

Chapter 1

Why Federal Deposit Insurance Threatens to Break Down

This book seeks to change the way the reader thinks about federal deposit insurance. It looks at deposit insurance not from the point of view of a prospective beneficiary but from the point of view of a taxpayer who—through higher taxes, inflation, or user fees—will be called upon to make good the financially staggering amount of the system’s guarantees. Far from celebrating the past crises that deposit insurance has spared us, the book emphasizes the past regulatory decisions about how to handle actual and potential insolvencies at individual deposit institutions have taken a largely unrecognized toll on both the aggregate value of implicit federal obligations and the riskiness of contemporary financial institutions.

The book’s theme is that the system of federal deposit insurance adopted during the 1930s is becoming as dangerous and as unreliable as an old and undermaintained automobile. This metaphor is instructive if only because the behavior of such cars is a subject about which most of us gain considerable expertise. While the deposit insurance automobile is still adequate for light loads in flat country, it cannot be driven endlessly up and down steep interest-rate mountains without breaking down. There is good reason to doubt either that the old car has many more interest-rate mountains left in it or that it can be steered unharmed through the mine field of contemporary financial services competition. Subsequent chapters develop evidence to support the aptness of this metaphor. To let us examine this evidence unemotionally, it is useful to clear away some potentially disturbing questions:

1. How could elected officials let these problems develop? Why don’t they fix or replace the system before a breakdown occurs?
2. What would the breakdown look like? Who would get hurt?
3. Why do failures of insured deposit institutions drag deposit insurers into trouble?
4. What types of changes would improve the system?

1. How could elected officials let the value of deposit insurance guarantees lurch out of control? Why don't they fix or replace the system before a breakdown occurs?

The answer to the first set of questions lies in the human mind's penchant for responding to fearful prospects by simple denial. Most of us instinctively refuse to face unpleasant evidence squarely. Anyone who has ever broken a bone or suffered a deep cut knows that our first impulse is to deny that *we* could ever suffer so serious an injury. The breakdown of deposit insurance is so disruptive an event that everyone desperately wants to believe that it cannot happen. As the little boy said to Shoeless Joe Jackson at the onset of the Black Sox Scandal, "Say it ain't so, Joe."

Elected politicians have extra incentives to deny that serious problems exist. First, facing up to the problem would force them to accept some of the blame for allowing the situation to deteriorate so badly. Second, to make things right, they would have to take actions that would redistribute wealth away from some of their supporting constituencies. Either action could adversely affect their chances of winning reelection.

Policymakers' denial of the deposit insurance problem means that instead of using the time provided by the largely downhill interest-rate ride of 1982–1983 to make needed repairs, the administration and Congress spent the time congratulating themselves and their drivers for keeping the deposit insurance car from being shaken apart by two patches of particularly rough road traversed in the last five years: the problems of thrift institution insolvency and de facto defaults on commercial bank loans to less-developed countries and to agricultural and energy firms in this country. Since 1981 these problems have kept many large and small deposit institutions under continual pressure.

Chapter 4 develops data that indicate that the net worth accounts of thrift institutions have sunk deeply underwater in market value. Even when interest rates declined in 1983, many deposit institutions remained underwater. At best they floated near enough to the surface to emit visible bubbles. On average during 1982–1984, one savings and loan association (S&L) and one commercial bank have failed every week. In the second half of 1984 the failure rate was running even

higher. In 1983 the list of problem banks maintained by the Federal Deposit Insurance Corporation (FDIC) grew by 25 institutions per month. Despite reaching record levels, in 1984 it was still increasing by about three banks a week. The size of receivership assets owned by the FDIC is approaching \$10 billion, and the caseload of creditor lawsuits against which the FDIC must defend itself is growing by thousands of cases per year. Even though the Federal Savings and Loan Insurance Corporation (FSLIC) does not maintain a parallel list of problem S&Ls, the hangover of low-interest-rate mortgages on the books of S&Ls and mutual savings banks (MSBs) means that rising interest rates in the first half of 1984 drove the market value of the assets of the firms it insures many billions of dollars farther underwater.

In the face of these developments, it is hard to understand why many economists continue to praise the federal deposit insurance system as the single unqualifiedly successful financial policy innovation to come out of the 1930s. The issue is whether the system's obvious successes in the flat country of 1933–1965 are sustainable in the mountainous land of contemporary times.

In 1933 the institution of federal deposit insurance helped to restore public confidence in the U.S. system of deposit institutions. But over time agency personnel performed this task too zealously. Misguided but understandable efforts to paper over the current costs of failure resolution lulled many uninsured creditors of deposit institutions into the mistaken presumption that, except for scattered closings of small firms, deposit institution failures were a thing of the past. For the first four decades after 1933 the nation's avoidance of failures among large institutions—and indeed of widespread deposit runs or failures of any kind—fostered the illusion that federal deposit insurance is a miraculously low-cost device for ensuring a stable system of financial intermediation.

We may exploit our automotive metaphor to demonstrate the danger inherent in this illusion by recalling a famous series of television commercials for Fram oil filters. In these commercials a mechanic who holds a broken piston in one hand and a Fram oil filter in the other observes that drivers can either pay him now or pay him later. Like a procrastinating motorist, FDIC and FSLIC cost accounting makes a

myopic trade-off between paying for routine maintenance now and paying for heavy repairs later. The true costs of resolving past deposit insurance problems are much greater than the accounting record reveals. The more experience deposit institutions have had with the system, the more leverage, default, and interest-rate risk they have sought to load into the deposit insurance jalopy. This makes for good downhill riding but strains the brakes on curves and overloads the motor on grades.

The point that authorities don't want to face is that, however well the deposit insurance system may have run in the past, it is headed for a bureaucratic breakdown. It's not a case of "If it ain't broke, don't fix it." Unless market discipline is reimposed on deposit institution risk-taking, the deposit insurance bureaucracy will seize up at a most inopportune time.

2. What would happen if Federal deposit insurance reserves were suddenly exhausted?

It is unlikely that insured customers would suffer long-lasting losses or inconvenience in a deposit insurance breakdown. Although such problems are not totally out of the question, the politics of central banking and deposit institution regulation make it unlikely. Congress has already passed a joint resolution putting the "full faith and credit" of the federal government behind insurance agency guarantees. But because the resolution fails to indicate how the government's blanket obligation is to be discharged, a sudden nationwide run on troubled deposit institutions (a widespread, panicky effort by deposit institution customers to withdraw their funds from many of the weakest institutions in the system) could temporarily exhaust deposit insurance reserves and cause some wild bureaucratic scrambling if Congress feels the need at that moment to debate how best to make good its guarantees.

