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No. 9004

BANKING REFORM

by

Gerald P. O'Driscoll, Jr.\*

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# Research Paper

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Federal Reserve Bank of Dallas

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**Gerald P. O'Driscoll, Jr.\***

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If the U.S. economy has performed so remarkably for seven years, its banking system has surely been an embarrassment. How can an economy that has grown consistently for more than seven years have a banking system in such disarray? In 1988, the sixth year of an expansion, the economy generated 3.6 million new jobs -- over 300,000 each month.<sup>1</sup> In the same period, 200 commercial banks failed -- a post war record. Concomitantly, 12 percent of the nation's savings and loans were insolvent according to generally accepted accounting principles. The nation's thrift industry is being all but nationalized in the process.

In this paper, I offer a diagnosis of what went wrong with the U.S. banking system and examine some proposed remedies. Only by understanding the present situation one can appreciate why so many banking reform proposals have recently been offered. Many deal only with symptoms and not causes, attempting to stop a financial hemorrhage with a policy Band-Aid. In the first half of the paper, I focus on proposals that identify and address the causes of the banking crisis. Nonetheless, these take for granted most institutional features of the monetary and banking systems. In the second half, I examine some even more fundamental reforms that have been recently put forth. I begin with an examination of the thrift crisis that currently grips the United States. The crisis encompasses all of the problems plaguing banking. It is noteworthy only because the problems are present to such a heightened degree among savings and loan associations.

### The Thrift Crisis

It is difficult to exaggerate the magnitude of the problems in the U.S. thrift industry. President Bush proposed and Congress implemented a \$157 billion bailout of insolvent thrifts, previous efforts having conspicuously

failed. Most recent among these was the late but not lamented "Southwest Plan," which envisioned merging insolvent savings and loan associations with solvent ones to form a larger and more viable institution. The Federal Home Loan Banking System, the supervisory agency overseeing the nation's savings and loans, was so constrained by political considerations that the plan was doomed from the beginning. First and foremost, Congress never provided the Federal Home Loan Banking System with enough money to resolve the problem.<sup>2</sup> The System had \$10.8 billion with which to implement the Southwest Plan, which was not enough even to resolve the insolvent savings and loans in Texas.<sup>3</sup> Second, opposition prevented the System from merging institutions into viable interstate or even statewide institutions. The lack of geographical diversification had contributed greatly to the economic losses incurred by thrifts. Localism was to be preserved as a matter of public policy.

Finally, when all else is said, the Southwest Plan was flawed in a very basic way: The plan had been tried once before and failed. The Southwest Plan reincarnated the "phoenix" program of the early 1980s, which merged two or more failing thrifts into one larger entity. The Federal Savings and Loan Insurance Corporation (FSLIC) injected new funds into the institutions and replaced management. The policy was predicated on the belief that one larger insolvent institution is better than two smaller ones. Whatever the attraction might have been originally, the plan failed in its implementation. FSLIC found it difficult to extricate itself from the mega-institutions it had created (Kane, 1985, pp. 5-6).

The Southwest Plan was supposed to be different because it would attract private capital and permit a rapid withdrawal of FSLIC's equity position. Not

much private capital was attracted, however, and FSLIC retains a substantial implicit investment position. The new owners were largely immunized from losses. Any positive present value these new phoenix firms possess reflects the FSLIC guarantee. A balance sheet accurately reflecting market values of assets and liabilities would enter the guarantee as an implicit equity investment. Likewise, an accurate representation of the government's own balance sheet would show the guarantee as a massive taxpayer liability.

If not completely nationalized, the new phoenix institutions still have a large FSLIC involvement. If the past is any guide, these undercapitalized institutions will have a difficult time surviving. Some will probably end up back in the care of the deposit insurer. The main point here, however, is that the Southwest Plan as implemented repeated many of the mistakes of the phoenix program. Once the Federal Home Loan Bank Board saw that sufficient private capital would not be forthcoming, it should have withdrawn the plan. To go ahead in disregard of its own previous policy failure makes the Bank Board culpable no matter what the constraints were under which it was operating.

President Bush's proposal makes explicit what has long been implicit: the necessity for the taxpayer to underwrite the losses accruing from successive public policy failures in the thrift industry. The proposal also signals the end of the Southwest Plan. Finally, the proposal removes the thrift crisis from the status of a regional problem to a national one. For these and other reasons, the plan is laudable. It does have the potential, however, for misdirecting policymakers' attention and, possibly, sowing the seeds of an even larger financial crisis in the future.

