Creditor Rights, Debt Capacity and Securities Issuance: Evidence from Anti-Recharacterization Laws

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MOTIVATION

1. **Goal:**
   Understand the impact of creditors’ rights protection on firms’ financing decisions
Cross-Country Evidence on Creditors Rights:

1. La Porta, Lopez-de-Silanes, Shleifer and Vishny (1998):
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   - ✓ Approval of debtor’s filing for reorganization

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   - Country’s bankruptcy procedure are **correlated** with *(un)observable* country characteristics
   - Understanding **within** country effect(s) of creditor rights protection laws is important
Staggered Adoption of Anti-recharacterization Laws:

1. Securitization: SPVs→ Limit risk exposure of collateral/pledgeable assets
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   - The transfeeree has the *right to pledge or exchange* the transferred asset
   - The transferor has no rights or obligations to reclaim the transferred assets
   \(\Rightarrow\) Transferor does *not maintain effective control* over the transferred assets
Staggered Adoption of Anti-recharacterization Laws:

1. CONTEXT: La Porta et al (1998): U.S Case:
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<table>
<thead>
<tr>
<th>Approval of debtor’s filing for reorganization</th>
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<td>D.I.P {post-vs pre-petitioners}??</td>
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<td>Ability to seize collateral after reorganization petition is approved</td>
<td>NO {Automatic Stay Clause}</td>
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La Porta et al 1998

U.S Bankruptcy
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3. The laws **effectively transfer** some control rights from borrowers to creditors: \{liquidation value, financial slack\}
Staggered Adoption of Anti-recharacterization Laws:

1. The laws strengthen creditors rights in adopting states by:

   - Facilitating swift seizure and repossession of assets from SPVs
   - Limiting applicability of Ch.11 automatic stay clause
   - Reduce uncertainty regarding value of collaterized assets

2. Seven states adopted anti-recharacterization laws:

3. Exogenous: Laws are due to the lobbying efforts of banking and securitization industries (Kettering, 2008)
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   - What are the effects of anti-recharacterization laws on firms’ debt capacity?
   - What are the effects of anti-recharacterization laws on securities issuance decisions?
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- **Compustat**: North America Fundamental Annual File
- Exclude financial firms (SIC 6000-6999): Liquidity
- Exclude financial firms (SIC 4900-4999): Regulations
- Require a firm has at least $10 Million in Assets
- US firms: require availability of state of incorporation
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## Summary Statistics:

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<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Median</th>
<th>Std. Dev</th>
<th>25(^{th})</th>
<th>75(^{th})</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash</strong></td>
<td>0.204</td>
<td>0.0954</td>
<td>0.247</td>
<td>0.0237</td>
<td>0.299</td>
</tr>
<tr>
<td><strong>Ln(assets)</strong></td>
<td>4.56</td>
<td>4.53</td>
<td>2.46</td>
<td>2.91</td>
<td>6.22</td>
</tr>
<tr>
<td><strong>Tangibility</strong></td>
<td>0.265</td>
<td>0.187</td>
<td>0.265</td>
<td>0.077</td>
<td>0.387</td>
</tr>
<tr>
<td><strong>Book Leverage</strong></td>
<td>0.234</td>
<td>0.181</td>
<td>0.231</td>
<td>0.0175</td>
<td>0.375</td>
</tr>
<tr>
<td><strong>Market Leverage</strong></td>
<td>0.215</td>
<td>0.122</td>
<td>0.246</td>
<td>0.01</td>
<td>0.357</td>
</tr>
<tr>
<td><strong>Capex</strong></td>
<td>0.067</td>
<td>0.039</td>
<td>1.001</td>
<td>0.016</td>
<td>0.0749</td>
</tr>
<tr>
<td><strong>Market-to-Book</strong></td>
<td>2.30</td>
<td>1.52</td>
<td>2.43</td>
<td>1.09</td>
<td>2.45</td>
</tr>
<tr>
<td><strong>Dividend Dummy</strong></td>
<td>0.328</td>
<td>0.000</td>
<td>0.469</td>
<td>0.00</td>
<td>1.000</td>
</tr>
<tr>
<td><strong>Profits</strong></td>
<td>-0.056</td>
<td>0.093</td>
<td>1.02</td>
<td>-0.03</td>
<td>0.16</td>
</tr>
<tr>
<td><strong>Equity Issuance</strong></td>
<td>0.127</td>
<td>0.004</td>
<td>0.382</td>
<td>0.00</td>
<td>0.042</td>
</tr>
<tr>
<td><strong>Debt Issuance</strong></td>
<td>0.0701</td>
<td>0.00</td>
<td>0.296</td>
<td>0.00</td>
<td>0.08</td>
</tr>
<tr>
<td><strong>Net Leverage</strong></td>
<td>0.029</td>
<td>0.073</td>
<td>0.403</td>
<td>-0.22</td>
<td>0.313</td>
</tr>
<tr>
<td><strong>Equity Rep.</strong></td>
<td>0.0138</td>
<td>0.000</td>
<td>0.0597</td>
<td>0.00</td>
<td>0.002</td>
</tr>
<tr>
<td><strong>Net working Capital</strong></td>
<td>-0.283</td>
<td>0.041</td>
<td>25.5</td>
<td>-0.067</td>
<td>0.185</td>
</tr>
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BASELINE REGRESSION: Staggerred Difference-in-Difference