To appreciate how politically disruptive a shortage of deposit insurance reserves can be, we may look at the reactions of politicians, depositors, and state-insured institutions in Nebraska to the November 1983 insolvency of the Nebraska Depository Institutions Guaranty Corporation. This case represents a microcosm of the pressures that would develop if federal deposit insurance broke down. The insolvency occurred when the claims generated by the November 1, 1983, failure of \$67 million

Commonwealth Savings Company, a state-chartered industrial bank ineligible for FDIC insurance, came up against a \$2 million state insurance fund. Estimates of the liquidation value of Commonwealth assets leave the bank's 6,700 depositors holding the bag for between \$25 million and \$47 million in uncollectible deposits and suffering a serious loss of liquidity in having to wait out the liquidation process. Aggrieved depositors brought suit against the state of Nebraska on the grounds that the state had failed to stop its banking department and insurance agency from following "willful, wanton, or fraudulent" policies. In June 1984 a state claims board held the state liable for \$33 million. Among its other findings, the board judged the state to be negligent in allowing Commonwealth to join the guaranty corporation in 1979 and in raising the fund's account-level guarantees from \$10,000 to \$30,000 per account in 1980. Before depositors can collect from the state, however, this finding must be approved by a district court and the necessary funds must be appropriated by the legislature. As one would expect, legislative debate over how to raise the funds to finance such an appropriation pits various groups of potential taxpayers against each other and threatens to end the political careers of important incumbent politicians. Realistically the issue is how to divide the cost of the bailout between special taxes levied on surviving financial institutions in the state and various forms of general taxation. Surviving financial institutions were affected by the failure in other ways too. In the immediate wake of the insolvency, other state-insured industrial banks had to scramble to arrange alternative forms of cover. They found this cover either in the FSLIC, in a strong acquirer, or in the protections offered by a bankruptcy court.

At the federal level the ability to create money makes subsidized emergency loans to threatened institutions a quick and politically easy way to arrest any systemic run on deposit institutions. But repeated doses of bailout medicines run the risk of cumulating into a de facto nationalization of the deposit institution industry. This is the bottom line to the incipient crisis, one whose difficulties and inevitability are foreshadowed in two other recent cases.

The first case is that of so-called S&L phoenix institutions: seven large FSLIC-owned (i.e., implicitly nationalized) S&Ls created in the

early 1980s by supervisory mergers of two or more failing S&Ls that happened to be located in the same geographical area. Like the mythical phoenix itself, these institutions sprang from the ashes of their predecessor firms' previous existence. Government operation was adopted as a way of resolving the imminent failure of the component associations in the absence of attractive takeover bids from private parties. To avoid a write-down of its insurance reserves, the FSLIC put funds and new management into the phoenixes and waited for a more favorable opportunity to sell its equity stake. At year-end 1982, one phoenix had been sold, and the remaining phoenixes aggregated about \$18 billion in assets (Guttentag 1984). In August 1984 three phoenixes had still not been sold back to the private sector: Talman Home Federal (Chicago), First Federal of Rochester, and First Federal Savings Bank of Puerto Rico. At year-end 1983 these institutions had \$11.5 billion in assets. Delays in liquidating FSLIC equity positions, phoenix managers' allegations of excessive regulatory interference, and complaints from competing enterprises that phoenix institutions enjoyed unfair exemptions from antitrust restrictions underscore the temptations and difficulties that even a temporary nationalization imposes.

The second case is the FDIC's July 1984 takeover of 80 percent of the stock in the Continental Illinois Bank and Trust Company. As in the phoenix nationalizations, private parties failed to make an attractive bid for the failing firm, and administrators of deposit insurance reserves saw nationalization as preferable to liquidating the firm's assets and liabilities. Nationalization appeared bureaucratically less embarrassing than accepting an appropriately large write-down of the insurer's accumulated reserve funds.

Selling off the FDIC's and FSLIC's stake in a few institutions has proved to be a slow and painful business. Selling off at a politically nonembarrassing price and without corruption a parallel stake in the hundreds of institutions that might be acquired in the course of a full-fledged deposit insurance crisis might not even prove a manageable undertaking. Even if a full-fledged deposit insurance crisis can be avoided, the equity stake inherent in the value of deposit insurance guarantees is growing rapidly. History tells us that whatever activities a government supports, it eventually strives to control.

3. *Why do deposit institution failures drag deposit insurers into trouble?*

Deposit institution failure is a morbid topic. Like the death of a valued citizen, the failure of a deposit institution has unpleasant consequences for a number of parties: stockholders, employees, suppliers, customers, and—because deposit institution soundness is a major regulatory responsibility—deposit institution regulators.

Deposit institutions fail because they are in the business of taking risks. No matter how well they choose these risks, events cannot always turn out favorably. Still, whenever a series of failures occurs or strongly threatens, deposit institution regulators are made to share the blame with deposit institution managers. Regulators are criticized for lacking vigilance: for failing to curb at least the boldest forms of failed institutions' unsuccessful risk-taking. At such times the intensity of public criticism rises with the number and aggregate size of the institutions perceived to be in danger of failure.

Regulators' economic responsibilities and political interest in minimizing public criticism lead them to adopt policies for preventing, detecting, and resolving individual insolvencies and for arresting their spread to additional institutions. Risk-control programs aimed at individual institutions include restrictions on portfolio composition and record keeping, surprise examination of the condition of individual institutions, careful management of the information assembled in these examinations, and pressure on managers to correct abusive and unsound practices and to strengthen institutional balance sheets. In pursuing these policies, regulators labor at an informational disadvantage. They operate on the opposite side of a regulatory game board from deposit institution managers who reap benefits from concealing their firm's problems from the regulators' view. Hiding problems postpones the imposition of regulatory penalties, buying time for daring new business strategies to succeed and for asset values to be restored by favorable movements in interest rates.

Risks that Individual Deposit Institutions Take

Risk attaches to any project that exposes the value of one's human or nonhuman wealth to a chance of future losses. The word *chance* makes

it clear that the outcome of a risky project or opportunity cannot be fully predictable. Owning a deposit institution exposes a stockholder to unpredictable variability in the market value of the institution (Rosenberg and Perry 1978). This market value may be conceived as capital: the difference between the aggregate value of the financial and physical assets owned by the institution and the aggregate value of its nonequity liabilities. For a deposit institution's stockholders and uninsured creditors, portfolio risk comes from two separate sources: from fluctuations in the values of the financial assets and liabilities that a firm books as an institutional investor and from fluctuations in the value of the physical assets it holds as a producer and deliverer of financial services. We call the first class of portfolio risk a firm's *financial risk* and apply the term *service facility risk* to the second type.

Both classes of risk may be sliced into separable layers of risk exposure that we may associate with management decisions about the level of risk accepted in different aspects of a deposit institution's business activities (Sinkey 1985). As depicted in figure 1.1, financial risk may be sorted into six categories: internal integrity risk, affiliated institution risk, liquidity risk, credit risk, interest rate risk, and foreign exchange risk. Service facility risk may be separated into operating efficiency risk, regulatory risk, and technology risk.

Some sources of risk are managed differently from others. In particular managers are expected to adopt policies to minimize uncertainty about the internal integrity and operating efficiency of the organization they head; however, the object is to control rather than to avoid other forms of risk. For bearing voluntary forms of risk, managers are expected to position the firm so that it promises to reap a creditable return. Tools for managing risk include: reserve positioning; lines of credit; credit investigation; portfolio, locational, and technological diversification; techniques for correcting mismatches in the maturity profiles of assets and liabilities; and research and planning directed at predicting and coping with technological and regulatory change.

