

Can Losses of Federal Financial Programs Be Reduced?

By Sean Beckett

Federal financial programs have cost taxpayers billions of dollars in recent years. The collapse of the thrift insurance fund is the most familiar and expensive example. But many other programs, such as pension insurance and credit programs for students, farmers, and homeowners, have also suffered large losses. The Administration estimates these and other financial programs will cost taxpayers billions of dollars more in coming years.

Congress and regulators are searching for ways to reduce future losses. Some programs have already been restructured, and legislation for further changes is being debated. A key question in these debates is whether losses can be reduced significantly without also reducing program benefits. If not, Congress will have to make the hard choice between higher taxes and lower program benefits.

This article argues that the scope is limited for reducing future program losses without reducing program benefits. The first section of the article describes the major federal financial programs. The second section explains why various programs suffered losses in the past and are expected to suffer losses in the future. The final section argues that the risks responsible for a sizable share of prospective losses cannot be reduced without reducing benefits.

Federal Financial Programs

The dozens of federal financial programs fall into two types: insurance programs and credit programs. Both types of programs are designed to offer financial services the private market does not offer and to promote such social goals as home ownership and education. Insurance programs provide coverage that is difficult or

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impossible to obtain from private insurers. Credit programs use a variety of methods to increase the flow of finance to such activities as agriculture, education, and housing. These programs make the federal government the nation's largest source of credit and underwriter of risk, with a total risk exposure of more than \$6 trillion.

Insurance programs

Government insurance programs are perhaps the most familiar of the federal financial programs because of the catastrophic losses of the deposit insurance system. Insurance programs account for almost three-quarters of federal financial programs, and deposit insurance accounts for almost two-thirds of the federal insurance outstanding (Table 1). Pension benefit insurance accounts for another 21 percent of total federal insurance. The remainder is composed of a grab bag of smaller insurance programs.

Deposit insurance. The three deposit insurance programs together cover close to \$3 trillion in deposits. FDIC's Bank Insurance Fund (BIF) insures deposits at commercial and savings banks. FDIC's Savings Association Insurance Fund (SAIF) protects deposits at thrifts.¹ The Share Insurance Fund (SIF) of the National Credit Union Administration insures deposits at credit unions.

All three deposit insurance programs operate similarly. Insured institutions pay premiums tied to the size of their deposit holdings. When an insured institution fails, the insurance fund resolves the situation. The insurance fund may find a buyer for the failed institution. Or, the fund may close the institution, pay off the insured depositors, and sell the institution's assets to recover what it can.² Whatever approach is taken to resolve the situation, the insurance program protects the

Table 1

Federal financial programs

(Amounts in billions)

Program	Face value*
Insurance programs	\$4,496
<i>Deposit Insurance</i>	
Banks	1,911
Thrifts	726
Credit unions	178
<i>Pension insurance</i>	943
<i>Other insurance</i>	738
Credit programs	1,648
<i>Agriculture</i>	
Farmers Home Administration	59
Farm Credit System	50
<i>Education</i>	
Guaranteed student loans	53
Sallie Mae	—
<i>Housing</i>	
Fannie Mae	372
Federal Housing Administration	356
Freddie Mac	317
Veterans Affairs	161
Federal Home Loan Banks	117
<i>Other credit</i>	163
Total	\$6,144

* The face value of each program is its total potential liability. For example, the Bank Insurance Fund insures \$1,911 billion of bank deposits.

Source: *Budget of the United States Government, Fiscal Year 1992, Part Two, p. 204.*

insured depositors from loss.

Deposit insurance was created to safeguard the savings of small depositors and to prevent bank runs. Bank runs arise when depositors who are concerned about the condition of one or a handful of weak institutions

flee healthy and failing institutions alike. Such a bank run can reduce credit and impair the payments system.

Federal deposit insurance prevents bank runs because depositors know the government's resources are adequate to back deposits even if many insured institutions fail simultaneously. Federal deposit insurance is backed by the full faith and credit of the United States. Thus, depositors are protected even when losses exhaust the reserves of the insurance fund, as happened with FSLIC (Federal Savings and Loan Insurance Corporation) in the 1980s.

