Deposit Insurance in Theory and Practice

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My purpose in this paper is to analyze how market incentives could substitute for government regulation of banks in controlling risk. The present system for insuring bank deposits is unique in conjoining insurance with a highly detailed system of government regulation. In what follows, I briefly describe and explain the current system.[1] Then I present the rationale for reforming the system by making a transition to private insurance of deposits. Finally, I suggest that privatizing deposit insurance might be only one part of a more general reform of the existing banking system.

The Risks Defined

Two risks need to be distinguished. First, an individual bank may fail and be incapable of paying off its depositors in full. This is a case of failure to fulfill a contract and by itself does not involve any serious third-party effects. Second, the failure of one bank may lead to failures of other banks. The mechanism for this domino effect may be either direct or indirect. It is direct if, for example, the failed bank served as a correspondent bank for other banks, and their losses lead

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[1]There are separate federal insurance agencies for, respectively, commercial banks and mutual savings banks, savings and loan associations, and credit unions. In this paper, I concentrate on the case of commercial banks and the FDIC. The principles and issues involved are the same for all depository institutions. An excellent analysis of thrift problems is contained in Kane (1985). Clair (1984) examines just the case of credit unions.

to their insolvency. The mechanism is indirect if the first bank's failure causes fearful depositors to withdraw their funds from other solvent but illiquid institutions. This "contagion" effect involves a classic banking panic, in which widespread depositor runs on banks occur. In this case, the payments mechanism itself is threatened. If a contagion effect exists, it would be a prime example of the possible third-party effects of a bank failure. In the economist's parlance, the third-party effects are externalities.

In examining whether there are externalities in bank failures, one must distinguish between the two types of risk associated with a failing bank. As I suggest below, policies designed to deal with one type of risk are not necessarily efficacious in controlling the other type. And, more important, the feasibility of a system of private deposit insurance very much depends upon which type of risk insurers would be facing.

Why Deposit Insurance?

The post–World War I period was characterized by a large number of bank suspensions. Between 1921 and 1928 (inclusive), suspensions averaged 552 per year (Friedman and Schwartz 1963, pp. 438–39). Approximately one-sixth of all banks failed during this period of general prosperity and price stability. Three features of suspended banks stand out. First, they tended to be small unit banks. Second, failures were concentrated in agricultural states, a fact reflecting the distress experienced by the agricultural sector throughout this period. Finally, agricultural states with unit banking were also likely to have enacted state deposit insurance systems.[2] I will reconsider this pattern of bank failures at the end of this paper.

Even in comparison to the extraordinary number of bank failures during the previous decade, the early years of the Great Depression saw a marked increase in failures. Between 1929 and 1933, 9,755 suspensions occurred; this was over one-third of the banks then in existence. Suspensions were more widespread and involved larger institutions than in the previous period. It was against this background that the existing system of federal regulation and deposit insurance was implemented.

The primary legislative purpose in creating the Federal Deposit Insurance Corporation (FDIC) was the avoidance of bank runs and the protection of the payments mechanism (Golembe 1960). The tide

[2]In this century, state deposit insurance systems were enacted in Oklahoma, Kansas, Nebraska, South Dakota, Texas, Mississippi, North Dakota, and Washington. See White (1983, pp. 191–204).

of bank closings and the concomitant contraction of the money supply together threatened the payments mechanism itself. If analyzed in terms of its subsequent history and policies, the FDIC makes much more sense as an agency established to control third-party risks of bank failures than as a protector of small depositors unable to bear losses incurred in the event of an individual bank failure (Kareken 1983, pp. 199–200). In fact, the FDIC has been so successful in pursuit of its goal that until recently it had virtually eliminated bank failures.[3]

The FDIC was created by the Banking Act of 1933 ("Glass-Steagall Act"), whose stated purpose was "to provide for the safer and more effective use of assets of banks, to regulate interbank control, to prevent the undue diversion of funds into speculative operations, and for other purposes." Among other things, the act prevented banks from being affiliated with any firm engaged in the securities business; established limits on loans made by banks to affiliates, including holding company affiliates; prohibited the payment of interest on demand accounts; and empowered the Federal Reserve Board to regulate interest rates paid on savings and time deposits. These regulations were intended to provide for the safety and soundness of the banking system.

