Specialization investments and market power in the underwriting market for municipal bonds.

Dario Cestau

IE Business School
Heat map top 7-12 underwriters of school bonds

Actual

Theoretical
Why are underwriters segmented by state?

- Part 1:
  - Question 1: Strong entry barriers. What are these barriers?
  - Finding 1: Underwriters specialize either in competitive sales or negotiated sales in each state.
  - Conclusion 1: They have different entry barriers.

- Part 2:
  - Question 2: What are entry barriers for each sale type?
  - Finding 2: Top negotiated underwriters tend to be local, and top competitive tend to be national banks based in NYC.
  - Conclusion 2: Underwriting firms with pre-established broker-dealer relationships have an advantage in competitive sales. Local firms can provide more non-yield benefits, giving them an advantage in negotiated sales.
Sample

- Issuers: independent school districts.
  - Simple and homogenous across states.
  - School bonds constitute a large sample.
  - ISDs generally issue simple plain vanilla bonds.
  - They can’t self-regulate.


- Periods: 5 periods of 5 years each: 150 state-periods.

- For each state-period, I measure the market shares of the top 3 competitive and the top 3 negotiated underwriters.
Pennsylvania 2000-04 - Market shares

**Negotiated**
- Dain Rauscher: 18%
- Arthurs Les: 17%
- PNC: 11%

**Competitive**
- Boenning: 33%
- BNY-Mellon: 19%
- Paine Webber: 10%
## Pennsylvania 2000-04 - Drop market shares

### Negotiated
- Dain Rauscher: 18%
- Arthurs Les: 17%
- PNC: 11%

### Competitive
- Boenning: 33%
- BNY-Mellon: 19%
- Paine Webber: 10%
- BNY-Mellon: 4.6%
- Paine Webber: 0.9%
- Boenning: 0.5%
- Dain Rauscher: 0%
- Arthurs Les: 0%
- PNC: 0%
Median drops in market shares

- All bonds:
  - Top negotiated: 72% in deals, 85% in notional amount.
  - Top competitive: 69% in deals, 94% in notional amount.

- New-money unlimited vanilla example:
  - Negotiated: 84% in deals, 95% in amount.
  - Competitive: 88% in deals, 100% in amount.

- Ranking regression: \[ rknCOMP_{i,s} = a + b \times rknNEG_{i,s} + \varepsilon \]
  - High negotiated rankings lead to lower competitive rankings.
  - Substantial ranking reversion.

- Not a spurious result: they genuinely specialize.
Types of underwriters

- I classify each top underwriter in each state-period according to the location of the HQ relative to the state:
  - *Local-N*: local and never a top underwriter in another state.
  - *Local-X*: local and also a top underwriter in other states.
  - *Regional-1*: HQ in a contiguous state.
  - *Regional-2*: HQ at two state borders.
  - *National*: None of the above.

<table>
<thead>
<tr>
<th>Underwriter type by sale method specialization</th>
<th>Nat</th>
<th>Reg-2</th>
<th>Reg-1</th>
<th>Loc-X</th>
<th>Loc-N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 3 Neg</td>
<td>22%</td>
<td>12%</td>
<td>20%</td>
<td>19%</td>
<td>27%</td>
</tr>
<tr>
<td>Top 3 Comp</td>
<td>55%</td>
<td>5%</td>
<td>17%</td>
<td>15%</td>
<td>8%</td>
</tr>
</tbody>
</table>
Conclusion

Postulation:

- Underwriting firms with pre-established broker-dealer relationships have an advantage in competitive sales.
- Local firms can provide more non-yield benefits, giving them an advantage in negotiated sales.
  - Not know-how.
  - Not reputation (in the case of competitive sales).

Sales laws:

- Cestau et al. (2018): bans on private sales save 13bp per deal.
- 15 states have relaxed the bans of on negotiated sales. Why?
  - To favor local firms.
  - Local firms make a stronger lobby group.