Pension insurance. The government insures \$950 billion of pension benefits in the private sector through the Pension Benefit Guaranty Corporation (PBGC). PBGC insures defined benefits pensions, which promise retirees fixed monthly payments.³ Annual premiums paid by the insured pension plans fund PBGC insurance. These premiums are based on the number of persons enrolled in the plans and the adequacy of plan funding.

PBGC insures pensions by making up the shortfall in promised benefits when defined benefits plans are terminated.⁴ Plans typically are terminated when the firm sponsoring the plan fails. A terminated plan might suffer a shortfall because it did not invest enough to cover promised benefits; that is, the plan was underfunded. Alternatively, the return on the plan's investments might be inadequate.

Private insurance companies do not insure pensions for two reasons. First, the possibility of catastrophic claims makes the government the only credible insurer. Second, it is difficult to predict the pension plan terminations accurately. As a result, private firms cannot determine the appropriate premium to cover the expected losses of a pension benefit insurance policy.

Credit programs

Federal credit programs subsidize and increase the supply of credit to a number of sectors. In 1990, the face value of the outstanding obligations of these programs exceeded \$1.6 trillion. Programs serving agriculture, education, and housing accounted for over 90 percent of these obligations (*Budget of the United States Government, Fiscal Year 1992; Budget hereafter*).⁵ Credit programs direct credit to favored sectors in four ways: They loan money directly to borrowers in favored sectors. They guarantee loans made by others. They securitize loans made by others (that is, they issue securities backed by a pool of loans). Finally, they provide assistance to lenders who serve a targeted sector. These programs are financed by federal appropriations, by fees and interest charges levied by the programs, and by borrowings from the private sector.

Agriculture. The Farm Credit System (FCS) and Farmers Home Administration (FmHA) are the largest credit programs serving agriculture. FCS is an example of a government-sponsored enterprise, that is, a privately owned but federally chartered specialized lender. FCS institutions make real estate loans, operating loans, and loans to cooperatives—all of which they finance with bonds. The bonds are sold on national capital markets at low, government agency rates.⁶ FmHA is a part of the Agriculture Department. FmHA provides loans and loan guarantees to young farmers, undercapitalized farmers, and other farmers who cannot obtain credit elsewhere. These loans are financed by federal appropriations.

The missions of FCS and FmHA are different. FCS was established in the early 1900s to reduce the transactions costs of bringing credit from national capital markets to rural

communities and to restructure credit terms to better match the income cycle of farmers. Today, these institutional problems have largely disappeared. FCS now helps farm borrowers primarily by borrowing money at low, government agency rates and passing on these savings to borrowers.

FmHA's mission has always been to assist poorer farmers. Originally called the Resettlement Administration, FmHA offered loans and outright grants to destitute farmers during and after the Great Depression. FmHA has remained a lender of last resort, lending to and guaranteeing loans for farm borrowers turned down by private lenders. Interest rates on FmHA loans are typically lower than market rates and sometimes lower than Treasury rates.

Education. Two programs serve education: the Guaranteed Student Loan (GSL) program and Sallie Mae (Student Loan Marketing Association). The GSL program guarantees and subsidizes loans from banks and other qualified lenders to students and their parents. The GSL program is administered by the Department of Education and financed by appropriations.⁷ Sallie Mae encourages lender participation in the GSL program by buying student loans from lenders and by providing technical assistance in loan servicing. Sallie Mae is a self-supporting government-sponsored enterprise.

The GSL program helps solve the problem of financing an education, especially for students unable to tap family savings. Private lenders probably would not make student loans in the absence of government guarantees because student borrowers have little collateral and limited job histories. Moreover, students are mobile, making it difficult to find them should they default. Finally, students are typically unable to begin repayment until they finish school. The GSL program replaces the

weak credit standing of the student borrowers with the strong credit standing of the federal government to overcome these obstacles to obtaining finance.

