Banking Theory, Deposit Insurance, and Bank Regulation

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Introduction - What does this paper do?

- The purpose of this paper is to summarize the policy implications of existing economic models of the banking industry and to examine some current recommendations in light of the theory.
- Oppose Kareken's lead piece in that symposium.

Introduction - Kareken (1986)

- "I argue that, if having safe transactions account balances is the objective of the federal government, then that policy has to be regarded as less than adequate."
- "I also argue that, if the object of the government is, say, to protect the money supply, however defined, then, of the alternatives I consider, there is only one that may be better than present-day policy, that under which banks would be split de facto or de jure into separate payments services and lending companies"

Introduction - Kareken et al (1978)

- "Among the more important conclusions are the following: (1) Absent deposit insurance and regulation, bankruptcy does not occur; (2) under an FDIC-type insurance scheme, the banking industry holds as risky a portfolio as regulations allow; and (3) a capital requirement, by itself, does nothing to forestall bankruptcy."

Introduction - Why current literature is insufficient?

- The bank management literature has considered the management problems faced by individual banker, not at banking industry level.
- The macroeconomics literature has focused on banks' effects on the macroeconomy, with special emphasis on their role in determining the money supply, ignoring banks' need to provide services that are the very reason for the existence of banks, i.e., transformation services.
- A third literature focuses directly on the banking industry and on the services provided by banks. In the authors' view, this is the right track for discussing banking regulations, but this string of research is still young and many of its model predictions remain unverified through empirical studies.

Introduction - What are the objectives of regulation?

- Prevent bank runs. Since banks play a fundament role in maintaining the economic stability of the market, the probability of having a bank run should be minimized.
- Do not disturb banks' function in providing their core services. That is asset, liability, and transformation services. Come back later.
- Focus on solving the problems of banks, not shifting the problems to other parties in the economy.

Introduction - Proposals

- Proposals to impose market discipline on banks by limiting deposit insurance or requiring banks to have uninsured subordinated short-term debt are bad policy.
- Banks should be prevented from using insured deposits to fund entry into new lines of business, such as investing in real estate or underwriting equity issues, that are characterized by risk taking and not primarily by creation of liquidity.

Introduction - Proposals (cont'd)

- Proposals to move toward 100% reserve banking would prevent banks from fulfilling their primary function of creating liquity
- Deposit insurance premiums should be based on the riskiness of the bank's loan portfolio to the extent that the riskiness can be observed.

- Asset services are provided to the "issuers" of bank assets (the borrowers); these services include evaluating, granting, and monitoring loans.
- Liability services are provided to the "holders" of bank liabilities (the depositors); these services include holding deposits, clearing transactions, maintaining an inventory of currency, and service flows arising from conventions that certain
- Transformation services involve providing the depositors with a pattern of returns that is different from (and preferable to) what depositors could obtain by holding the assets directly and trading them in a competitive exchange market.

Synthesis of Banking Theory and Policy - Asset Services

- Banks have advantages in information gathering - alleviating adverse selection, moral hazard, and free riding problems.
- Therefore, we want to choose a regulatory policy that will give banks the incentive to give loans to profitable projects, to deny loans to unprofitable projects, and to perform the optimal level of monitoring.
- Given our goal, fixed rate deposit insurance has potential incentive issues if used carelessly, i.e., encourage banks to take on high risk projects because deposit insurance contract sets a lower bound for their losses.

Potential solutions to overtaking risks

- One solution is to impose restrictions on what banks can do with a covenant.
- Another solution is to make the insurance premiums variable, just as insurance companies charge lower health insurance premiums to nonsmokers than to smokers and lower auto insurance premiums to people who have had no accidents.
- A third solution is to monitor the banks continually and to make suggestions on how to reduce risk, just as insurance companies do for commerical fire and accident insurance.

Among the three, what do regulators focus on?

