Discussion of:

Competition and Stability in Banking: A New World for Banking Policy?

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The views expressed are my own and do not reflect those of the FRBNY or the Federal Reserve System.
The Question

- How does competition affect stability of the banking system?
  - timely question with important implications
- What are the mechanisms at work?
  - paper goes through theory and evidence
- What are the implications for banking regulation ...
  - in normal times?
  - during a crisis?
• Paper provides an excellent overview and synthesis of the literature

• Examines two channels through which competition can affect stability
  • liability side: makes a bank more susceptible to a run
  • asset side: affects bank’s investment decisions

• I will focus my comments on the liability side
  • illustrate the argument in a simple model
  • then comment on implications
Competition and Bank Runs

- A simple model based on Diamond & Dybvig (1983)
- 2 periods, \( t = 1, 2 \)
- Depositors’ preferences:

\[
\begin{cases}
  u(c_1) \\
  u(c_1 + c_2)
\end{cases}
\]  
if
\[
\begin{cases}
  \text{impatient} \\
  \text{patient}
\end{cases}
\]

- type is revealed at \( t = 1 \); fraction \( \pi \) will be impatient

- Two assets:

<table>
<thead>
<tr>
<th></th>
<th>Return at ( t = 1 )</th>
<th>Return at ( t = 2 )</th>
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<tbody>
<tr>
<td>liquid</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>illiquid</td>
<td>1 - ( \tau )</td>
<td>( R &gt; 1 )</td>
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• Banks offer demand deposit contracts
  • depositors receive $c_1$ if they withdraw early, $c_2$ if they wait
• Imperfect competition:
  • a bank’s depositors have outside option $\bar{u}$
  • higher $\bar{u}$ ≈ more competition
• Bank’s profit
  \[ R (1 - \pi c_1) - (1 - \pi) c_2 \]
• Bank maximizes profit subject to
  \[ \pi u (c_1) + (1 - \pi) u (c_2) \geq \bar{u} \]
Graphically:

Perfect competition

Slope = \(-\frac{R\pi}{1-\pi}\)
Graphically:

- Perfect competition
- Imperfect competition

Utility = $\bar{u}$
Graphically:

- **Perfect competition**
- **Imperfect competition**

Utility = $\bar{u}$
Graphically:

Less competition $\rightarrow$ lower $c_1$ and $c_2$, higher profit
• The bank is susceptible to a self-fulfilling run if

\[ c_1 > \pi c_1 + (1 - \tau) (1 - \pi c_1) \]

or

\[ 1 > \pi + (1 - \tau) \left( \frac{1}{c_1} - \pi \right) \]

• RHS is strictly decreasing in \( c_1 \)

\[ \Rightarrow \text{increased competition makes this more likely to be satisfied} \]

• Intuition: profits are a buffer against unexpected withdrawals
  
  • competition shrinks this buffer; leaves bank more vulnerable
  
  • note: profit and bank capital are equivalent here
What should a regulator do?

- Deposit insurance can (usually) prevent runs, but ...
  - exacerbates moral hazard problem on the asset side

In principle:

- Use risk-sensitive deposit insurance
  - design to offset moral-hazard effects
- Combine with risk-based capital requirements
  - offset externalities caused by systemic effects
In other words:

- Appropriate (risk-sensitive) regulation can remove the tradeoff between competition and stability
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In practice:

- Risk-sensitive regulation requires regulators to assess and *codify* risk
- Codification opens the door to regulatory arbitrage
  - people care independently about the asset’s rating (think of “AAA” assets)
• If risk-sensitive regulation is imperfect, limiting competition may be a (partial) substitute
  • a blunt instrument to be sure, but perhaps useful nonetheless
  • might want some risk-sensitive regulation, some limits to competition

• Interesting point; potentially quite important

• Arguing against competition makes me uncomfortable, but ...
  • now is certainly a time for thinking broadly
Comments

1) How broadly should we think of this analysis as applying?
   
   - Only commercial banks? all financial intermediaries?
   
   - answer has important implications for regulatory reform
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1) How broadly should we think of this analysis as applying?
   - Only commercial banks? all financial intermediaries?
     - answer has important implications for regulatory reform

2) Should not underestimate the benefits of competition
   - Danger following a crisis is sometimes too much reaction rather than too little
   - Dynamic efficiency and innovation is important
     - compare online banking with cable TV service
3) How are banks different from General Motors?

- Some of the arguments above would apply to GM as well
  - less competition would have increased (short-term) profits
  - possible coordination failure among customers
  - large social cost of (disorderly) failure, etc.
- Good test for any argument that banks are special
  - paper partially addresses this issue; could do more
4) Time-consistency is a serious issue

- Paper discusses how policy has changed during the crisis
  - allowing mergers that previously would have been rejected, etc.
  - market participants anticipate these reactions to some degree
  - need to incorporate these effects into our models
- See recent work on the Diamond-Dybvig model with limited commitment by policy makers
  - Ennis and Keister (2009)
  - shows how public intervention can be a source of instability