Sallie Mae increases the willingness of lenders to make student loans by promoting a secondary market and by reducing loan servicing costs. By standing ready to purchase student loans from the original lenders, Sallie Mae makes student loans liquid. By developing and distributing sophisticated software for servicing student loans, Sallie Mae reduces servicing costs. Sallie Mae has a competitive advantage in undertaking these activities because it borrows funds at agency rates.

Housing. The housing sector is served by several competing programs. The FHLBanks (Federal Home Loan Banks), another government-sponsored enterprise, provide advances to the thrift industry, which specializes in mortgage lending. Advances are loans of varying maturities collateralized by high-quality, liquid assets used to provide thrifts with a stable source of funds. The FHLBanks finance their lending by borrowing in national capital markets at agency rates and by accepting deposits from member thrifts.

Fannie Mae (Federal National Housing Administration) and Freddie Mac (Federal Home Loan Mortgage Corporation) are government-sponsored enterprises that serve the housing sector by promoting an active secondary market for mortgages and mortgage-backed securities. Both programs purchase mortgages from thrifts and other mortgage lenders, releasing funds to make additional mortgages. The mortgages are pooled and used to back securities that entitle investors to pro rata shares in the principal and interest payments from the mortgages. Fannie Mae and Freddie Mac guarantee these mortgage-backed securities against defaults on

the original mortgages.⁸

The activities of Fannie Mae and Freddie Mac increase the flow of housing finance and decrease mortgage rates. The programs' guarantees of mortgage-backed securities attract additional funds to the mortgage market. As government-sponsored enterprises, Fannie Mae and Freddie Mac borrow at agency rates, passing on this cost advantage to borrowers. In this way these programs lower the cost of housing finance (Hendershott and Shilling).⁹

Several other programs use housing assistance to help target groups. For instance, FCS and FmHA help rural families by providing and guaranteeing rural real estate loans. The FHA (Federal Housing Administration) and VA (Department of Veterans Affairs) guarantee mortgage loans for low-income and veteran borrowers. Qualified borrowers obtain FHA/VA-guaranteed loans from private mortgage lenders. To further aid these borrowers, FHA and VA restrict the fees, down payments, and other terms lenders can impose. Fees and federal appropriations finance FHA and VA.

Losses of Federal Financial Programs

Most federal financial programs have suffered significant losses and are likely to suffer more in the future. Like any financial concern, these programs lose money because they are exposed to credit risk, interest rate risk, business risk, and management risk. Business and credit risk account for much of the past and most of the prospective losses.

Program costs are divided into two parts: subsidies and losses. Subsidies are a measure of the services a financial program provides. For example, the GSL program subsidizes some of the interest charges of guaranteed student loans. That is, the program pays some of these charges to lower the cost to student

borrowers. Losses are expenditures for insurance claims, loan defaults, portfolio losses, and the like. For instance, when a student defaults on a guaranteed loan, the GSL program suffers a loss.

While both are costs, subsidies and losses have very different implications. Subsidies may be expensive, but they provide the services Congress intended to deliver when it enacted a program. Thus, subsidies are not a cause for concern provided they do not exceed the levels intended by Congress. Losses, on the other hand, drain the resources available to a program. Thus, losses are costs that Congress, program managers, and taxpayers wish to minimize.

Why do federal financial programs lose money?

Financial program losses result from exposure to the same risks facing any financial concern: credit risk, interest rate risk, business risk, and management risk. *Credit risk* is the risk that debt obligations will not be repaid. Programs are exposed to credit risk directly by making, guaranteeing, or purchasing loans. Programs are exposed to credit risk indirectly when they insure institutions that make loans. For example, deposit insurance indirectly exposes the government to credit risk because depository institutions make loans. Pension insurance indirectly exposes the government to credit risk because plans can default on obligations to pay future benefits.