It is no accident that federal deposit insurance and the modern federal regulatory system were created by the same act. The incentives established by the insurance system necessitated the regulatory framework. Specifically, from its inception, the FDIC has charged a flat-rate premium for insurance. The statutory rate is one-twelfth of 1 percent—approximately .0833 percent—of domestic deposits (not just insured deposits). Thus, larger banks pay larger premiums, but riskier institutions of a given size pay no more than conservatively managed ones. This premium system confounds sound insurance practices. Since institutions can increase their expected return by selecting a riskier portfolio, they have an incentive to do so. The FDIC's pricing of deposit insurance creates a subsidy to risk taking, a subsidy that can only be captured insofar as banks actually make their asset portfolio riskier.[4]

[3]"From 1921 through 1933, every year requires at least three digits to record the number of banks that suspended; from 1934 on, two digits suffice, and from 1943 through 1960, one digit, for both insured and uninsured banks" (Friedman and Schwartz 1963, p. 437).

[4]This point is well recognized in the literature. Benston (1983) contains an excellent bibliography. More recent papers include Kareken (1983); Short and O'Driscoll (1983a and 1983b); Flannery and Protopapadakis (1984); and Baer (1985).

The incentive for risk taking constitutes a classic moral-hazard problem for the FDIC. Moral hazard occurs when the provision of insurance itself diminishes the incentives facing the insured to avoid risk, thereby increasing the occurrence of the risk insured against. Therefore, at the same time it implemented the present deposit insurance system, Congress enacted a system of binding regulations on banks. If banks wanted federal insurance, then they had to adhere to the new rules. National banks and state members of the Federal Reserve System were required to join the FDIC, and virtually all commercial banks now belong to the FDIC.

On its own terms, the system worked reasonably well for 30 or 40 years. It began unraveling, however, as competitive forces asserted themselves in financial markets. Inflation, which accelerated and became more volatile in the mid-1960s, appears to have been a catalyst in the process. Consequently, banks and other depository institutions experienced more funding pressure as regulatory ceilings on interest rates payable on deposits became binding. Depository institutions experienced outflows in a process known as disintermediation (O'Driscoll 1985, p. 3).

The emergence of money-market mutual funds and cash management accounts at brokerage firms fueled the competitive fire. From the perspective of depository institutions, the major impact of these new financial products was to alter the structure of their balance sheets. A large percentage of money-market funds' assets is held in certificates of deposit at commercial banks and other depository institutions. Funds withdrawn from depository institutions and placed in money-market funds wound up back in the banking system. In the process, however, deposits paying high money-market rates were substituted for low-yielding, regulated deposits, such as passbook savings accounts. Economic rents previously earned on regulated deposits were thereby competed away.[5]

As banks' funding costs came to reflect more fully the fluctuations in money-market interest rates, it became imperative that their assets also yield competitive returns. Banks responded to these pressures by, among other things, shortening the maturities of their assets and setting floating rates on a higher proportion of their loans (Merris and Wood 1985, pp. 74–75). The alarming increase in the failure rate among banks suggests that in their search for higher yields, banks may have also taken on more risk (Short 1987).

[5]The process probably also changed the distribution of assets among depository institutions, since money-market funds tend to purchase certificates of deposit only from larger depository institutions. Thrifts, in particular, probably suffered on net.

I have been describing the process by which the de facto deregulation of interest rates paid on deposits occurred. In 1980, Congress ushered in the beginning of de jure deregulation with the Depository Institutions Deregulation and Monetary Control Act. This act created the Depository Institutions Deregulation Committee, whose purpose was to phase out controls on the interest rates that banks could pay on most accounts. In 1982, Congress passed the Garn–St Germain Depository Institutions Act, which accelerated the pace of deposit interest rate deregulation. That act also addressed the problem of insuring bank deposits in a deregulated environment. It mandated that each of the three federal agencies insuring depository institutions examine its insurance system and report to Congress on the feasibility of risk-based insurance. This requirement was the source of renewed interest in and research on deposit insurance.

Pricing Deposit Insurance

Risk-Based Premiums

The FDIC is well aware of the defects of its pricing system. As put in its report to Congress on the deposit insurance system: "Comprehensive government insurance of liabilities is inconsistent with deregulation of the institutions responsible for those liabilities; it is unlikely that government can allow deregulation to proceed much further without addressing the insurance connection."[6]

By referring to the "comprehensive" nature of federal deposit insurance, the FDIC focused attention on one of the most significant aspects of its settlement policy for depositors of most failed banks. For the past 30 years, the majority of bank failures and nearly all large bank failures have been settled by a purchase and assumption (P&A) transaction.[7] In a P&A transaction, the FDIC replaces the bad assets of a failed bank with cash. Another bank then purchases the remaining assets and assumes all the nonsubordinated liabilities of the failed bank. All depositors are thus made whole. The transaction typically occurs overnight, resulting in no disruption to depositors. The only change that they observe is in the name of the bank with which they are dealing.

