#### The federal safety net: Not for banks only

George G. Kaufman

In 1985, the financial insolvencies of some larger thrift institutions in Ohio and Maryland led to widespread runs on these institutions. A consequence was the insolvency and disappearance of the state-sponsored deposit insurance agencies that insured them. In 1987, after many years of increases in the number and size. of savings and loan association failures, Congress was forced to recapitalize the Federal Savings and Loan Insurance Corporation (FSLIC) in order to keep it in operation. Although solvent, the Federal Deposit Insurance Corporation (FDIC) has been weakened by the large number of commercial and savings bank failures. In addition, serious attention is being devoted to a possible merger of the FDIC and FSLIC, if the capital infusion to the latter proves insufficient.

This article does not consider why the deposit insurance funds are in trouble nor the potential solutions. This has been examined in a large number of other studies. Instead, it documents the history and scope of federal guarantees. It argues that the problems faced by deposit insurers are not unique and that the real policy debate is not "Should bank deposits be insured?" but "Should the federal government engage in insurance activities of any kind?"

In the United States, bank deposits appear to have been the first financial claims to be insured either directly or indirectly by governmental agencies. The first bank deposit insurance in the United States was adopted by New York State in 1829. This plan fully guaranteed bank deposits and circulating notes. All New York state-chartered banks (federal charters were not available until 1863) were required by statute to join the system upon renewal of their charters and to make contributions scaled to their capital into a safety Depositors and noteholders of failed banks were reimbursed by the fund for the difference between the par value of their claim and the pro rata recovery value from liquidation of the banks' assets. Deposit insurance was subsequently adopted by other states and, in 1933, by the federal government.1

Today, a wide variety of private financial assets and claims carry some form of government insurance or guaranty. More or less modeled after federal bank deposit insurance is insurance of deposits at thrift institutions (1934), share capital at credit unions (1970), customer credit balances and the market value of security holdings at security brokers and dealers (1970), and employee claims on defined benefit pension programs (1974). In addition, federal guaranteed lending programs are operated by numerous federal government departments, bureaus, and agencies, independent agencies, off-budget agencies, and so forth. More than 125 such programs are listed in a Catalog of Federal Loan Guarantee Programs published by the House Committee on Banking, Finance and Urban Affairs in 1982 and in a catalog of Federal Credit Programs and Their Interest Rate Provisions published by the General Accounting Office, also in 1982 (see Table 1). But even these lists omit programs, such as the Federal National Mortgage Corporation, which have limited de jure power and almost unlimited de facto power to borrow from the U.S. Treasury. In addition, Congress is currently considering the establishment of a Federal Agricultural Credit Corporation (to be nicknamed "Farmer Mac") to guarantee the creditworthiness of farm loans sold by commercial banks and other lenders on the secondary market. It would have a \$1.5 billion line of credit with the U.S. Treasury. Thus, federal government guarantees of deposits at depository institutions are exclusive neither in scope nor in dollar coverage.

The historical justification for each program differs and reflects the pressing economic and political concerns of the day, particularly the existence of an actual or perceived national or regional crisis. The rationals generally was put in terms both of protecting the individual lender or borrower and of protecting or promoting the corresponding industry or sector. The degree of coverage, the size of the

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government's liability in case of default, the fees or premiums charged, and the forms of administration also differ greatly from program to program.

The pace of new federal government insurance and guarantee programs is accelerating. About one-half of the programs listed in the 1982 Congressional catalogue had been established since 1967.

#### Background

The first bank insurance program was adopted by New York State in 1829.2 The chief sponsor of the plan was Joshua Forman, a Syracuse businessman. He attributed his idea to a scheme among the Hong merchants in Canton, China, who had exclusive rights to trade with foreigners, in which all participants were liable for each other's debts. Forman reasoned that by virtue of receiving a charter, banks received a similar exclusive arrangement allowing them to issue notes that served as a circulating medium. As a result, they should be similarly obligated to redeem each other's notes. By 1837, more than 90 percent of all New York State commercial banks were members of the note insurance plan. The New York plan was followed shortly by six other states before the Civil War. The success of these plans varied considerably.