Interest rate risk is the risk of loss due to a change in interest rates. Programs are exposed to interest rate risk when the values of their assets and liabilities respond differently to changes in interest rates. For example, Fannie Mae's net worth plummeted when interest rates increased in the early 1980s because the return on its fixed-rate mortgages remained

constant while its cost of funds increased sharply.

Business risk is the risk of loss due to factors beyond an organization's control. Examples of business risk are unexpected changes in legislation or changes in demand for a program's services. Over the past 20 years, for instance, changes in the law have permitted Freddie Mac and Fannie Mae to stimulate and to participate in the growth of the secondary mortgage market. The growth of this secondary market weakened the competitive position of the thrift industry by reducing the profitability of funding mortgages. Thus, the legislative changes that led to the growth of the secondary mortgage market constituted a business risk for the thrift industry and, hence, for the thrift deposit insurance fund.

Management risk is the risk of costly management mistakes. Fraud and other program abuses also are included in management risk. For example, inexperienced and unprofessional management in some FCS institutions reportedly caused some FCS losses.

Losses of selected programs

Almost all major federal financial market programs have suffered substantial losses—in recent years, more than \$100 billion (Table 2).¹⁰ Losses of the same order of magnitude are expected in the coming decade.¹¹

Thrift deposit insurance. The deposit insurance system has suffered the largest losses so far and is expected to suffer the largest losses in the near future. The thrift insurance program accounts for most of these losses. The Administration estimates that the total cost of the S&L cleanup will be \$130 billion to \$176 billion—that is, up to \$700 for every American (*Economic Report of the President*).

Interest rate risk was largely responsible

Table 2

Past losses and prospective costs of selected programs (Amounts in billions)

Program	Past losses	Prospective costs *
Insurance programs		
<i>Deposit Insurance</i>		
Banks	\$22	\$42-78
Thrifts	130-176	70-83
<i>Pension insurance</i>	2	6-20
Credit programs		
<i>Agriculture</i>		
Farmers Home		
Administration	10	20-36
Farm Credit System	4	1-2
<i>Education</i>		
Guaranteed student loans	12	30-37
<i>Housing</i>		
Federal Housing		
Administration	6	8-16
Veterans Affairs	5	3-6

* Past losses and prospective costs of credit programs are not directly comparable because the prospective costs include both losses and subsidies. Subtotals for insurance and credit programs are not included because many programs are omitted. See the appendix for additional explanation.

Source: See appendix.

for the initial losses. Sharp increases in interest rates in the late 1970s, combined with legal limits on deposit rates, led to disintermediation. That is, depositors withdrew funds from thrifts and placed them in higher yielding investments. Thrifts raised rates and retained deposits when deposit rate ceilings were eliminated in the early 1980s. But the higher cost of deposits drove many institutions into insolvency because the return on existing portfolios of fixed-rate mortgages remained low.

Management risk compounded the original losses. In response to the losses from higher interest rates, Congress granted thrifts new powers in the hope that thrifts could earn their way out of insolvency. Thrift managements inexperienced in these new business areas made many misguided investments. Additional losses from management risk were incurred because of delays in closing insolvent thrifts. These delays allowed losses to mount. Moreover, during these delays, owners of insolvent thrifts had a greater incentive to undertake risky projects because they no longer had their own wealth at risk. Some observers estimate that a quarter to a third of the total costs can be attributed to such delays.¹² More vigorous efforts by Congress and the regulators to close insolvent thrifts would have avoided much of these costs.

Business risk also contributed to losses. Economic downturns in oil and agriculture damaged a number of thrifts. These downturns reduced incomes and produced job losses in regions dependent on these industries. As a consequence, defaults on home mortgages also increased in these regions, hurting thrift profits in the process. In addition, increasing competition from Fannie Mae and Freddie Mac squeezed profit margins in housing finance, the core business of the thrifts.

Interest rate risk and management risk are expected to produce smaller future losses than those produced in the past. The explosive rise of interest rates that reduced the net worth of many thrifts was unprecedented and is unlikely to be repeated. And the costly delays in closing insolvent institutions are not expected to recur.

