Banking Theory, Deposit Insurance, and Bank Regulation

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based largely on Diamond, Douglas W., and Philip H. Dybvig, 1986, Banking Theory, Deposit Insurance, and Bank Regulation, *Journal of Business* **59**, 55–68. Stable URL: http://www.jstor.org/stable/2352687

Some Policy Conclusions

1. Market discipline is unlikely to be effective.
2. Banks should be not be allowed to enter exotic or risky business using insured deposits.
3. 100% reserve banking is risky because it stops liquidity creation.
4. The deposit insurance premium should reflect riskiness of the assets.
5. Deposit insurance should be unlimited.
6. Basel's structure cannot fulfill its objectives.
7. Asking about the appropriate capital requirement misses the important point.

Overview

- What do banks do?
- Bank regulation pre-Basel
- Regulation under Basel
- Shadow banking
- Financial crisis
- Current regulation
- Suggestions looking forward

What Banks Do

- Asset Side Services (e.g., originating and servicing loans)
- Liability Side Services (e.g., accepting deposits and providing cash)
- Transformation Services (creation of liquidity)

Diamond and Dybvig (1983): liquidity creation by banks

Traditional Bank Regulation

- Bank Examiners
  - examined the loan documentation and lending practices
  - formed an opinion of the safety and soundness of the bank
- Glass-Steagall
  - separated investment banking from commercial and mortgage banking
  - limited deposit insurance umbrella to a short list of activities

Regulation under Basel

- Designed to create a "level playing field"
- Capital requirements based on coarse aggregates
  - based on punishment in a repeated game
  - game not repeated if the bank blows up!
- No more Glass-Steagall, so government is insuring hedge funds etc.
- Not effective either in keeping banks safe or in allowing banks to do what we need them to do

Shadow Banking

- Huge unregulated repo market
- Some possible causes
  - regulatory arbitrage
  - limits on deposit insurance
  - restrictive regulation under Basel

Financial Crisis (simplified and partial view)

- Collapse of shadow banking
- US real estate small compared to shadow banking
- Bank commercial paper, MMFs, too big to fail, etc.
- Basel regulation failed
  - simultaneous bank failures in many countries
  - coarse risk measures easy to game

A Surprisingly Accurate Quote from 1986

> Proposals to move toward 100% reserve banking would prevent banks from fulfilling their primary function of creating liquidity. Since banks are an important part of the infrastructure in the economy, this is at best a risky move and at worst could reduce stability because new firms that move in to fill the vacuum left by banks may inherit the problem of runs.

Diamond, Douglas W., and Philip H. Dybvig, 1986, Banking Theory, Deposit Insurance, and Bank Regulation, *Journal of Business* **59**

cf. Prescott, Edward Simpson, 2010, "Introduction to the Special Issue on the Diamond-Dybvig Model," *Federal Bank of Richmond Economic Quarterly*, First Quarter 2010.

http://www.richmondfed.org/publications/research/economic_quarterly/2010/q1/pdf/prescott.pdf

How to Eliminate Bank Failures Completely

If we want to avoid the problem of banks blowing up, it is simple: just make banking illegal.

Of course, this destroys whatever benefits we get from banks.

Some Big Questions

- Is liquidity provided by banks important?
- Is liquidity provided by shadow banks important?
- Will increasing deposit insurance limits and regulation shrink shadow banks?
- Will Basel start becoming effective in controlling risk? (I doubt it.)

My Recommendations

- Eliminate Basel and bring back the bank examiners (is this politically feasible?). Alternatively, re-organize Basel to become monitors of national bank regulators (can this possibly work?).
- Reinstate Glass-Steagall – the Volcker Rule is a watered-down version.
  - Even this watered-down rule has been repealed in a bi-partisan effort.
  - Probably the only effective part of Dodd-Frank has been repealed.
- Eliminate the limits on deposit insurance (in process?).
- Move towards narrow banking if bank liquidity provision can be shown to be surplus (doubtful at this point).

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Recent Developments

1. Ring-fencing
2. Pre-packaged bankruptcy
3. Managerial incentives
4. Withholding bonuses for five years
5. Money Market Funds – off the hook again!
6. Superpriority (financial instruments exempt from bankruptcy rules)

some recent work:
http://phildybvig.com/somepapers.html

More Detailed Questions

1. Is creation of liquidity by banks surplus liquidity in the economy or does it serve a useful economic purpose?

2. How about creation of liquidity by the shadow banking sector? Was it surplus? Did it represent liquidity banks could have provided?

3. From the events in the crash, it would seem that the liquidity provide by banks and shadow banks was important because their collapse is associated with the start of prolonged problems in the economy. Now, it is an empirical question whether these problems were actually caused by the banking collapse, and it is an interesting empirical question to test this against various alternatives (for example, maybe the problem is rising oil prices or unemployment due to increased automation). Personally, I suspect (but cannot prove) that loss of liquidity was a big problem.

Questions (cont.)

4. If, as I suspect, the loss of liquidity was a big problem, was that only a problem given that agents came to expect more liquidity than they needed and organized their affairs in a way that required too much liquidity? Or, is it a more fundamental problem and the liquidity is important for an efficient economy?

5. If there was too much liquidity in the economy, why? Some people have argued that it was because of too much stimulus and the government kept interest rates too low (and perhaps the Chinese government had a role as well as the US government). I don't want to take a side on these claims, but it is an important empirical question whether the explosion of the huge shadow banking sector was a distortion that was an unintended side effect of policy or whether it is an essential feature of a healthy economy.

Questions (cont.)^2

6. We have good reason to think banks taking retail deposits should be required to have deposit insurance and regulated on the amount of risk they can take. How about investment banks and other "systemically important financial institutions?" This is a tough question. There are arguments for and against, although perhaps there is also a symantic question about what beside a bank could possibly be a systemically important financial institution.