Banking without Tax-Backed Deposit Insurance

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TRADITIONAL BANKS and thrift institutions are beset by two special problems that most other firms do not confront. The first special problem is the extreme mismatching of maturities by thrift institutions. Until recently, these institutions were expected and even encouraged to finance 30-year fixed-rate mortgages by accepting savings deposits with maturities of virtually zero. The second special problem is the tendency for institutions that offer checkable deposits to be subject to liquidity crises unless the deposits are backed 100 percent by reserves.

These problems motivated policymakers to introduce federal deposit insurance in the 1930s. During the past three decades, however, financial markets have developed the means of solving these two special problems without government intervention.

The solution to the first problem is the certificate of deposit (CD), which was introduced in the early 1960s. That thrift institutions can issue CDs permits them to reduce interest rate risk to any degree desired. The thrift industry disaster of 1979-82, which ultimately led to the collapse of the Federal Savings and Loan Insurance Corporation (FSLIC) in 1989, could therefore have been prevented. It would never have happened if federal deposit insurance protection had not encouraged depositors to keep their funds in thrift institutions that followed the unsound traditional practice of speculating against an increase in interest rates.[2]

The solution to the second problem was the development of money market mutual funds (MMMFs) in the early 1970s. The value of shares in these funds is predictable enough that owners can write checks against them for any amount up to the total sum deposited.[3] Yet even though MMMFs invest in financial instruments that may not come due for many weeks or months, they are entirely run-proof. Should the volume of withdrawals be high enough to cause a decline in the value of the assets as they are sold off, the fund's liability to its remaining depositors simply falls in the same proportion. At the same time, the prospective return on investments in the fund increases, so as old customers line up to withdraw, new customers will be lining up to invest.

To earn interest revenue, banks and thrift institutions back their transactions liabilities by making loans or purchasing credit instruments with positive maturities. If these transactions

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[2]See Kane (1985 and 1989). Robert Van Order has pointed out that the borrower's prepayment option written into most fixed-rate mortgages would leave an institution funded with fixed-maturity CDs exposed to losses if the interest rate fell. Even this risk could be eliminated, however, by making CDs similarly prepayable at the thrift's option, with a penalty to discourage its actually being exercised that could be as large as the sum of the prepayment penalty written into mortgages (in the form of discount points) and the institution's capital/assets ratio.

[3]There is a small possibility that when checks for the amount invested clear, the value of the shares will have fallen slightly. Ordinarily the manager of the fund would have no reason not to commit to lend customers the small difference, at a penalty overdraft interest rate, to prevent checks from bouncing in such a case.

accounts have fixed nominal values, at least a small amount of interest risk is created. Someone must bear this risk. A common argument for government deposit insurance is that no single private issuer has the resources to insure this risk credibly for all the transactions deposits in the country. The fallacy in this argument is that *the depositors themselves* have more than adequate resources. MMMFs simply spread this risk (which is small per dollar deposited but may be large per dollar of bank capital) over all their depositors, much as a stock mutual fund spreads undiversifiable stock price risk over a large pool of investors. Spreading an observable risk in this manner is generally a much closer approximation to optimal risk sharing than concentrating it on the shoulders of an outside insurance company. It is vastly superior to concentrating any possible losses entirely on the last unlucky depositors in line, as occurs in a run on a traditional bank. Most money holders would undoubtedly prefer to bear the small interest rate risk of an MMMF than to forego a market return by holding deposits fully backed by cash reserves.

One important limitation of an MMMF is that its assets must be highly marketable securities, rather than one-of-a-kind customer or commercial loans. These illiquid assets can still be indirectly monetized by MMMFs, however, if the latter buy the marketable commercial paper of finance companies that make illiquid loans (presumably on a matched-maturity basis). Relying on MMMFs to provide checking-account services would thus require bifurcating the traditional bank into a finance company that makes commercial loans and sells its own marketable commercial paper on the open market and an MMMF that buys commercial paper and other similarly liquid short-term securities to back checkable deposits.