As constituted, the plan suggests that money is the solution to the thrift crisis. Certainly, an injection of funds must be an element in any plan. But lack of money, specifically capital, is not the primary cause of the current crisis. The savings and loan industry dissipated billions of dollars of capital that it once had. Understanding how individual institutions could not only permit their capital to dissipate, but also move deeply into the red is fundamental to any permanent solution. That understanding has yet to take hold among policymakers. It requires insight into how federal deposit insurance operates.

Before discussing the role of deposit insurance, I offer a perspective to non-American readers. Focusing on deposit insurance may strike you as parochial. But deposit insurance is only the peculiarly American form that blanket financial guarantees of the banking system have taken. Any policy that effectively underwrites banking losses produces moral hazard and invites American style banking problems. As Europeans look to 1992, they need to consider the incentives generated by their public policy toward banking. Among other things, they need to learn to allow insolvent banks to fail. U.S. public policy towards banking is one American idea that should be discarded, not imitated.

#### Deposit Insurance

In the simplest terms, insurance constitutes an intertemporal exchange between the insured and the insurer. The insured trades a fixed loss or outgo each period (the premium) for a promise that he will be indemnified against losses of a stated kind, but an uncertain amount, for the life of the insurance contract. The insured gains because he forgoes a small sum in return for protection against a potentially greater loss. The insurer gains

because, by pooling risks of many insures, he can earn a profit. Though the basic principle is quite simple, provision of insurance is a complex matter. Many of the provisions of an insurance contract are designed to specify the exact risks covered and the amounts of the coverage. Other provisions are designed to constrain the insured's behavior in the future, because possession of insurance establishes perverse incentives. Having insurance reduces the incentives for the insured to avoid the risk against which he has been insured. Such behavioral change, by increasing the frequency of occurrence of the risk, would alter the probability calculus underlying the insurance contract. What would have been a profitable transaction for the insurance company might become unprofitable (Arrow, 1971, p. 142).

Fire insurance provides a readily understandable example. A homeowner covered by fire insurance will, on the margin, take fewer precautions than he would were he exposed to the entire risk of loss due to fire. Notice that I am not assuming that he will deliberately increase the risk of fire. (Such behavior might occur if the house were insured for more than its value.) Risk is something that individuals must incur costs to avoid. Being insured against a particular risk reduces the return to risk avoidance. Insured individuals will, therefore, reduce their effort at the margin to avoid the risk. Consequently, risky outcomes increase.

A situation in which opportunistic behavior will result in greater risk is called moral hazard. Sound insurance is structured to avoid moral hazard, or offset its effects with countervailing incentives. In the case of fire insurance, underwriters will both prescribe and proscribe certain behavior so as to reduce the probability of loss. The insurance contract will normally include a deductible amount, so the insured bears some of the cost of

opportunistic behavior. The presence of such features is essential to the viability of insurance as a commercial product.

Since 1933, the U.S. government has provided for insurance of bank deposits.<sup>4</sup> Initially set at \$2,500 per deposit, the insured amount has risen over the years. In 1980, Congress raised the coverage from \$40,000 to \$100,000. Individuals are covered for up to \$100,000 at each depository institution. Since there are approximately 14,000 separate commercial banks in the United States, one individual could theoretically hold \$1.4 billion in insured deposits at commercial banks. Additionally, there are the nation's thrift institutions, savings and loans, plus credit unions. Furthermore, by holding joint accounts and accounts in trust for others, an individual can multiply several fold the insured deposits in each bank.<sup>5</sup>

Federal deposit insurance has always been provided in an unsound fashion. Specifically, the premiums charged are unrelated to the riskiness of the bank's portfolio. Thus provided, deposit insurance skews the choice in favor of incurring additional losses. An investor can generally increase the probability of earning higher returns if he is willing to incur additional risk of loss (Short and O'Driscoll, 1983, pp. 14-15). A rational investor weighs the expected returns against the risk of loss, and decides whether an investment's expected returns compensates for the probability of loss.

Normally, various market signals are sent to an investor undertaking a risky activity. If he has purchased insurance protection for the activity, he will face rising premiums as the risk increases. The higher premiums will tend to restrain risk taking by increasing its cost. In the case of banking, this channel is blocked. It turns out, however, that blocking this channel also interferes with the transmission of other potential market signals.



Creditors of my hypothetical investor will ordinarily make the same risk-return decision as the investor. As the risk of his investment increases, creditors will demand higher returns. Accordingly, the investor will pay higher interest rates on borrowings the riskier is the proposed investment project. We observe the phenomenon in a wide variety of contexts. Well established firms in predictable lines of business pay less to borrow than start-up firms in new and untested business ventures. B-rated bond issues pay a higher return than A-rated issues.

