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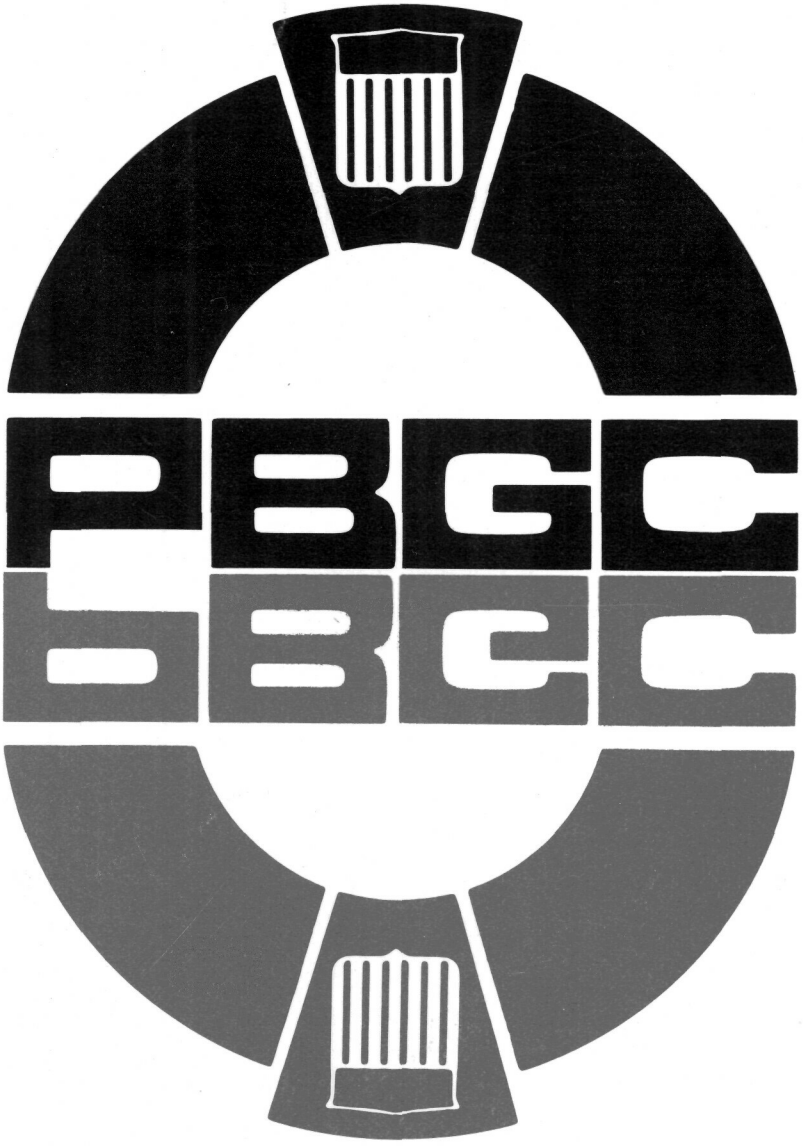
Controlling Losses of the Pension Benefit Guaranty Corporation



CBO Publication

S U M M A R Y

January 1993

CBO STUDY OF WAYS TO CONTROL LOSSES OF THE PENSION BENEFIT GUARANTY CORPORATION

The Pension Benefit Guaranty Corporation (PBGC), the federal agency responsible for administering the government's insurance of private pension plans, has accumulated a deficit of several billion dollars. Unless the Congress takes steps to control PBGC's losses, this unfunded deficit is likely to increase. A Congressional Budget Office study, *Controlling Losses of the Pension Benefit Guaranty Corporation*, examines the causes of these losses and several options for program reform.

Although, in a strict legal sense, the government is not liable for any obligation or liability incurred by PBGC, recent experience with deposit insurance and the farm credit system suggests that the Congress would not allow PBGC to default on federally insured pensions and thereby threaten the income security of retirees or workers whose pensions had been guaranteed by the government. Rather, losses in this program are troubling because they are at odds with clear legislative intent, are largely unnecessary to protect workers against the loss of their pensions, and waste tax monies.

Federal law mandates that the government cover the cost of pension insurance through premiums collected from employers on behalf of employees. Premium collections have been less than the underfinanced gap between the obligations and assets of the pension plans PBGC has taken over. If the Congress uses tax revenues to close this gap, it will be providing a subsidy to some workers. The questions of equity that this policy would raise become even more troubling when one considers that the wages of workers with pension plans tend to be higher than the average wage for all taxpayers.

The key to avoiding an unintended subsidy to the pension insurance system is to tie the insurance premium paid by each firm more closely to the loss PBGC expects from that firm's plan. This approach need not mean an increase in the average insurance premium. If changing the premiums for some firms also brings a decline in expected losses—as a result of tighter rules or a more risk-based premium structure—the average premium could be reduced.

To ensure that this tighter link between premium income and expected insurance losses is maintained, the management structure of the pension insurance program could be changed. Depending on the method of reform the government chooses to use, these changes could either alert the Congress more quickly to the need for program adjustments, authorize PBGC to exercise more responsibility for its financial condition, or make greater use of private insurance.

Questions regarding this analysis should be directed to the authors, Ron Feldman and Marvin Phaup of CBO's Special Studies Division, at (202) 226-2838. The Office of Intergovernmental Relations is CBO's Congressional liaison office and can be reached at 226-2600. For additional copies of the report, please call the Publications Office at 226-2809.

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CONTROLLING LOSSES OF THE PENSION BENEFIT GUARANTY CORPORATION

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NOTE

Unless otherwise noted, all financial data of the Pension Benefit Guaranty Corporation included in this report relate to the single-employer insurance program.

Preface

The federal government's exposure to losses from its insurance programs is large and growing. Several features of these programs make it difficult to keep their financial costs under control; in particular, their complexity and their budgetary treatment may obscure losses until they are unavoidable. Federal pension insurance, administered by the Pension Benefit Guaranty Corporation (PBGC), is one such program: current budget data do not provide enough information to understand and assess its financial performance. In addition, the program has accumulated a deficit that is likely to increase unless the Congress tightens the terms of the insurance and improves the government's ability to respond to indications of financial imbalance in the pension insurance system.

At the request of the House Committee on Ways and Means, Subcommittee on Oversight, the Congressional Budget Office (CBO) prepared this study of federal pension insurance. The study examines the causes of PBGC's losses and offers several options for reforming the program. In keeping with CBO's mandate to provide nonpartisan analysis, the report contains no recommendations.

Ron Feldman and Marvin Phaup of CBO's Special Studies Division prepared the study under the direction of Robert W. Hartman. The authors would like to thank Chris Bonham, Tim Carr, John Reilly, and Don Williams of the General Accounting Office; Chris Lewis and Justine Farr Rodriguez of the Office of Management and Budget; and Richard Ippolito and David Lindeman of the Pension Benefit Guaranty Corporation for their valuable comments. James Blum, Susan Borghard, Larry Ozanne, Robin Seiler, Bruce Vavrichek, and David Weiner of CBO made significant contributions to the report. Other CBO staff who offered helpful suggestions included Wayne Boyington, Paul Cullinan, Tom Cuny, Gail Del Balzo, Robert Dennis, Philip Joyce, C.G. Nuckols, Jr., Elliot Schwartz, and David Torregrosa.

Leah Mazade edited the manuscript; Chris Spoor provided editorial assistance. With the assistance of Martina Wojak-Piotrow, Kathryn Quattrone prepared the report for publication.

Robert D. Reischauer
Director

January 1993

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The Pension Benefit Guaranty Corporation (PBGC), which insures $900 billion in retirement benefits from private pension plans, has $2.5 billion more in liabilities than it has in assets. Without reform, PBGC's deficit is expected to increase by tens of billions of dollars.

Although this financial prospect is a cause for concern, it should not alarm the 32 million Americans whose pensions are guaranteed by this agency of the U.S. government. Unlike private insurance, default on the promises made by a federal government insurer is not a serious possibility, no matter how big the deficit in its insurance fund. No beneficiaries of a federal insurance program will fail to receive their benefits because of the program's financial condition. The safety of insured pensions is not at issue.

What is of concern is that the losses the federal government is absorbing from its pension insurance program were never intended to occur and are highly undesirable. They squander scarce resources and are largely unnecessary to provide the intended benefits to the insured.

Federal pension insurance protects almost all of the retirement benefits of those citizens whose privately funded pension plans offer specified, or defined, benefits. PBGC thus insures the participants in these defined-benefit plans against the hazard that the sponsor of a pension plan will be unable to pay all of the benefits it has promised from the pool of dedicated assets set aside for this purpose. The Congress, in writing the legislation that set up the pension insurance program, intended that the costs of this insurance would be financed by premiums paid by employers on behalf of their employees. The Congress was explicit in stating that pension insurance was not intended to be a program for transferring money from taxpayers to insured retirees or their employers.