The motivations for these plans also differed, but focused primarily on the need to preserve the circulating medium in a community and to protect small noteholders. After reviewing the legislative debates leading up to the adoption of the state plans, Carter H. Golembe, an authority on bank history, concluded that the

primary object has not been to guard the individual depositor or noteholder against loss but, instead, to restore to the community, as quickly as possible, circulating medium destroyed or made unavailable as a consequence of bank failures. In this view, bank-obligation insurance has a monerary function, and the protection of the small creditor against loss is incidental to the achievement of the primary objective.

Golembe buttressed this conclusion by quoting from Supreme Court Justice Oliver W. Holmes in a 1911 decision upholding the constitutionality of later state deposit insurance plans:

Few would doubt that both usage and preponderant opinion give their sanction to enforcing the primary conditions of successful commerce. One of these conditions at the present time is the possibility of payment by checks drawn against bank deposits, to such an extent do checks replace currency in daily business ... the primary object of the required assessment is not a private benefit ... but ... is to make safe the almost compulsory resort of depositors to banks as the only available means of keeping money on hand.

The same rationale appears to underlie the implementation of the proviso of the National Bank Act of 1863 that collateralized national bank notes with U.S. Treasury securities. The government decided that the notes would be guaranteed by the Treasury at full face value at all times regardless of the market value of the collateral Treasury securities at the issuing bank. In his first report to Congress, the Comptroller of the Currency stated:

If the banks fail, and the bonds of the government are depressed in the market, the notes of the national banks must still be redeemed in full at the Treasury of the United States. The holder has not only the public securities but the faith of the nation pledged for their redemption.

Soon after the National Bank Act was enacted, national bank notes in circulation were about equal in dollar magnitude to total bank deposits.6 State bank notes were taxed out of existence by an amendment to the Act in 1865. Although it is not possible to distinguish statistically between demand and time deposits at that time, the Treasury's policy insured, at a minimum, 50 percent of the nation's circulating media. But the rapid growth of bank deposits soon reduced the relative importance of national bank notes as a medium of exchange and thereby also reduced the significance of the guarantee for protecting the money supply. By the 1880s, national bank notes were only 25 percent as important as total bank deposits and insurance covered only 20 percent of notes and bank deposits.

State insurance funds for bank liabilities, all of which had disappeared with the outbreak of the Civil War, started to reappear again following the bank crisis of 1907. Even before this, a growing number of bills calling for federal deposit insurance were introduced in Congress. By 1933, the total number of such bills had reached 150.7 Federal deposit insurance finally was enacted in 1933 as part of the comprehensive Banking (Glass-Steagall) Act effective January 1, 1934. The initial de jure account limit was \$2,500. At that time, the total maximum dollar amount of insured de-

## Table 1 Federal Loan Guarantee Programs

Agency and program	Year
Department of Agriculture: Alcohol fuels and biomass loans (guaranteed/insured) Business and industrial loans (guaranteed/insured) Community antenna television loans (guaranteed) Community facilities loans (insured) Community facilities loans (insured) Domestic farm labor housing loan program (insured) Emergency disaster loans (insured) Farm operating loans (guaranteed) Farm operating loans (guaranteed) Farm ownership loans (guaranteed) Farm ownership loans (insured) Grazing association loans (insured) Indian tribe acquisition loans (insured) Irrigation, drainage and other soil and water conservation	1971-72 1971-72 1971-72 1971-72 1965-66 1971-72 1961-62 1961-62 1971-72 1971-72
(insured)  Low to moderate income housing loans (insured) Recreation facilities loans (insured) Resource conservation and development loans (insured) Rural electrification loans (guaranteed) Rural housing site loans (insured) Rural telephone loans (guaranteed) Rural telephone loans (insured) Soil and water loans to individuals (guaranteed) Soil and water loans to individuals (insured) Water and Waste Disposal Systems for Rural Communities (insured) Watershed protection and food prevention loans (insured)	1949-50 1971-72 1961-62 1935-36 1935-36 1965-66 1935-36 1971-72 1971-72
Department of Commerce: Business development loan guarantees (guaranteed) Coastal energy impact program (guaranteed) Federal ship financing guarantees (guaranteed) Fishing vessel obligation guarantee program (guaranteed/insured) Trade adjustment assistance for communities (guaranteed) Trade adjustment assistance for firms (guaranteed)	1971-72 1971-72 1971-72 1973-74
Department of Defense: Defense Production Act (guaranteed) Foreign military credit sales (guaranteed)  Department of Education:	1947-48 1967-68
Guaranteed student loan program (guaranteed) (including parent loans for undergraduate students program)	1965-66
Department of Energy: Alcohol fuel loan guarantees (guaranteed) Loan guarantees for alternative fuels development (guaranteed) Biomass loan guarantees (guaranteed) Coal loan guarantee program (guaranteed) Electric and hybrid vehicle loan guarantees (guaranteed) Geothermal loan guarantee program (guaranteed) Municipal waste energy project loan guarantees (guaranteed) Loan guarantees for synthetic fuels development	1973-74 1979-80 1975-76 1975-76 1979-80
(guaranteed) Urban wastes demonstration facilities guarantee program (guaranteed)	