We have not historically observed the relationship in banking -- certainly not to the same degree. While riskier banks have had a higher cost of funds, the differential has tended to emerge not when the risk was taken, but only after problems developed. To be an effective price signal, any premium must affect risk taking ex ante. Moreover, the magnitude of the differentials in banks's funding costs have historically not approached those for nonfinancial corporations (Short, 1987).

Because of mispriced deposit insurance, the deposit market does not adequately constrain risk taking by banks. The market for deposits is the most important one for pricing risk in banking because banks enter it daily. By contrast, banks issue new equity shares or subordinated debt infrequently. In the United States, most banks are small and will never issue either debt or new equity once established. If the deposit market does not work, then banks will not receive timely market signals as they alter their risk exposure. Consequently, they will tend to incur too much risk (given the expected return).

Depositors are not irrational. The same individuals who ignore a bank's risk of failure carefully investigate the risk of their nonbank investments.<sup>6</sup>

The incentives generated by deposit insurance explain the apparently inconsistent behavior. Depositors behave as if they are not at risk because they normally are not. Deposits at insured banks have no risk of loss so long as their account balances are within the insured limits. At large banks, deposits of any size can be held risk free. This is because of the "too big to fail" doctrine that protects large banks from failure. In an ominous development, regulators have in one instance -- Continental Illinois National Bank -- indemnified all creditors, depository and nondepository, of a failed bank.<sup>7</sup> Blanket guarantees of safety anesthetize credit markets, dulling the senses to risk.

Many factors can generate losses on bank portfolios. The relevant policy question, however, is why so many bank managers have permitted losses to mount, eroding capital and threatening their viability of their institution. And, if managers have allowed this to happen, why have depositors funded the losses? In other words, what is the systemic cause of the current banking problems in the United States? Mispriced deposit insurance has played a critical role in the emergence of these problems.

Insolvent banks are currently open for business and attracting deposits. And attract funds they must, because they are using insured deposits to cover daily operating losses. Institutions known to be insolvent can attract funds only because deposit insurance immunizes the depositor from loss. The depositor is effectively depositing his money with the government, not the bank.

Not only do insolvent institutions garner funds in competitive deposit markets, their stock trades at a positive price. This makes no sense in ordinary accounting terms, unless one realizes that the stock trades with a

put option on the deposit insurance fund. For a firm to be insolvent means that its liabilities exceed its assets. Accordingly, its equity value ought to be negative. A positive share price, however, implies positive equity value. What gives? What gives, or who gives, is the taxpayer. The equity markets clarify what accounting practices obfuscate -- deposit insurance guarantees are an unbooked asset on the balance sheets of depository institutions. Indeed, Kane (1985, p. 23) has estimated that the U.S. government is "the leading supplier of equity funds to deposit institutions."

Put in the most straightforward way, deposit insurance constitutes a blanket guarantee against losses to depositors. By protecting depositors, however, deposit insurance also insulates stockholders and managers against near-term effects of excessive risk taking. Managers are free to engage in strategies that "bet the bank" on particular outcomes. If they win, managers book the profits. If they lose, the deposit insurance picks up the tab for any losses in excess of bank capital.

Critics point to the low level of capital, particularly equity capital, in U.S. depository institutions. Some see this as the cause of current difficulties. Consequently, many have called for tougher capital standards. There is no question that bank capital has eroded in recent years and that a healthy dose of capital would strengthen depository institutions. But actions to improve the capital positions of banks will not address the fundamental problem of incentives. With deposit insurance, who needs capital? It is a wonder that banks have any at all. Mispriced deposit insurance encourages the substitution of public for private capital.

Uncovered creditors (for example, holders of subordinated debt) will insist that the bank have some equity capital. In recent years, the demands

have become more insistent as these creditors have watched the rising bank failure rate. Most banks do not issue any subordinated debt, however. To a significant extent, banks are holding as much capital as they do only because of regulatory pressure. Where that pressure has been relaxed and supervision lax -- as in the savings and loan industry -- capital levels are lower than in the rest of the banking system.

If incentives are not changed, compelling banks to hold more capital may just be increasing the amount to be dissipated by risk taking. True, more capital lengthens the period in which regulators can identify problem institutions. But the regulatory record does not make one sanguine that regulators will avail themselves of the opportunity. Several factors contribute to the problem.

First and foremost, the incentive structure militates against the ability of regulators to sufficiently constrain bankers' behavior. Bankers stand to capture the gains from financial innovations. For every form of risk taking constrained, bankers have found two new ways to take on more risk in the search for higher returns. The lure of higher profits will always make it feasible for banks to pay inventive employees more than regulatory agencies can compensate methodical examiners. If an examiner happens along who outmaneuvers the best and brightest products of the nation's business schools, a depository institution will likely lure him away.