Now, however, the prospect of such transfers looms. PBGC has a deficit because the assets it has acquired through its operations are less than its liabilities for pension payments. These accumulated losses are ultimately liabilities of the federal government, and the chances of finding other sources of funding besides tax revenues are slim. Firms that have defaulted on their pension promises and that have had their plans taken over by PBGC have gone into bankruptcy; they are not likely to be able to make up the losses they have imposed on the system. Recovering the costs of these past losses by charging higher premiums to the current and future sponsors of pension plans faces a major constraint: the sponsors of defined-benefit pension plans can avoid these make-up premiums by leaving the insurance pool—that is, terminating their defined-benefit plans and establishing plans that do not require insurance. The participants of pension plans are a potential source of funds: the Congress could require them to finance these losses by paying a tax surcharge or some other involuntary assessment. Given that pension insurance was set up to spare precisely these individuals from the risk of loss, however, this alternative is not an attrac-

tive one. By process of elimination, the U.S. taxpayer looks increasingly like the residual bearer of accumulated losses from the federal pension insurance program.

Why Is the Pension Benefit Guaranty Corporation Losing Money?

PBGC's losses can be explained at several levels: as a matter of financial imbalance in the federal pension insurance program, as a problem in the law, and as a failure of structural design. In terms of balancing income and expense, the premiums PBGC receives have been less than the administrative costs of the program and the shortfalls in funding—or underfunding—in terminated, insured plans. The financial explanation of PBGC's losses, therefore, is that income from premiums was too low in relation to the assets being set aside by pension plans to cover the benefits they were promising their employees and retirees.

A legal explanation can also be offered. The Employee Retirement Income Security Act of 1974 (ERISA), which set up the pension insurance program, does not require all defined-benefit pension plans to have enough funds at all times to finance the benefits they have agreed to pay. If it did, the pension insurance program would have avoided significant losses. But such a requirement for the "full funding" of benefits would also have resulted in enormous, periodic funding burdens on the sponsors of defined-benefit pension plans, which the Congress was not prepared to impose.

ERISA thus seeks to ease the burden of funding defined-benefit plans. For example, it permits sponsors to amortize—spread out over time, rather than pay immediately—most of the underfunding in a plan. In particular, when the sponsor of a retirement plan is struggling for its existence, the law does not require it to make full funding of its pension plan its highest priority. Underfunding of pensions is lawful and, many would argue, reasonable, but it also explains why terminated pension plans taken over by PBGC have fewer assets than liabilities and why the pension insurance program is incurring losses. The funding rules embodied in the law, one could argue, are at fault.

ERISA also controls how premiums for pension insurance are set. At present, premium changes require a change in the statute, which involves a deliberative—and often lengthy—legislative process. By the time the Congress raises premiums to cover PBGC's current losses, its foreseeable losses are generally even higher. Thus, the law is also at fault for failing to provide adequate premium income to PBGC.

An even more general answer to the question of why losses have occurred is that the institutional structure of federal pension insurance is poorly suited to the task of balancing premium income and insured losses. ERISA, probably appropriately, left room for pension plan sponsors to choose funding strategies for their plans that entail some risk of loss to the insurance program. The Congress did not, however, create a management system capable of limiting the losses that result from these risks. Specifically, PBGC is unable to monitor the exercise of sponsor discretion, to modify and restrict the terms of the insurance as changed economic circumstances might warrant, or to price the insurance so that income from premiums matches expected losses.

Establishing Fiscal Balance

The financial imbalance PBGC is now experiencing can be usefully broken down into

its three sources: sunk costs, current sponsor insolvencies, and future losses. Some losses of the pension insurance system are fixed, or "sunk," in the sense that they cannot be avoided by any actions PBGC might take. These sunk costs are mainly the losses embedded in pension plans that have already been taken over by PBGC, but some additional losses in plans sponsored by firms teetering on the brink of economic insolvency must also be regarded as beyond recovery. PBGC cannot avoid these losses, and the government will probably have to finance them through an involuntary assessment rather than through premiums. Some possible forms for this financing are a one-time, lump-sum assessment levied on all insured firms, a levy on all participants of defined-benefit plans, or an appropriation financed by taxes.

The second important element in PBGC's financial difficulties is the virtually insolvent pension plan sponsors in the federal insurance pool. The problem here is not the sunk costs that these plans have already accumulated but rather their potential for generating even larger losses. Once the financial failure of a firm is likely, its owners have an incentive to adopt high-risk, or go-for-broke, business strategies. These gambles may save the firm, but they are more likely to increase its losses. Such firms are highly dangerous to the financial stability of the insurance program. PBGC could mitigate this threat by terminating the pension plans of these firms before the firms begin to incur great risks—that is, if it could identify them in time. Another option would be for the Congress to establish new limits on the benefits the government will insure for high-risk sponsors of underfunded plans.

The third element of PBGC's present financial imbalance—its anticipated future losses from plans that are fiscally strong now—is the one most amenable to improvement. The great majority of defined-benefit plans are well funded and sponsored by firms in good financial condition. The key objective for this portion of the insurance pool is to ensure that these firms, during their expected lives, pay premiums that are adequate to cover the losses in their pension plans when PBGC must take them over. A variety of policy options will produce this result—for example, more stringent rules for funding, the increased use of coinsurance, and premiums based on risk.

Reforming the Structure of Pension Insurance

To ensure fiscal balance in federal pension insurance requires two kinds of changes to the system. In the short term, the Congress must make the policy adjustments necessary to produce a balance between the assets available to the system and its liabilities for pension payments. Maintaining long-term fiscal balance depends on improving the structural capacity of the federal government to operate and manage the pension insurance program. At least four kinds of structural reforms might be used:

- An information option, which could improve reports to the Congress about the financial performance of the pension insurance system.
- A general tax revenue option, which keeps all authority for changing the terms of pension insurance with the Congress but changes the budgetary treatment of the program so that an indication of fiscal imbalance requires an appropriation of funds to restore balance. This change has two purposes: to maintain the financial balance of the insurance system and to use the budget to alert and motivate the Congress to make policy adjustments in a timely fashion.
- A premium option, which shifts some operating authority to PBGC, including the responsibility for setting premiums based on the risk of the loss PBGC might have to assume. The Congress could choose to appropriate funds to "buy down" the in-

surance premiums established by PBGC. Like the general tax revenue option, the premium option will help maintain financial balance in the insurance program and will provide incentives for timely policy correction.

- A privatization option, which makes increased use of private capital and incentives to monitor and control losses in pension insurance. The federal government would play a backup role by insuring the pension insurers under most of these options.

The objective of federal pension insurance—to protect workers against the loss of promised retirement benefits without a taxpayer subsidy and without prohibitively burdensome regulations—is not easy to accomplish. The government cannot simply mandate these results; it must achieve them. Accordingly, the Congress must equip the pension insurance system to monitor and manage the incentives that insurance creates. What is needed is to create the restraints, authorities, and incentives necessary for the government to act consistently with the goals it has established.

Chapter One

Introduction

The federal government protects citizens against loss from a variety of financial hazards. The purpose of one such protection, the Employee Retirement Income Security Act of 1974 (ERISA), is to ensure that employees and retirees of private firms receive the pensions they have been promised as a condition of their employment. As part of this effort to bolster pension security, ERISA established the Pension Benefit Guaranty Corporation (PBGC).

As its name indicates, PBGC's mission is to guarantee payment of the pension a worker has earned in the event that his or her employer is unable to honor its pension commitments.[1] More particularly, PBGC insures those pension plans that promise a specific, or "defined," retirement payment; this benefit is usually based on an employee's years of employment and final pay.[2] Although PBGC's guarantee of these benefits is not in doubt, the pension insurance program it administers has accumulated billions of dollars in losses that are expected to grow.

Events Leading to the Establishment of Pension Insurance

Protecting employees against the unexpected loss of their pensions only became an issue with the growth of private pension plans after World War II. The number of employees covered by these plans—the plan participants—grew rapidly, and this growth was accompanied in some instances by abusive, corrupt practices. Both union officials and management appear to have been involved in these actions, which led eventually to several highly publicized cases of workers losing the pensions they had expected to receive.[3]

The failure of the Studebaker Company in 1963 is also considered a milestone: 6,900 employees lost 85 percent or more of their pension benefits.[4] The publicity surrounding the event contributed to a sense of urgency that something needed to be done to prevent such losses in the future.

1. For an earlier discussion of federal pension insurance policy, see Congressional Budget Office, *Federal Insurance of Private Pension Benefits* (October 1987).

2. The other major type of pension plan is the defined-contribution plan, which specifies the contributions the employer must make to the retirement plan rather than the benefit the employee will receive. In defined-contribution plans, the benefit is simply the accumulated value of the funds in the individual worker's account. Because employers do not promise a specific benefit level for defined-contribution plans, these pensions do not need to be insured. This report thus treats only defined-benefit plans, which are insured by PBGC.