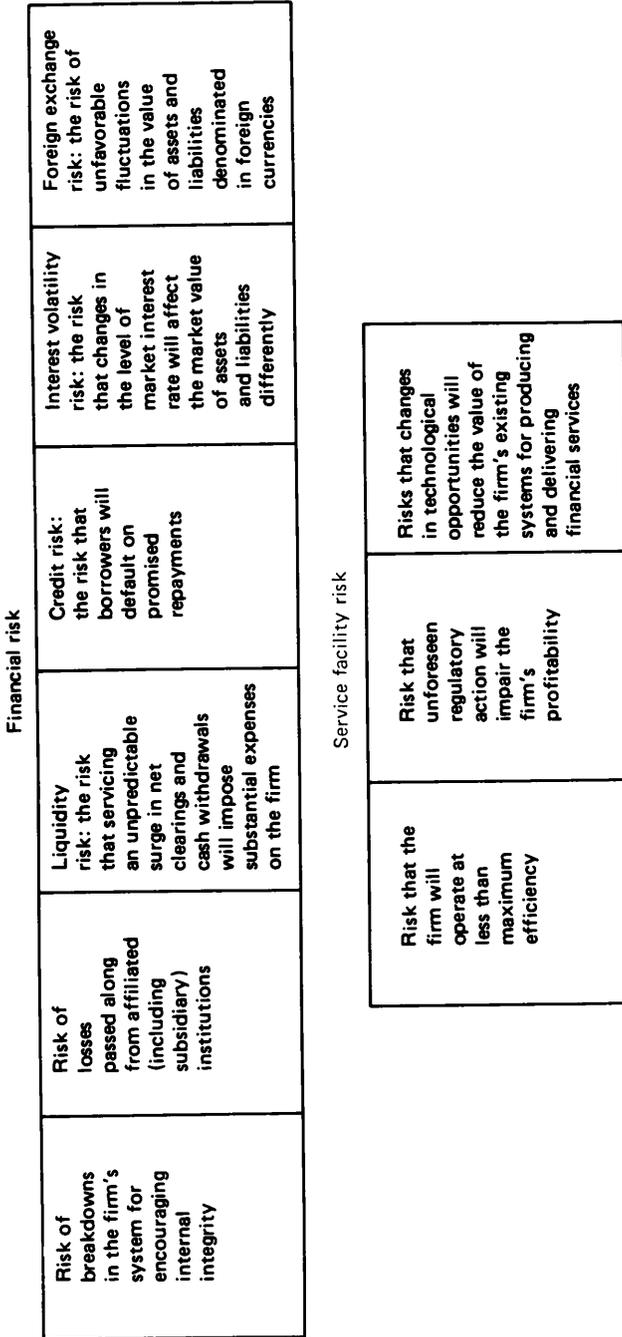


Figure 1.1 Components of portfolio risk for a deposit institution

Resulting Systemic Risks of Individual Failures Triggering a Chain Reaction

Insuring depositors of a single institution against loss is conceptually more straightforward than insuring a system of institutions. Sinkey (1979, p. 5) observes the “misuse of banking resources by inept or dishonest managers has been the major cause of bank failures (except, of course, during periods of severe economic depression).”

When a federal agency undertakes to insure a network of deposit institutions, it must worry also about the statistical independence of financial risks and service facility risks across the universe of individual firms it insures. Agency management must both assess and (so far as it can) control the risk that individual failures might accumulate into a systemic event. Elected politicians reveal themselves to be less interested in how efficiently the FDIC and FSLIC handle the failures of individual institutions in the long run than in whether they maintain public confidence in deposit institutions during their current term in office. At the FDIC and FSLIC the overriding goal is to keep difficulties experienced by individual institutions from spreading in epidemic fashion to other members of the depository institution system.

Because deposit insurance in an individual institution protects depositors up to \$100,000 per account name, the vast majority of U.S. citizens need worry about deposit institution failures only when economic information makes the threat of widespread insolvency seem very real. This insight leads deposit institution lobbyists to view the task of arresting the development and spread of deposit institution failures as a matter of minimizing not merely managerial mistakes but even bad publicity. Until the 1970s specialized state and federal regulatory authorities for deposit institutions determinedly sheltered poorly managed institutions from unfavorable publicity. They feared that bad news about a deposit institution might increase its chance of failure by driving away uninsured depositors and other creditors.

Even today regulator-approved accounting principles make economic and legal insolvency conceptually distinct events. De facto or market-value insolvency exists when an institution no longer has the resources to meet its contractual obligations. This occurs when the market value

of its assets falls below the market value of its liabilities. Legal insolvency occurs when an institution cannot cover its current liabilities. In contrast to both of these conditions, failure occurs when the insolvency is officially recognized by the institution's chartering agency and the firm is closed by supervisory action or involuntarily merged out of existence. Especially for large firms, regulators ordinarily make a tenacious effort through subsidized lending to keep troubled institutions afloat well past the point of market value insolvency. In cases where *de jure* insolvency either is or becomes inevitable, they endeavor as a matter of policy to effect the closing in a way that, compared to liquidating the assets of the failing firm, minimizes the chance of undermining public confidence in other deposit institutions.

Because performance of insurance agency bureaucrats is not judged by agency profits, minimizing an already small probability of contagion typically seems preferable to minimizing the solely economic costs of individual failures. Immediate damage to other parties is lessened in two ways: by delaying the closing until holders of uninsured debt have had time either to liquidate or to insulate their claims and by being prepared to assist a stronger institution to absorb the failing firm and assume full responsibility for its outstanding debt contracts. This policy effectively invests some of the immediately salvageable value of the insurance agency's claim on the resources of the failing firm in supervisory activity aimed at minimizing the number of failures actually observed. In staking the continued play of failing institutions with insurance agency money, regulators force the taxpayer to hold the downside of their portfolio bets. The interests of the taxpayer would be better served by a profit-maximizing insurer who would take over the upside, too.

For an insurance company, notice periods for cancelling insurance coverage (and, for a lender, contractual rights for foreclosing on the assets of an insolvent client) constitute important means for limiting its exposure to risk-taking that is initiated voluntarily by its clients. Information management is also conceived as an important element in federal risk management and failure prevention policies. Accurate and timely information on deposit institution risk-taking would allow customers and investors to penalize overly risky behavior. However,

even for well-run deposit institutions, truly adequate information on the quality of assets and operating policies is hard to come by. Almost without exception and with regulatory connivance, financial statements published for deposit institutions are exercises in cosmetic accounting.