Second, regulators judge bank solvency according to accounting principles that value assets at cost or book value. The economic solvency of a bank depends on market values, however. The discrepancy between historical or accounting value, and economic or market value, can be quite large. It is certainly large enough to permit a bank to stay within regulatory standards,

but be utterly insolvent if its assets and liabilities were marked to market. If taxpayers are to be protected against future losses, a market-valued accounting system must be introduced.

Third, it is practically impossible to supervise adequately all the number of depository institutions in the United States. Commercial banks alone number approximately 14,000. The kind of close supervision necessary to prevent loss to the insurance fund is beyond the resources conceivably available to the supervisory agencies.

Finally, supervisory responsibilities are divided between federal and state governments. (This division is what is meant by "dual banking" in the United States.) It would be naive to expect the federal and state bureaucracies to keep at all times in as close contact as would be necessary to adequately supervise banks. Additionally, the interests of federal and state banking regulators do not always coincide. State regulators generally take a position as more of an advocate for the interests of the banks they supervise than do their federal counterparts. More importantly, the deposit insurance agencies are more attentive to the effects of public policy on their funds than are the other regulators, be they state or federal.

All things considered, it is too much to expect any system of supervision and regulation to offset perverse incentives established by financial safety nets like the present deposit insurance system. To straighten out the mess, policy makers need to get the incentives right. Getting incentives right, however, seems to be just what the political system seems least capable of doing. If the pessimistic assessment is accurate, then the present crisis has the potential to be repeated -- probably within the next decade. And each repetition brings greater federal government

involvement and further moves to de facto nationalization of banking in the United States (Kane, 1985, p. 13).

Other factors have contributed significantly to the current thrift crisis. Previous regulation of savings and loans can only be described as lax -- at both the state and federal levels (Kane 1989). When savings and loans experienced losses, the Federal Home Loan Bank Board engaged in "capital forbearance." The policy further relaxed capital standards. To put it straight forwardly, regulators allowed the industry's actual capital position to affect the capital regulations, rather than the other way around.<sup>8</sup> Now the taxpayer will be paying the piper.

One must be very careful not to confuse cause and effect. The existence of deposit insurance leads banks to lower capital below what it would otherwise be. Additionally, mispriced deposit insurance results in excessive risk taking that often erodes what capital there is. Increasing capital requirements, however, is not a substitute for altering the incentives set up by deposit insurance.

#### Deposit Insurance Reform

Virtually every major public policy problem in banking derives from the existence of mispriced deposit insurance. If deposit insurance is not actually the cause of the problem, it is the chief obstacle to reform. Only recently, however, has the deposit insurance system become the focus of banking reform proposals. That it has done so is testimony to the suddenness with which the consensus on the deposit insurance system has changed.

In their monumental work on banking history, Friedman and Schwartz (1963, p. 434) concluded that "federal deposit insurance of bank deposits was the most important structural change in the banking system to result from the

1933 panic, and, indeed in our view, the structural change most conducive to monetary stability since state bank notes were taxed out of existence immediately after the Civil War." In other words, deposit insurance was a government program that worked -- even from a classical liberal's perspective. Friedman and Schwartz's statement at once summarized economists' view at the time and shaped it for years to come.

Besides deregulating deposit liabilities and broadening asset powers for thrifts, the Garn-St Germain Act mandated that the deposit insurance agencies reexamine the insurance protection afforded commercial banks, savings and loans, and credit unions. This produced a flurry of studies at the various federal bank regulatory agencies. The studies, though well done, languished. The moral hazard inherent in the deposit insurance system was evident to many, but it was not the time to act politically.

It is now apparent to nearly all that the deposit insurance system is broke in more ways than one (Garcia 1988). Through the end of 1988, there have been 878 commercial bank failures in the 1980s for an annual average of 98. In 1989, 207 banks insured by the Federal Deposit Insurance Corporation (FDIC) failed. Meanwhile, 262 savings and loans have been intervened and are being operated under FDIC supervision.<sup>9</sup> These figures compare with an annual average of 6 commercial bank failures in the period 1946-79. Recorded failures undoubtedly understate banking problems. If assets and liabilities were valued at market rather than historical prices, additional banks would surely be revealed to be insolvent. FSLIC is broke and the FDIC's fund is strained.

Suddenly, substantive reform of deposit insurance is a serious possibility. Once again, the regulatory agencies are studying the question.

And the topic appears on almost every banking program. Yet all the proposals take as given the political impossibility of completely abolishing federal deposit insurance.<sup>10</sup> Consequently, in one way or another, each proposal involves compromises.