Several justifications are offered for using P&A transactions, but the FDIC itself has identified the most important reason: "The P&A enables the FDIC to implement its monetary stability objective in a

[6]In *Deposit Insurance in a Changing Environment* (Washington, D.C.: Federal Deposit Insurance Corporation, 1983), p. xiii.

[7]*Deposit Insurance in a Changing Environment*, p. x.

way that might be impossible if the FDIC had only the option of paying insured depositors directly."[8] Indeed, if protection of small depositors were the main goal of the deposit insurance system, a payoff to them (and permanent closure of the failed bank) would be an equally sound policy.[9] Paying off insured depositors, however, raises the possibility of flight by large depositors from troubled banks in the future. In a payoff, uninsured depositors receive a pro rata payment and a contingent claim on any residual asset value of the failed bank. Large depositors, fearful of incurring at least a partial loss, would be inclined to flee troubled institutions in such an environment. It is believed that such behavior could result in additional bank failures through a contagion effect.

With the virtual collapse of Continental Illinois National Bank, the FDIC added a new wrinkle to the deposit insurance story. In that case, it made an explicit ex ante guarantee not only to all depositors but to all creditors (including those of the holding company). By making explicit (and extending) the blanket guarantee implied by federal deposit insurance, the FDIC starkly revealed the perverse incentives established by the current system. The rational depositor should now be indifferent to the quality of the assets held by any large bank likely to be settled by a P&A transaction.[10]

Recognizing the problems with the current system, the FDIC proposed instituting a three-tier system of risked-based deposit insurance premiums for normal, risky, and very risky banks. Short and O'Driscoll (1983b) examined that proposal. More recently, Flannery and Protopapadakis also offered a useful critique of the FDIC's proposal, in which they presented a public choice analysis of an agency's attempt to assess and price risk (Flannery and Protopapadakis 1985, p. 8):

> 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

[8]*Deposit Insurance in a Changing Environment*, p. xi.

[9]Of course, the current $100,000 limit on deposit insurance negates any argument that deposit insurance exists to protect the small depositor.

[10]In the 1982 failure of Penn Square Bank, which had $470 million of deposits, the FDIC did not use a P&A transaction but paid off insured depositors. For a time it was believed that this case signaled a change in policy for handling large bank failures. Continental surely negated any such change and further constrained the FDIC. Further, the agency recognized the inequality of settling the failures of large and small banks differently. (See *Deposit Insurance in a Changing Environment*, chap. 1, p. 1.) Nonetheless, the FDIC has continued to settle some small bank failures through modified payouts to depositors.

> glacial speed compared to the rapid assessment of information and the continuous reassessment of risk that takes place in the financial *markets.*

As telling as their public choice argument is, Flannery and Protopapadakis introduce another, even more compelling issue: different insurers will typically assess risks differently (Flannery and Protopapadakis 1985, pp. 7–8). This argument goes to the most basic function of a competitive price system.

Complete information, including information on risk, is not something that individuals bring with them to markets. The market process itself is a source of needed information, information generated through a trial-and-error process. For example, some insurers will demand a relatively high premium for insuring a given risk, while others will charge a relatively low premium. Some insurers will avoid insuring a particular type of risk, while others will specialize in underwriting policies to cover that very risk.[11] This trial-and-error process, comprising innovation and imitation, yields information on the expected losses from insuring a particular risk. Given a good deal of other information (including that on its other risks), the individual insurer has a basis for setting premiums.

The information-gathering function of competitive markets is a continual and unending process. There is no once-and-for-all answer to the question, "What premium should be assessed?" New data constantly render previous calculations obsolete. Further, the process of adapting to these changes by each firm alters the underwriting environment for all others.[12]

Under its proposal, the FDIC would remain a monopoly provider of insurance. As such, it would lack the information generated by competitive markets. Accordingly, it would face an insoluble calculation problem in setting risk-based insurance premiums (O'Driscoll and Rizzo 1985, pp. 138–42). It may be that a system of competitively provided insurance is impolitic at this time, but a rational system of risk-based insurance premiums offered monopolistically by a public agency is simply impossible.

