The Double Benefit Myth: Disallowed Interest Expense and Inefficiency in the Municipal Bond Market

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Outline

• What is IRC 265?

• How the formulaic application of 265 to banks forced them out of the muni market

• Debunking double benefit myth

• The consequences of 265 for efficiency in the muni market

• Policy options
IRC 265: NO INTEREST DEDUCTIONS FOR TAX-EXEMPT INVESTMENTS

• “In the case of a financial institution, no deduction shall be allowed for that portion of the taxpayer’s interest expense which is allocable to tax-exempt interest.”

• Why? “a taxpayer could accrue a double benefit by deducting interest paid on money borrowed to invest in tax-exempt securities.” (GAO 1988)

• TEFRA 1982: 15% of formulaic allocation disallowed.

• TRA 1986: 100% disallowed.
Formulaic application of 265 caused an exodus of banks from muni market
The Double Benefit Myth

• “a taxpayer could accrue a double benefit by deducting interest paid on money borrowed to invest in tax-exempt securities.” GAO 1988.

“suppose a taxpayer with an annual income from taxable dividends of $5,000 borrows $100,000 at 5-percent interest and uses the $100,000 to purchase tax-exempt securities that pay 5-percent interest…if the $5,000 interest expense is allowed as a deduction, no tax would be due on the $5,000 in taxable dividends.”
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The Double Benefit Myth

- Arbitrage requires that \( r_t(1-t) = r_e \), where:
  - \( r_t \) is the yield on taxable bonds
  - \( r_e \) is the yield on tax-exempt bonds
  - \( t \) is the marginal tax rate

- If the bank deposit rate is \( r_d \) then banks earn the same after-tax return if and only if they get the tax benefit from deducting interest, when:
  
  \[
  (r_t-r_d)(1-t) = r_e-r_d(1-t) \\
  =(r_e-r_d) + r_d t
  \]
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  \]

- Disallowing interest expense imposes tax penalty, drives return on exempt debt below that of taxable debt.
### Numerical example

<table>
<thead>
<tr>
<th></th>
<th>Taxable Bond</th>
<th>Tax-Exempt Bond w/ Deduction</th>
<th>Tax-Exempt Bond No Deduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment rate</td>
<td>4.77</td>
<td>3.14</td>
<td>3.14</td>
</tr>
<tr>
<td>Deposit rate</td>
<td>2.86</td>
<td>2.86</td>
<td>2.86</td>
</tr>
<tr>
<td>Pre-tax income</td>
<td>1.91</td>
<td>0.28</td>
<td>0.28</td>
</tr>
<tr>
<td>Tax</td>
<td>0.40</td>
<td>-0.60</td>
<td>0</td>
</tr>
<tr>
<td>After-tax income</td>
<td>1.51</td>
<td>0.88</td>
<td>0.28</td>
</tr>
</tbody>
</table>
## Numerical example: Sensitivity of After-Tax Income

<table>
<thead>
<tr>
<th></th>
<th>Taxable Bond</th>
<th>Tax-Exempt Bond w/ Deduction</th>
<th>Tax-Exempt Bond No Deduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original</td>
<td>1.51</td>
<td>0.88</td>
<td>0.28</td>
</tr>
<tr>
<td>Investment yield +1%</td>
<td>2.30</td>
<td>1.88</td>
<td>1.28</td>
</tr>
<tr>
<td>Expense cost -1%</td>
<td>2.30</td>
<td>1.67</td>
<td>1.28</td>
</tr>
<tr>
<td>Spread -0.5%</td>
<td>1.31</td>
<td>1.13</td>
<td>0.53</td>
</tr>
<tr>
<td>Tax rate 34% (vs 21%)</td>
<td>1.26</td>
<td>1.25</td>
<td>0.28</td>
</tr>
</tbody>
</table>
Consequences of 265 Disallowance

• Exodus of banks → now a retail market

• High tax-adjusted spreads, high transaction costs. Why?
  • Illiquidity (e.g. Ang et al 2010, 2014)
  • Excessive risk premia (Schwert 2017)

• Absence of banks surely contributes
  • Bring pools of risk-bearing capital; expertise in local underwriting; financial sophistication and trading capacity.
Consequences of 265 Disallowance

• Bank participation reduces spreads and increases liquidity

• Build America Bonds (Treasury 2011)

• Dagostino 2022 & St. Clair 2022: Bank qualification reduces yields, increases issuance, boosts local activity.
Policy options

• Repeal IRC 265’s 1980s pro-rata disallowances.
• Increase small issuer thresholds
  • Adjusted for inflation $10m in 1986 would be ~$30m
• Make permanent ARRA’s 2% de-minimus rule
• Changes would reduce yields, increase liquidity, improve delivery of municipal subsidy.
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