Benston, et al (1986, pp. 304-14) advocate a fairly typical reform package for FDIC insurance. First, the authors recommend establishing risk-related premiums for deposit insurance. They prefer joining this with a system of risk-adjusted capital standards. Next, they suggest several alternatives for reducing coverage. These include a selective rollback of the de jure coverage from \$100,000 to 50,000 or \$25,000. Finally, they argue that premiums should be collected based on the riskiness of the entire portfolio of the holding company. They reject the idea that the risks of nonbank activities can be functionally isolated from them.<sup>11</sup>

In an earlier article, Short and O'Driscoll (1983) proposed a plan designed to facilitate a transition to competitive provision of deposit insurance. They proposed that de facto coverage above statutory limits be eliminated; coverage limits be introduced, and some form of coinsurance developed. These proposals were each intended to address the moral hazard inherent in the current system. Additionally, they recommended a number of other actions to open the door to private suppliers of deposit insurance. They did so on the views that, without competitive markets, it would be impossible to systematically price the risk. The FDIC could remain as a supplier of deposit insurance, but its monopoly needed to be eliminated.

Flannery and Protopapadakis (1985, p.8) advanced the critique of a governmental agency's attempting to price risk.



Public institutions' decisions are subject to public scrutiny. Such scrutiny can involve lengthy debates, appeal procedures, and compromises between economic efficiency and political needs. Even the most well-meaning and efficient public institutions move with glacial speed compared to the rapid assessment of information and the continuous reassessment of risk that takes place in the financial markets.

Aside from the public choice critique, there are additional difficulties with reform proposals like those offered by Benston, et al. Analysis suggests that market forces are likely to effectively undermine many of the suggested reforms that are instituted. For instance, there does not appear to be coverage low enough to prevent most depositors from securing as much insurance protection as they desire. Money-market brokers routinely place funds in lots as small as \$1,000. With commercial banks and thrifts numbering in the thousands, financial markets could reallocate even large sums into many smaller insured accounts. Any successful proposal surely must incorporate some form of deductible or coinsurance. Yet any such proposal would run afoul of the political commitment to protecting smaller depositors.

Deposit insurance was crafted to protect not the small depositor, but a system of uneconomically small and undiversified banks (O'Driscoll, 1988b, pp. 2-5). Economic fact, however, cannot surmount the obstacle of the political mythology surrounding the small depositor. Unless the mythology is

successfully countered, deposit insurance reform will be unsuccessful. Even the \$150 billion cost of the thrift crisis has not shaken the faith of the system's supporters. Perhaps only a second bill of similar size will awaken American taxpayers to the system's cost.

Other banking reform proposals attempt to offset the effects of deposit insurance by performing more radical surgery on the banking system. Robert Litan (1986, 1987 and 1988) has proposed implementing a modified version of 100 per cent banking -- the old "Chicago Plan" for banking. His plan envisions highly diversified financial holding companies (akin to universal banks), which would comprise both traditional commercial banking services as well as a broad range of additional financial services. His plan envisions carving out a narrow subset of banking services; only these services could be funded by insured deposits. "...The 'bank'...would essentially be a money-market fund, permitted to invest in highly liquid 'safe' securities, such as obligations of the United States Treasury and high-quality commercial paper" (Litan, 1986, p.10). The financial holding company's other activities could be funded by anything except insured deposits.

Litan's ingenious, if somewhat complex, plan testifies to the lengths reformers must go to offset the effects of deposit insurance. Viewed in isolation, the plan makes little sense. Why institute a legally separate institution for investing in very safe and liquid assets? The answer, the only answer, is the existence of a blanket guarantee for deposits. To render that system safe and sound, the assets purchased with the deposits must themselves be immunized from risk -- Litan's plan would largely accomplish this task at the cost of potential inefficiencies in the financial system.

The inefficiencies may be preferable, however, to the losses being generated under the current system.

One telling criticism of the Litan proposal can be made. The proposal suggests that deposit insurance only be offered on transaction accounts backed 100 per cent by highly liquid and safe assets. Yet the financial system has already developed a similar system: money-market mutual funds. Notably, however, these accounts are not insured. In the United States, they have grown phenomenally, and now contain well over \$300 billion in assets. O'Driscoll (1988a, pp. 673-74) questioned whether a broad system of insuring deposits of a safe and sound banking system would meet a market test. The experience of money-market mutual funds suggests that deposit insurance would not be required in such a system. Further, if banks were compelled to provide such insurance on transaction accounts, they would likely lose even more market share to money-market mutual funds. The latter have been consistently lower cost providers of funds. It appears, then, that Litan's proposal might be a case of overkill. If we could get banks to hold the appropriately safe asset portfolios, then deposit insurance would be unnecessary.<sup>12</sup>

Market forces and legislative changes at the state level are evolving a system of more diversified regional, if not national banks. These developments are to be applauded, as they may partially offset the effects of deposit insurance (O'Driscoll 1988a). Broadening bank powers to permit greater asset diversification would further strengthen the U.S. banking system (Benston, et al., 1986, pp. 127-59). It is unlikely, however, that the U.S. banking system will be safe and sound until deposit insurance is eliminated or significantly changed.