When deposit institutions are closely held, cosmetic accounting may serve stockholder interests. But as deposit institution ownership has broadened and particularly as it has become layered through holding companies (corporations formed to own the stock of other corporations), minority owners have often been placed at a scandalous disadvantage. As the U.S. banking system switched increasingly to holding company ownership in the late 1960s, Securities and Exchange Commission (SEC) jurisdiction over securities issued by large, publicly held bank holding companies (those with over 300 shareholders and over \$3 million in assets) permitted it to require disclosure of adverse information by major banks. (In addition, holding companies with at least 500 shareholders and those that are registered on a national exchange are subject to SEC restrictions on corporate governance.) The SEC has required large bank holding companies to disclose nonperforming loans since 1976, asset liability mismatching since 1980, and problems with foreign loans since October 1982. Market participants' judicious response to this information and the Reagan administration's announced preference for deregulation have led agencies directly responsible for deposit institution regulation and the interagency Federal Financial Institutions Examination Council to consider numerous proposals for additional disclosure. Nevertheless, examiner reports and ratings are not ordinarily available for public scrutiny. Damage control recordkeeping, which focuses on book rather than market values of assets and liabilities, makes unfavorable information all the more dramatic when it does surface. With uninsured creditors and minority stockholders having much at stake and little reliable information, adverse rumors about a deposit institution's condition sometimes trigger substantial outflows of deposit and nondeposit funds and declines in the market value of the firm's stock. For example, in four months in 1984 Continental Illinois lost more than 25 percent of its private funding and roughly 80 percent of its stock value.

When such problems become epidemic as in 1933, restoring public confidence in deposit institutions becomes an urgent political problem. At such times fundamental changes in regulatory arrangements are adopted, often with greater concern for their dramatic immediate effect than for their long-run consequences. Regulatory reforms that are so conceived take their place among the causes both of an immediate economic recovery and in time of the next banking crisis.

Some Unpleasant Effects of Deposit Insurance

Far from eliminating the risk of deposit institution insolvency, deposit insurance merely shifts the burden of portfolio risk from deposit institutions and their creditors to other parties in society. Moreover, unless it is properly priced, deposit insurance actually increases aggregate deposit institution risk-taking. Which sectors ultimately bear the burden of deposit institution risk depends on the system of deposit insurance pricing and the methods that deposit insurance agencies use to resolve de facto client insolvencies when they occur. Analysis indicates that, under current arrangements, the burden of backing up insurance agency deposit guarantees falls principally on the insurance system's implicit guarantors: the general taxpayer and conservatively managed institutions able to survive whatever crisis might unfold.

Today the aggregate value of deposit insurance guarantees is much larger than is generally recognized and is administratively out of control. This lack of control and the distribution of the implicit responsibility for backstopping the system's unfunded guarantees is neither economically nor politically sustainable. The danger is that by the time the issue is openly confronted, U.S. deposit institutions may find that—without anyone's ever intending it—exercising the system's option to take over an insolvent deposit institution industry may have become the only politically expedient way to settle accounts.

This back-door path to nationalizing deposit institutions is being paved by systematically mispricing deposit insurance services. In what is a world of rapid change, current arrangements offer clients essentially free coverage for unfamiliar types of risk-taking. Newly emerging varieties of deposit institution risk—such as those generated by asset and

liability product line expansion and extensions in geographic market area accomplished through holding company affiliates—are neither explicitly nor implicitly priced by deposit insurance authorities. Unpriced risks tempt managers of insured institutions to occupy a more hazardous portfolio position that their unsubsidized tolerance for risk would otherwise support.

Arbitrage possibilities exist whenever a good or service has a different price or anticipated rate of return in two markets. If transactions costs were zero, one could earn a riskless profit by buying (going long) in the high return market and covering this position by selling (going short) in the low return one. However, an insured institution cannot arbitrage the price of risk-bearing services between asset and deposit insurance markets without exposing itself to a definite risk of failure. This is because deposit insurance agencies are not legally required to make payments unless and until a client's own resources are exhausted. To arbitrage the price of deposit insurance, a deposit institution manager must go long in opportunities whose riskiness is less than fully priced by his or her insurance agency and dare to cover this risk by giving the insurer the right to take over his firm when and if its net worth becomes inadequate. Such arbitrage shifts the burden for underwriting an insured institution's catastrophic losses onto the agency's insurance reserves.

Deposit insurance arbitrage illustrates every insurance fund's exposure to moral hazard. Dictionaries define *moral hazard* as an insurance company's risk as to the insured's trustworthiness and honesty. This definition construes moral hazard literally, as the chance of unethical behavior by an insured. But except for explaining the etymological origin of the term, this definition is outdated. In contemporary usage the meaning of *moral* is stretched to cover any self-interested voluntary response to an insurance contract by an insured (Mayers and Smith 1982). Moral hazard exists because of differences in the risk-taking incentives that would confront an insured and an uninsured party that are identical except in their insurance coverage. Conflicts between the interests of the two parties to an insurance contract mean that, like acrobats working with the benefit of a safety net, insureds can afford to be more daring than they could if they were not able to rely on

insurance coverage to truncate their losses. An insurance company's moral hazard resides in the power that its clients retain to pursue risks that willfully increase the value of their side of an insurance deal, thereby lowering net expected benefits to the insurance company.

Because the early success of the federal deposit insurance system increased customer and managerial confidence in that system, it encouraged managers to adopt progressively bolder attitudes toward portfolio risk. In the 1970s and early 1980s examples of this phenomenon can be found in aggressive commercial bank lending both to independent operators in the energy field and to governments and governmental enterprises in less-developed and Eastern European countries.

Preventing Deposit Insurance Failures: Examination, Disclosure, and Strengthening Policies

In line with the maxim that an ounce of prevention is worth a pound of cure, deposit insurance agencies emphasize client surveillance. The bulk of their labor force consists of examiners who, making little use of modern information and telecommunications technology, review data from call reports and periodically visit client institutions to evaluate the quality of their loan portfolios and management practices. Although responsibility for preserving depositors' wealth rests with the deposit insurance agencies, authority to conduct on-site examinations is shared bureaucratically with chartering authorities (state banking commissions and the U.S. Comptroller of the Currency) and the Federal Reserve System. Principles and standards for federal examinations are being standardized by the five-agency Federal Financial Institutions Examination Council. This Council was established by the Financial Institution and Interest Rate Control Act of 1978 to coordinate the regulatory activities of five federal deposit institution regulators: the Fed, the Comptroller, the FDIC, the Federal Home Loan Bank Board (FHLBB), and the National Credit Union Administration. But progress toward coordination has been slow due to differences in the distribution of the costs and benefits of regulatory change across individual agencies and to continued skirmishing over bureaucratic turf.

Reports from on-site examinations focus on the adequacy or inadequacy of the firm's capital account for meeting the particular forms

of risk exposure that worry examiners. Traditionally examiners have devoted their attention primarily to risks from nonperforming and questionable loans (Spong and Hoenig 1979) and secondarily to risks from problems rooted in management competence and integrity. Examination reports feature recommendations for changes in management practices designed to improve the institution's performance and for increases in capital meant to strengthen the institution's balance sheet.