Competitive Deposit Insurance

Short and O'Driscoll (1983b, p. 17) presented a four-point transition proposal for moving to a system of competitively supplied deposit insurance. The plan envisioned a period in which the FDIC would be the chief if not exclusive provider of the basic or underlying policy

[11]See Short and O'Driscoll (1983a); compare Short and O'Driscoll (1983b, p. 17) and Flannery and Protopapadakis (1985, p. 7).

[12]See O'Driscoll and Rizzo (1985, pp. 73–74 and 99–109, especially pp. 101–02).

covering deposits, and private firms would enter as suppliers of excess policies. The recommendations were as follows:

> First, eliminate *de facto* coverage of deposits above statutory limits; reduce coverage limits; introduce some form of coinsurance. Second, eliminate the statutory requirement that national and state-chartered member banks, as well as banks in bank holding companies, purchase deposit insurance from the FDIC. Third, require the FDIC to utilize the best available information to determine risk categories; require that these risk classifications be used to set premiums that minimize cross-subsidization among risk categories. Fourth, require the FDIC to cover costs plus earn a reasonable return on capital.

The purpose of the proposal was to provide a framework within which private insurers could successfully operate. The first recommendation would provide private insurers an opportunity to enter the market initially by offering excess insurance to banks (or directly to depositors). In this case, risk would be priced at the margin. Some market discipline would thus be introduced into the market for deposits.

The purpose of the third and fourth points was to compel the FDIC to set up risk-based premiums on the basic or underlying insurance policy issued to banks. Further consideration of the economic calculation issue makes me less sanguine than I was two years ago about the feasibility of the FDIC's properly pricing the risk associated with even a limited insurance policy. The first and second points go to the heart of the pricing problem, however. If there is to be any market discipline in the market for banks' depository liabilities, the 100 percent coverage of all deposits provided by P&A transactions must be eliminated. Even were this done, however, the present $100,000 statutory limit would be too high, especially if there is to be a market for excess insurance. Large depositors need only purchase $100,000 CDs from multiple institutions in order to have insured deposits of $1 million or more. The latter strategy is prevalent already among depositors in multi bank holding companies.

This insight highlights the necessity of a deductible of some magnitude. Brokerage firms have developed a market for CDs in lots of $1,000. Simply lowering the limits would not address the problem, therefore.[13] Requiring depositors to coinsure, as is done for most medical policies, would add to market discipline.

[13]The FDIC promulgated a rule that would effectively end the practice of brokering retail deposits. Each brokerage house would only be insured for the first $100,000 of deposits, thus treating the broker and not the customer as the beneficial owner of the deposits. At this point, the FDIC has been unable to implement the rule because of successful court challenges.

The second point, urging elimination of the statutory requirement to purchase FDIC insurance, specifically addresses the issue of competition, which, as I argue above, is absolutely necessary for rational pricing of deposit insurance. Eventually, it must at least be possible for competitors of the FDIC to underwrite basic policies for banks or individuals.

In terms of the feasibility of this proposal, I would emphasize three points. First, the plan envisages firms entering, as it were, on the fringe of the market and at low capital costs. Specifically, it provides the opportunity for private insurance companies to write excess policies for depositors. For example, even the present reserves of existing property and casualty companies would permit their writing *some* financial insurance. Over time, if the business were profitable, additional capital and new firms would be attracted to the industry. Second, the proposal does not envision that private insurers would ever be providing the present level of coverage. Reduction in the size of total coverage would presumably be an effect of reducing the limits. Third, and most important, private insurers would not be effectively insuring the payments mechanism or the money supply itself. In other words, the function of deposit insurance itself would change with its provision. *The risk against which protection would be offered would be different: limited protection of depositors, not of the payments mechanism.* This final point is key to the feasibility of introducing some competition into deposit insurance. It also raises more general issues for our banking system. If the payments mechanism is no longer being protected by deposit insurance, then something else must be substituted in its stead.

Further Considerations

Until now, I have focused only on reforming deposit insurance. The stringent regulatory system established by the Banking Act of 1933 makes sense, however, only as an offset to the incentives for incurring risk set up by deposit insurance. The effects of the regulatory system are to lessen competition between different types of financial institutions and to inhibit financial innovation. In addition, the act's limitations on banks' permissible activities have inhibited banks' diversification. This, in turn, has arguably lessened the stability of the banking system. The Banking Act of 1933 artificially froze lines of commerce, delimiting the activities in which it is legally permissible for commercial banks, investment banks, brokerage houses, and other financial firms to engage.

