Discussion of Ma and Wei’s

“International Equity and Debt Flows to EMEs: Composition, Crises, and Controls”

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Summary

• Paper provides a theory of countries’ external capital structure
  • Based on notion that equity generates greater moral hazard than debt
  • And institutional quality counteracts moral hazard incentives

→ More developed countries use more equity
  → Are better insured
  → Experience fewer crises
  → Have less need for capital controls

• Will provide more extensive comments in person
Background: Pecuniary Externalities

Incomplete financial markets generate two types of pecuniary externalities (Davila and Korinek, 2018):

• Distributive externalities: when agents are imperfectly insured, and price movements change agents’ terms-of-trade to improve insurance

• Collateral externalities: when agents are subject to price-dependent financial constraints
Background: Pecuniary Externalities

This paper: collateral externalities

- Declining Collateral
- Capital Outflows
- Falling Exchange Rates
Background: Pecuniary Externalities

This paper: collateral externalities

Declining Collateral

Capital Outflows

Falling Exchange Rates
Background: Pecuniary Externalities and 2\textsuperscript{nd}-Best Interventions

\[ \frac{1}{1+r} S \]

\[ \text{MRS period 1/period 2} \]

\[ \frac{1}{1+r} \]

\[ 1/(1+r) \]

\[ \text{MRS period 2/period 3} \]
Pecuniary externalities and capital structure

• Described collateral externalities arise in any state of nature in which the collateral constraint binds
  • Typically, constraint is tightest in bad states of nature
  • Equity contracts entails much smaller repayments than debt in those states
    → smaller externalities

• General formula for tax $t_x$ on security $x$:
  $$t_x = E[\tau^\omega \cdot x^\omega]$$
  where $\tau^\omega$ ... externality kernel (externality in state of nature $\omega$)
  and $x^\omega$ ... state-contingent payoff
Pecuniary externalities and capital structure

For example, in Korinek (JIE 2018):

<table>
<thead>
<tr>
<th>Asset category</th>
<th>Real gross return</th>
<th>Externality in 1998</th>
<th>Optimal tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dollar debt</td>
<td>218%</td>
<td>30.7%</td>
<td>1.54%</td>
</tr>
<tr>
<td>GDP-indexed dollar debt</td>
<td>190%</td>
<td>26.8%</td>
<td>1.34%</td>
</tr>
<tr>
<td>CPI-indexed rupiah debt</td>
<td>100%</td>
<td>14.1%</td>
<td>0.71%</td>
</tr>
<tr>
<td>Rupiah debt</td>
<td>63%</td>
<td>8.9%</td>
<td>0.44%</td>
</tr>
<tr>
<td>Stock market index</td>
<td>44%</td>
<td>6.2%</td>
<td>0.31%</td>
</tr>
</tbody>
</table>
Empirical findings

Fact 1: institutional quality \(\uparrow\) share of equity financing

Fact 2: share of equity financing \(\downarrow\) crisis probability

Fact 3: institutional quality \(\downarrow\) use of capital controls

Comments:
• Much of this probably driven by AEs vs EMEs/DEs
• External equity financing/GDP is better indicator of a country’s insurance
Main Contribution: Model of Capital Structure

Tirole-style moral hazard problem that is linear in amount raised
• MH problem is set up for both debt & equity
• then assumed away for debt
• but collateral constraint on debt is imposed

→ It would be cleanest to derive both from (the same) microfoundations
Debt vs Equity

Tirole-style moral hazard problem that is linear in amount raised
• Gives rise to “iceberg cost” of equity $\theta$
• Debt vs equity = return vs insurance
• Greater institutional quality allows for more insurance

Propositions 4 & 6: competitive equilibrium and planner feature:
• only debt if $\theta$ too high
• debt and equity otherwise
(case of equity only is unlikely unless $\theta \leq 0$)
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