3. The extent to which fraudulent and abusive practices actually occurred is in dispute. For a view that these practices were not common, see Richard A. Ippolito, "A Study of the Regulatory Effect of the Employee Retirement Income Security Act," *The Journal of Law and Economics*, vol. 31, no. 1 (April 1988), pp. 85-125.

4. In fact, 3,600 retirees and workers age 60 and older with at least 10 years of service received full benefits. See David C. Lindeman and Michael W. Rae, "Pensions and Bankruptcy," *American Enterprise* (forthcoming).

These events caught the Congress's interest, and it began to consider how the security of private pensions might be increased. This interest continued to intensify throughout 1965-1972, as shown by a series of investigations, studies, and legislative proposals.[5] Many of these activities were motivated by horror stories of lost pensions that workers believed, sometimes mistakenly, they were entitled to. One study of a sample of plans found that only 8 percent of the employees covered by a pension plan had qualified—by length of service or age—for benefits. In one case, a man had worked for the same company for 32 years, only to be laid off 3 years before he was eligible for a pension. For many workers, leaving a job for any reason before retirement meant that they forfeited all of their anticipated retirement benefits. The Congress's concern about these matters culminated in 1974 in its enactment of ERISA.

The Rationale for ERISA

ERISA may be seen in part as an attempt to overcome an informational disadvantage of employees. When workers accept an employer's offer of a pension, they are essentially agreeing to defer payment of part of what they have earned until sometime in the future. But they may not have the information they need to assess accurately the uncertainty and risk involved in waiting for these payments. Specifically, employees may not be able to judge the likelihood that certain events will occur: that the firm will fail; that the individual employee will be discharged or will quit before he or she qualifies for a pension; that the pension plan will be terminated; or that the pension plan will have insufficient funds to pay an employee's pension when it falls due. Moreover, even if employees can gather the information they need to make these judgments, they must constantly revise them in the light of new financial developments. Otherwise, they will be unable to determine the value of their total compensation—what they receive now as well as what is deferred until the future.

As one might expect, the firm sponsoring the pension plan is more likely than the employee to be completely informed about its own financial condition and that of the pension plan. Consequently, it may be able to use this information to gain an economic advantage over its employees and, potentially, over its competitors. For example, a firm may underfund its pension plan—set aside less money than it has promised to pay in the future—without the explicit knowledge or agreement of its employees. By promising employees deferred compensation in lieu of higher wages now and then underfunding those promises, the firm may reduce the cash cost of its labor in the short term, use the cash savings to finance profitable investments, and increase its current earnings. But it also subjects its employees to the risk that it will be unable to honor its pension promises when they retire. If the employees are unaware of this risk, they will not be compensated for their exposure to loss and will be surprised—and unprepared—if a pension default occurs.

One way to redress the imbalance in information that may exist between pension plan sponsors and participants is to require firms to disclose to participants all of the provisions and the financial condition of their pension plans. In fact, an important predecessor of ERISA, the Welfare and Pensions Plans Disclosure Act of 1958, legislated just such a requirement. But these mandated disclosures must be complete and frequent if the participants in a plan are to be fully informed. The time and effort required to evaluate this voluminous flow of information are likely to be too great for many employees to undertake.

ERISA differs from the Welfare and Pensions Plans Disclosure Act in its approach to correcting this lack of information, or asymmetry, as it is sometimes called. The legislation relieves the participants of a pension plan

5. For a history of this period, see Senate Special Committee on Aging, "Overview: Why Was ERISA Enacted?" *The Employee Retirement Income Security Act of 1974: The First Decade*, S. Prt. 98-221 (August 1984), pp. 2-25.

of almost all of the burden of obtaining, evaluating, and acting on this information. Instead, it sets rules for the minimum funding required in pension plans and shifts the role of assuring the quality of pensions to the federal government. With ERISA in place, employees can accept promises of pension payments from their employers without any uncertainty about how reliable those promises are. The government insures that the payments will be made regardless of the financial condition of the firm or its pension plan—now or in the future.

Under ERISA, when a firm terminates a defined-benefit pension plan whose assets are insufficient to cover its liabilities, PBGC becomes the plan's trustee, takes over all of its assets, and pays the pensions to plan participants when they fall due. The amount of PBGC's monthly pension payments is limited by law. In 1992, the Congress set the maximum monthly benefit amount, or cap, at $2,437.50. Moreover, PBGC will not cover benefits fully unless the benefit has been in place for five years.[6]

The Financial Condition of the Pension Benefit Guaranty Corporation

PBGC currently insures more than 65,000 single-employer defined-benefit plans.[7] These plans cover nearly 32 million workers and represent pension promises totaling $900 billion. At the end of 1991, PBGC was paying retirement benefits to 141,100 individuals in 1,582 terminated plans. The benefits it paid in 1991 totaled $514 million.

PBGC is responsible for closing the gap between the value of a terminated plan's assets and the insured pension benefits. ERISA intended this gap to be filled with income from the insurance premiums PBGC collects from employers who sponsor insured pension plans. But that income has been at least $2.5 billion short of what PBGC needs, and the pension insurance program now faces a substantial deficit.

The gap in underfunding in insured plans is increasing. PBGC estimates that financially weak firms, whose failure is now "reasonably possible," are sponsoring pension plans that have $12 billion more in pension liabilities than they have in assets. Studies that look farther into the future have estimated that the present value of the foreseeable deficit for PBGC exceeds $35 billion.[8] (The present value is the value today of payments that will occur in the future. Specifically, it is the minimum amount that, if it were invested at current interest rates, would grow to equal the amount to be paid in the future.)

The federal government is almost certainly responsible for those liabilities of PBGC that exceed PBGC's assets, even though ERISA states that the United States is not liable for any obligation or liability incurred by PBGC.[9] Based on experience with deposit insurance, it is unclear whether such language would allow the government to avoid paying claims made on PBGC. More important, the Congress has behaved as if PBGC's liabilities are the liabilities of the federal government, and it will

6. Virtually all pension plan participants suffer some losses from the termination of a pension plan. See Richard A. Ippolito, *The Economics of Pension Insurance* (Homewood, Ill.: Irwin, 1989), especially Chapter 2.

7. A single-employer plan is sponsored by one firm for its workers alone; a multiemployer plan is jointly administered by a group of employers and unions (in the same industry). PBGC administers separate insurance programs for these two types of plans. Multiemployer plans constitute less than 1 percent of PBGC's claims and are not treated in this report. Almost all of PBGC's assets and liabilities are in its single-employer insurance program.

8. Christopher M. Lewis and Richard L. Cooperstein, "Estimating the Current Exposure of the Pension Benefit Guaranty Corporation to Single-Employer Pension Plan Terminations" (paper presented at the Pension Research Council Symposium, Philadelphia, Pennsylvania, May 8, 1992).

9. Title IV, Section 4002 (g)(2).

almost certainly continue to do so to avoid a default on federally insured pensions.

PBGC has operated with a deficit since its inception in 1974. Periodically, the Congress attempts to arrest PBGC's losses through two types of policy adjustment: higher insurance premiums and more stringent restrictions on pension plan funding and insurance coverage. The Congress initially fixed the PBGC insurance premium at a flat annual rate of $1 per participant. Since then, through a series of amendments to ERISA, it has increased the flat-rate annual premium to $19 per plan participant and added a new variable-rate premium, which is now set at $9 for every $1,000 of pension plan underfunding per participant per year. The total annual premium, however, is capped at $72 per participant. Thus, a firm with 1,000 participants in its pension plan currently pays a minimum premium of $19,000—but could pay as much as $72,000 per year.

In addition to premium adjustments, the Congress has amended ERISA to reduce the claims being made against PBGC. For example, firms can no longer terminate their pension plans unless they meet stringent criteria of economic distress. In 1987, the Congress further amended ERISA to increase the level of funding that sponsors must maintain in their plans. Yet despite these periodic adjustments in policy, PBGC's losses continue.

Why Are Losses So Persistent in Federal Pension Insurance?

One explanation for PBGC's persistent losses is that the structure of the federal pension insurance system is flawed. The Congress does not receive relevant information about the financial condition of the system in a form that would prompt it to adopt timely corrective action. Indeed, the federal government seems to have taken on the role formerly played by the participants of pension plans before the advent of federal insurance: it is uninformed about the extent of its risk exposure—the extent of the losses it might have to assume—and, consequently, only acts to redress its losses after they have occurred.

It is instructive to imagine how pension insurance would have worked if the Congress, rather than establish a federal insurance system, had required pension plans to obtain private insurance. The result would have been to shift the cost of insuring underfunded pensions to private insurers. But private insurers would have operated their programs differently from the way the federal system works. They would have first assessed their risk exposure from the insurance contract and then set the insurance premiums to charge the plan sponsors for these costs. If a commercial insurer encountered losses that exceeded its expectations, it would act promptly to modify the terms of the insurance. This predictable response of private insurers helps to clarify the government's choices: it can either act like a commercial insurer and shift the costs of current pension practices back to those sponsors whose decisions make insurance costly; or it must attempt to make the payers of PBGC premiums—especially those that pose little risk to the government—and, potentially, taxpayers bear the costs that formerly the disappointed participants of pension plans had to assume.