Business risk and credit risk are therefore expected to account for most of the prospective losses of the thrift insurance fund. Profits will be squeezed by continuing competition from commercial banks, mortgage banks, Fannie Mae, and Freddie Mac. In addition, the recent

weakness in real estate values in some regions is likely to increase loan defaults.

Bank deposit insurance. Bank Insurance Fund losses have also been high in recent years. Losses exceeded \$1 billion in seven of the ten years in the 1980s (Federal Deposit Insurance Corporation, Table 125). These losses cut the reserves of the bank insurance fund by almost half from 1985 through 1990 and by over a quarter in 1989 alone (*Budget*, Table A-4).¹³

Losses are expected to remain high. The recent decline in real estate values has weakened many banks, particularly in the Northeast. In the longer run, stiffer competition in banking's traditional lines of business is likely to squeeze bank profits. The Administration estimates that, in the absence of recapitalization or other legislative initiatives, the bank failures produced by these forces will push the Bank Insurance Fund into insolvency by the end of 1992. The Administration also forecasts that the Bank Insurance Fund's net worth will continue to fall in succeeding years, reaching a negative \$22 billion by 1996 (*Budget*, Table A-5).

Business risk and credit risk appear to account for most of the past and prospective losses in bank deposit insurance. Business risk, in the form of downturns in the agriculture and energy sectors in the 1980s, hurt a number of banks. Increased competition from securities markets, foreign banks, and other competitors is expected to continue to cap the profitability of banking (U.S. Department of the Treasury 1991). Credit risk appears to be a serious problem as well. Many banks are not adequately diversified. The most recent example is the concentration of real estate loans in many bank portfolios. Some observers also believe that banks simply made too many bad loans.

Pension insurance. The pension insurance fund has deteriorated steadily since its incep-

tion. Claims against the PBGC have exceeded projections and have grown faster than premiums. As a result, the PBGC deficit grew from \$12 million in 1975 to over \$1.9 billion in 1990.¹⁴ A large part of PBGC's losses reflect the economic distress of the U.S. steel and automobile industries, which account for over 60 percent of PBGC claims.¹⁵ Because the conditions that produced past losses are expected to persist, future costs may reach \$20 billion (*Budget*).

The PBGC's vulnerability to economic downturns in a handful of industries constitutes an important business risk. Nonetheless, most of the PBGC losses reflect credit risk from pension fund defaults. A number of insured corporations have attempted to terminate pension plans despite their ability to pay benefits.¹⁶ In addition, many corporations deliberately reduce funding just before terminating their pension plans (Ippolito). The aspects of PBGC insurance that encourage such behavior have not changed. Thus, losses from this behavior are expected to continue in the future.

Farmers Home Administration. FmHA losses have risen in recent years for several reasons. First, the farm income crisis of the 1980s increased FmHA loan defaults. FmHA chargeoffs have exceeded 12 percent of loans outstanding in recent years, and delinquency rates have topped 50 percent in some FmHA programs. Second, legal challenges for years delayed FmHA attempts to foreclose on delinquent borrowers. Finally, Congress has legislated a number of "borrower's rights" designed to keep delinquent borrowers on their farms (*Budget*). As a result, FmHA's portfolio has many weak loans, suggesting that loan losses will remain high.

Business risk and credit risk account for both the past and the prospective losses of FmHA. The collapse in farm incomes in the

1980s and the legal challenges to FmHA's foreclosure powers were business risks that contributed to past losses. The increase in borrowers' rights is a business risk that is likely to keep losses high in the future. And, as for credit risk, FmHA's statutory obligation to serve as a lender of last resort to low-income, high-risk farm borrowers guarantees FmHA a higher-than-average rate of loan losses.