- Bank regulators have focused on restrictions on bank behavior and careful monitoring of banks but have been resistant to introducing a risk adjustment to deposit insurance premiums.
- It is hard to get good information about the quality of those bank loans for which there is no secondary market, let alone objective information that could justify a governmental policy choice.
- Even though some useful variables, i.e, interest rate paid on deposits and interest rate charged on loans, it is still hard to punish banks ex-post based on these variables because the bank would already be broke, these variables can be used to control banks ex ante though.

Liabilitiy services

- The clearing of transactions and the holding of currency inventories are the most important bank services associated with the liability side of the balance sheet.
- Changes in the payments technology have weakened the link between the money supply and bank deposits.
- One implication is that banks need not be so important to macroeconomics as they were before since close substitutes exist in the provision of payment and other liability services. The other implication is a potential policy goal of trying to repair the money supply linkage by keeping nonbanks out of the liability service businesses.

Transformation services - What is it?

- Converting illiquid assets into liquid assets is the bank service associated with both sides of the balance sheet.
- Conversion of illiquid claims into liquid claims is related to the "law of large numbers" property of averaging out the withdrawals of large numbers of individual depositors, allowing the transfer of ownership without transferring the loan monitoring task.
- Preventing bank runs is a big concern when we discuss transformation services. A literature on transformation services shows that there is an intimate relation among improving risk sharing, fixed claim deposits, and bank runs.

Transformation services - Bank runs could happen to healthy banks

- All that is required to make a run possible is that the liquidation value of the loan portfolio is less than the value of the liquid deposits.
- While, traditional theroy says that unexpected loan losses can cause bank runs.
- The recent literature shows that the existence of bank runs does not require any loss in value of the underlying assets.

Transformation services - Bank run solutions

- Deposit insurance, lending from the government to cover large withdrawals, suspension of convertibility of deposits into currency are three ways to stop or avert runs. In each case, the solution removes the incentives for the depositors to take out their funds
- The solutions have to be implemented quickly, convincingly, and for a sufficiently long time.

Summary of policy implications

- Banks are subject to runs because of the transformation services they offer.
- Bank runs do real damage because of the interruption of profitable investments.
- Federally sponsored deposit insurance has been the most (the only?) effective device for preventing runs. Privately provided insurance and the discount window have not been credible sources of confidence to depositors. Suspension of convertibility interrupts bank services and only defers the problem until banks reopen.
- Banking policy must preserve the basic function of banks, that is, the creation of liquidity. In particular, any device to prevent runs must not simultaneously prevent banks from producing liquidity.
- The bank-run problem is exacerbated when banks can take on arbitrarily risky projects. Given deposit insurance (or the discount window or suspension of convertibility), it is important to keep banks out of risky outside businesses.

Existing Proposals for Reform - 100% Reserve Banking

- Requirement that intermediaries offering demand deposits can hold only liquid government claims or securities, for example, Treasury bills or Federal Reserve Bank deposits.
- The short answer is NO. This is a dangerous proposal that would do substantial damage to the economy by reducing the overall amount of liquidity. It is also likely to be ineffective in increasing stability since it will be impossible to control the institutions that will enter in the vacuum left when banks can no longer create liquidity

Existing Proposals for Reform - 100% Reserve Banking

- If successful, this policy would remove the purely monetary causes of bank runs by limiting banks to performing liability services. The net effect of such a policy is to divide the banking industry into two parts.
- The proposal would just pass along the instability problem to their successors in the intermediary business. Whatever party that holds the illiquid assets would suffer similar threat of runs as banks.

Subordinated Short-Term Debt

- The idea is to expose the banks to some risk so that they will be less likely to make efficient risk choice and cost minimization.
- If the fraction of uninsured short-term deposits is large, such a run will be costly. In addition, the government has a hard time leaving claims on large banks uninsured, ex post. So this does not look like a viable option

Limiting Deposit Insurance

- Requiring banks to issue some minimum quantity of uninsured claims is a good idea, but the requirement ought to be to issue longterm claims, such as equity or long-term debt
- Sometimes, due to regulator's need to avoid encumbering lawsuits, even long term claims end up being paid off in full. So this policy is unlikely to be completely effective expost.