# Table 1 (continued) Federal Loan Guarantee Programs

Agency and program	Year adopted
Department of Health and Human Services: Health education assistance loans (guaranteed) Health maintenance organizations (guaranteed) Medical facilities construction (guaranteed)	. 1973-74
Department of Housing and Urban Development: Armed services housing for civilian employees, sec. 809 (insured)	. 1955-56
Armed services housing in impacted areas, sec. 810 (insured-inactive)	
Community development block grant sec. 108 loan guarantee program (guaranteed)  Construction or substantial rehabilitation of condominium projects,	
sec. 221(i) (insured-inactive)  Construction or substantial rehabilitation of condominium projects, sec. 234(d) (insured)	
Combination and mobile home lot loans, title I (insured)	. 1973-74
(insured)  Development of sales-type cooperative projects, sec. 213 (insured)	
Experimental homes, sec. 233 (insured)  Experimental projects other than housing, sec. 233 (insured)  Experimental rental housing, sec. 233 (insured)  Graduated-payment mortgages, sec. 245 (insured)  Group practice facilities, title XI (insured)  Historic preservation loans, title I (insured)  Homes assistance considerations, sec. 203(b) (insured)  Homes for certified veterans, sec. 203(b) (insured)  Homes for disaster victims, sec. 203(h) (insured)  Homes for low and moderate income families, mortgage, insurance,	. 1961-62 . 1967-68 . 1961-62 . 1973-74 . 1965-66 . 1933-34 . 1933-34
sec. 221(d)(2) (insured)  Homes for lower income families, sec. 235(i) (insured)  Homes in military impacted areas, sec. 238(c) (insured)  Homes in outlying areas, sec. 203(i) (insured)  Homes in urban renewal areas, sec. 220 (insured)  Housing in older, declining areas, sec. 223(e) (insured)  Investor sponsored cooperative housing, sec. 213 (insured)  Land development, title X (insured)  Management-type cooperative projects, sec. 213 (insured)  Mobile home loans, title I (insured)  Mobile home parks, sec. 207 (insured)  Mortgage insurance for hospitals, sec. 242 (insured)  Mortgage insurance for servicemen, sec. 222 (insured)  Multifamily rental housing supplemental loan insurance, sec. 241	. 1967-68 . 1973-74 . 1933-34 . 1953-54 . 1967-68 . 1965-66 . 1933-34 . 1933-34 . 1955-56 . 1967-68
(insured)  New communities loan guarantees (guaranteed—inactive)  Nursing homes and intermediate care facilities, sec. 232	. 1967-68 - 1967-68
(insured) Property improvement loan insurance for improving all existing	. 1959-60
structures and building of new nonresidential structures, title I, sec. 2 (insured)	. 1933-34
(insured)  Purchase of sales-type cooperatives, sec. 213 (insured)  Purchase of units in condominiums, sec. 234(c) (insured)  Purchase or refinancing of existing multifamily housing projects,	. 1949-50
sec. 223(f) (insured)	
(insured)	1965-66 1933-34