At the time the act was enacted, the distinction between, say, commercial banks and investment banks may have reflected commercial practice, but the distinction was already in the process of breaking down.[14] Indeed, in examining banking and financial history, one is struck by how quickly the traditional business of financial institutions changes with changing market conditions. The business of a typical commercial or investment bank can, perhaps, be defined at a given time, but historically such a definition would not be valid for even a generation.[15]

At the time of Glass-Steagall's passage, branching by banks was either prohibited or severely constrained in most states. The McFadden Act firmly established that national banks had to conform to the policy of the states in which they operated. As a consequence, the United States had a system of thousands of small banks, undiversified with respect to either their deposit base or their loan portfolio. Branching restrictions exposed banks to the effects of downturns in the local economy. This problem particularly afflicted unit banks in rural areas and small towns. Agriculture is notoriously subject to economic cycles. At the very time that farmers would be under stress and payments on agricultural loans in arrears, agricultural banks would also tend to be suffering deposit outflows. Without branches, these banks had no other good local loan opportunities or sources of deposits.

Over the years, the system of interbank deposits had evolved in a way that, to some extent, substituted for a system of geographically diversified banks. By maintaining correspondent balances in money center banks, smaller banks indirectly gained access to other loan markets. Money center banks competed vigorously for funds by offering competitive rates on interbank deposits. In turn, a correspondent relationship provided small banks with access to funds to tide them over bad times or merely to meet seasonal variation in loan demand (White 1983, pp. 65–74).

By its prohibition of interest payments on interbank deposits, the Banking Act of 1933 crippled the interbank system.[16] The act's framers feared that a competitive market for interbank funds would "siphon off" funds in rural areas and small towns to urban financial centers. Of course, this might occur in times of poor loan opportunities resulting from a local downturn. This process is an aspect of the diversifi-

[14]White (1986) argues that commercial banks were attracted to the securities business because of economies of scope in the production of financial services.

[15]For a fascinating account of the evolution of British merchant banks that illustrates this point, see Chapman (1984).

[16]Only the development of the federal funds market restored some financial integration to our fragmented banking system.

cation provided by a competitive market for interbank funds. In times of financial crisis, however, money center banks actually increased their loans to their rural and small-town counterparts.[17] The federal guaranty of deposits was designed to provide financial stability without either competition or diversification. Fifty years of experience have clarified the flaws in this design.

There is thus a double symmetry in the banking act. On the one hand, the regulations offset the undesirable incentive effects of deposit insurance. On the other hand, deposit insurance offsets the destabilizing effects of the regulations. A combination of market forces and liability deregulation has undone the delicate balance. Like Humpty Dumpty, it is doubtful that we can put the pieces of the regulatory mosaic back together.

The value of financial diversification should not be underestimated. One need only compare the performance of the Canadian and U.S. banking systems in this century. Between 1920 and 1929, there were 6,008 suspensions and 3,963 absorptions and mergers in the United States. In the same period, only one bank failed in Canada. Contraction also occurred in Canada, but it did so by a 13.2 percent reduction in the number of bank *offices*. Similarly, there were no Canadian bank failures in the Great Depression. The number of Canadian bank offices declined by 10.4 percent, while 34.5 percent of all U.S. bank offices closed.[18]

The Canadian banking experience in the 1929–33 period is even more remarkable given that Canada and the United States experienced similar monetary shocks. Until Great Britain went off the gold standard in September 1931, Canada maintained a fixed exchange rate between its currency and the U.S. dollar. Since the Canadian dollar depreciated less than sterling after September 1931, Canada's national income and money supply were forced to contract in order to maintain external equilibrium at the new fixed exchange rate between the U.S. and Canadian dollars. Friedman and Schwartz (1963, p. 35) found that[19]

[17]"Critics charged that New York banks protected themselves in times of crisis and shortchanged their correspondents. The opposite was, in fact, true, and central reserve-city banks' loans rose in these periods, providing assistance to the interior banks. Interest rates on these loans did rise, but that was what any sound institution, commercial bank or central bank, would do" (White 1983, pp. 73–74).

[18]Compare Friedman and Schwartz (1963, pp. 352 and 457–58) and White (1984, pp. 131–32).

[19]Friedman and Schwartz present the following comparison. In the 1929–33 period, the U.S. money stock fell 33 percent while the Canadian money supply declined 13 percent. The decline in net national products for the two countries was nearly the same (53 percent versus 49 percent). The different behavior of velocity in the two countries explains the results. Velocity declined 29 percent in the U.S. but 41 percent in Canada.