Strategically examiners have the task of uncovering problem institutions before their situation declines to the point where future losses threaten to exceed the privately supplied equity of the firm and tap into the resources of the deposit insurance agencies. Although in special cases a problem classification may trace to corruption or gross risk-taking of another sort, examiners typically conceive a problem institution as one whose capital is low relative to potential default losses on outstanding loans (Sinkey 1979). Because it ignores several important sources of risk displayed in figure 1.1, this conception of deposit institution risk is dangerously outmoded. Like the institution of federal deposit insurance itself, examination procedures are rooted in a 1930s conception of what causes bank failures. They implicitly embody the view that because loans are the chief asset of deposit institutions, and except for losses due to theft and embezzlement, institutions find themselves in irremediable trouble only when borrowers prove unable to service outstanding loan agreements. Besides risks from crime and customer defaults, examiners today must confront the possibility of losses caused by interest volatility, movements in foreign exchange rates, political developments in foreign countries, and technological obsolescence. To be maximally effective, examiners must adaptively identify and evaluate new forms of risk as they emerge.

To protect client institutions from unfavorable publicity, cosmetic accounting is permitted and examination reports and agencies' lists of problem institutions held from public view. This pursuit of administrative secrecy contrasts sharply with the openness emphasized by the SEC. The keystone of the SEC's approach to regulating securities activity is government-mandated disclosure of potentially relevant financial information that can allow outside investors to form accurate assessments of the value of specific securities. Deposit institutions and their

specialized federal regulators have argued continually among themselves and with the SEC over proposals to require increased disclosure of information on problem loans and balance sheet structure.

In the 1980s, as financial services institutions became more and more alike and public support for deposit institution deregulation developed, proposals for disclosing problem conditions gained considerable momentum. Bank holding companies and deposit institutions that engage in brokerage activities fall under the disclosure regulations of the SEC. The SEC requires a growing number of specified bank holding companies (between April 1983 and July 1984, the number grew from 553 to 981) to discuss mismatches between the maturities of their assets and liabilities in their annual reports. In October 1982 it mandated that bank holding companies disclose information on significant loans and investments (those constituting more than 1 percent of outstanding assets) in countries experiencing so-called liquidity problems. Even more recently it announced plans to require figures for foreign and domestic nonperforming loans to be divulged separately.

Specialized deposit institution regulators have begun to follow the SEC's lead. In December 1982 the Comptroller of the Currency and the head of the FDIC separately espoused the principle that releasing more information about the operations of individual banks would help to check excessive risk-taking by increasing the effectiveness of market discipline on risky banks. In particular they have stepped up enforcement actions against banks that fail to report accurate financial information to depositors and stockholders. In mid-1983 federal regulators began to publish information on loans that are ninety or more days past due, on nonaccruing loans, and on troubled debt restructurings. They are also encouraging insured banks and thrifts to make additional disclosures voluntarily and considering requiring public audits of bank financial statements, announcing disciplinary actions taken against individual banks, and disclosing the weaknesses regulatory personnel uncover in the course of periodic examinations.

Deposit Insurers: Fly Now, Pay Later

Over time the true cost of financing federal deposit insurance has increased massively and become increasingly inequitable in its distribution.

Correspondingly the formal protection against deposit institution failures that the system is supposed to provide has begun to wear thin. Beginning in the mid-1970s a wave of failures among large institutions started the nation on a course of reality therapy. By 1980 deposit institution balance sheets reeked of de facto insolvency. They contained unrealized losses whose realization would swamp not only the industry's accumulated net worth but even the reserves of federal deposit insurance agencies. For the first time since the 1930s the rate of failure of U.S. deposit institutions surfaced as a regular subject for cocktail-party inquiry.

Perhaps surprisingly the basic difficulties were clearly foreseen in the debate that preceded the establishment of the federal deposit insurance system. Deposit insurance occupied a place on the national agenda for roughly a century before its adoption in 1933. State experiments with insuring bank obligations (bank notes as well as deposits) extend back to 1829. In Congress the legislative history includes the introduction of 150 bills providing for federal guarantees or insurance of bank deposits, dating as far back as 1886. These bills are analyzed in detail in the FDIC's *Annual Report* for 1950 (pp. 63–101), and the FDIC's *Annual Report* for 1952 (pp. 59–71) summarizes the structure and operating experience of the fourteen state insurance systems established between 1829 and 1917.

Legislators resisted federal deposit insurance so long because insight derived from the experience of defunct state deposit insurance funds and from economic analysis showed it to be menaced by twin problems of economic inefficiency and uneven incidence in benefits and costs. Economists noted that unless insurance assessments were related to the risks taken by individual banks, deposit guarantees eventually would foster looser banking practices rather than sounder ones. In one of the first published analyses of the federal deposit insurance system, Emerson (1934) made this point with disconcerting force. Economists also expressed the fear that the benefits and costs of federal guarantees would be unfairly distributed. Early observers predicted that deposit insurance would subsidize small and weak banks at the expense of large and strong ones (Emerson 1934; Golembe 1960; Burns 1974; Green 1981). Many saw this distributional effect as inefficiently retarding the devel-

opment of systems of wide-area branch banking in regions where branch office networks would be socially beneficial.

While events have confirmed the dangers of setting insurance premiums that are not risk-rated, the precise scenario that unfolded differed in three ways from the one envisioned by the system's early critics. First, although from the beginning managers of deposit insurance agencies have proved unwilling to undertake the difficult administrative task of setting risk-rated explicit premiums, they discovered that their resources would soon be swamped if they did not erect regulatory incentives to limit client venturesomeness. Effectively the agencies use state and federal examiners to enforce a risk-rated structure of implicit premiums. They accomplish this by imposing escalating administrative penalties on institutions whose operating policies or portfolio positions are recognized as risky by examiners. The rub in this approach is that the mix of political and economic incentives that governs the behavior of government bureaucrats greatly lengthens the inevitable lag of examiner recognition behind the true importance of emerging forms of yet-to-be-regulated risk. In recent years this delay is exemplified by regulators' slowness to regulate interest volatility risk, liquidity risk from standby commitments, credit risk from loans to sovereign governments and government-owned corporations in other countries (against which traditional lender remedies such as judgments and foreclosure rights are hard to enforce), and service facility risk associated with technological change. Regulatory lags amplify incentives for clients to invent and to pursue new and unregulated forms of portfolio risks. If their agency's economic viability were not backstopped by other federal resources, deposit insurers would have to take cognizance much sooner of emerging risks.

Second, as predicted, conservatively managed deposit institutions find themselves paying too much for deposit insurance, while institutions that aggressively pursue unregulated risks pay too little. But in an adaptive world inequities in the distribution of the burden of financing the deposit insurance system could not permanently turn on the size of client portfolios. The unwillingness of the FDIC to permit uninsured creditors to suffer the consequences of a large-bank failure and evidence on the pattern of short-funding and intercountry lending observed for

banks in different size classes indicate that banks in the nation's largest size class faced strong incentives to develop a subsidized exposure to unregulated risks.