## Table 1 (continued) Federal Loan Guarantee Programs

Agency and program	Year Edicipted
Rental housing mortgage insurance, sec. 207 (insured) Rental housing for the elderly, sec. 231 (insured) Rental housing for moderate income families, sec 221(d)(4)	1937-38 1957-58
(insured)	
sec. 220 (insured)  Rental and cooperative housing for low and moderate income families, sec 221(d)(3) (insured)	
Single family home mortgage coinsurance, sec. 244 (insured)	1973-74
Department of the Interior: Guarantee of certain obligations of the Guam Power Authority (guaranteed)	1975-76
Guarantee of Virgin Islands Bonds (guaranteed) Guarantee of Virgin Islands Loans (guaranteed) Indian loans—economic development (guaranteed)	1975-76 1975-76
Department of Transportation: Emergency Rail Services Act of 1970 guarantee of trustee certificates	
(guaranteed)	
(guaranteed)Loan guarantees issued under the Rail Passenger Service Act of 1970	
(guaranteed) National Capital Transportation Act revenue bond guarantee program	
(guaranteed)	1969-70
Department of the Treasury: Chrysler Corporation loan guarantees (guaranteed) New York City loan guarantees (guaranteed)	1979-80 1977-78
Agency for International Development: Agricultural and productive credit and self-help community development program (guaranteed) Housing guaranty program (guaranteed)	1969-70 1969-70
Environmental Protection Agency: Loan guarantees for construction of treatment works (guarantee)	1975-76
Export-Import Bank:	1373-76
Cooperative financing facility (CFF)—participating financial institution guarantees and guarantees on certificates of loan	104E 42
participation (guaranteed) Financial guarantees (guaranteed) Medium-term commercial bank guarantees (guaranteed)	1945-46
Medium-term export credit insurance (insured) Short-term export credit insurance (insured)	1945-46
General Services Administration: Federal building loan guarantees (guaranteed)	
Overseas Private Investment Corporation: Foreign investment guarantees (guaranteed)	1969-70
Small Business Administration:	1057 50
Bond guarantees for surety companies (guaranteed)	1969-70
Economic injury disaster loans (guaranteed)	1957-58
Handicapped assistance loans (guaranteed)	1957-58

### Table 1 (continued) Federal Loan Guarantee Programs

Agency and program	
Physical disaster loans (guaranteed)  Small business loans (guaranteed)  Small business energy loans (guaranteed)  Small business investment companies (guaranteed)  Small business pollution control financing guarantees	. 1957-58 . 1977-78 . 1957-58
(guaranteed) State and local development company loans (guaranteed)	
U.S. Railway Association:  Loans for railroads in reorganization (guaranteed)  Loans to state, local, or regional transportation authorities  (guaranteed)	
Veteran's Administration: Veterans housing loans (guaranteed and insured) Veterans mobile home loans (guaranteed)	

Source: Catalog of Federal Loan Guarantee Programs, Subcommittee on Economic Stabilization, House Committee on Banking, Finance, and Urban Affairs, 97 Cong. 1 Sess. (GPO, 1981).

posits plus the dollar amount of national bank notes represented about 50 percent of the sum of currency and bank deposits, about the same percentage as had initially been insured by the National Bank Act 70 years earlier.

The debate on federal deposit insurance in Congress was long and emotional. It was strongly opposed by the Roosevelt administration; many bankers, particularly from larger banks; and most bank regulators. Golembe concluded that the primary reasons for the ultimate adoption of the program were a desire to end the destruction of the medium of exchange and to preserve, or at least not end abruptly, the existing structure of independent unit banks. To achieve the latter purpose, the proponents of deposit insurance had to engage in a political tradeoff with larger banks, who favored, among other things, wider branching. Thus, ironically enough, the Act also expanded the ability of national banks to branch on the same basis as state banks in the home state.

The FDIC served as an impetus for other federal insurance programs. In 1934, the FSLIC was established by the National Housing Act with basically the same powers as the FDIC. But it was placed within the Federal Home Loan Bank Board rather than created as a separate and independent agency. The primary intent of deposit insurance at savings and loan associations appears to have been less to preserve the money supply and structure of the industry or to protect small depositors as to

preserve the channeling of household funds into the residential mortgage market. It was feared that households would transfer their funds from uninsured savings and loan associations to insured commercial banks and that this would reduce the flow of funds for household mortgages. Thus, protecting SLAs was a means, not an end. A study prepared for the Federal Home Loan Bank Board concluded that Congress established FSLIC more to "stimulate additional home mortgage credit through increased capitalization of S&L's than in preventing the demise of these institutions."