> though the required fall in both prices and income was sharp, the depreciation of the Canadian exchange rate permitted the percentage fall to be somewhat smaller than that in the United States. The stock of money fell sharply also, but by a much smaller percentage than in the United States. Even the smaller fall was, however, nearly one and a half times as large as the fall in any contraction in U.S. history since the Civil War except only the 1929–33 contraction. So it can hardly be regarded as minor.

The recent failures in 1985 of two small Canadian banks (Canadian Commercial Bank and Northland Bank) reinforce rather than rebut my thesis. Both failed banks were more like the typical U.S. rather than the typical Canadian bank. Neither of the two failed banks was widely branched, and they were specialized energy banks. The failures caused financial troubles for six of the remaining seven smaller Canadian banks, which had been experiencing deposit outflows in the absence of any obvious loan problems. There appears to have been a contagion effect from the failures. In other words, there were potential externalities to these two bank failures.

It is noteworthy, however, to see how the Canadian banking system dealt with the problem. The five major Canadian banks plus the next largest institution—not the Bank of Canada—provided loans to the troubled banks. Two of the affected institutions merged: Continental Bank with Lloyd's Bank and Mercantile Bank with the National Bank of Canada. The third-party effects of the bank failures were internalized by the remaining banks. Recognizing that all would suffer from the spread of the contagion effect, the stronger institutions were prepared to lend on the value of the sound assets of the weaker institutions. This is what economic theory would predict, of course. And this is the way our own clearinghouse system operated in the past to internalize the externalities of bank failures (Gorton 1984).

It would require a separate paper to deal with contagion effects more generally. A new literature is emerging, however, that disputes the conventional wisdom.[20] The new literature questions the existence of a contagion effect in the sense that one bank failure leads to the failure of other, sound institutions. The latter may experience brief runs, which is the justification for holding liquid reserves, but absent catastrophic macroeconomic policies, such as occurred in the 1930s, runs should not translate into failures of sound institutions.

[20]For example, see Benston (1986) and Rolnick and Weber (1982, 1985). For a succinct statement of the traditional view, see Gilbert and Wood (1986). Their paper clearly distinguishes between the problems of runs and of failures. Finally, see Kaufman (1987).

Even with bad macroeconomic policy, the Canadian experience demonstrates the vitality of a sound, diversified banking system.

I am certainly not suggesting that in the absence of branching restrictions, the U.S. banking system would be composed of as few as a dozen or so banking institutions. There are good reasons to believe that in a competitive system, banking institutions would number in the thousands. First, the U.S. population is 10 times that of Canada, suggesting room for more competitors. Second, the Canadian system is the product of a public policy that, until the 1970s, actively discouraged the entry of new independent commercial banks. California's banking system is probably a better source for an order-of-magnitude estimate of how many banks would exist nationwide if branching were unrestricted. California, the most populous state, has a long history of statewide branching and liberal chartering practices. In mid-1985, there were 470 insured banks in the state. If we extrapolate from this number (assuming the same ratio of banks to population nationwide as exists in California), there would be over 4,000 independent banking institutions nationwide. It is fair to conclude that if competition had reigned in North American banking, Canada would have had many more independent banks and the United States far fewer.

In any case, geographical deregulation is now proceeding rapidly in the United States. We will probably detour through a system of regional banks on the way to one of nationally branched commercial banks. In the end, however, we will have arrived at the very system that Glass-Steagall sought to prevent: a system of financially integrated, diversified national banks whose pricing of deposits and loans reflects market interest rates.

As the Canadian experience in the 1930s illustrates, a nationally branched banking system with diversified assets can withstand even severe shocks, both real and monetary. In other words, diversification by itself can help solve the stability problem that deposit insurance was intended to address. In the last few years, banks' liabilities have been substantially deregulated. Geographical deregulation is proceeding rapidly and could be completed by decade's end.

