	96,332	96,332
F-stat	28.39	

Back to Main Slide