The national concern with housing at this time was also reflected in the large number of federally guaranteed loan programs for housing adopted at the same time. All of the 10 federal loan guarantee programs enacted by the 73rd Congress in 1934-35 were located in the predecessors of the Department of Housing and Urban Affairs. These included housing loans to veterans, disaster victims, and to low- and moderate-income families as well as for cooperative projects and rehabilitation projects.

In 1970, federal deposit (share capital) insurance was extended to credit unions through the National Credit Union Share Insurance Fund (NCUSIF) in the National Credit Union Administration. In contrast to the environment at the time of the establishment of the FDIC and FSLIC, the NCUSIF was established at a time of no unusual financial problems either for credit unions or the fi-

nancial system as a whole. Rather, its creation appears motivated purely by a desire for competitive equality with federally insured commercial banks and thrift institutions. Contrary to the battle lines at the enactment of the FDIC, smaller institutions opposed creation of NCUSIF, primarily out of fear of increased federal regulation, while larger institutions favored it, primarily for competitive reasons relative to commercial banks and thrift institutions. The majority of credit unions had successfully blocked creation of federal deposit insurance from 1956 until 1970.

In 1970, federal insurance was also extended to customer credit balances and security holdings at security dealer and broker firms by the Securities Investor Protection Act which established the Securities Investor Protection Corporation (SIPC). In contrast to the lengthy debates and earlier failures surrounding the adoption of federal insurance for depository institutions, SIPC was established only two years after the first bill for such insurance was introduced in Congress. The Act was adopted in response to a sudden jump in the number of failures of brokerage houses with significant losses to customers. The Report accompanying the bill from the Senate Committee on Banking and Currency states that

The Securities Investors Protection Corporation (SIPC), like the Federal corporations that ensure savings and demand deposits, is intended to serve several purposes: to protect individual investors from financial hardship; insulate the economy from the disruption which can follow the failure of major financial institutions; and to achieve a general upgrading of financial responsibility requirements of brokers and dealers to eliminate, to the maximum extent possible, the risks which lead to customer loss.

It is evident that, as with the previous insurance plans, the objectives of SIPC insurance are multiple.

In 1974, employee claims on defined benefit employer pension funds were federally insured by the Pension Benefit Guaranty Corporation (PBGC) established by the Employment Retirement Income Security Act (ERISA). The Act defines the purposes of the insurance to 1) encourage the maintenance of private pension plans and 2) provide for the timely and uninterrupted payment of pension benefits. The program was enacted after a number of failed firms had sold the pension funds' assets which they were administering.

As a result, the employee's pensions were reduced or wiped out altogether.

An examination of the federal loan guarantee programs enacted by the 96th Congress in 1979-80, the latest included in the Congressional catalog cited earlier, suggests that the emphasis was on encouraging or preserving particular industrial sectors or firms, such as alternative energy sources and Chrysler Corporation, rather than on protecting the financial security of households or of the nation as a whole.

#### Conclusions

The above analysis shows that the federal insurance safety net is not unique to banking. The net has been spread under a progressively increasing number of activities. This has important implications for understanding both the behavior of activity in the insured sectors and the potential pressures on the federal government budget. By its very nature of reducing the cost of loss to the insured, insurance of any kind changes the behavior of the insured by making them unintentionally a little less careful. Thus, persons are less likely to double check whether they have locked their car doors or to install burglar alarm systems after they acquire theft insurance than before or to install fire alarms and sprinkler systems after they acquire fire insurance than before. This change in behavior attributable to insurance is termed "moral hazard."

Private insurance firms generally attempt to protect themselves against moral hazard on the part of their customers by scaling their premiums to the risk assumed, by including provisions for rate reductions if the insured agrees to accept specified precautions, such as installing burglar or fire alarms, and by excluding certain types of events, such as floods and wars. If the premiums and their provisions are structured correctly, the insured will have less incentive to take additional risk and the insurer will be compensated for any additional risk that the insured does take. The premium will represent the actuarially fair value of the expected loss.