The federal pension insurance system can be modified to promote pension security without simply transferring pension losses to other workers or taxpayers. But an opposing view must also be taken into account: that such reforms are undesirable because the Congress intends this insurance system to be subsidized.

Did the Congress Intend PBGC to Lose Money?

Although clearly expressing a minority view, some observers argue that the Congress does not now and never did intend to finance federal pension insurance without subsidies.[10] To understand this argument, two types of subsidies—general and cross—must be distinguished. The first consists of explicit payments from general tax revenues to PBGC. A general subsidy would allow all pension plans to pay premiums that were priced below a fair amount—the expected cost of their insurance. The second type of subsidy, a cross subsidy, consists of implicit payments from the financially strong sponsors of fully funded plans to the financially weak sponsors of underfunded plans. Financed by charging well-funded plans more than a fair premium, a cross subsidy would enable pension insurance premiums to be set below the expected claims for underfunded plans.

Supporters of subsidization rarely call for taxpayer subsidies to PBGC. Rather, proponents suggest that economically strong sponsors of pension plans—through their premiums—should provide subsidies to troubled firms that currently sponsor underfunded pension plans. From this perspective, pension insurance is intended to subsidize firms that are encountering financial difficulties. Current recipients of the cross subsidy include the auto and steel industries, rubber and tire manufacturers, and airlines. Over time, however, the number of firms receiving the subsidy tends to increase because the decline of some industries, accompanied by the growth of others, is an enduring feature of economies that respond to changes in technology, consumer preferences, and costs. For instance, airlines are a recent addition to the list of distressed industries.

A difficulty with the case for perpetual interfirm or cross subsidies is that far-sighted, fiscally sound premium payers will not voluntarily subsidize the pension costs of their competitors indefinitely. Instead, they will terminate their pension plans and avoid paying these overpriced premiums. At some point, if the high-risk sponsors of pension plans are to be subsidized with underpriced premiums, PBGC will have little choice but to look to the taxpayer for financial support. A voluntary federal insurance system that relies heavily on subsidies from one insured firm to another is probably destined for a taxpayer bailout.

Although the government's policy of making good on pension promises has spared many workers the catastrophic, unexpected loss of their pensions, it has done so at the expense of others: fiscally healthy firms and their workers, whose premiums currently fund the operations of PBGC, and taxpayers, whose backing of PBGC permits it to continue operating even though its liabilities exceed its assets. Transfers of wealth of this sort raise questions not only of equity but, more important, of necessity: shifting pension losses from some employees to other workers—or future taxpayers—is unnecessary to give workers pension security.

The language of the legislation that established PBGC makes it difficult to accept a version of the Congress's intent that calls for funding by taxpayers. Section 4006(a)(1) of ERISA, for example, states that premiums should be set "to provide for sufficient revenue to the fund for the corporation [PBGC] to carry out its functions under this title." The statements of legislative leaders (Congressman Al Ullman [D., Ore.] and Senator Harrison Williams [D., N.J.]) reiterate that premiums,

10. See the "Dissenting Comments" of Michael S. Gordon in Ippolito, *The Economics of Pension Insurance*, pp. 263-265.

and not general tax revenues, are to pay for pension insurance.[11]

In 1979, when the Congress raised PBGC's annual insurance premium from $1 to $2.60 per participant, it did so with the explicit expectation that this rate would be adequate to meet the costs of the program for at least five years.[12] Again, in 1986, when the annual premium was raised to $8.50, the section on findings in the legislation (the Single-Employer Pension Plan Amendments, or SEPPA) reported the following: "The Congress finds . . . that . . . an increase in the insurance premium for single-employer defined-benefit pension plans is necessary to finance properly current funding deficiencies and future obligations of the single-employer pension plan termination insurance system."[13] The same sentiment is expressed in the section titled "Declaration of Policy": "It is hereby declared to be the policy of this title to assure the prudent financing of current funding deficiencies and future obligations of the single-employer pension plan termination insurance system by increasing termination insurance premiums."[14]

SEPPA also required PBGC to study and report on the level and structure of its premiums. In its 1987 report, *Promises at Risk*, the corporation wrote as follows: "The PBGC's single-employer pension insurance program is intended to be self-sufficient. . . . To maintain the program's financial health, premiums must make up the difference between the net liabilities to participants in trusteed plans and the amounts available from the program's other sources of income."

The Omnibus Budget Reconciliation Acts of both 1987 (OBRA-87), through the Pension Protection Act, and 1990 continued this pattern of adjusting premiums and tightening rules in pursuit of a fiscal balance between costs and premiums. But neither of these acts, nor any earlier legislation, envisioned using general tax revenues to pay for PBGC's insurance operations. OBRA-87 in particular demonstrates the Congress's determination to keep PBGC on a premium-financed basis. This act added the variable-rate component to the flat-rate insurance premium as an incentive to sponsors to increase the funding in their plans and to help control the possible costs to the federal government from underfunded plans.[15]

For pension insurance to break even, changes are necessary in the program. The federal government must be able to monitor the financial condition of both the firms that sponsor pension plans and the plans themselves; it must also be able to modify the terms and conditions of the insurance so that the sponsors will act in such a way that their insured pension claims do not exceed the premiums they have paid. Effective management also requires incentives for the insurer—that is, the government—to exercise these authorities in a timely fashion.

Federal Incentives to Control Losses

The budget often exerts a powerful influence on Congressional decisions. In recent years, the Congress has defeated some proposals that would have increased the deficit, in part be-

11. Representative Ullman described PBGC's primary means of financing by pointing out that "the insurance is financed by premiums paid by covered plans" (*Congressional Record*, August 20, 1974, p. 5171). Senator Williams echoed this sentiment: "To pay for the costs of the insurance program, all covered plans will pay an initial per-capita premium. . ." (*Congressional Record*, August 20, 1974, p. 5184).

12. House Committee on the Budget, *Omnibus Budget Reconciliation Act of 1985 to Accompany H.R. 3500*, H. Rept. 99-300 (October 3, 1985), p. 278.

13. Omnibus Budget Reconciliation Act of 1986 (OBRA-86), Title XI, Section 11002(b)(4).

14. OBRA-86, Title XI, Section 11002(c)(6).

15. See also House Committee on the Budget, *Hidden Exposure: The Unfunded Liabilities of the Federal Government*, Hearings before the Task Force on Urgent Fiscal Issues (October 24, 1991), especially pp. 36-42.

cause it wants to avoid this undesirable effect. It probably has passed other measures that it would not otherwise have enacted because they reduced the deficit. Developments that neither increase nor decrease the deficit tend to receive less attention than those that do.

Under the current budgetary treatment of PBGC and federal pension insurance (see Chapter 3), the Congress does not receive accurate signals from the budget about the financial condition of the program; moreover, the way the budget accounts for PBGC does not provide incentives to encourage policymakers to balance pension losses with premium income. Surges in the costs of pension insurance do not appear in the budget until long after they are "sunk," or unavoidable. In addition, the budget does not always show the correct financial effect of Congressional actions, especially those that increase the payments the government must make in the future. As long as PBGC's annual income from premiums exceeds its annual benefit payments and administrative expenses, the budget will show that the federal pension insurance system is lowering the federal deficit. In 1991, this deficit reduction effect exceeded $788 million, even as PBGC's accumulated losses rose by $597 million.[16]

An economically meaningful budgetary treatment can affect Congressional decisions and strengthen the government's incentives to control its losses. These incentives assume even more importance in the face of what is generally predictable behavior for firms covered by insurance: a decrease in participation by firms that are overcharged for insurance and an increase in risk-taking by those that remain in the insurance system, especially as these firms approach the end of their economic lives.

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16. ERISA required that PBGC be a nonbudgetary program. The Multi-employer Pension Plan Amendments Act of 1980 amended ERISA by putting part of PBGC on-budget.

Chapter Two

Incentives and Responses That Destabilize Pension Insurance

The basic premise of insurance is quite straightforward: when an event is almost certain to impose high costs on a few individuals whose identity cannot be known in advance, at least some of those at risk would prefer to pay a small sum to insure themselves against the possibility of a catastrophic loss. By each paying a small share of the expected losses into a fund, members of the pool of people in the insurance program avoid the possibility of an unlikely, but potentially ruinous, loss. Insurance increases the well-being of the insured by spreading the losses that occur among all those at risk, without requiring subsidies from others.

If federal pension insurance operated this way, the Congress could have legislated the program into existence and largely left it to run itself. The annual losses to be expected for those at risk could be calculated from historical data, and each sponsor of a pension plan could be assessed a per capita share, or premium. The pooled premiums of all participants would cover the losses that occurred.