There has basically been no deregulation of banks' assets, however, and the Banking Act of 1933 remains an effective obstacle to asset deregulation.[21] This obstacle remains, yet the delicately balanced system of regulations joined with financial safety nets has been radically, if not permanently, changed. If the banking system itself

[21]I am using "assets" broadly, referring not only to the marketable financial assets in a bank's portfolio but also to the lines of commerce in which a bank may engage.

were to attain a self-reinforcing stability, this would take the pressure off the federal deposit insurance system as guarantor of the payments mechanism. In the presence of a more stable banking system, if deposit insurance were offered competitively, it would likely be no more widespread than portfolio insurance or insurance of municipal bond issues. As with other financial insurance, deposit insurance would be an option usually rejected. Most investors do not wish to sacrifice the necessary yield to immunize themselves from loss, and instead rely on diversification and sophisticated financial instruments (such as options and futures contracts) to protect themselves.

Competitive deposit insurance might take the form of performance bonds issued to depositors who place an extraordinary premium on safety. In such a system, however, insurance would truly protect individual depositors, not the payments mechanism itself. Similarly, the deposit insurance system would no longer be a destabilizing force whose incentive structure would need to be offset by a system of rigid regulations. Only time will tell how far along to a stable, competitive banking system market-driven changes alone can take us.

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Toward a Sound Financial System

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Gerald O'Driscoll's purpose in his paper is to analyze how market incentives could substitute for regulation in controlling risk taking by depository firms. This is a useful purpose in that regulation is costly to both consumers and regulated firms. Moreover, it may not be possible to regulate risk exposures in any meaningful sense. Regulation, rather than restraining potentially risky activities, is more likely to shift such exposures into new and unpredictable channels. Particularly, in today's aggressive, trading-oriented banking environment, it seems unlikely that regulation can substitute for market discipline in controlling risk taking by banking firms.

Although there is a lot I agree with in this paper, I am also left with the feeling that it glosses over some thorny issues. In particular, I do not think that this paper, by itself, will convince skeptics that we can rely on market solutions for banking in lieu of banking regulation and the existing federal safety-net apparatus.

O'Driscoll begins by making three very important points that are worth emphasizing. First, banking law and regulation have inhibited diversification across activities and geographic markets and as a result have contributed to the riskiness of banking. Removing such obstacles to bank diversification would be very important in reducing the problem of bank failures. Second, it is unlikely that the deposit insurance agencies will ever be capable of implementing a truly effective risk-based premium structure. Third, failure resolution techniques that have extended the level of safety-net protection to large depositors, other creditors, and managers of banks, thrifts, and their holding companies have greatly exacerbated the moral-hazard problem from deposit insurance. There would be important benefits associated with eliminating this type of de facto coverage.

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Ultimately, O'Driscoll would like to see the federal government out of the deposit insurance business. He proposes a four-point program that would allow private insurers to enter the market gradually, primarily as suppliers of insurance coverage in excess of statutory maximums. Over time, governmentally provided deposit insurance would be phased out.

The central argument in O'Driscoll's paper is that a nationally branched banking system with diversified assets would "attain a self-reinforcing stability" that would take the pressure off the deposit insurance system "as a guarantor of the payments mechanism or the money supply itself." O'Driscoll claims that with such a system it would be feasible for deposit insurance to be supplied privately. The evidence he cites is the Canadian banking experience during the 1930s, when there were no bank failures. He concludes that such a system "can withstand the severest shocks, both real and monetary."

This is an important and surely controversial argument. Unfortunately, the evidence in the paper on this critical point is weak. O'Driscoll does not provide information about other factors that could have influenced comparative failure rates, such as capital levels of Canadian and U.S. banks or monetary policy. Between 1929 and 1933, the U.S. money stock was permitted to decline by one-third, while the Canadian money stock fell by 12 percent. Although part of this difference might plausibly be attributed to differences in banking structures in the two countries, it is also likely to have been related to differences in monetary regimes. A full analysis of the effects of bank structure on failure experience would systematically examine the experience of a number of countries operating under distinct monetary and regulatory regimes.

Early in his paper, O'Driscoll recognizes that the feasibility of a system of private deposit insurance depends on whether the banking system is subject to contagious runs. Although he does not make the argument explicitly, O'Driscoll must believe that the risk of contagious runs is manageable in an environment with a nationally branched and well-diversified banking system.

Some scholars have recently argued that the risk of contagious bank runs has been exaggerated, irrespective of further product and geographic market diversification. Studies of bank runs prior to the establishment of federal deposit insurance by George Benston and George Kaufman (1986), Phillip Cagan (1965), Anna Schwartz (1985), Michael Bordo (1985), and Arthur Rolnick and Warren Weber (1983) lead to several important conclusions. First, true contagious panics have been rare. There are many periods in U.S. and British history in which bank failure rates were high, but widespread panics did not

occur. Second, the panics that did occur took place either in the absence of a lender-of-last-resort mechanism or as a result of a major failure of the central bank to act as lender of last resort. Third, these panics did not generally precipitate economic downturns, although they often accompanied them.