Third, by designing strategically located networks of subsidiaries that possess complementary banking powers, bank holding companies have been able to establish, with little loss of economic efficiency, a banking presence across state boundaries.

Failure, Insolvency, and Deposit Institution Net Worth

In choosing to fly now and pay later, deposit insurers have nurtured an essentially artificial distinction between the insolvency and the failure of an insured institution. Failure is marked by a suspension of autonomous operations, an event that requires discretionary action by an institution's chartering authority. Insolvency occurs whenever an institution's nonownership liabilities exceed its assets. A finding of at least potential insolvency is a necessary condition for declaring a failure, but even in the face of a strong evidence of market value insolvency, failure is an administrative option that a supervisory authority may or may not choose to exercise.

Regulators seldom declare a deposit institution insolvent just because it reaches a condition where the *market value* of its net worth ceases to be positive. In 1938 the three federal banking agencies and supervisors of state banks agreed to value reasonably risky marketable securities at cost and to carry loans at par as long as ultimate repayment was "reasonably assured" (Klebaner 1974, p. 161). Hence the only category of an institution's unrealized losses that currently enter regulatory appraisals of deposit institution solvency is losses projected on assets that are classified unfavorably by deposit institution examiners. De jure insolvency occurs only when the chartering authority certifies formally that the book value of an institution's capital resources has been exhausted by a combination of operating losses, assets disallowed by examiners worried about default risk, and losses recognized either from asset sales or from employee theft.

A problem institution fails when it is closed or involuntarily merged out of existence. Closing requires the state commission or federal agency

that chartered a firm to decide (often under the urging of the deposit insurance agency involved) that its normal attitude of administrative forbearance is no longer in its bureaucratic interest. The deposit insurance agency's strongest independent sanction is merely to threaten to institute proceedings to terminate the institution's insured status. Typically an institution's insurance agency and chartering authority review a problem situation for a long while before deciding to merge or to close a troubled firm. As an alternative to failure, the insurer may offer financial assistance or request that the institution raise additional capital or make specified changes in management or management policies.

An individual deposit institution's risk of failure is rooted in its management and in its balance sheet. Particularly relevant are the exposure of its loans to default, mismatches between the time profiles of its assets and liabilities, and the extent to which it has leveraged its accumulated capital resources. Risks of deposit institution failure rose during the 1970s and early 1980s for two reasons.

First, many deposit institution managers voluntarily embraced unregulated forms of portfolio risk as a way to increase the anticipated return on equity capital paid by their firm. To increase their prospective lending margins, deposit institution managers made riskier loans and financed these loans in riskier fashion. They spread their earnings over a smaller equity base and funded their holdings of assets with liabilities that promised to roll over on average well before (or in some cases well after) the assets matured.

Second, the risk of existing deposit institution portfolios shot upward with the sudden increase in the volatility of interest rates shown in figures 1.2 and 1.3. Interest rate swings shown in figure 1.2 are much wider after October 6, 1979, than before. Figure 1.3 reports moving average values for mean squared variation in bill and bond rates over twelve-month periods. Both graphs confirm that a break occurred in the structure of these interest rate series in late 1979.

This break in economic structure was brought about by the October 6, 1979, change in operative monetary policy strategies. The increase in interest volatility and the long recession that began soon after caused an across-the-board rise in the riskiness of preexisting asset-liability

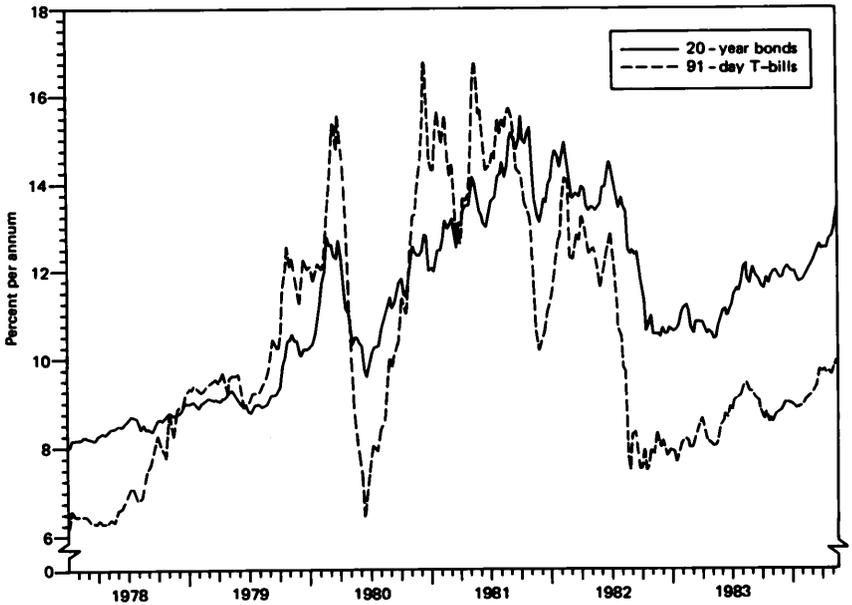


Figure 1.2 October 1979 shift in volatility of interest rates on U.S. Treasury bills and bonds

mismatches, in the value of depositor options to draw down passbook and checking account funds, and in customer default rates on loans. These developments underscore the nonrandom role of macroeconomic policy decisions in interest volatility risk. Deposit institutions' exposure to discretionary macroeconomic policy risk provides a loose justification for government efforts to ease the transitional burdens that sudden alterations in policy instruments create.

As a practical matter it is hard to draw a line between central bank efforts to maintain aggregate liquidity by acting as lender of last resort and FDIC and FSLIC efforts to minimize deposit institution failures. However, a useful theoretical principle may be enunciated. The Federal Reserve should hold itself responsible through the discount window for easing transitional problems caused by unpredictable shifts in its policy, but individual institutions should be held answerable for the extent of their exposure to the risk of interest volatility.

The major purpose of net worth accounts at deposit institutions is to help federal agencies to maintain confidence in these institutions'

