Financial and Banking Regulation in the Aftermath of the Financial Crisis

ECON 40364: Monetary Theory & Policy

Eric Sims

University of Notre Dame

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Readings

▶ Text:
  ▶ Mishkin Ch. 10; Mishkin Ch. 12 pg. 283-289

▶ Other:
As we have seen, banking / financial intermediation is useful because (1) it helps solve asymmetric information problems (2) engages in liquidity transformation
  - This allows savings to be funneled into productive investment
But banking / financial intermediation is prone to another asymmetric information problem
Depositors (more generally, lenders to a bank or similar financial institution) do not have perfect information about the health of the bank
This can result in fear induced runs, runs which can be (and have been in history) very costly
Banks are Heavily Regulated

- Banks are heavily regulated. Why?
- Bank failures are costly – because of informational asymmetries and contagion, failure of one bank could lead to failure of others by stoking fear-induced runs. A sort of externality
- And these runs can be economically very costly
- So banks are afforded protections to limit costs of failure – deposit insurance, lender of last resort, bailouts
- But this creates a moral hazard problem
- Regulations make sense to mitigate the moral hazard problem:
  - Disclosure requirements
  - Capital ratios
  - Liquidity/reserve ratios
  - Restrictions on types of assets
The Financial Crisis and Regulation

- Part of the problem with the financial crisis is that it centered on shadow banks, which operate outside of the conventional regulatory system of commercial banks.
- Also, whereas the government safety net was explicit for commercial banks with deposit insurance, it was not for other financial firms, although many evidently behaved under a belief of an implicit safety net.
- The Fed and other government agencies knew what they needed to do given the liquidity crisis, but in some cases their legal authority to do so was not clear (e.g. Lehman).
- Since the Great Recession, there have been calls for more, different, and expanded forms of financial regulation.
The Basel Accords (I, II, and III) constitute an international set of recommendations concerning capital ratios and related regulatory issues for the banking industry.

Most important regulation concerns minimum capital requirements measured in terms of “risk-weighting” (Basel I: 8 percent).

In Basel 2, capital requirements were what I would call countercyclical (the Mishkin book calls them procyclical): banks are required to hold more capital in bad times and less in good times.

Basel 3 moved towards raising capital requirements and reversing the countercyclicality of capital requirements in Basel II.
Microprudential Regulation

- **Microprudential regulation** is the traditional form of banking regulation
- It is focused on the regulation of particular institutions, not the financial system as a whole
- Basic idea: impose capital constraints on institutions. This forces them to “internalize” some of the social losses of failure that they otherwise might not due to the presence of deposit insurance / lender of last resort / bailout
- If a bank gets into trouble with too little capital, regulators force it to restore its capital ratio
- Regulators do not care whether the bank raises more capital (the numerator) or reduces assets (the denominator)
- In a micro context, this makes sense
- What about a macro context?
Macroprudential Regulation

- Macroprudential regulation focuses on regulating the banking/financial system as a whole.
- To see this clearly, suppose that a bank starts with assets of $100 and capital/equity of $10 – capital ratio of 10 percent.
- Suppose that $5 of loans go bad – resulting in assets of $95 and capital of $5 – capital ratio of 5.2 percent.
- One way to restore ratio to 10 percent is to sell assets and pay off debt – sell $45 of assets and pay off $45 in debt to restore capital ratio of 10 percent (i.e. balance sheet “shrinkage”).
- But if there is a macro crisis and all banks do this, we get fire sale dynamics. This won’t be very successful (because prices will fall), and depressed asset prices will exacerbate any credit crunch.
- Why wouldn’t a bank raise more capital rather than sell assets to restore its capital ratio? It’s harder to do – trying to raise equity in a crisis is difficult and may send bad signals.
Hanson, Kashyap, and Stein (2011) characterize macroprudential regulation as:

“... an effort to control the social costs associated with excessive balance sheet shrinkage on the part of multiple financial institutions hit with a common shock”

In a nutshell, macroprudential regulation is aimed at:

1. Not try to shrink assets in a crisis (to avoid firesale dynamics)
2. To have bigger/better capital ratios in good times, thereby reducing the probability of crises in the first place

Importantly, macroprudential regulation doesn’t presuppose deposit insurance (one of things which makes traditional banks unique from other financial institutions)

Therefore, the principles of macroprudential regulation ought to apply to any kind of large financial institutions that engages in maturity transformation and is therefore subject to runs
Macroprudential Tools

- A non-exhaustive list of possible tools:

  1. Time-varying capital requirements: make required capital ratios **high** in good times and comparatively **low** in bad times
     - High in good times: less probability of a crisis (i.e. build up a “capital buffer”)
     - Low in good times: reduce incentive to engage in balance sheet shrinkage

  2. Larger and “better” capital requirements on average: common stock is easier to recapitalize than preferred stock (preferred stock is more senior, and hence any new capital a bank raises will serve to bail out the preferred investors, making it difficult to make new equity issuance)

  3. Corrective action based on dollars of capital, not ratios. Idea here is simple: in a crisis, require banks to raise more capital, not raise their capital ratio (which would allow them to engage in asset shrinkage)

  4. Regulating debt maturity: short maturity debt (e.g. repurchase agreements) needs to be “rolled over” and is therefore much more subject to runs than longer maturity debt
The **Dodd-Frank** bill is the principal piece of legislation in the US that came out of the crisis. Its stated aim: 

*To promote the financial stability of the United States by improving accountability and transparency in the financial system, to end “too big to fail”, to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services practices, and for other purposes*

**Key features:**

1. Consumer protection
2. Resolution authority to seize financial firms that are “systemically important”
3. Additional regulation (higher capital standards) for systemically important firms
4. Volcker rule: restrictions on proprietary trading
5. Derivatives legislation: related to AIG blowup
“Too Big to Fail”

- The notion of “too big to fail” is that the government would bail out large firms.
- Of course, this raises moral hazard issues.
- And politically, “bailouts” during the time of the Crisis were politically very unpopular.
- Dodd-Frank promised to “end” too big to fail by establishing things like the Financial Stability Oversight Council, which gave the Fed far wider latitude to regulate large financial institutions, not just traditional banks.
- Reduced flexibility to act as lender of last resort, while giving Fed more flexibility to act preemptively before a crisis.
- Of course this is all coming into focus again, as the Fed takes unprecedented steps to combat the Coronavirus epidemic.