Creditor Conflict and the Efficiency of Corporate Reorganization

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Our paper

• Studies incentives for secured creditors to force inefficient liquidations or sales in bankruptcy.

• Develops a simple model that mirrors characteristics of Ch. 11 and allows us to gauge efficiency of outcomes.


• Key results:
  – Inefficient sales/liquidations occur in 8% of cases.
  – Average cost of inefficiency is 0.28% of reorganization value.
Policy debate

“There has been an explosion in the use of secured credit... trumping any long-term reorganization for the benefit of existing shareholders”

--Bankruptcy Reform Commissioners Robert Keach and Albert Togut, June 2011

“The Bankruptcy Code provides few checks on lenders overreaching ... often to the detriment of the estate and the debtor’s other stakeholders.”

Related literature

• Early studies of capital structure and restructuring efficiency:

• Liquidation values and incentives to renegotiate:
  – Benmelech and Bergman (2008)

• Inefficient liquidations in bankruptcy:
  – Strömberg (2000)
  – Ayotte and Morrison (2009)

• **Our paper:** Combines a structural model with large dataset to estimate incidence and costs of inefficient liquidations.
The Model

• Let:
  – \( V \) = expected reorganization value at start of case.
  – \( L = (1-\delta)V \) is the liquidation value at start of case.
  – \( S \) = Size of secured creditor’s claim

• We assume secured creditor with claim \( S \) has strong control over decision to liquidate versus reorganize.

• Well known result: Senior (secured) creditors prefer early liquidations because upside from a reorganization is capped at \( S \), but downside can go to zero.
The Model

• Three factors can mitigate number of inefficient liquidations:
  1. For $V$ far below $S$, secured creditors can still capture upside from reorganization.

  2. For values of $L$ that are much lower than $V$ (high liquidation discounts), it can still pay for secured creditor to make the efficient decision.

  3. For $V > S$, junior creditors can litigate, object, or payoff secured creditors to take over process and reorganize.
     • Assume junior creditors must pay transaction cost $\theta \times S$ to take over process.
Simple model: Senior creditors’ decision

Senior creditors prefer to liquidate whenever
\[ \text{Min}(L, S) > V - C(V, S, \sigma, T) \]
Simple model: Add junior creditors

Junior creditors prefer to take control of process whenever

\[ \max(0, L - S) < V - S(1 + \theta) \]
Simple model: Add junior creditors

Junior creditors prefer to take control of process whenever
\[ \max(0, L - S) < V - S(1 + \theta) \]
Model estimation

• Use Moody’s database to collect information on:
  – Whether a firm is reorganized or sold/liquidated.
  – Realized recovery values from reorganizations and liquidations.

• Use model to estimate expected reorganization values and liquidation values for each of the 721 bankrupt firms.

• Examine reorganization frequencies as a function of degree to which secured creditor is under- or over-secured.
Model + Data yields rich results (Table 6)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Estimate</th>
<th>Std. Err.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total reorganizations</td>
<td>73%</td>
<td>(2.3%)</td>
</tr>
<tr>
<td>- By seniors</td>
<td>41%</td>
<td>(2.5%)</td>
</tr>
<tr>
<td>- By juniors</td>
<td>33%</td>
<td>(1.7%)</td>
</tr>
<tr>
<td>Total liquidations</td>
<td>27%</td>
<td>(2.3%)</td>
</tr>
<tr>
<td>- Efficient</td>
<td>19%</td>
<td>(1.8%)</td>
</tr>
<tr>
<td>- Inefficient</td>
<td>8%</td>
<td>(3.2%)</td>
</tr>
<tr>
<td>Average liquidation discount</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- All bankrupt firms</td>
<td>11%</td>
<td>(1.7%)</td>
</tr>
<tr>
<td>- Reorganizations</td>
<td>16%</td>
<td>(2.8%)</td>
</tr>
<tr>
<td>- Efficient liquidations</td>
<td>-8%</td>
<td>(2.5%)</td>
</tr>
<tr>
<td>- Inefficient liquidations</td>
<td>4%</td>
<td>(0.4%)</td>
</tr>
<tr>
<td>Expected efficiency losses</td>
<td>0.28%</td>
<td>(0.14%)</td>
</tr>
<tr>
<td>Transactions cost paid by juniors, $\theta$</td>
<td>7%</td>
<td>(3.0%)</td>
</tr>
</tbody>
</table>

"Saved" by juniors
Summary

- Use a large sample of Moody’s bankruptcies and estimable economic model to measure frequency and costs of inefficient liquidations.

- Results indicate that the frequency of bankruptcies that end in an inefficient liquidation, 8%, and attendant costs, 0.28% of value, are relatively small.

- Drawback: Inferences based on large firms only. Estimation using smaller firms would be interesting area for future research.