Unfortunately, federal pension insurance does not work this way. The government cannot avoid losses simply by charging those it insures equal premiums based on the losses that occurred when the insurance was not in force. Insurance (both the premium and the coverage) affects the behavior of participants in the insurance pool. Because they must pay premiums and other costs that are not in keeping with the risk of loss they pose to the system, some low-risk participants will drop out of the insurance pool. As a result, the average riskiness of the insured participants that remain will increase. Because they have insurance, some participants will take risks that they would not take without it. As a result, losses will increase both absolutely and in relation to the level of the premiums that are paid. To maintain the financial stability of an insurance program, the design and management of the system must incorporate these predictable responses to insurance.

Adverse Selection

Adverse selection is the tendency for those with the highest probability of loss to purchase insurance and those with the least risk of loss to opt out of the insurance pool.[1] It occurs in insurance systems financed by premiums in which the insurer does not adjust the premiums for the different degrees of risk of loss that individual participants in the pool may pose.

The risk of default and the value of insurance vary among pension plans. Insurance

1. For a more complete discussion of adverse selection, see Nicholas Barr, "Economic Theory and the Welfare State: A Survey and Interpretation," *Journal of Economic Literature*, vol. 30 (June 1992), pp. 741-803; see especially pp. 750-752.

against a pension plan's terminating is less valuable for a fully funded plan than for a plan sponsored by a financially troubled firm that has few assets in relation to its liabilities. If the premium and other costs sponsors pay for pension insurance do not reflect their true risk exposure, the high-risk firms will buy, from their perspective, underpriced insurance; that is, those firms will pay less to the insurer than they expect to receive in benefits. In contrast, those firms whose insurance is overpriced will have a financial incentive to leave the insurance pool, because the cost of the insurance outweighs the benefits they can expect to receive.

This self-selection process can undermine the financial stability of any insurance system. For example, if the system charges a flat-rate premium that it sets equal to the average loss it expects for all those at risk, those policyholders with the least risk will leave the insurance pool. Those with the greatest risk will remain. The average riskiness of the insured will rise, and the insurer, faced with more losses than it collects in premiums, will be forced to raise premiums. This upward adjustment (to compensate for the initial effects of adverse selection) will push the next layer of lower-risk policyholders out of the insurance pool. As a result, the pool tends to consist of members with risks higher than the average risk of those for which the premiums were calculated.

Little definitive evidence is available that adverse selection has occurred in the PBGC insurance pool. What is clear is that a significant movement away from defined-benefit plans has taken place. The percentage of workers with pensions whose primary source of retirement benefits is a defined-benefit plan declined dramatically during 1979-1988 from 83 percent to 66 percent.[2] Similarly, the number of single-employer plans insured by PBGC has declined nearly 22 percent—from 83,000 to 65,000—over the past several years. Researchers attribute this decline to several causes: rising administrative costs for defined-benefit plans (which are especially burdensome for small firms); the shrinking of the heavy-industry sector of the economy, in which defined-benefit plans are concentrated; and an increasing preference on the part of employees for defined-contribution plans.

All of these causes are relevant to adverse selection. First, most studies of pension insurance premiums have focused on the extent to which the premiums have been set too low for high-risk sponsors, rather than too high for low-risk firms.[3] But the significance many sponsors attach to high administrative costs in their decision to leave the defined-benefit insurance pool indicates that the premium charge is only one of many factors that they take into account. When total costs, including those for premiums and administration, exceed the benefits expected from an insurance program, firms will have an incentive to leave the insurance pool.

Second, the concentration of defined-benefit plans in declining sectors of the economy means that many participating plans have shorter life expectancies and entail higher risks than the average U.S. firm. Unless the Congress adjusts PBGC's premiums to take these risks into account, it will not be in the interest of low-risk firms to share an insurance pool with high-risk firms.

Third, the increasing popularity of defined-contribution plans among employees facilitates the decision of employers to introduce such a plan and leave the defined-benefit insurance pool. Furthermore, because only fully funded plans can be terminated voluntarily, all of those leaving the system must have been fully funded and therefore had a low risk of making a claim against PBGC. When taken

2. Richard A. Ippolito, "Towards Explaining the Growth of Defined Contribution Plans" (Pension Benefit Guaranty Corporation, August 1992); Angela Chang, *Explanations for the Trend Away from Defined Benefit Pension Plans*, CRS Report for Congress 91-647 EPW (Congressional Research Service, August 25, 1991).

3. See, for example, Jack VanDerhei, "An Empirical Analysis of Risk-Related Premiums for the Pension Benefit Guaranty Corporation" (report submitted to the Pension Benefit Guaranty Corporation, 1988).

together, these developments suggest that adverse selection has been and will continue to be a factor in increasing the riskiness of the federal pension insurance pool.

Government insurers may use two partial, complementary solutions to counter adverse selection: risk-based premiums and compulsory participation. The first solution requires that the insurer obtain information about the true risk of loss it faces from each member of the insurance pool and then set the premium it charges each member at a level equal to the loss it expects from that policyholder. Premiums established in this way offer no incentive to those with low risks to withdraw from the insurance system; every policyholder gets its money's worth from the insurance.

Premiums that vary with expected losses, however, are only a partial solution to adverse selection, because information about the risks the policyholder might be taking is itself costly for the insurer to obtain. Moreover, the policyholder has an incentive to deceive the insurer about its risks, which can raise the insurer's cost of obtaining information. The higher these administrative costs to the insurer, the higher the premiums that must be set, and the greater the likelihood that the premiums will be significantly higher than the benefits policyholders receive. When a policyholder's premiums and other costs of insurance exceed its expected benefits, the financial incentive to leave the insurance pool reappears.

Yet despite these drawbacks, premiums based on risk can still be effective in checking adverse selection without their being set exactly equal to the expected loss for each participant. Policyholders will pay a premium higher than their expected loss if their next best option is less attractive than the "overpriced" insurance for the plan they prefer.

The other partial solution to adverse selection that government insurers can employ is compulsory participation. Federal pension insurance makes some use of this mechanism: a firm may leave the insurance system only by terminating its defined-benefit plan. Although broader use of compulsion might mitigate adverse selection, in the case of pension insurance it could also damage the interests of workers. For example, to require that every firm maintain a defined-benefit plan could frustrate workers' demands for defined-contribution plans and infringe on their right to negotiate their terms of employment.

A variation on compulsory participation is to charge an exit fee to those sponsors that convert to defined-contribution plans. PBGC now levies such a charge on sponsors who wish to leave a multiemployer defined-benefit plan. These exit fees provide an incentive for pension plans to stay in the insurance pool.

Moral Hazard

Insurance tends to change the behavior of those who have it: it weakens their incentives to avoid loss, with the result that losses increase. Moral hazard is the tendency of those with insurance to take less care and effort to avoid risks than they would if they had no insurance. Having insurance against the loss of their pensions means that participants in pension plans have weaker incentives and are willing to go to fewer lengths to see that their employers, the sponsors of their pension plans, fully fund their pension promises.

Before the Employee Retirement Income Security Act of 1974 and the advent of federal pension insurance, the sponsors of pension plans were not required to fund their pension promises fully, although some did. One of the reasons they did was that their employees wanted some assurance about the reliability of the deferred compensation they were being promised. Uninsured employees have a strong financial interest in the extent to which pensions are funded. They express these concerns explicitly in labor negotiations and implicitly in the labor markets, where workers choose from among the total-compensation offers of various employers.

Federal pension insurance eases the concerns of employees about the financial condition of their pension plan. If participants in a plan rely on the insurer—the federal government—rather than the sponsor to assure their future benefits, a well-funded pension plan will not be an objective of labor negotiations. Therefore, the sponsor of the plan will have less reason to fund retirement benefits fully. Underfunding benefits will be especially attractive if the employer has other urgent or highly profitable uses for the funds. Funding a plan with risky assets, another option for sponsors, will be appealing if the sponsor prefers the higher expected return on risky, rather than safe, pension plan assets. The federal guarantee weakens the restraint on risky practices that uninsured workers provide.

Of course, not all pension losses are the result of moral hazard, nor are they all undesirable from an economic point of view. Before pension insurance existed, some sponsors of pension plans took risks—including underfunding their plans—that occasionally resulted in losses for employees. The significance of these losses depends on whether those who have to bear them expect them or are taken by surprise. If, for example, the sponsor of a pension plan fully informs its employees about the potential for the loss of its pension funds, then employees can expect and prepare for possible losses. In return for bearing these risks, workers receive higher wages or higher expected pension benefits. In this case, the level of risk-taking is agreed to by those who benefit and are subject to loss.

In other circumstances, however, employees may not have information about the potential for the loss of their pensions. This lack of information puts them at a disadvantage and allows employers to shift the burden, but not the benefits, of risky behavior to workers. In this case, risk-taking is excessive from a social point of view because the decision to take risks (underfund the pension plan, for instance) is being made in the light of the benefits but not the costs of this action.