It turns out that MMMFs have already weathered one major run, but it was so uneventful that no one remembers it. MMMF deposits fell from $242.8 billion in November 1982 to $184.2 billion in May 1983, as the subsidy provided by federal deposit insurance lured customers to the newly created money market deposit accounts at banks and thrift institutions. Even though the MMMFs suffered a 24.1 percent loss in their deposits over just six months, the episode passed without a noteworthy incident. A similar run on banks or thrifts would have been a calamity comparable to that of the early 1930s.

Unfortunately, some money market funds have attempted to emulate traditional banks by penny-rounding, that is, by ignoring changes in the market values of their portfolios that amount to less than 0.5 percent. This is an inherently destabilizing practice because as the portfolio's true market value is eroded, informed customers will pull their funds out to attain a higher return elsewhere and to avoid the prospective downward discontinuity in the value of their accounts. This actually happened to one large fund in the early 1980s at great expense to its manager. As long as MMMFs behave like true mutual funds, this problem cannot arise.[4]

It may well be that uninsured yet well-capitalized traditional banks investing in safe, short-term loans, as advocated by Kevin Dowd in this issue, would provide adequately safe checking accounts with fewer transactions costs than the bifurcated finance company/MMMF system just outlined. Or perhaps traditional checking accounts and checkable MMMFs would coexist side by side. If these more traditional banks meet the market test, there is no reason the government should either discourage them by imposing restrictions or subsidize them by providing tax-backed deposit insurance.[5]

It is well known that federal deposit insurance creates adverse incentives for institutions to take potentially undesirable risks such as maturity transformation, undiversified lending or outright speculation. Whatever case may once have existed for the Federal Deposit Insurance Corporation (FDIC) and the FSLIC, the development of market solutions to the two prob-

[4]Some MMMFs offer investors a variable number of shares of fixed value instead of a fixed number of shares of variable value. This is merely a cosmetic difference with no substance, however. The penny-rounding problem arises when funds try to offer investors a fixed number of shares of fixed value.

[5]Keeley (1990, p. 1185) shows that the average market value of bank holding company capital relative to assets exceeded 10 percent throughout the early 1960s, when bank failures were uncommon. The pertinent figure for depositor protection is the capital of the subsidiary banking companies themselves, but we may assume that this figure was comparable. Absent government deposit insurance, we may therefore assume that depositors would seek out institutions with capital/assets ratios of 10 percent or even higher and that banks would be forced either to provide such ratios or to close. Without restrictions on competition, the market value of bank capital would correspond more closely to book value than it did during the 1960s.

lems faced by banks and thrift institutions made these two agencies obsolete long before the 1989 collapse of the FSLIC and the 1991 insolvency of the FDIC.[6]

One particularly dangerous argument that is repeatedly put forward in favor of federal deposit insurance is that the government, with its power to print paper money, is the only entity in the economy that is able to insure banks' obligations to their depositors credibly. Though it is true that there is no limit to the number of dollars the Federal Reserve System can circulate, monetary theory tells us that there *is* a limit to the purchasing power of these dollars. Monetizing the existing capital shortfalls of failing banks and thrift institutions through Fed loans to the FDIC's Bank Insurance Fund or the Savings Association Insurance Fund would simply cause a one-time increase in the price level, which is itself a form of taxation. But relying on the Fed to write a blank check for the unconstrained future excesses of insured financial institutions could easily lead to runaway hyperinflation and the complete collapse of the U.S. financial system.

