Dodd-Frank and Municipal Borrowing Costs: Evidence from Nationwide Data

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Dodd-Frank and the muni market

Federal response to 2007 financial crisis

- Stabilize markets, reduce systemic risk
- Reduce federal tax expenditure on bond interest

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By November 2010, MAs

...have a fiduciary duty to issuers
...must register with SEC and MSRB (temporary rule)
...expect promulgation of additional rules

Research question and potential mechanisms

Did the Dodd-Frank Act lower municipal interest costs by improving the quality of municipal advising services?

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Are effects driven by improvements in

...third-party certification?
...underwriter monitoring?
...technical expertise?

Municipal advisors

Private sector firms and individuals

Structure and market securities

Interact with rating agencies, underwriters, bond attorneys

Third-party certification

Muni market suffers from information problems

Certification mitigates asymmetric information

MA certification unequally beneficial

- Lower or no credit rating
- Less secure pledge

Leland & Pyle 1977; Diamond 1984; Millon & Thakor 1985; Booth & Smith 1986, Forbes, Leonard, & Johnson 1992; Johnson 1994; Vijayakumar & Daniels 2006, Allen & Dudney 2010

Underwriter monitoring

Underwriters agent to issuers and investors

Underwriter monopsony power in negotiated sales

MAs monitor underwriters

F, L & J 1992; Simonsen & Hill 1998; V & D 2006; A & D 2010; Luby & Moldogaziev 2013

Technical expertise

MAs provide technical expertise to issuing agencies

Some bond attributes require greater expertise

- Refunding bonds
- Call features
- Revenue
- Negotiated

Clarke 1997; V & D 2006; A & D 2010

Data

Ipreo Municipal Application (and Bond Buyer)

Nationwide, all issuer types

2002 to 2018

N = 2,059,069

Method

Generalized difference-in-differences

Post-period: 2011 to 2018

Treated group: bonds issued with MA

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Treated group: bonds issued with MA

$$\begin{aligned} Yield_{migt} = \alpha_0 &+ \beta_1 MA_i * Post\text{-}2010_t \\ &+ \beta_2 MA_i \\ &+ \beta \mathbf{X}_m + \beta \mathbf{X}_i + \beta \mathbf{X}_g \\ &+ \gamma_g + \lambda_t + \varepsilon_{migt} \end{aligned}$$

m indexes bond maturities

i indexes bond issues

g indexes issuers

t indexes years

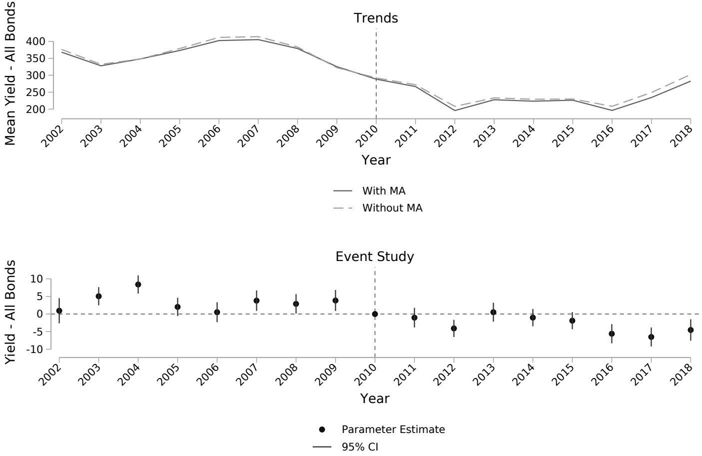
$\mathbf{X}$ are vectors of covariates at the maturity-, issue-, and issuer-level

