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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Municipal advisors (MAs) unregulated prior to Dodd-Frank
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Municipal advisors (MAs) unregulated prior to Dodd-Frank

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?
Research question and potential mechanisms

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

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

Underwriter monitoring

Underwriters agent to issuers and investors

Underwriter monopsony power in negotiated sales

MAs monitor underwriters

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
Method

Generalized difference-in-differences

Post-period: 2011 to 2018

Treated group: bonds issued with MA

\[ \text{Yield}_{migt} = \alpha_0 + \beta_1 MA_i \times \text{Post-2010}_t \]
\[ + \beta_2 MA_i \]
\[ + \beta X_m + \beta X_i + \beta X_g \]
\[ + \gamma_g + \lambda_t + \epsilon_{migt} \]

\( m \) indexes bond maturities
\( i \) indexes bond issues
\( g \) indexes issuers
\( t \) indexes years
\( X \) are vectors of covariates at the maturity-, issue-, and issuer-level
\( \gamma \) are issuer fixed effects
\( \lambda \) are year fixed effects
and \( \epsilon \) are standard errors clustered at the issuer level
Full sample trends & event study

Mean Yield - All Bonds

Year:
- With MA
- Without MA

Trends

Event Study

Parameter Estimate

95% CI

Year:
- Parameter Estimate
- 95% CI
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

Yield, basis points

-40 -30 -20 -10 0 10 20 30 40

- Full sample
- AAA rated
- AA rated
- A rated
- BBB or worse rated
- Not rated
- Ult. GO
- All GO
- Revenue
- Certification sample
Potential mechanisms - Monitoring

Method of sale
  Competitive, negotiated

Monitoring sample
  Negotiated
  New money
  Rated above A
  Insured
  GO
Monitoring results

- Full sample
- Competitive
- Negotiated
- Monitoring sample

Yield, basis points

-40 -30 -20 -10 0 10 20 30 40
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

- Expertise sample
- Full sample
- Advance refunding
  - Current refunding
  - New money
- Callable
  - Not callable

Yield, basis points

-40 -30 -20 -10 0 10 20 30 40
By relative change

<table>
<thead>
<tr>
<th>Sample</th>
<th>Pre-2011</th>
<th>%△ from pre-2011</th>
<th>N</th>
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<tr>
<td></td>
<td>w/MA mean</td>
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<tr>
<td>BBB or lower</td>
<td>359</td>
<td>-5.25***</td>
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<td>Revenue</td>
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<td>Expertise</td>
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<td>Advance refunding</td>
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<td>Full sample</td>
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<td>Unlimited GO</td>
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<td>Monitoring</td>
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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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The 2010 Dodd-Frank provisions reduced interest costs
Potential mechanisms difficult to disentangle
Strongest effect for certification
Mixed results for expertise
Weakest effect for monitoring