The manifestations of moral hazard tend to differ over time as changing economic conditions create new opportunities for the sponsors of pension plans to increase the value they receive from insurance. The financial condition of a firm may also affect moral hazard because financial distress can change the costs and benefits of taking on more risk. In particular, as the sponsors of insured pension plans approach bankruptcy, insurance encourages them to offer increases in compensation in the form of insured pension benefits rather than in wages. For example, TWA, whose pension plan is underfunded by $1.2 billion, increased pension benefits by more than $100 million in lieu of wages while in bankruptcy. Insurance may also lead to greater pension underfunding, high-risk investment strategies, or "gambles for resurrection." If the gamble succeeds and the firm survives, the federal government as the insurer receives no gain; if the firm fails, the government must take on additional losses.

In fact, PBGC has reported that the average underfunded plan that terminates has a funding ratio (the ratio of plan assets to guaranteed benefits) of 80 percent five years before termination; at termination, the funding ratio is 40 percent. Not all of this decline can be attributed solely to pension insurance, however, because financial deterioration in a pension plan could also be expected to accompany the failure of a sponsor who had no insurance.

Three partial solutions to moral hazard are at hand: monitoring, regulation, and coinsurance. Keeping tabs on the finances of sponsors and their plans gives an early warning of increasing risk and the opportunity to limit losses. Its biggest disadvantage is the cost: continuously collecting, processing, and reacting to information are costly operations.

Regulation attempts to control the ability of the insured to increase its risk after insurance is provided.[4] (ERISA, for example, constrains underfunding in defined-benefit pension plans.) But it is impossible to craft and enforce regulations that anticipate—and constrain—all of the opportunities individual firms have to assume greater risks in pension funding, especially when the firms are in financial trouble.[5]

Coinsurance can be a useful supplement to regulation. The most familiar form of coinsurance is the deductible amount on health and property insurance—those dollars of the loss that someone other than the insurer pays (usually the insured). Coinsurance is useful in controlling losses because it restores some of the cost, and therefore some of the incentive to avoid risk, that insurance takes away.

Federal pension insurance contains several elements of coinsurance. Sponsors pay a kind of deductible because PBGC will not take on a terminated pension plan unless the sponsor is virtually bankrupt.[6] (This restriction would be analogous to a homeowners' policy that pays claims only if the policyholder's net worth has been reduced to zero.) Thus, the sponsor's assets in excess of its liabilities constitute the first line of financial defense against defaults on pension promises. Employees pay a coinsurance amount because they usually incur real losses when their pension plans terminate as a result of the difference between their pay at termination and their pay at retirement.[7] Finally, under current law, PBGC is a creditor of the bankrupt sponsor of an underfunded retirement plan. The more PBGC receives from the bankrupt firm, the less the other creditors receive. Consequently, the other unsecured creditors in a bankruptcy proceeding are also coinsurers of pension insurance.

Coinsurance constrains risk-taking only as long as the coinsurers have something to lose. For example, as a firm approaches financial failure, neither its owners nor its insured employees have much interest in restraining the financial risks the firm may take. Under ERISA, PBGC can exert some control over moral hazard in these circumstances by seizing underfunded plans from distressed sponsors through the process of involuntary termination (see Chapter 4).

To operate a pension insurance system and limit its losses to amounts that can be financed from premiums is a challenging task. It is similar to playing a strategic game against a large number of rational opponents who—under some circumstances—can gain an advantage by increasing the amount of risk to which other players are exposed. If insurers cannot counter the incentives that insurance provides to the members of an insurance pool to increase their risk-taking, then the insurance system is likely to be unstable. The tentative evidence from a survey of PBGC's operations suggests that the federal government has not fully addressed the system's potential for instability.

4. Richard S. Grossman, "Deposit Insurance, Regulation, and Moral Hazard in the Thrift Industry: Evidence from the 1930s," *American Economic Review*, vol. 82, no. 4 (September 1992), pp. 800-821, discusses the tendency for moral hazard to emerge over time and the ability of regulation to restrain it. See also David Wheelock, "Deposit Insurance and Bank Failures: New Evidence from the 1920s," *Economic Inquiry*, vol. 30 (July 1992), pp. 530-543.

5. Gregory R. Niehaus, "The PBGC's Flat Fee Schedule, Moral Hazard, and Promised Pension Benefits," *Journal of Banking and Finance*, vol. 14, no. 1 (1990), pp. 55-68, presents some evidence that restrictions imposed by ERISA were insufficient to suppress moral hazard.

6. ERISA sets out three alternative criteria for distress: (1) the contributing sponsor and every affiliate (or controlled group of which the sponsor is a member) is being liquidated or reorganized in bankruptcy or similar state insolvency proceedings; (2) PBGC determines that termination is necessary to allow the employer to pay its debts as they become due; or (3) PBGC determines that termination is necessary to avoid an unreasonably burdensome pension cost that is caused solely by a decline in the employer's work force.

7. See Richard A. Ippolito, *The Economics of Pension Insurance* (Homewood, Ill.: Irwin, 1989), especially Chapter 2.

Chapter Three

How PBGC Operates

The Congress established the Pension Benefit Guaranty Corporation to administer federal pension insurance. It provided PBGC with a board of directors consisting of the Secretaries of Labor, the Treasury, and Commerce. It also mandated repeatedly that the pension insurance system finance itself by collecting premiums. Yet PBGC continues to take on liabilities from terminated plans—in the form of pension benefits it must eventually pay—substantially faster than it is acquiring assets to pay for these benefits.

PBGC's losses stem most directly from provisions in the Employee Retirement Income Security Act of 1974, as amended, that give substantial latitude to the sponsors of pension plans to determine the levels of funding that their plans will maintain. Yet these provisions can be defended as a necessary means to avoid placing too great a financial burden on sponsoring firms. For example, requiring immediate full funding of all plans could cause some financially weak firms to fail. Still, all of these well-reasoned exceptions to a full-funding requirement, in combination with premiums that are slow to adjust to changes in anticipated losses and that are not sensitive to the risk posed by individual plans, practically ensure subsidies to some firms and losses to PBGC.

What PBGC Does

To recap, PBGC insures participants of defined-benefit pension plans against the loss of their pensions.[1] When an underfunded pension plan is terminated, usually because the sponsor has become insolvent, PBGC steps in as the plan's trustee, takes over the plan's assets, and pays guaranteed retirement benefits to the participants in the plan. PBGC fills the gap between the value of the assets it has acquired from the sponsor of the terminated plan and the pension benefits it has insured. Its only source of funds to fill this gap is the premiums paid by sponsors of defined-benefit plans. PBGC can augment these funds, however, by a claim against the sponsor of a terminated plan and by earnings on the assets it holds. PBGC has no authority to adjust the amount or structure of its premiums. Nor does it oversee the operation of pension plans; the Department of Labor's Pension and Welfare Benefits Administration and the Internal Revenue Service (IRS) perform these functions.

PBGC's obligations to pay pension benefits from terminated plans are large and growing; they already exceed the assets PBGC has acquired. Table 1 uses data prepared according to generally accepted accounting principles for commercial firms to show the growth in the deficit for PBGC's single-employer insurance program.[2]

1. PBGC insures only those plans judged to be "qualified" by the Internal Revenue Service. Several types of pension plans are exempt from PBGC coverage—for example, those sponsored by governments or churches and plans maintained by certain professional groups with 25 or fewer participants.

2. Some pension researchers suggest that the way PBGC's deficit is measured ignores the surplus in the defined-benefit system as a whole. That is, the assets of insured defined-benefit plans total $1.3 trillion, and plan liabilities total $900 billion. The implication is that as long as total pension assets exceed total liabilities, PBGC can correct any shortfalls in individual plans by transferring assets from strong plans to weak plans. This argument ignores the fact that the assets of overfunded plans do not belong to the government and that merely proposing a transfer of these assets to underfunded plans could trigger a massive exodus of overfunded plans from the defined-benefit insurance system.

What Causes PBGC's Losses?

By definition, losses occur for PBGC if the premiums it collects are insufficient to cover the cost of the pension benefits it has taken on for future payment and its ongoing administrative expenses. And losses have, indeed, been the rule for PBGC because premium income has been too low, given the extent of the claims being made against the system. These losses stem from certain of the policies that have guided the pension insurance system, such as the lack of tight rules to govern pension funding and the use of premiums that are not related to the risk posed by firms whose pensions PBGC is insuring. Perhaps even more important among the causes of PBGC's losses are the time lags that have occurred between the need to adjust those policies and actually enacting the changes. The inadequacies of PBGC's current financial and budgetary reporting systems are a major cause of these costly delays.