γ are issuer fixed effects

λ are year fixed effects

and ε are standard errors clustered at the issuer level

Full sample trends & event study



Potential mechanisms - Certification

Credit rating

- AAA, AA, A, BBB or below, not rated

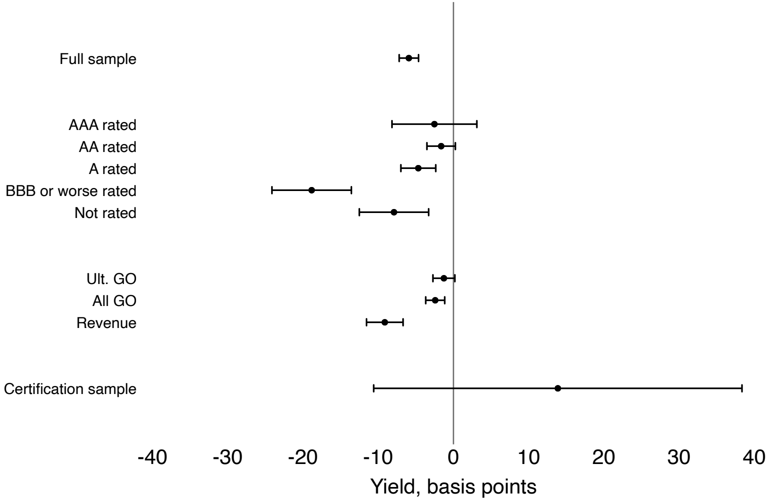
Security pledge

- Unlimited GO, all GO, revenue

Certification sample

- **Rated below AA or not rated**
- **Revenue**
- New money
- Competitive

Certification results



Potential mechanisms - Monitoring

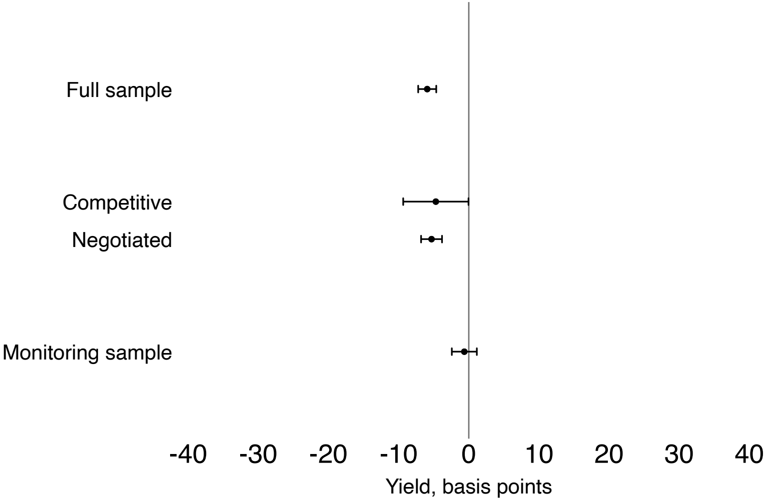
Method of sale

- Competitive, negotiated

Monitoring sample

- **Negotiated**
- New money
- Rated above A
- Insured
- GO

Monitoring results



Potential mechanisms - Expertise

Type of money

- Advance refunding, current refunding, new money

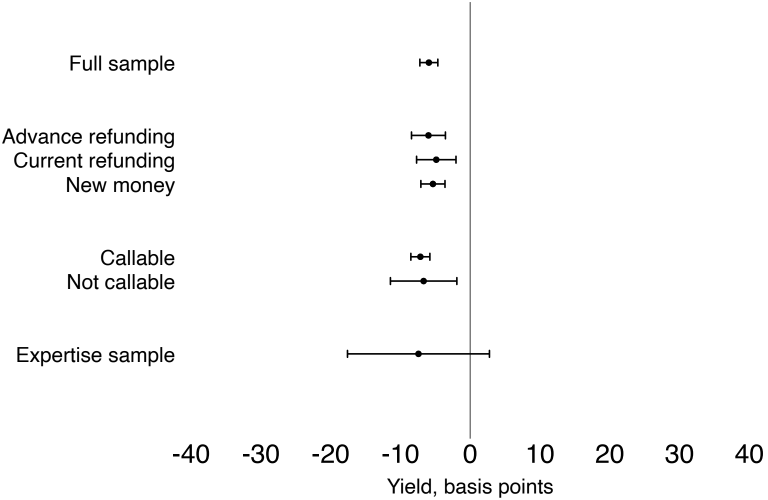
Callability

- With, without call feature

Expertise sample

- **Refunding**
- **With call feature**
- Competitive
- Revenue

Expertise results



By relative change

Sample	Pre-2011 w/MA mean	%Δ from pre-2011 w/MA mean	N
BBB or lower	359	-5.25***	459,124
Certification	325	-2.54	47,938
Revenue	373	-2.44***	770,084
No call feature	293	-2.28***	256,809
Not rated	385	-2.06***	210,775
Expertise	379	-1.96	89,496
Call feature	366	-1.95***	1,802,014
Advance refunding	350	-1.71***	349,028
Full sample	358	-1.66***	2,059,569
New money	337	-1.59***	777,898
Current refunding	328	-1.48***	393,762
Negotiated	367	-1.42***	1,265,719
Competitive	351	-1.34**	793,716
A	366	-1.28***	531,120
AAA	328	-0.77	146,346
All GO	349	-0.69***	1,283,168
AA	349	-0.47*	711,369
Unlimited GO	350	-0.36*	1,003,308
Monitoring	339	1.32	53,062

Significant savings

Benefit

- $20 million issue, at par, 5% coupon, 20 year maturity
- 6bp reduction = $150,000 NPV savings

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Cost

Median MA fee in CA 2011-2018 = $38,000

Conclusion

The 2010 Dodd-Frank provisions reduced interest costs

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Potential mechanisms difficult to disentangle

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Strongest effect for certification

Mixed results for expertise

Weakest effect for monitoring