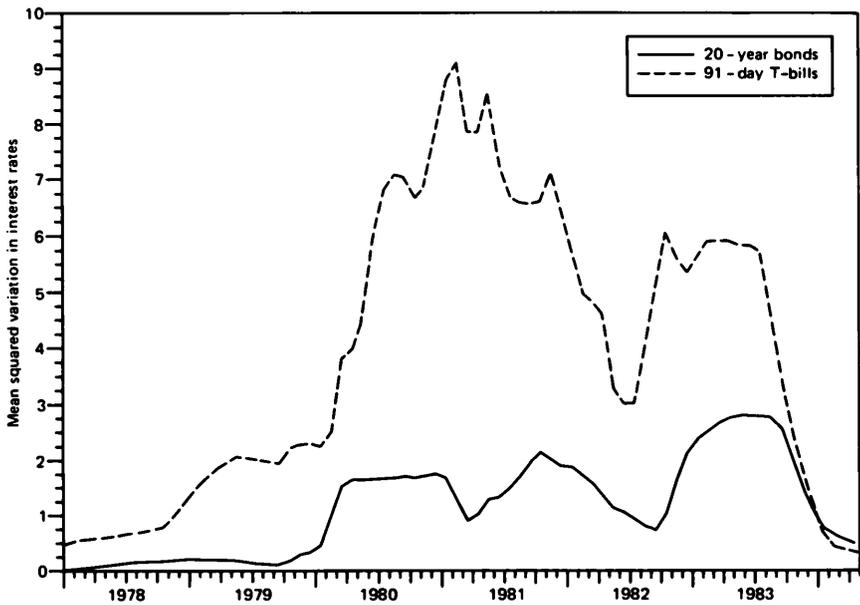


Figure 1.3 12-month moving variance of U.S. Treasury bill and bond rates

ability to cope with adversity: to buffer severe financial pressures that might emanate from instances of unfavorable economic conditions or employee misjudgment and crime. As long as deposit insurance guarantees remain both credible and underpriced, far too few deposit institution managers find the benefits of strengthening their capital accounts to be worth the cost of raising additional equity (Buser, Chen, and Kane 1981). Systematically underpricing deposit insurance has induced a massive and ongoing substitution of equity in the form of deposit insurance guarantees for private equity in deposit institutions. The federal government is already the leading supplier of equity funds to deposit institutions. The problem is not that deposit institutions have been doing more business than can be supported by their capital accounts but that the composition and funding of deposit institution capital accounts have shifted uncontrollably. To reverse the process, federal deposit insurance coverages and pricing policies must be reformed. For deposit institutions to remain part of the private sector, incentives to invest private capital in deposit institutions must be restored.

4. *Outlook for deposit insurance reform*

During the 1970s economists continued to call for risk-rated deposit insurance premiums (Scott and Mayer 1971; Gibson 1972; Merton 1978; McCulloch 1981) and for changes in coverage (Mayer 1975; Silverberg and Flechsig 1978). In the early 1980s the heads of both the FDIC and the FSLIC finally acknowledged the need for their agencies to develop a system of risk-rated premiums. In October 1982 Congress asked the deposit insurance agencies to study the feasibility of extending their coverage of deposits and the possibility of allowing private insurance and reinsurance for this coverage. During the next six months FDIC Chairman William Isaac opened a public dialogue concerning ways to overhaul the deposit insurance system. While campaigning for increasing the strength of implicit premiums through greater disclosure, he proposed putting large depositors more at risk in bank failures, encouraging private insurance companies to underwrite some deposit insurance risks, and making bank examiners responsible for levying risk-related explicit premiums on individual institutions. He further proposed that the FSLIC be merged into the FDIC and that the supervisory functions of the various federal deposit institution regulators be consolidated into a single agency. His agency's staff-prepared report to the House banking committee (FDIC 1983) ultimately endorsed a series of reforms cautiously designed to implement these principles.

For its part the FHLBB, which controls the FSLIC, called for general comments on a loose plan to establish graduated premiums. In this plan surcharges for risk would raise charges for risky institutions by as much as 50 percent over the basic premium. It simultaneously engaged a panel of academic consultants as a drafting committee to help prepare its own congressionally mandated report (FHLBB 1983).

How the Need for Deposit Insurance Reform Aggravates Other Regulatory Problems

Although both agencies' reports emphasized the need for change and recommended bold action, the House and Senate banking committees so far have attached little urgency to deposit insurance reform. The entry of nondepository financial services firms into banking, the recip-

rocal entry of depository firms into nontraditional markets, the de facto spread of interstate banking, and the desirability of paying explicit interest on demand deposits and required reserves pushed the question of reforming deposit insurance off the effective legislative agenda. This is ironic in that the subsidies to risk-taking hidden in the current system of deposit insurance play a large role in making these other problems seem so very urgent. Without prior reform of the deposit insurance system, the nation's financial structure cannot be controlled effectively.

Any comprehensive solution to the deposit insurance mess must endeavor to restore market discipline. The FDIC and FSLIC must act more like private insurers so that uninsured depositors and stockholders bear more of the risk inherent in deposit institution operations. Opportunities for risky institutions to fail must be administratively unblocked (for example, by authorizing bailouts only when a fixed percentage of insured institutions has failed within the past twelve months) and timely disclosure of problem situations must be adopted. A useful first step would be the replacement of book value accounting for insured institutions by market value accounting. A second step would be to expand FDIC and FSLIC rights to supervise insured institutions and to cancel insurance coverage in timely fashion. Currently deposit insurers are required to phase out an institution's coverage over a two-year period and may not start this process until completing a time-consuming notification and hearings process. To rebalance insured institutions' own rights, opportunities for private competition in deposit insurance must be established. The easiest way to do this would be to lower the basic coverage from \$100,000 to \$10,000 per account name and, by indexing this coverage to a general price index, to remove this value from the legislative arena as far as possible.

Deposit institutions should be able to purchase supplementary coverage, perhaps in \$10,000 layers, from either federal or private insurers. At the same time individual account holders should be able to purchase additional insurance for their accounts from private companies. To make sure that private institutions have a legitimate opportunity to compete for layers of secondary coverage, the FDIC and FSLIC should be required to hold periodic auctions for insurance companies to bid on opportunities to reinsure these contracts. Finally, to keep expectations

from developing that private deposit insurance carriers will themselves be routinely bailed out whenever deposit institution failures push any of them to the brink of insolvency, government assistance of these companies should be legislatively constrained.

So far, although the Treasury has been drafting a parallel plan, the FSLIC's plan and reform proposals floated by the FDIC exist as trial balloons developed for submission to Congress. Neither agency has irreversibly committed itself to undertaking fundamental reform. The agencies' public dialogue continues to duck the three basic questions of risk management: (1) How comprehensively should client portfolio risk be conceived? (2) How accurately and how regularly should this risk be measured? (3) What degree of graduation in the premium schedule would be sufficiently steep to eliminate the subsidy to risk-bearing? Until the full resources of the deposit insurance bureaucracy are mobilized to make the development of an operational plan a number-one priority, resolution of these issues figures to be stymied by political tensions endemic to the legislative process, to the bureaucratic structure of regulatory agencies, and to regulator-regulatee relationships.

Congressional Denial of the Need for Deposit Insurance Reform

Although great progress has been made since 1982, the essentially political impasse causes great distress to many academic economists. Congressional committees' skeptical attitude toward testimony about the need for federal deposit insurance reform reminds me of a country doctor whose wife developed a serious heart condition. Because his town had not yet been wired for telephone service, he rigged up a large bell that his children could ring to alert him if his wife's condition should require his attention while he was off treating other patients. Soon after he installed this emergency warning system, the children rang the bell frantically just as he was concluding his first call of the day. Leaping into his buggy and whipping his horse into a near-frenzy, he raced home in record time. Dashing up to his wife's bedroom, he was told that she had suffered some slight shortness of breath and mild chest pain, but that her difficulties had passed when she lay down. When an extremely cursory examination uncovered no compelling rea-

son for alarm, he scolded the children for diverting him from his rounds and for subjecting him and his horse to such unnecessary stress. Then, he left for his second call.