Farm Credit System. Many factors impaired the performance of FCS in recent years. The farm income crisis of the 1980s imposed losses on FCS. Net loan chargeoffs soared from only \$8 million in 1983 to \$1.3 billion in 1986 (U.S. Department of Agriculture). From 1982 through 1989, cumulative net loan chargeoffs were \$3.8 billion. Management weaknesses also surfaced in recent years. Examples include inadequate oversight of managers by some boards of directors, ineffective internal audits, and inadequate systems for reporting problem loans. The interest rate increases of the early 1980s also hurt FCS as the system borrowed long-term funds at high interest rates without raising lending rates proportionately.

FCS's financial performance has improved recently, but its troubles are not over yet. FCS held loan loss reserves of \$1.6 billion at the end of 1989. Fourteen percent of outstanding loans are classified as high-risk loans. And, according to the Farm Credit Administration, management weaknesses continue to hamper many FCS institutions.

Past and prospective FCS losses reflect exposure to all four types of risk. The farm recession of the 1980s was a business risk, an event beyond the control of farm lenders and borrowers. Restricting FCS to agricultural lending ensures its continuing vulnerability to the fortunes of agriculture (U.S. General Accounting Office). Turning to credit risk, the boom in farming in the 1970s apparently generated

overly optimistic and overly expansive lending in the early 1980s, resulting in higher defaults as the decade progressed. FCS loan portfolios remain weak, so losses from credit risk will continue (U.S. Department of the Treasury 1990). Weak management practices and controls—management risk—added to the losses of FCS. Several management deficiencies are being corrected, although some deficiencies remain. Finally, the failure to synchronize interest rates on FCS assets and liabilities produced past losses. Large swings in interest rates, however, are unlikely to be repeated.

Guaranteed student loans. Default rates on guaranteed student loans climbed throughout the 1980s, although loss rates remained about the same due to improvements in collections (*Budget*). Default losses from 1980 through 1990 totaled \$12 billion, slightly more than a third of program costs. Interest rate and other subsidies accounted for most of the remainder. The share of defaults in program costs has been rising, however. The \$2.7 billion in defaults in 1990 represented 70 percent of costs. The prospective losses on student loans in Table 2 are split about evenly between subsidies and defaults. Thus, the present value of prospective defaults should total \$15 billion to \$19 billion (*Budget*).

Credit risk, management risk, and business risk are responsible for most of the past and prospective losses in the GSL program. The rate of net default claims is over 10 percent, and it has taken steadily increasing collection efforts to keep the rate from climbing even higher. A recent Congressional investigation blamed the management of the GSL program for a share of program losses (U.S. Congress, Senate). The growth in proprietary schools, such as cooking and cosmetology schools, whose students have much higher-than-average default rates, raises business risk

for the GSL program. Without a change in the structure of the GSL program, these factors will continue to add to the costs of the program.

Federal Housing Administration and Veterans Administration. FHA and VA suffered substantial losses in recent years, and more losses are expected. Defaults have been high in the 1980s. Over 250,000 VA-guaranteed loans were foreclosed from 1986 to 1990, and the fees charged by FHA and VA have proved too low to cover the costs of the defaults. The reserves of the FHA single-family fund, for example, fell from 5 percent of outstanding mortgages in 1980 to less than 1 percent in 1990. To reduce losses in the FHA loan guarantee programs, Congress enacted reforms in 1990 to be phased in through 1995. Congress debated, but did not enact, reforms in the VA program (*Budget*). Thus, losses are expected to decline in the FHA program but stay about the same in the VA program.

Credit and business risk account for most of the past and prospective losses of FHA and VA. Both programs are exposed to extraordinary credit risk. Because FHA/VA borrowers are required to make little or no down payment, they have strong incentives to default if they suffer financial reverses or if the value of their homes decline.

Unanticipated changes in the mortgage market in the 1980s—a business risk—also increased FHA and VA losses (Hendershott and Waddell). The number of homes whose prices fell increased sharply, increasing mortgage defaults. In response to this change, private mortgage insurers raised premiums and tightened underwriting standards in the mid-1980s. As a result, some relatively risky borrowers shifted from private mortgage insurance to FHA or VA insurance, producing even higher defaults.

