Discussion of

1) Lessons from “American Bank Supervision from the Nineteenth Century to the Great Depression” by White

2) Systemic Risk Monitoring by Brunnermeir

3) Two Monetary Tools: Interest Rates and Haircuts by Pedersen
Preamble

- Three very interesting and very different papers on a common theme: Banking regulation.

- Why do we need regulation?

- Because of some market failures:

  1) Too big to fail
  2) Deposit insurance
  3) Externality in liquidity
  4) Asymmetric information creates inefficiencies
Macro vs. Micro regulation

The term “macroprudential regulation” has become common in the regulatory arena and the press. What is the difference

<table>
<thead>
<tr>
<th></th>
<th>Micro</th>
<th>Macro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximate objective</td>
<td>Limit distress of individual financial institutions</td>
<td>Limit financial system-wide distress</td>
</tr>
<tr>
<td>Ultimate objective</td>
<td>Taxpayers’ protection</td>
<td>Avoid GDP losses</td>
</tr>
<tr>
<td>Risk</td>
<td>Exogenous</td>
<td>Endogenous</td>
</tr>
<tr>
<td>Correlation</td>
<td>Irrelevant</td>
<td>Important</td>
</tr>
<tr>
<td>Calibration</td>
<td>Bottom-up</td>
<td>Top-down</td>
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**Micro:** “for the financial system to be sound it is necessary and sufficient that each institution is sound.”  **Macro:** neither necessary nor sufficient
The clearest in this sense.
The problem is externalities

- Direct contractual: domino effect (interconnectedness)
- Indirect: price effect (fire-sale externalities, credit crunch, liquidity spirals, haircut)

How to fix it: Pigouvian tax.

Goal is to measure this externality
2 approaches

1) Co VaR:

VaR: \( q \) quantile of losses

Co VaR: \( q \) quantile of losses contingent on other(s) institution(s) having certain losses

- Contingent event has two elements:
  - State of the world is bad enough that other institutions have large losses
  - Spillover effect of other institutions
If (as claimed) today banks’ risk management system ignore both it is a huge problem.

But only the second one represents a true externality.

How do we separate the two?
Authors recognize that these estimates are backward looking.

Risk of exacerbating the fluctuations

This is the reason why they go to a characteristic-based approach

But this relationship is subject to dramatic changes due to financial innovation -> difficult to have reliable estimates
2) Risk Topography

- Two-step approach
  1) Elicit from market participants their (partial equilibrium) responses
  2) Calibrate general equilibrium responses

  - Calibrate not estimate. Structural model?
  - Built how?
  - How do we induce truth telling from private agents?
## 4. Macro- vs. micro-prudential regulation

- **Fallacy of the Composition:**
  
  what’s micro-prudent need not be macro-prudent

<table>
<thead>
<tr>
<th>Balance sheet</th>
<th>action</th>
<th>micro-prudent</th>
<th>macro-prudent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset side</td>
<td>(fire) sell assets</td>
<td>Yes</td>
<td>Not feasible in the aggregate</td>
</tr>
<tr>
<td></td>
<td>no new loans/assets</td>
<td>Yes</td>
<td>Forces others to fire-sell + credit crunch</td>
</tr>
<tr>
<td>Liability side</td>
<td>(raise long-term debt)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>raise equity</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

- Micro: based on risk in isolation
- Macro: Classification on systemic risk contribution measure, e.g. CoVaR
- Ratios versus Dollars
Very interesting history of the evolution of bank regulation in the United States.

The goal is to “Look back at history at a time when Micro-Prudential Regulation was sufficient”

Sufficient to what?

In the “golden age” of the National bank era we had 5 major Banking Panics in 50 years (1873, 1884, 1890, 1893, 1907)

Plus many minor panics.
Insolvent banks on average paid 75.7% of the debt

Is this the effect of double liability or of excessive liquidation

If you never missed a plane you waited too long

If we are meant to draw a lesson from this history we need to ask the question of what is the goal of regulation.
Pedersen

- Similar complaint with Pedersen’s paper.
- The existence of an haircut (and the level) is taken as exogenous.
- Sure the practice is 2000 years old. But debt is almost 4000 year old and we still want to derive its level endogenously.
- What is the source of inefficiency, why MM is violated?
- My guess is that the haircut is either too low or too high to compensate risk.
- If this is the case, the second monetary tool is nothing more than a hidden subsidy provided by the Fed.
- As in the PPIP program, the Fed (taxpayer) is undercompensated for the risk it takes lending.
In their model, transferring wealth from risk averse agent to risk tolerant ones will improve asset prices (welfare?)

Why do not they consider a regressive income redistribution as an alternative policy tool?

What they are proposing is similar, but hidden and as such more politically appealing.
Political economy

- Regulation has failed because regulators are captured.
  - It was not lack of power to intervene, it was lack of political will to intervene.

- Why do we think that moving the problem from the micro level to the macro level will improve outcomes?
  - It is easier to bail out an entire industry than individual institutions
  - When intervention at a macro level, lobbying opposition is softer