The Law Permits Sponsors to Underfund Their Pension Plans

Underfunding in terminated plans is the direct cause of PBGC's accumulated deficit. If all plans were fully funded when they terminated, federal pension insurance would not be necessary. In fact, the bulk of the claims on

Table 1.
Financial Statement of the Pension Benefit Guaranty Corporation's Single-Employer Insurance Program (By fiscal year, in thousands of dollars)

	1985	1986	1987	1988	1989	1990	1991
Assets							
Investments	954,000	1,410,000	1,730,000	1,920,000	2,398,000	2,442,000	4,581,000
Net due from sponsors	71,000	265,000	361,000	378,000	339,000	343,000	271,000
Miscellaneous assets	129,000	65,000	72,000	125,000	322,000	326,000	812,000
Total	1,154,000	1,740,000	2,163,000	2,423,000	3,059,000	3,111,000	5,664,000
Liabilities							
Future pension payments:							
To participants of pension plans taken over by PBGC	1,851,000	3,222,000	3,164,000	3,603,000	3,608,000	3,618,000	5,632,000
To participants of plans about to be taken over by PBGC	132,000	125,000	153,000	95,000	133,000	61,000	1,437,000
To participants of plans soon to be taken over by PBGC[a]	464,000	2,145,000[b]	312,000	108,000	242,000	1,111,000	776,000
Unearned Premiums[c]	17,000	62,000	65,000	144,000	148,000	150,000	197,000
Accounts Payable	16,000	13,000	18,000	16,000	51,000	84,000	132,000
Total	2,480,000	5,567,000	3,712,000	3,966,000	4,183,000	5,024,000	8,174,000
Accumulated Deficit	-1,325,000	-3,826,000	-1,549,000	-1,544,000	-1,124,000	-1,913,000	-2,510,000

SOURCE: Pension Benefit Guaranty Corporation.

a. These liabilities are calculated after subtracting the value of the plan's assets, which PBGC will take over when the pension plan terminates.

b. This surge in liabilities resulted from PBGC's expected takeover of the pension plans of LTV. These plans have been returned to LTV.

c. Premium payments received before the end of PBGC's fiscal year for services to be provided after the end of the fiscal year.

Box 1.
Minimum Funding of Defined-Benefit Plans

The Employee Retirement Income Security Act of 1974 established rules for the funding of pension plans to regulate the pace of contributions to the plans and ensure that workers receive the benefits they have been promised. But a firm can meet the legal requirements for minimum funding and still not have a fully funded pension plan when the plan terminates. Specifically, firms that sponsor plans that provide a flat benefit for each year of service are almost always underfunded at termination. Because the Pension Benefit Guaranty Corporation only takes on claims when a plan terminates, the degree to which a plan is funded when it terminates determines PBGC's losses.

ERISA requires that firms make two annual payments to their pension plans: the normal cost and the past-service liability. The normal-cost payment is an amount sufficient to pay for the benefits workers have earned in the current year. The past-service liability is the pension cost incurred by the firm in an earlier period for which it set aside inadequate monies. For example, during labor negotiations, firms often agree to increase their workers' pension benefits for past years of service. ERISA requires that these past-service liabilities be funded over 5 to 40 years, depending on the cause of the liability. If a plan pays its annual normal costs and its amortized past-service liability, it is fulfilling its legal funding requirements. The government provides an incentive for firms to fund their pension plans by treating contributions to them as deductions from income for tax purposes. But firms also face limits on the maximum amount of their pension contributions that can receive favorable tax treatment.

These funding rules are based on an assumption that the plan will continue to operate. PBGC's overriding concern, however, is the funding of a plan when it terminates. In fact, the ability of funding rules actually to cause a firm to finance its pension plan fully, and reduce future PBGC claims, depends on how the firm calculates pension benefits. Some firms base these benefits on a worker's cash compensation near the time of retirement—for example, an employee may receive annual pension benefits equal to 30 percent of his or her final salary. The Internal Revenue Service requires firms that sponsor this kind of plan, called a final-pay plan, to project their employees' final salaries when they determine their annual normal-cost payments. But if a final-pay plan terminates, workers receive benefits based on their current, not final, salaries. Consequently, because final-pay plans that terminate have based their pension funding on the expectation of making higher benefit payments than will actually be paid, they will almost always be overfunded when they terminate.

In contrast to final-pay plans, flat-benefit plans base their benefit payments on a flat dollar amount for each year of service. This kind of pension plan is common in heavy manufacturing, and benefits normally increase with every contract renegotiation (in many cases, every three years). The steadily increasing benefits cause a large past-service liability to accumulate as workers are granted increases in deferred compensation for past work. Because the IRS does not allow firms to anticipate these increases, flat-benefit plans perpetually build up past-service liabilities that are funded over long periods. In other words, the plans are always trying to pay off old debt, which, in turn, is always increasing. If these plans terminate, therefore, they will almost always be underfunded, even though they have met all of the legal requirements for funding. Because of these funding patterns and rules, flat-benefit plans, which make up only 25 percent of all defined-benefit plans, are a major cause of PBGC's losses.

Table 2.
U.S. Firms with High Levels of Unfunded Pension Benefits Guaranteed by the Pension Benefit Guaranty Corporation, 1991 (In millions of dollars)

Rank[a]	Company	Guaranteed Pension Benefits	Pension Plan Assets	Unfunded Guaranteed Pension Benefits	Guaranteed Funding Ratio (Percent)[b]
1	General Motors	48,194	38,903	-9,291	81
2	Chrysler	8,430	4,855	-3,575	58
3	LTV	3,244	425	-2,819	13
4	Bethlehem Steel	5,079	3,492	-1,587	69
5	Navistar International	2,621	2,050	-571	78
6	Uniroyal-Goodrich	898	391	-507	44
7	Westinghouse Electric	4,749	4,275	-474	90
8	American National Can	883	516	-367	58
9	New Valley Corporation	677	331	-346	49
10	Trans World Airlines	936	592	-344	63
11	Rockwell International	741	437	-304	59
12	National Intergroup	721	434	-287	60
13	Deere & Co.	1,417	1,185	-232	84
14	Bridgestone-Firestone	519	305	-214	59
15	Goodyear Tire & Rubber	1,332	1,146	-186	86
16	Budd Co.	494	333	-161	67
17	Crown Cork & Seal Co.	687	528	-159	77
18	Maxxam	769	617	-152	80
19	CSX Corporation	958	815	-143	85
20	Goodrich (BF)	628	490	-138	78
21	Loews	263	129	-134	49
22	Cyclops Industries	403	275	-128	68
23	RJR Nabisco Holdings Co.	852	727	-125	85
24	Reynolds Metals	657	542	-115	82
25	Keystone Consolidated Ind.	195	85	-110	44

(Continued)

SOURCE: Pension Benefit Guaranty Corporation.

a. Companies are ranked according to the amount of their unfunded guaranteed pension benefits.

b. The guaranteed funding ratio is calculated by dividing a plan's assets by its guaranteed pension benefits.

the federal pension insurance program come from a very small number of large plans with substantial underfunding.

PBGC publishes an annual list of the 50 U.S. firms with the highest levels of unfunded pension benefits guaranteed by PBGC (see Table 2). In 1991, these firms accounted for 60 percent ($24 billion) of the $40.1 billion in total underfunding in the nation's 65,000 single-employer, defined-benefit pension plans. The top four firms (General Motors, Chrysler, LTV, and Bethlehem Steel) were responsible for 43 percent of total underfunding.

Underfunding has been a frequent target of reform legislation. ERISA requires firms that sponsor a pension plan to make regular payments to their plans according to an actuarial schedule (see Box 1 on page 17). On the face of it, this requirement would seem to eliminate the possibility of loss on the part of the federal government, but PBGC's experience demonstrates otherwise. Underfunding persists because a number of exemptions have been written into the law that permit firms to make use of various funding options.[3]

3. For further discussion of the causes of underfunding, see the statement of James B. Lockhart III, executive director of PBGC, before the House Ways and Means Committee, Subcommittee on Oversight, August 11, 1992.

Table 2.
Continued

Rank[a]	Company	Guaranteed Pension Benefits	Pension Plan Assets	Unfunded Guaranteed Pension Benefits	Guaranteed Funding Ratio (Percent)[b]
26	Sharon Steel	231	122	-109	53
27	Anchor Glass	267	159	-108	60
28	White Consolidated Ind.	328	230	-98	70
29	Allegheny Ludlum	405	313	-92	77
30	Tenneco	279	191	-88	68
31	Borg-Warner	206	121	-85	59
32	Northwest Airlines	437	357	-80	82
33	Ravenswood Aluminum Corp.	85	10	-75	12
34	Varity	315	243	-72	77
35	Pacificorp	549	478	-71	87
36	Morrell & Co.	118	51	-67	43
37	Honeywell	433	367	-66	85
38	Burlington Northern	497	431	-66	87
39	ACF Ind.	189	124	-65	66
40	Armco Steel LP	737	672	-65	91
41	Carter Hawley Hale	143	81	-62	57
42	Occidental Petroleum Corp.	177	115	-62	65
43	National Steel	543	482	-61	89
44	Rohr Inc.	386	326	-60	84
45	Kimberly-Clark Corp.	838	780	-58	93
46	Lacledic Steel	126	70	-56	56
47	Clark Equipment	290	234	-56	81
48	James River Corp.	267	214	-53	80
49	Foxboro Co.	180	129	-51	72
50	ASI Holdings	244	199	-45	82
Total		94,617	70,377	-24,240	74[c]

c. The total guaranteed funding ratio is calculated by dividing total plan assets by total guaranteed pension benefits.