As he completed treating the second patient, the bell rang out anew. Again, the doctor dashed home, nearly killing his horse in the process. Reaching the house, he virtually flew up the stairs and rushed gasping into his wife's bedroom, where she was resting peacefully and talking with the children. The children explained that, although she had felt intense chest and arm pains for several minutes, the pains had stopped when they gave her some digitalis. In a state of great aggravation, he brought the children outside the room and lectured them even more sternly about the value of his services to the rest of the community and the importance of calling him only when a real problem existed.

However, he didn't even reach the location of his third patient before the bell rang out once more. Spurred on by the unhappy fate of the boy who cried wolf, he drove back as fast as he could. As he rushed up the porch and into the house, his horse keeled over dead behind him. This time, when the doctor reached his wife's bedroom, she was rolling on the floor in severe pain, turning blue, and gasping desperately for breath. Beaming approvingly on the children, he proclaimed, "Now, *that's* more like it."

Using an antiquated system for developing and communicating information, deposit insurance officials have been trying to tell a preoccupied Congress some bad news about the financial health of deposit institutions. Despite conducting a succession of committee hearings on the subject, Congress has chosen repeatedly to close its ears to this news. Ironically, if an undeniable deposit insurance crisis were to occur, far from acknowledging the timeliness and correctness of the regulators' repeated warnings, Congress would spank its children and rebuke them publicly for having failed previously to make the extent of the developing danger sufficiently clear. In refusing to act on the warnings of these officials, Congress is forfeiting the chance to institute reforms that could forestall the bureaucratic crisis that continued inattention to the problem may force on us.

References and Additional Readings

- Aspinwall, Richard. 1975. "Discussion." *Journal of Financial and Quantitative Analysis* 10 (November): 589–610.
- Benston, George, and Pierce, James. 1981. "Discussions." In Karl Brunner, ed., *The Great Depression Revisited*. Boston: Martinus Nijhoff.
- Burns, Helen M. 1974. *The American Banking Community and New Deal Banking Reforms, 1933–1935*. Contributions in Economics and Economic History, No. 11. Westport, Conn.: Greenwood Press.
- Buser, Stephen A.; Chen, Andrew H.; and Kane, Edward J. 1981. "Federal Deposit Insurance, Regulatory Policy, and Optimal Bank Capital." *Journal of Finance* 35 (March): 51–60.
- Emerson, Guy. 1934. "Guaranty of Deposits under the Banking Act of 1933." *Quarterly Journal of Economics* 48 (February): 229–244.
- Federal Deposit Insurance Corporation. Various years. *Annual Report*. Washington, D.C.
- Federal Deposit Insurance Corporation. 1983. *Deposit Insurance in a Changing Environment*, Washington, D.C., April 15.
- Federal Home Loan Bank Board. 1983. *Agenda for Reform*. Washington, D.C., March 23.
- Gibson, William E. 1972. "Deposit Insurance in the United States: Evaluation and Reform." *Journal of Financial and Quantitative Analysis* 7 (March): 1575–1594.
- Golembe, Carter H. 1960. "The Deposit Insurance Legislation of 1933: An Examination of Its Antecedents and Its Purposes." *Political Science Quarterly* 75 (June): 181–200.
- Green, George D. 1981. "The Ideological Origins of the Revolution in American Financial Policies." In Karl Brunner, ed., *The Great Depression Revisited*, pp. 220–252. Boston: Martinus Nijhoff.
- Guttentag, Jack. 1984. "A Note on Hedging and Solvency: The Case of a Phoenix." *Journal of Futures Markets* 3 (Summer): 137–141.
- Horvitz, Paul M. 1975. "Failures of Large Banks: Implications for Deposit Insurance and Banking Supervision." *Journal of Financial and Quantitative Analysis* 10 (November): 589–601.
- Humphrey, David B. 1976. "100% Deposit Insurance: What Would It Cost?" *Journal of Bank Research* (Autumn): 192–198.
- Kareken, John, and Wallace, Neil. 1978. "Deposit Insurance and Bank Regulation: A Partial Equilibrium Exposition." *Journal of Business* 51 (July): 413–438.
- Klebaner, Benjamin J. 1974. *Commercial Banking in the United States: A History*. Hinsdale, Ill.: Dryden Press.
- Kreps, Clifton, and Wacht, R. F. 1971. "A More Constructive Role for Deposit Insurance." *Journal of Finance* 26 (May): 605–613.
- Leff, Gary. 1976. "Should Federal Deposit Insurance Be 100%?" *Bankers Magazine* 159 (Summer): 23–30.
- Leff, Gary, and Park, J. W. 1977. "The Mississippi Deposit Insurance Crisis." *Bankers Magazine* 160 (Summer): 74–80.

- McCulloch, J. Huston. 1981. "Interest Rate Risk and Capital Adequacy for Traditional Banks and Financial Intermediaries." In Sherman J. Maisel, ed., *Risk and Capital Adequacy in Commercial Banks*, pp. 223–248. National Bureau of Economic Research Monograph. Chicago: University of Chicago Press.
- Mayer, Thomas. 1965. "A Graduated Deposit Insurance Plan." *Review of Economics and Statistics* 47 (February): 114–116.
- Mayer, Thomas. 1975. "Should Large Banks Be Allowed to Fail?" *Journal of Financial and Quantitative Analysis* 10 (November): 603–613.
- Mayers, David, and Smith, Clifford L., Jr. 1982. *Toward a Positive Theory of Insurance*. Monograph Series in Finance and Economics. New York: Graduate School of Business Administration, New York University.
- Merton, Robert C. 1978. "On the Cost of Deposit Insurance When There Are Surveillance Costs." *Journal of Business* 51 (July): 439–452.
- Rosenberg, Barr, and Perry, Philip R. 1978. "The Fundamental Determinants of Risk in Banking." In *Proceedings from a Conference on Bank Structure and Competition*, pp. 402–477. Chicago: Federal Reserve Bank of Chicago.
- Scott, Kenneth W., and Mayer, Thomas. 1971. "Risk and Regulation in Banking: Some Proposals for Deposit Insurance." *Stanford Law Review* 23 (May): 857–902.
- Silverberg, Stanley C., and Flechsig, Theodore G. 1978. "The Case for 100% Insurance of Demand Deposits." *Issues in Bank Regulation* 1 (Winter): 38–44.
- Sinkey, Joseph F., Jr. 1979. *Problem and Failed Institutions in the Commercial Banking Industry*. Greenwich, Conn.: JAI Press.
- Sinkey, Joseph F., Jr. 1985. "Regulatory Attitudes toward Risk." In Richard C. Aspinwall and Robert S. Eisenbeis, eds., *The Banking Handbook*, pp. 347–380. New York: Wiley.
- Spong, Kenneth, and Hoernig, Thomas. 1979. "Bank Examiner Classifications and Loan Risk." *Economic Review*, Federal Reserve Bank of Kansas City (June): 15–25.