Like private insurance, government insurance and guarantee programs are apt to lead to additional risk taking by the insured. However, unlike private insurers, government insurers rarely scale their premiums to the

### The Pension Benefit Guaranty Corporation: A Case in Point

The federal deposit insurance programs are not the only federal guarantee programs currently experiencing severe financial difficulties. Indeed, the number of troubled programs is large and increasing rapidly, and the dollar magnitude of the losses is mounting even faster. Most if not all of the programs appear to suffer from the same underlying problem—a serious design flaw that produces incentives for the insured to take excessive risks and passes most of the resulting frequent and large losses through to the insurance or guarantee agency. The two most seriously troubled programs appear to be the Farm Credit System and the Pension Benefit Guaranty Corporation (PBGC).\* box discusses the PBGC.

The PBGC, which was established by the Employee Retirement Income Security Act of 1974 (ERISA), guarantees up to a potential maximum of nearly \$2,000 per month per individual participant in all defined benefit pension programs in the United States. The program currently covers more than 30 million participants in some 110,000 pension programs. For this service, the PBGC charges the plan sponsor a fixed premium per pension plan participant, regardless of how well or poorly the particular plan is Thus, as with the FDIC and FSLIC structure, there is an incentive for sponsors to underfund their pension plans in order to use the resources elsewhere. Also, as with the federal deposit insurance programs, better funded plans subsidize more poorly funded plans. But although PBGC's premium structure resembles those of the federal deposit insurance agencies, its enforcement and claimant powers are considerably weaker.

Unlike the FDIC and FSLIC, the PBGC has effectively no selection, monitoring, supervisory, and regulatory powers over the pension funds it insures. It can neither disqualify plans nor influence the funding behavior of the plans. Indeed, it

has little ability even to monitor the ongoing performance of the funds. Also unlike the FDIC and FSLIC, its ability to borrow from the U.S. Treasury is severely restricted, amounting to only \$100 million. In case of plan termination, the Corporation has a first claim only up to 30 percent of the sponsor's net worth (which is frequently negligible as the plan is terminated because of the bankruptcy of the sponsor) and a second less valuable claim against the sponsors's recoverable assets up to 75 percent of the loss less any amount previously recovered from positive net worth. However, because the PBGC has de facto paid less than the full potential of the monthly benefits lost, it may encourage greater monitoring and discipline by the pension plan participants than is exerted by depositors at federally insured commercial banks and particularly thrift institutions.

The PBGC has operated with deficit net worth (i.e., the present value of its liabilities exceed that of its assets) almost from its inception. The deficit ballooned in 1985 when both Allis-Chalmers and Wheeling-Pittsburgh terminated large and underfunded pension plans and jumped substantially further in 1986 when LTV terminated its pension plan, which was underfunded by some \$2.5 billion. This increased the present value of PBGC's liabilities to almost \$4 billion. (In September, PBGC announced that it was returning responsibility for LTV's pension plan to the Company. LTV is contesting the transfer. If PBGC is successful, the effect would be to reduce PBGC's deficit by half to near \$2 billion.) It is of interest to note that, at present, nearly 80 percent of PBGC's deficit is attributable to the iron and steel industry. But, because it was operating on a cash flow surplus until recently, actions to correct the deterioration were delayed in Congress until 1986 when annual premiums were more than tripled from \$2.60 to \$8.50 per participant. This

was the first increase since 1978. However, even this substantial increase was enacted before LTV's plan termination and has proved to be inadequate. As a result, the PBGC has been forced to sell investment assets to meet its scheduled payments.

In April 1987, the Reagan administration, at the urging of PBGC, proposed legislation that would scale the premiums to the insured plan's risk of default as measured by the degree of underfunding. Under the proposal, employees with insured plans that are funded below 125 percent of the plan's vested liabilities would pay an annual surcharge of \$6 per \$1,000 of underfunding up to a maximum of \$100 per employee. The surcharge would affect an estimated 8 percent of employers. The surcharge would be adjusted every three years according to actual loss experience. In addition, all premiums would be indexed to inflation. If enacted by Congress, the surcharge scheme may be expected to encourage employers to reduce underfunding in order to reduce their expenses.