Some banking reform proposals now go significantly beyond addressing deposit insurance. These proposals question basic features of the existing banking system. In the next section, I examine some of them and analyze the issues they raise.

### Banking Reform

Robert Litan's plan constitutes a transition between reform proposals designed simply to deal with the moral hazard generated by the current deposit insurance system, and those proposals envisaging more far-reaching changes in the commercial banking system. A move to 100 per cent banking would be a significant change in commercial banking. In the context of Litan's proposal, the move is probably not a major one. Yet he implicitly raises the question of whether substantial changes in the structure of the banking system are needed. What the proposals I now consider have in common is that they each provide an affirmative answer to the question.

All of the proposals examined here advocate a highly deregulated financial system in which there is no role for central banks. Since Europeans are now debating whether to have a European central bank, the questions raised by the literature are particularly relevant today. White (1984) is the most influential recent work on the historical performance of free banking. He examined the Scottish case. In a series of articles, Rolnick and Weber (1982, 1983, 1984, and 1986) reexamined the American free banking experience.<sup>13</sup>

White (1984) argued that, judged by accepted criteria, the Scottish system of competitive and unregulated free banking performed well historically (1716-1844).<sup>14</sup> The banking system was safe and relatively stable. While there were bank failures, these did not generate uncontained runs or systemic failure. The Scottish banks compared particularly well to the unstable

English banking system, whose source of strength was the Bank of England. White found the Scottish system to be stable despite the absence of a central bank.

In her important but neglected book on central banking, Lutz (1936) aptly described the American banking system as one of "decentralization without freedom." To this day, the American banking system reflects a public policy of an uneconomically large number of small banking units. In contrast, White (1984, pp. 33-34 and 82-84) identified the system of nationwide branch banking as playing a crucial role in stabilizing Scottish banks by immunizing them from local downturns. Additionally, in the U.S., regulators have traditionally prescribed and proscribed assets for bank portfolios. Particularly important in many states was the requirement that institutions chartered under the free-banking statutes hold state bonds as collateral for notes issued. Purportedly designed to ensure that notes were backed by safe assets, the requirements look more like a scheme designed to stimulate demand for the sometimes dubious paper of antebellum state governments. In some cases, new banks could acquire depreciated state bonds and deposit them with the state banking commissioner, who valued them at par. The banks then issued liabilities in the form of bank notes against the inflated value of the bonds. This policy effectively made the banks insolvent from their inception. In periods of rising interest rates, the gap between accounting and market values of the bonds increased. If a bank experienced a run, it would be unable to redeem all its notes. This made for a system of unsound banking and gave free banking its bad name among historians.

Rolnick and Weber thus dealt with a system of free banking more alike in name than akin in substance with the Scottish system. Yet they found that the

system was not inherently unstable. That is, problems faced by free banks "were caused by economic shocks that caused many banks to fail but did not lead to bank runs or panics" (Rolnick and Weber, 1986, p. 878). Rolnick and Weber (1984) found that the role played by state bonds was significant. Yet the state bond programs represented bad public policy, not an element inherent to free banks (White, 1986, pp. 891-95).

The recent work on free banking has generated a large and growing literature that reassess free banking historically and theoretically. Lacking, however, are programs for applying the insights to contemporary monetary institutions. Advocates face the classic problem of getting from here to there. So it becomes a question of creating or evolving parallel institutions.<sup>15</sup>

In a separate strand of literature, a number of authors offer proposals for fundamental institutional change. Less grounded in history, the literature is more directed to the financial future. The critiques of the current banking system also focus somewhat more on macroeconomic issues than on microeconomic problems (e.g., price stability compared to bank failures).

Intellectual and historical priority in the literature is surely held by Black (1970). He imagined the future evolution of banking. It would be world in which banks were free to offer any variety of depository liabilities and price them as they choose. In Black's world, banks cease to be institutions whose distinctiveness lies in their producing money. In this world, "money" is an abstract unit of account and banks the place in which exchanges of goods are registered. The unit of account is no longer a means of payment, and there is no longer any circulating medium. The unit of account is a kind of mnemonic for registering exchanges and entering loans and repayments in units

of equivalent value. There is no reason to fear or restrict the creation of bank deposits -- their supply is completely endogenous to real transactions. Reserve requirements would be absent, so there would be no reason for open market operations by a central bank. "In such a world, it would not be possible to give any reasonable definition of the quantity of money. The payments mechanism in such a world would be very efficient, but money in the usual sense would not exist" (Black, 1970, p. 9).