In reviewing this evidence, I conclude that a system in which depositors are subject to greater risk of loss than they are today is probably more vulnerable to disruptive episodes—episodes in which a bank failure triggers runs on other banks perceived to be marginal. The risk of contagious runs on the banking system as a whole is small, provided such episodes are handled properly by the authorities. This involves managing failures in such a way that the liquidity of depositor accounts is preserved even if depositors are subject to losses and that solvent but illiquid banks have access to necessary reserves, preferably through open market operations but if necessary through the discount window.

Nonetheless, I doubt that private deposit insurance would become an important and permanent feature of our financial system even if O'Driscoll's proposed program were implemented. That is not to say there would be no private insurance of deposits; rather, there would be no extensive coverage.

Even without contagious runs, the banking system would be subject to macroeconomic disturbances—monetary shocks, velocity shocks, price-level shocks—that could affect a broad group of banks simultaneously. Although a bank system that is more diversified, both geographically and in terms of activities, would be less exposed to regional and industry shocks, such macroeconomic shocks are a nondiversifiable risk from the perspective of a private insurer, and they represent potentially enormous exposure.

Macroeconomic volatility over the past decade has been an important causal factor in explaining the rising rate of bank and thrift failures. Many of today's problems in financial markets are the result of the cycle of inflation and disinflation that began in the 1970s and of the accompanying volatility of interest rates and real returns. A private deposit insurer is simply not capable of insuring against such risks.

Other problems are posed by the transition to privately supplied deposit insurance. As long as a federal deposit insurance agency is the principal insurer, regulators presumably will not be willing to allow private insurance firms to determine when insolvent banks and thrifts should be closed or reorganized. Experience over the past decade, however, clearly shows that the extent of deposit insurance losses upon failure depends chiefly on how quickly insolvent firms

are closed. Just as the loss exposure of a fire insurance underwriter depends upon the abilities of a community's fire fighters, the risk of loss to private deposit insurers would depend upon the ability and willingness of regulators to quickly close insolvent firms.

The deepest of our problems with the deposit insurance system result from the unwillingness of regulators to promptly close insolvent firms. Particularly when a large firm is in trouble, or when problems are widespread in an industry or region, the regulators have proven reluctant to incur the short-run disruptions and criticism that would result. Private insurance is not feasible unless the insurer has the power to close insolvent firms or to withdraw coverage, and I believe it is unlikely that the government would grant such powers to private insurers.

Another important transition problem relates to capacity constraints within the insurance industry. Presently, insured deposits amount to well over $2 trillion. Even if deposit insurance coverage is rolled back so that potential exposure is no more than, say, 2 percent of total deposits, this amounts to a staggering sum. One of the largest insurance packages ever assembled was designed to insure against losses from a nuclear accident. It took federal sponsorship and approximately 30 years of effort to bring the insurance pool up to $750 million.[1]

An attractive alternative to private insurance that may be more feasible to implement is a subordinated debt capital requirement. Subordinated notes play a role similar to that sought from private insurers: If losses exceed a bank's equity capital, note holders suffer a loss, just as a private deposit insurer would. The note holders, in effect, are "insuring" deposits up to the amount of their financial investment. Holders of such debt cannot withdraw their funds in times of trouble, yet they have incentives to provide important market discipline. Since they do not share in the higher returns that may result from risk taking, they are more inclined than stockholders toward conservative operations. To the extent the debt is rated and priced to reflect risk, it can provide a market signal of asset quality. A subordinated debt requirement would also not be particularly burdensome for healthy banks, since the marginal cost would be the difference between rates on uninsured notes and insured deposits on an after-tax basis.

In sum, I agree with O'Driscoll's emphasis on the value of diversification of activities and geographic markets for reducing risk in the U.S. banking system, but I am skeptical about the viability of

[1]See FDIC (1983) for further discussion of this point.

private deposit insurance, at least on a large scale. The federal deposit insurance system will be with us for some time. The important thing is to eliminate burdensome regulations that make banks more vulnerable to failure, as well as to correct the gross distortions resulting from current forbearance and failure resolution policies. The more bank and thrift regulators rely on market disciplines and prompt closure of firms that are insolvent on a market-value basis, the less regulation will be needed to protect the deposit insurer against losses.

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