1. \[ y_{i,s,t} = \alpha_i + \beta_1 \text{Law}_{i,s,t} + \psi' \mathbf{X}_{it} + \eta_i + \delta_t + \epsilon_{it} \]
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- \( \text{Law}_{i,s,t} \): Indicator variable equals “1” for states that passed anti-recharacterization laws at \( t \)
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\[ \text{Exogeneity: } E[\epsilon_{it}|\eta_i, \delta_t, \mathbf{X}_{it}]=“0” \]
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- \( \{i, s, t\} \)- Indexes- firm, state, time respectively
- Exogeneity: \( E[\epsilon_{it}|\eta_i, \delta_t, X_{it}] = "0" \)
- DiD Set-up: Favara, Gao and Giannetti 2019, Chu 2018, Li, Whited and Wu 2016, Mann 2017
BASELINE REGRESSION: Staggered Difference-in-Difference

1.

\[ Market\_Leverage_{it} = \left\{ \frac{DLTT_{it} + DLC_{it}}{DLTT_{it} + DLC_{it} + MVE} \right\}, \quad MVE = \{ PRCC_{it}, XCSHO_{it} \} \]

(2)
**Hypothesis [1]:**

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   - The laws expand contractual space
   - Contractual space is bounded by pre-existing debt/debt capacity
   - The laws are *pareto improving* since some firms will increase their borrowing capacity
## Market Leverage:

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DEBT CAPACITY:

Kernel Density: Leverage Distribution

Creditor Rights, Debt Capacity and Securities Issuance: Evidence from Anti-Recharacterization Laws
## DEBT CAPACITY:

### Market Leverage:

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**Notes:**
- Law: Coefficient estimates for the effect of anti-recharacterization laws on market leverage.
- Constant: Estimates for the constant term in the regression.
- Firm Controls: Indication whether firm controls are included in the model.
- Firm F.E: Indication whether firm fixed effects are included.
- Year F.E: Indication whether year fixed effects are included.
- Clustered Std Errors: Indication whether clustered standard errors are used.
- Robust Std Errors: Indication whether robust standard errors are used.
- Regression Type: Type of regression used (FE = fixed effects).
- Quantile Regression Estimates: Estimates for the quantiles of the distribution.
- 25th%, 50th%, 75th%: Percentiles of the distribution of the estimates.
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Hypothesis [1]:

1. Key Findings:
The state adoption of anti-recharacterization is:

- Associated with an increase of 6.05% in leverage
  ▶ This result is driven mostly by firms in the first two quartiles of leverage distribution

- Option to borrow is valuable as it enables the firm to avoid more costly forms of financing in future states
  ▶ Stronger creditors' rights restore the option (cost of borrowing)
  ▶ Firms in adopting states react by exercising this option
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DEBT CAPACITY:

Hypothesis [1]: Debt Maturity Structure:

1. \textbf{[H1A]}: Anti-recharacterization laws are \emph{positively} related to long-term debt financing
Hypothesis [1]: Debt Maturity Structure:

1. [H1A]: Anti-recharacterization laws are positively related to long-term debt financing
   - Long-term debt = {Capital leases, commercial paper, debentures, convertible debt, subordinated debt, bonds-and-notes}
   - Welch (2010), Colla, Ippolito and Kai (2010)
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   - Long-term debt mainly consists of public (market) debt
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   - On average public debt is cheaper than bank debt
   - The laws transfer control rights from debtors to creditors \(\Rightarrow\) mitigate potential distortions (debt overhang)
Hypothesis [1]: Debt Maturity Structure:

1. [H1B]: Anti-recharacterization laws are negatively related to short term debt financing
Hypothesis [1]: Debt Maturity Structure:

1. [H1B]: Anti-recharacterization laws are negatively related to short term debt financing
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   - On average bank debt is costlier due to costly state verifications
   - **Long-term vs. Short-term Debt:**
     Increase in financial flexibility reflects the option-value of unused debt capacity- DeAngelo, DeAngelo and Whited (2011)
## DEBT CAPACITY:

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Hypothesis [2]: Financing Activities:

1. [H2A]: Anti-recharacterization laws are positively related to debt issuance
Hypothesis [2]: Financing Activities:

1. [H2A]: Anti-recharacterization laws are positively related to debt issuance

   ▶ The laws enhance the value of pledgeable assets and increase the option-value of unused debt capacity
Hypothesis [2]: Financing Activities:

1. [H2A]: Anti-recharacterization laws are positively related to debt issuance
   - The laws enhance the value of pledgeable assets and increase the option-value of unused debt capacity
   - Firms would respond to exogenous change in debt capacity by issuing debt: borrowing cost
DEBT CAPACITY:

Hypothesis [2]: Financing Activities:

1. **[H2A]**: Anti-recharacterization laws are **positively related to debt issuance**
   - The laws enhance the value of pledgeable assets and increase the **option-value of unused debt capacity**
   - Firms would respond to **exogenous change in debt capacity** by issuing debt: **borrowing cost**

2. **[H2B]**: Firms that **actively issue debt are more likely to increase debt issuance following adoption of the laws**
Hypothesis [2]: Financing Activities:

1. **[H2A]**: Anti-recharacterization laws are positively related to debt issuance
   - The laws enhance the value of pledgeable assets and increase the option-value of unused debt capacity
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2. **[H2B]**: Firms that actively issue debt are more likely to increase debt issuance following adoption of the laws
   - Frequency of security issuance might reflect special features of the issuing firm
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   - The laws enhance the value of pledgeable assets and increase the option-value of unused debt capacity
   - Firms would respond to exogenous change in debt capacity by issuing debt: borrowing cost

2. **[H2B]: Firms that actively issue debt are more likely to increase debt issuance following adoption of the laws**
   - Frequency of security issuance might reflect special features of the issuing firm
   - Proactive issuers might behave very differently from passive issuers following the enactment of anti-recharacterization laws
## DEBT CAPACITY:

### Debt Issuance:

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<tr>
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Creditor Rights, Debt Capacity and Securities Issuance: Evidence from Anti-Recharacterization Laws
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**Hypothesis [2]: Financing Activities:**

1. **[H3]:** Anti-recharacterization laws are negatively related to equity issuance
Hypothesis [2]: Financing Activities:

1. [H3]: Anti-recharacterization laws are negatively related to equity issuance
   ▶ Large equity issuance are costlier than debt issuance of similar size
Hypothesis [2]: Financing Activities:

1. [H3]: Anti-recharacterization laws are negatively related to equity issuance
   - Large equity issuance are costlier than debt issuance of similar size
   - The announcement of equity issuance is associated with stock decline and lower raw returns
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   - Frequent issuers tend to have greater and pressing needs for external financing -Ritter and Huang (2017)
DEBT CAPACITY:

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   - Frequent issuers tend to have greater and pressing needs for external financing -Ritter and Huang (2017)
   - **Divergence** in the cost of equity vs debt tend to lead to higher utilization of debt over equity
## Equity Issuance:

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Creditor Rights, Debt Capacity and Securities Issuance: Evidence from Anti-Recharacterization Laws
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Robustness Tests:

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Robustness Tests:

Confounding Effects: Placebo Tests

1. **Question:** Are the documented effects due to actions other than the state adoption of the laws?
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1. **Question**: Are the documented effects due to *actions* other than the state adoption of the laws?
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Robustness Tests:

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Robustness Tests:

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   - **Characteristics:**
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   - Alabama [S. Carolina], Delaware [Montana]
   - Texas [Michigan], S. Dakota [N. Dakota], Nevada [Arkansas]
## Robustness Tests: Confounding Effects: Placebo Tests

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Creditor Rights, Debt Capacity and Securities Issuance: Evidence from Anti-Recharacterization Laws
Legal Challenge: Federal vs. State laws:

1. **Case Law Precedent 2003:**
   *Reaves Brokerage Company Inc. v. Sunbelt Fruit & Vegetable Company*
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   - Creditors were unable to repossession pledged collateral

2. **Concern:** Potential challenges to the laws weakened the effects of the state laws

3. The effects of the state laws should be limited to pre-2003 period
Robustness Tests:

**Legal Challenge(s): Federal vs State Laws:**

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Creditor Rights, Debt Capacity and Securities Issuance: Evidence from Anti-Recharacterization Laws
Role of Internal Funds:

1. Firms should prefer internal financing to external financing:
   Pecking Order: Myers (1984)
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   - Firms trade-off the benefit of security issuance the against associated information sensitivity cost
   - **Conjecture:** Negative r/ship between cash and leverage
   - Higher cash holdings firms might be less responsive to the laws
### Role of Internal Funds:

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Creditor Rights, Debt Capacity and Securities Issuance: Evidence from Anti-Recharacterization Laws
### Robustness Tests:

#### 2008 Financial Crisis:

1. **Question:**
   Are the documented “treated effects” due to the 2008 financial crisis?
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2. **Empirical Strategy** *Difference-in-Difference:*
Robustness Tests:

2008 Financial Crisis:

1. **Question:** Are the documented “treated effects” due to the 2008 financial crisis?
   - Treated effects might be simply picking up the effects of the crisis/external shock(s)
   - Significant overlap between the post-crisis period and the post-adoption period

2. **Empirical Strategy Difference-in-Difference:**
   - Dummy “After” => Account for financing decision(s) before and after the financial crisis
### Robustness Tests:

**Financial Crisis:**

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Robustness Tests:

Which Firms Respond More Strongly?

1. **Constrained vs. Unconstrained:**

   - **Unconstrained Firms:**
     - Expansion in contractual space: Face lower trade-off costs,
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     - Reduce costly external financing

   - **Constrained Firms:**
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Creditor Rights, Debt Capacity and Securities Issuance: Evidence from Anti-Recharacterization Laws
Growth in Firm-Level Covariates:

1. Controlling for firm-level determinants does not take into account the effects of changes in firm’s determinants
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1. Controlling for firm-level determinants does not take into account the effects of changes in firm’s determinants
   ▶ Treatment Effects might be attributable to mechanical balance sheet expansion
Robustness Tests:

Growth in Firm-Level Covariates:

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Conclusion:

1. **Extant Literature:**
   - Evidence on stronger creditors rights protection is mixed
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2. **Seven States:**
   - Anti-recharacterization laws strengthen creditors rights in adopting states
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   - Evidence on stronger creditors rights protection is mixed

2. **Seven States:**
   - Anti-recharacterization laws strengthen creditors rights in adopting states

3. **Debt Capacity:**
   - The laws are positively related to (market) leverage
   - The laws are positively related to long term debt financing and negatively related to short term debt financing
   - The laws are positively related to debt issuance
   - The laws are negatively related to equity issuance
   - Proactive issuers of debt significantly increase debt issuance
   - Proactive issuers of equity significantly decrease equity issuance
Conclusion:

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