O'Driscoll (1985) argued that, both historically and theoretically, circulating money would not disappear. Largely unregulated banking systems have produced no observable tendency for circulating money to disappear. Moreover, Black's banking system is theoretically incomplete. Any banking system requires something constituting final settlement between banks. By its nature, the good constituting final payment cannot itself be a liability of one of the banks. What the good is has varied over time, but it is base money in all its instantiations. We can perhaps contrive a world without circulating currency, in which debit cards substitute for currency and coin. But we cannot conceive a banking system without a means of settlement, i.e., banks reserves or base money. Thus, the limitation on bank deposits is not a contrivance but a natural phenomenon.<sup>16</sup>

Despite the faults in Black's article, its merits had a significant influence on subsequent authors. Though clearly derivative, Fama (1980) further developed Black's vision of an unregulated payments system. Greenfield and Yeager (1983) constitute a genuine extension. They present a blueprint for implementing a Black-Fama payments system. They advocate the system because of what they view as the poor macroeconomic performance of fiat money, whose supply is unresponsive in the short run to changes in money

demand. There is no stability of value in our current monetary system, because purchasing power is only what the demand and supply for money fleetingly accord to a dollar, pound or franc.

Complicating the problems is the fact that money has no market of its own. Consequently, monetary disequilibrium must be worked out in all markets. Further, prices are inflexible in the short run. "Under these realistic circumstances, failure to keep the quantity of money correctly and steadily managed can have momentous consequences" (Greenfield and Yeager, 1983, p. 309). They conclude that monetary authorities are not up to the task of so precisely managing a fiat money supply. They view Black's vision as implementable and desirable.

Key to their proposal is the government's defining a unit of value, just as it does units of weight and measurement. They suggest a unit of value encompassing a broadly representative bundle of tradable commodities. The commodities chosen, however, need not be either stored nor storable, as there would be no convertibility. In fact, the authors point to the lack of convertibility as one of the system's chief benefits. "...The value unit remains stable in terms of the designated commodity bundle because its value never did depend on direct convertibility into the bundle or any specific commodity. Instead, its value is fixed by definition. It is free of any link to issues of money that might become inflated" (Yeager and Greenfield, 1983, p. 306; emphasis added).

No one other than the authors seems to understand how value can be effectively fixed by definition. A great deal of the literature that has developed around the original article (including responses and additional contributions by Greenfield and Yeager) deals with this issue. The critics



have not been able to understand the point, and the authors have supplied no satisfactory explanation. To be more precise, Greenfield and Yeager have specified no market mechanism maintaining the equivalence of defined values and actual prices. Under certain circumstances, convertibility could accomplish this, but they have ruled out this mechanism. It would be fair to say that the reader is being asked to take their proposal on faith.

One can approach the issue from another perspective. Yeager and Greenfield (1983, pp. 307-08) allow for the development of debt instruments denominated in units of account. What is to keep these instruments from trading? In the laissez faire system they propose, there could be no basis for a prohibition. Experience tells us, however, that tradable debt instruments easily become circulating media, like bills of exchange once were. The final stage in the evolution of circulating currency comes when issuers realize that market dynamics will allow them to issue non-interest-bearing notes (O'Driscoll, 1985, p. 28). Now we have the market dynamics for a classic case of overissuance of circulating media. An issuer can trade non-interest-bearing currency for interest-bearing debt. He will want to do so ad libitum. In Greenfield and Yeager's system, we not only have the potential for money's reemergence but for instability of prices in the extreme.

One must conclude that Greenfield and Yeager contains a basic error. Price stability cannot be attained simply by definition. Further, though they believe that they have ridded their system of circulating money, the system contains the incentives to reintroduce it. Moreover, in their system there would be no central bank or market constraint on overissuance of fiat currency. The classical criticism of unregulated fiat money remains intact.

Such systems require some anchor for nominal values, whether provided by a central bank or otherwise.

### Conclusion

It's been said that bad monetary practice produces good monetary theory. Theories are not developed in a vacuum, and pressing economic problems often stimulate sound economic analysis. Recent banking difficulties in the U.S. have stimulated a host of policy proposals. These naturally focus on the critical role played by deposit insurance in the recent wave of bank failures. While perhaps seeming to be a peculiarly American problem, the bank failures reveal the powerful effects that bad public policy can generate. As Europe develops a comprehensive banking policy, the community surely wants to avoid the policy traps that have lead to the banking problems in the U.S. Most importantly, policymakers must avoid actions that hide risk and insulate risk-takers from the consequences of their actions.