Which risks account for most of the losses?

Business and credit risk appear to account for much of the past and most of the prospective losses. Business risk accounts for substantial losses in all the programs considered in this section. Structural changes in financial markets affect deposit insurance. The decline in international competitiveness of some U.S. industries, such as steel and autos, hurts the pension insurance fund. The farm income crisis affected banks, thrifts, and the farm credit programs; and these programs remain exposed to the shifting fortunes of the farm sector. The rise of proprietary schools inflicts losses on the GSL program. Changes in the mortgage market threaten the FHA/VA programs.

Credit risk also is a central risk for every program suffering significant losses. Bad loans push banks and thrifts into insolvency. Terminations of underfunded pensions are a form of loan default. Most credit programs specialize in loans to risky borrowers.

Interest rate risk and management risk are not expected to contribute as heavily to losses in the future. For instance, skyrocketing interest rates in the late 1970s and early 1980s drove a number of thrifts into insolvency. Rising interest rates also imposed losses on FCS. Such a large swing in interest rates is unusual, however, and is unlikely to recur.

Management risk will also be less important in the future. The costly delays in resolving failed thrifts are not expected to be repeated. FCS is in the process of correcting past management deficiencies. Congress has investigated the management problems of the GSL program and may enact changes. If changes are not made, the GSL program will remain exposed to substantial management risk.

Can Program Losses Be Reduced?

Losses of financial programs can be reduced only by reducing risk exposure. Management risk and interest rate risk can be reduced or eliminated without reducing program benefits. Business risk and credit risk, however, are more difficult to control. Because prospective losses are due mostly to business and credit risk, the scope for reducing program losses without reducing program benefits is limited.

Management and interest rate risk can be controlled

Management risk can be controlled using techniques described in any management textbook. Such techniques include hiring qualified program managers, implementing strict financial controls, avoiding potential conflicts of interest, and performing regular, independent audits. In addition, regulators can strengthen their oversight. None of these measures needs to interfere with a program's mission.

Interest rate risk also can be controlled without reducing program benefits. In recent years, new techniques for measuring and hedging interest rate risk have protected investors from changes in interest rates (U.S. General Accounting Office; Morris). At their simplest level, these techniques involve purchasing assets whose values change with interest rates in the opposite direction from the changes in the investors' original portfolios. Thus, when interest rates shift, the changes in the values of the hedging assets offset the changes in the values of the original portfolios.

The difference in the performances of Fannie Mae and Freddie Mac provides a good example of how interest rate risk can be controlled without sacrificing program benefits. Both programs have helped create a more

liquid secondary market for mortgage loans. In the late 1970s and early 1980s, soaring interest rates drove Fannie Mae into insolvency from 1978 through 1984 (U.S. Department of Housing and Urban Development, Table V-3). In contrast, Freddie Mac has long maintained a policy of avoiding interest rate risk. As a result, Freddie Mac remained profitable throughout the 1980s despite high interest rate volatility.

Business risk cannot be controlled

Business risk, by definition, refers to events beyond the control of an organization. Macroeconomic downturns, natural disasters, political upheavals, and technological changes impose losses on a program that management can do little about. For example, FCS and FmHA suffered heavy losses in the 1980s as a result of the collapse of the farm sector. This collapse was outside the control of any government agency. In addition, the missions of the FCS and FmHA required them to continue supplying credit to the farm sector even though prospects for repayment declined.

Programs can at least anticipate, though not control, one type of business risk—changes in legislation. It generally takes a long time to fundamentally change legislation governing programs or the markets in which they participate. Program managers thus can anticipate and adapt to such changes in an orderly fashion. In addition, programs can make sure Congress is fully informed of the potential effects of new legislation on a program's mission and losses.

Controlling credit risk conflicts with program objectives

Credit risk can be reduced using several techniques. When used together, these tech-

niques limit—but do not eliminate—exposure to credit risk. A problem with using these techniques to reduce the credit risk of federal financial programs is that each technique conflicts with one or more program objectives. As a result, credit-related losses cannot be reduced without reducing program benefits.