As was the case for the federal deposit insurance programs, the flaw in the

design of the PBGC's structure and the resulting potential dangers were identified and analyzed a number of years before the seriousness of the problem became evident to the public. In her article "Guaranteeing Private Pension Benefits: A Potentially Expensive Business," published in the New England Economic Review of the Federal Reserve Bank of Boston in 1982, Alicia Munnell concluded that "since the agency has little control over the industry that provides the benefits it guarantees .... the PBGC will always remain financially vulnerable and the federal government may well end up as the insurer of the nation's private pension system." In addition, unlike the FDIC and FSLIC, the PBGC itself went public with its concerns early and proposed, among other things, that its insurance premiums be scaled to the degree of underfunding of each pension plan. Nevertheless, as with the FDIC and FSLIC, these warnings were not heeded sufficiently by policy-makers to prevent or at least mitigate the magnitude of the later crisis.

insured's risk exposure. Explicit premiums are generally a fixed flat percentage of the insured's asset, activity, or loan-size base. The FDIC and FSLIC, for example, both charge premiums that are a flat percentage of the total domestic deposits of the insured institutions.

When the insurance agencies attempt to control risk, they generally do so by imposing minimum standards or regulations that specify the types of activities in which the insured may engage. In addition, the bank agencies supervise and periodically examine their institutions to ensure conformity with the regulations. However, it is unlikely that such provisions will be as effective in offsetting moral hazard as risk-based premiums. As a result, one would expect to see greater risk taking by those insured by federal programs than by those insured by private programs and thereby greater losses to federal insurance agencies. The very large losses experienced by FSLIC, estimated to be in excess of \$40 billion, that would have driven it into insolvency if market value accounting were applied, and the moderate decline in FDIC reserves, if the same standards were applied, support this hypothesis.

Additional support is provided by the economic insolvencies of the Farm Credit System and the Pension Benefit Guaranty Corporation, both of which also effectively charge flat insurance premiums. Because the insured and other creditors of the insurance program perceive the federal government as supporting all demands on the insurance agencies, these agencies can continue to function even though they may be insolvent. The losses will eventually be borne in large part or in total by the taxpavers.

The broadening of the insurance safety net beyond banking to other financial activities may thus be expected to increase both risk taking in our society and the liabilities of the federal government. Whether and to what extent this is desirable, is a choice for the

<sup>\*</sup>The market value deficit in the Farm Credit System has been estimated to be as high as \$9 billion.

electorate to make. They are likely to do so more intelligently if the benefits and costs of these programs were carefully and explicitly quantified.

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<sup>&</sup>lt;sup>1</sup> The United States was the second country to adopt federal government bank deposit insurance after Czechoslovakia in 1924.

<sup>&</sup>lt;sup>2</sup> Thorough histories of deposit insurance in the United States appear in Carter H. Golembe, "The Deposit Insurance Legislation of 1933," *Political Science Quarterly* (June 1960), pp. 181-200 and George J. Benston, "Bank Examination," *Bulletin of the Institute of Finance* (89-90), New York University (May 1973).

<sup>&</sup>lt;sup>3</sup> Golembe, p. 189.

<sup>&</sup>lt;sup>4</sup> Golembe, p. 192.

<sup>&</sup>lt;sup>5</sup> Federal Deposit Insurance Corporation, Annual Report, 1952 (Washington, D.C.: 1953), p. 6.

<sup>&</sup>lt;sup>6</sup> This was about the same percentage as in 1820. Federal Deposit Insurance Corporation. Annual Report, 1950 (Washington, D.C.: 1951).

<sup>&</sup>lt;sup>7</sup> "Predecessors of the Federal Deposit Insurance Law," FDIC, Annual Report, 1950, pp. 63-101.

<sup>&</sup>lt;sup>8</sup> Federal Home Loan Bank Board, Agenda for Reform (Washington, D.C.: 1983), p. 34.

<sup>&</sup>lt;sup>9</sup> Securities Investor Protection Corporation Report, Senate Committee on Banking and Currency, 91 Cong. 2 Sess. (GPO, 1970), p. 4.