The cumulative monetary and banking problems of the '60s, '70s, and '80s have also generated broader and more far-reaching recommendations for changing the banking system. Because they are more removed from immediate public policy problems, these plans tend to be more abstract than deposit insurance reform. Nonetheless, they raise important and interesting questions that merit further development and debate.

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## NOTES

1. In terms of job creation, the U.S. economy is surely the envy of the world. No other major country -- not even Japan -- comes close in this regard. From the end of 1982 through the close of 1988, U.S. civilian employment expanded 15 percent while Japanese employment grew only 6.6 percent. This growth translates into an average annual gain of over 2.5 million jobs in the U.S. compared to approximately 615 thousand jobs in Japan. (The figures represent the net gains in employment. See the Handbook of Labor Statistics, U.S. Department of Labor, Bureau of Labor Statistics, August 1989.)

2. It is true that the Chairman of the Federal Home Loan Banking System, M. Danny Wall, got the amount of money that he requested. Whether intentional or not, Mr. Wall consistently underestimated the amount needed -- at least initially -- by a factor of roughly ten times. It is fairly clear, however, that until recently, Congress as a whole had refused to face up to the realities of the thrift problems. In a real sense, Mr. Wall got the job because he promised to contain the situation. The political crisis came when Mr. Wall, realizing that containment was impossible, came clean publicly and admitted the dimensions of the problem were much greater than he had heretofore acknowledged.

3. The "Southwest Plan" was a misnomer. Many of the more notorious insolvent thrifts were domiciled in Texas. The problem of insolvent depository institutions is national, however, not regional, in scope. Short and Gunther (1988).

4. From this point on, when I use the term "bank" (with no modifier) I will mean any depository institution. In the American context, this covers commercial banks, savings and loan associations, savings banks and credit unions. Each type of banking organization is covered by a legally separate deposit insurance agency. All the agencies are effectively backed by the full faith and credit of the U. S. government.

5. Most developed countries now have some system of deposit insurance. Most are of recent vintage compared to that in the United States. Further, in no other country has the deposit insurance system played the same role as it has in the United States.

6. "Casual observation indicates that [households and companies] are very much aware of what money market fund balance sheets are, much more aware than of what bank balance sheets are. Nor is it accidental that funds and

banks differ so in their balance sheets" (Kareken, 1981, p. 4). Money market funds are mutual funds holding a portfolio of short-term liquid assets.

Note that the argument does not assume that investors never make errors or even that their analysis is complete or even adequate. It merely asserts that depository creditors of banks are less knowledgeable about their bank deposits than about other investments. This is a conundrum that must be explained.

7. Banking regulators do not specify exactly which banks are too large to fail. At the time the doctrine was publicly announced by the Comptroller of the Currency, "at least" the top 11 banks were included. Banking analysts generally believe that at least the top 20 banks are presently included.

8. For an excellent summary of the regulatory actions in the early 1980s, see Barth, et al. The authors already saw the cost of policy procrastination: "...Not closing these [insolvent] institutions most likely increases the eventual cost to the FSLIC, as the institutions try to overcome their problems through riskier activities. Therefore, delay is costly." To put things in perspective, if thrift problems had been resolved in 1985 -- the year this article was written -- the cost would probably have been on the order of one-tenth what it will be now.

9. A political decision was made to hand over the problem of managing the thrift problem to the FDIC, even though FSLIC is the insurer of record.

10. As will be seen in what follows, there is no presumption that private deposit insurance is not a viable product. To be viable, however, premiums would have to be risk sensitive.

11. In the United States, many banks are part of a holding company. Some activities not permissible for commercial banks are permissible for the parent company. The concept is that the nonbank activities, some of which are viewed as inherently more risky than banking, be conducted outside the bank itself. The bank would then be isolated from deleterious effects of the nonbanking activities. Indeed, the Federal Reserve System believes these should be "a source of strength" for the banking activities of the holding company.

12. It should be noted that Litan has backed away from his original proposal. He is a coauthor of Benston, et al. (1989), which represents a more centrist position in the public policy debate.

13. White, and Rolnick and Weber followed in the intellectual footsteps of Rockoff (1974). This seminal work was largely neglected, however, except

by economic historians. The debate over free banking has now gained broad attention in the economics profession.

14. White (1984, p. 1) defines free banking as "the system under which there are no political restrictions on the business of issuing currency convertible into full-bodied coin."

15. Jordan (1989) does offer a rather explicit transition proposal to a free banking system that builds on the existing structure of Federal Reserve Banks. On the face of it, the proposal appears economically feasible but politically improbable.

16. Also validated is the classical conclusion that, without a limitation on the quantity of bank liabilities, there is no anchor for nominal values in the economy (O'Driscoll, 1985, pp. 6-7).



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