Before many restrictions on competition were relaxed or eliminated during the 1970s and 1980s, federal deposit insurance appeared to be self-supporting, despite the minimal premiums that were charged.[7] In truth, deposit insurance was supported, at great expense to depositors, by the quasi-monopoly rents that were earned by banks and thrifts because of the restrictions on competition. The capitalized value of these rents conveyed substantial value to bank charters, yet the value of the charter did not show up as an asset on the balance sheet of a bank. The market value of the institution was therefore much greater than the value that appeared on the books. Before the 1970s, banks and thrifts were rarely allowed by their owners to fail because failure would mean giving up the valuable charter.[8] In the few instances when banks did actually fail, it was not uncommon for investors to offer to *pay* the FDIC to take over these insolvent institutions. Because the FDIC rarely lost money when troubled institutions failed, it had little bureaucratic incentive not to act promptly to close them. Since 1980, however, investors instead must ordinarily *be paid* out of the deposit insurance fund's limited resources to induce them to take over failed banks.

Thus before deregulation the public paid dearly for deposit safety—not directly through explicit premiums, but indirectly through forgone interest on deposits and higher interest rates on loans. Often this cost depositors hundreds of basis points of interest on insured deposits—much more than the fair value of insuring a safe traditional bank.[9] Deregulation, though beneficial, thus exposed the inherent weaknesses of the federal deposit insurance system.

Diamond and Dybvig (1983) made a challenging case that tax-backed government deposit insurance allows bank-like institutions to serve a valuable risk-sharing function. This service, the authors argued, could not be provided without insurance. Diamond and Dybvig concluded that "government deposit insurance can improve on the best allocations that private markets provide." Their highly technical paper has been widely cited as providing the ultimate case for government deposit insurance.[10]

McCulloch and Yu (1991) have demonstrated that the risk-sharing function Diamond and Dybvig have modeled could be provided as easily by self-funding and run-proof financial institutions through what we call a contingent bonus contract. These institutions would not require taxpayer-backed government deposit insurance

[6]Yu (1991, p. 78) estimates that as of 1989, the cumulative realized losses of the FSLIC plus the still unresolved market-value insolvency of FSLIC-insured institutions was between $157 billion and $184 billion.

[7]These restrictions on competition included the relaxation of restrictions on intrastate branching, the deregulation of interest rates on large CDs, competition from MMMFs, and finally the deregulation of most remaining deposit interest rates by the Depository Institutions Deregulation and Monetary Control Act of 1980. For decades, the statutory deposit insurance premium was one-twelfth percent per annum, or 8.33 basis points. Even then, much of this was rebated to insured institutions.

[8]This effect is documented by Keeley (1990). Surprisingly, he finds that most of the reduction in the apparent monopoly value of bank charters occurred during the 1970s, not after 1980.

[9]McCulloch (1985, p. 150) shows that during 1959-82 the fair value of insuring a bank with a 10 percent capital/assets ratio and two months of duration mismatching (as proxied by three-month assets and one-month liabilities) against interest rate risk was at most 3.29 basis points—even at the height of the interest rate volatility in 1980. The typical volatility estimate for such a bank is only 0.09 basis points, far less than the traditional FDIC premium of 8.33 basis points.

[10]See, for example, John, John and Senbet (1991, p. 902) and Mishkin (1992, p. 220).

to operate smoothly, contrary to the claim of Diamond and Dybvig.[11] Therefore no theoretical case for continuing to underwrite bank or thrift deposits with tax dollars remains.

Now that the last argument in favor of federal deposit insurance has been refuted, it is time for it to go the way of Regulation Q and the ban on checking account interest.

[11]For details, see McCulloch and Yu (1991). See also Wallace (1988), who places a different interpretation than we do on Diamond and Dybvig's ambiguously termed *sequential service constraint,* and Jacklin (1992), who suggests an alternative, more complex mechanism for achieving the same goal as our arrangement. We also provide a mechanism to block the disintermediation that would potentially occur under either the Diamond and Dybvig deposit insurance plan or our contingent bonus contract. We do not advocate that banks actually attempt to implement our *contingent bonus contract,* but merely devise it to demonstrate that government deposit insurance is unnecessary, even in the special world Diamond and Dybvig have modeled.