Inside Debt and Bank Risk Taking

Discussion

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Is Jensen & Meckling framework appropriate?

• **Srivastav, et al. use J&M-style ratio as main test variable:**
  – CEO debt-to-equity / Firm debt-to equity
  – J&M-style ratio is explicit in this methodology

• **Bennet, et al. separate the CEO and Firm ratios:**
  – Simple CEO debt-to-equity ratio is main test variable
  – Firm debt-to equity is included as control variable
  – J&M-style ratio not used, but it is implicit in this methodology

• **Is this the appropriate framework for their tests?**
  – Is CEO inside leverage meaningful only in relation to Firm leverage?
  – Does the J&M “ratio of ratios” = 1.0 have meaning in these papers?
CEO risk taking; Mainly costs to creditors

CEO risk aversion; Mainly costs to shareholders
Is Jensen & Meckling framework appropriate?

• **Both of these studies focus on default risk.**
  – Bennet, et al.: Main dependent variable is Expected Default Frequency.
  – Srivastav, et al.: Main dependent variable is Distance to Default.

• **Default risk is the only risk that matters for creditors.**

• **Default risk is the major and ultimate risk that matters for bank supervisors.**
  – Indeed, Bennet, et al. use CAMELS (safety and soundness) ratings in place of default risk in robustness testing.

• **The J&M “ratio of ratios” = 1.0 has no special meaning for either creditor wealth or supervisor utility.**
  – Neither paper tests for differences in default sensitivity around 1.0.
  – Srivastav, et al: Are results similar if you substituted the simple “CEO ratio” in place of the J&M “ratio of ratios”? 
Raw CEO inside debt/CEO inside equity

<table>
<thead>
<tr>
<th></th>
<th>mean</th>
<th>median</th>
<th>std. dev.</th>
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<tbody>
<tr>
<td>Wei and Yermack</td>
<td>0.22</td>
<td>0.15</td>
<td>0.24</td>
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<tr>
<td>Bennet, et al.</td>
<td>0.37</td>
<td>0.09</td>
<td>1.35</td>
</tr>
<tr>
<td>Srivastav, et al.</td>
<td>1.15</td>
<td>0.39</td>
<td>2.23</td>
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</tbody>
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- **Why are Srivastav, et al. values so high?**
  - In their first-stage probits, they show that higher CEO inside debt makes acquisition less likely.

- **Srivastav, et al.: What about internal growth?**
  - Does inside debt shift growth from external channel to internal channel? Or does is simply staunch growth altogether?

- **Both papers: Were CEO inside debt levels persistent before, during and after the crisis?**
  - A time series from 2007-2013 would be interesting.
Returns to CEO inside debt

• **Srivastav, et al**: Acquisitions by high inside debt banks are risk-reducing.
  – Research into other bank policy decisions a natural complement/check.

• **Bennett, et al**: Inside debt reduces default risk and increases ROE, ROA and excess returns.
  – Is inside debt really this powerful? Risk↓ and Returns↑?
  – We need to see both studies repeated using data from across an entire business cycle.

• **Bennett, et al.** argue that inside debit may be a “signal” to investors that the bank will be strong during uncertain times.
  – I would expect the coefficients on their inside debt ratios to have smaller coefficients during “normal times” when all banks are far from default.
Vega, Delta, Inside Debt and Endogeneity

• Delta and vega are theoretically and/or arithmetically related to various CEO inside debt measures.

• Delta and vega are used as r.h.s. controls in both papers:
  – In all Srivastav, et al. models.
  – In Table 8 robustness tests in Bennett, et al.

• The estimated marginal effect of inside debt—holding delta or vega constant—is difficult to interpret.

• A bank’s delta, vega and inside debt are all likely endogenous to a bank’s default risk.
  – Srivastav, et al. instrument for inside debt—only in Table 6—but do not instrument for their vega/delta variable.
  – Bennet, et al. do not attempt to treat endogeneity of CEO compensation incentives.
Economic magnitudes

- The two papers use different models and specifications.

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<th>A one standard deviation increase in:</th>
<th>Is associated with:</th>
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<td>Srivastav, et al.</td>
<td>CEO Relative D/E Ratio</td>
<td>1/6&lt;sup&gt;th&lt;/sup&gt; std dev increase in DD from acquisition</td>
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<tr>
<td>Srivastav, et al.</td>
<td>CEO Relative D/E Ratio</td>
<td>1/4&lt;sup&gt;th&lt;/sup&gt; std dev increase in DD from acquisition</td>
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- Are these economically significant effects?
- Can the Bennet, et al. result be expressed as “increase in CEO inside debt needed to reduce EDF to acceptable supervisory level” ?
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