Forecastable losses. The first way to control credit risk is to participate only in projects with forecastable losses. This principle applies most forcefully to insurance programs. Private insurers refuse to write policies when they cannot develop reliable estimates of the likelihood and probable size of claims. Without this information, it is impossible to calculate a premium that will cover expected claims and yield a profit.

Unfortunately, this method for controlling credit risk conflicts with the rationale for some federal programs, especially insurance programs. One of the principal reasons for government insurance is the unwillingness or inability of private firms to offer coverage. For example, the difficulty of predicting claims is one of the reasons private insurers do not offer pension benefit insurance (Ippolito). The government has made three studies of pension termination rates in the last 20 years.¹⁷ Yet, even with this information, Congress and the PBGC have frequently underestimated the rate of net claims. If Congress and the PBGC rigidly adhered to sound underwriting principles, pension benefit insurance would not be offered. Such a decision, however, would eliminate not only the PBGC's credit risk, but also the benefits of the PBGC.¹⁸

Creditworthy borrowers. The second way to control credit risk is to fund only creditworthy borrowers. Banks try to lend only to borrowers with good credit histories, collateral, and realistic prospects of repayment. This principle of sound lending may seem obvious, but the missions of many programs

compel them to target borrowers shunned by private lenders. The student loan program guarantees loans to borrowers without collateral and often without jobs. Borrowers must be refused credit by a private lender to qualify for FmHA loans. Given these practices, the high default rates of these programs are no surprise. But tightening credit standards would reduce the assistance given by these programs.¹⁹

Coinsurance and down payments. A third way to control credit risk is to require coinsurance or down payments from borrowers. When potential losses are shared by the lender and borrower, both parties have a strong incentive to undertake only economically sound projects and to bring them to successful conclusions. When borrowers share in the profits but not the losses, however, they have an incentive to take greater risks and to abandon troubled projects.

Again, this sensible credit practice conflicts with the purposes of many federal programs. FHA and VA loans guarantee mortgages with little or no down payment to help low-income households buy homes. Students in the GSL program are typically too young to have acquired significant down payments. One of the goals of FmHA is to help younger, undercapitalized farmers “graduate” to borrowing from private lenders. These and similar federal programs could reduce credit-related losses by requiring coinsurance or down payments, but program benefits would be significantly reduced.²⁰

Diversification. Finally, credit risk can be limited by diversifying the types of projects and borrowers that are funded. Economic performance in any one sector of the economy is more variable than the average economic performance of many sectors. Thus, lending primarily to one sector, such as agriculture, is riskier than lending to many sectors.

Diversification is not feasible for many programs, however. The point of such programs as FmHA is to boost loans to a particular sector, not to augment the flow of credit to the economy as a whole. As a result, FmHA and FCS are exposed by design to fluctuations in the fortunes of farmers. Deposit insurance also suffers from a lack of diversification. Even though deposit insurance covers banks and thrifts across the nation, the failure of many of these insured institutions to diversify their portfolios exposes the insurance fund to greater risk than necessary.²¹

Conclusion

Federal financial programs have suffered billions of dollars in losses and are expected to suffer losses of the same magnitude in the future. Some of these losses are the result of exposure to management risk and interest rate risk—risks that can be controlled without interfering with program goals. A substantial portion of the losses, however, are due to business risk and credit risk. Business risk is beyond the control of management. And while methods are available for limiting credit risk, applying these techniques would directly reduce benefits for many programs. Consequently, the scope for reducing program losses without reducing program benefits is limited.

This tradeoff between program costs and benefits leaves Congress with difficult choices. Congress and the managements of the various programs have worked in recent years to reduce losses, and Congress is debating further legislative changes to control program costs. Nonetheless, Congress ultimately must decide how much of each kind of program taxpayers are willing to purchase in light of the high prices these programs unavoidably carry.