The Cost Burden of Negotiated Sales Restrictions: A Natural Experiment Using Heterogeneous State Laws.

Darío Cestau

IE Business School
Summary and Results

- Should legislation restrict the negotiated sale of school bonds?

- What are the costs of negotiated sales restrictions?

- Results:
  - They increase gross spreads.
  - They increase bond yields for maturities up to twenty years.
  - They decrease bond yields for maturities beyond twenty years.
Which is better, competitive sales or negotiated Sales?

We cannot compare them directly (selection bias).

Example:

- Negotiated sales cost $20.
- Competitive sales avg cost = $50, where,
  - Comp cost = $10 for half the issuers,
  - Comp cost = $90 for half the issuers.

  **True difference** \((\text{Neg}-\text{Comp})\) = $20 - $50 = -$30.  
  Choice: competitive if cost = $10, negotiated if cost = $90. 
  **Observed difference** \((\text{Neg}-\text{Comp})\) = $20 - $10 = +$10.

Literature: model the choice problem.

**My Contribution:** I avoid the choice problem: I compare the bond issues of unrestricted issuers to the bond issues of issuers that are bound by law to use competitive sales.
Comparable Bonds - Statutory Security Classification

- General Obligation v. Revenue is an insufficient classification!

- 3 Types:
  - Temporary borrowings.
  - COPs/Installment.
  - GO and RV Bonds & Notes.

- Contribution: Statutory Security Classification:

<table>
<thead>
<tr>
<th>Primary source of security</th>
<th>Unlimited</th>
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</thead>
<tbody>
<tr>
<td>Primary creates revenues</td>
<td>Secondary source of security</td>
</tr>
<tr>
<td>Primary source role</td>
<td>Pledge/Lien on secondary</td>
</tr>
<tr>
<td>Pledge/Lien on primary</td>
<td>Full Faith and Credit</td>
</tr>
<tr>
<td>Primary cont' appropriation</td>
<td>Unrestricted funds and revenues</td>
</tr>
<tr>
<td>Primary unlimited</td>
<td>State Guaranty</td>
</tr>
</tbody>
</table>
Data

- 17,313 ‘New money’ GO school Bonds & Notes “deals” between 2004-2014.

- Gross spreads, yields, issuer data, deal data, bond data.

- Final sample: 16,661 with hand-collected security data, and hand-collected statutory sales provisions data.
Sales Provisions since 1997
Yield Regression - Effect on Yields by Maturity Year

- Dependent Variable: Bond yield.

<table>
<thead>
<tr>
<th>Mat</th>
<th>Eff(%)</th>
<th>Mat</th>
<th>Eff(%)</th>
<th>Mat</th>
<th>Eff(%)</th>
</tr>
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<tbody>
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<td>1-yr</td>
<td>0.20</td>
<td>11-yr</td>
<td>0.13</td>
<td>21-yr</td>
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<td>2-yr</td>
<td>0.13</td>
<td>12-yr</td>
<td>0.13</td>
<td>22-yr</td>
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<td>3-yr</td>
<td>0.18</td>
<td>13-yr</td>
<td>0.12</td>
<td>23-yr</td>
<td>-0.18</td>
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<tr>
<td>4-yr</td>
<td>0.18</td>
<td>14-yr</td>
<td>0.11</td>
<td>24-yr</td>
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<tr>
<td>5-yr</td>
<td>0.18</td>
<td>15-yr</td>
<td>0.13</td>
<td>25-yr</td>
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<td>6-yr</td>
<td>0.16</td>
<td>16-yr</td>
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<td>7-yr</td>
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<td>0.11</td>
<td>27-yr</td>
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<tr>
<td>8-yr</td>
<td>0.15</td>
<td>18-yr</td>
<td>0.09</td>
<td>28-yr</td>
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<td>9-yr</td>
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<td>30-yr</td>
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</tbody>
</table>

- Included Covariates: Statutory security (Primary Source, Unlimited, State FFC), coupon type, tax status, callable, sinkable, par value, maturity, bond rating, state F.E., Maturity F.E., and Month-Year F.E..
Conclusion

- Future research should use the statutory security classification.
  - Informative: It has predictive power beyond bond ratings.
  - Parsimonious: Suitable for quantitative analysis.
  - Scalable: Suitable for a variety of bond types.

- Sales laws should:
  - Allow negotiated sales for maturities below 20 years,
  - Consider the trade-off between lower yields and higher gross spreads for maturities above 20 years.