Amortizing Pension Debt. Before ERISA, the law did not establish funding requirements for pension plans, and many plans operated with partial funding. Accordingly, when ERISA was enacted, it included provisions for a transition that allowed firms to fund their pension deficits over a period of 40 years, rather than requiring them to make large initial payments. ERISA makes other allowances as well; for example, it permits firms to finance pension shortfalls from other causes, such as changes in actuarial assumptions (see below) or differences between a firm's estimates of its rate of return and its actual experience over many years.

The exact time frame over which underfunding can be amortized depends on the cause of the shortfall. As a result, a firm may fulfill all of its annual funding requirements but be unable to pay its long-term liabilities when the pension plan terminates. Box 1 describes how these amortization rules allow many flat-benefit plans to be continually underfunded.

Deterioration Before Termination. Pension plan underfunding rises rapidly in the period before a plan terminates when the sponsor is experiencing economic distress. Firms in financial trouble may seek funding

waivers, defer pension contributions (if permitted by a bankruptcy court), lay off workers, offer early retirement, and close plants. All such responses to financial distress tend to increase underfunding either by slowing the accumulation of assets in the plan or speeding early retirements. "Shutdown benefits," for example, may allow a worker whose plant is closed to receive full retirement benefits earlier than other workers receive them. Because plant closings are rarely anticipated, these benefits are almost never funded in advance.

Funding Waivers. The IRS can grant waivers to firms in financial distress that allow the firms to skip their minimum pension contribution for one year. A waiver can be approved in 3 of 15 years (ERISA originally allowed waivers in 5 of 15 years). In recent years, bankruptcy courts have weakened the need for IRS waivers by allowing distressed firms to reduce contributions to their pension plans. If a plan terminates soon after it receives a waiver or after a period in bankruptcy, it probably will not have caught up with its funding contributions. The gap is PBGC's loss.

Changes in Actuarial Assumptions. The funding status of the pension plan is affected by the actuarial assumptions it uses—for example, its assumptions about the future rate of return on the pension plan's investments, the ages at which workers will retire, and the mortality rates of pensioners. A plan that is fully funded under the assumptions that it will earn a 10 percent return on its assets and participants will retire at age 65 will be substantially underfunded if its investments only bring a 7 percent rate of return and a rash of employees retire early. Assumptions about interest rates play a crucial role in determining the funding level of a pension plan because actuaries (individuals who calculate the contributions necessary to fund future insurance or pension payments) use them to predict the amount of interest income that the pension plan's assets will generate. If the interest rates turn out to be lower than they were assumed to be, a contribution that appeared adequate will not provide the requisite funds.[4]

Composition of Plan Assets. The type of assets held by a pension plan will affect the ability of the plan to pay employees the pension it has promised them. Existing federal and state laws give pension managers substantial discretion in their choice of investment strategies. If they choose to do so, managers can invest in assets that produce a fixed income, which they expect will match the amount and timing of the cash benefits the plan must pay. This strategy, which is called immunization, attempts to guard the pension plan against loss as a result of changes in interest rates and in the prices of assets. An immunization strategy is not attractive to all pension sponsors, however, because it may not result in a perfect match if unanticipated changes occur, for example, in the average age of retirement. Furthermore, the rates of return on the investments of immunized plans are lower than the rates that plans expect to earn on riskier investments. Consequently, an immunization strategy may increase the cost of pensions to the sponsor.

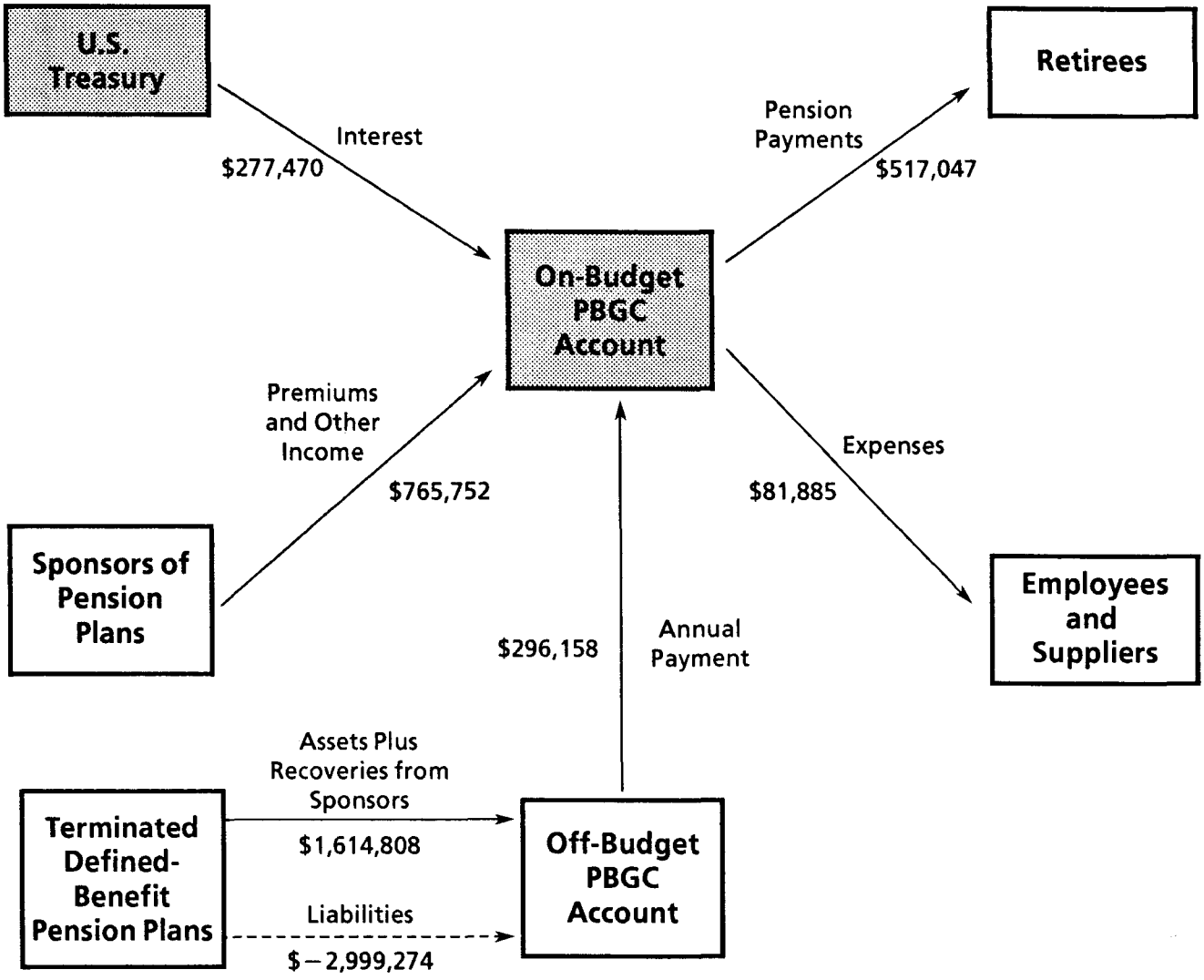
Rather than mandating immunization of all pension plans, ERISA requires that the assets in a plan be diversified; their exact mix depends on the size of the plan, its goals, and other factors. Asset managers must also consider the cash flow needs of the plan in relation to the liquidity of its assets and the rate of return on its investments. But within these requirements is substantial latitude for plan managers to adopt risky funding strategies.

Premiums Are Not Sufficiently Related to Risk

PBGC's current annual premium has a flat-rate component of $19 per plan participant and a variable component of $9 per $1,000 of plan underfunding. The total annual premium is capped, however, at $72 per plan partic-

4. ERISA requires that actuarial assumptions be "reasonable" and represent an actuary's best estimate of the future. Because plans achieve different rates of return on investments, actuaries are given discretion in the assumptions they use.

Figure 1.
How Funds Flow to and from the Pension Benefit Guaranty Corporation Under the Current Budgetary Treatment



SOURCE: Congressional Budget Office.

NOTE: Shaded boxes indicate on-budget entities. The amounts shown are 1991 figures (in thousands of dollars).

ipant. It is thus independent of the dollar value of the insurance, is adjusted only for a part of the risk of underfunding, and ignores both the chances that a firm will fail and the riskiness of the investments that are the pension plan's assets.[5]

The level of PBGC's premiums and their structure—their responsiveness to changes in risk—affect PBGC's deficit in two ways. First, the amount of the premiums determines the amount of income PBGC receives. Subject to the limitation imposed by the willingness and ability of firms to leave the system (see Chap-

5. For a more complete treatment of investment risk in pension insurance, see Zvi Bodie and Robert C. Merton, "Pension Benefit Guarantees in the United States: A Functional Analysis" (paper presented at the Pension Research Council Symposium, Philadelphia, Pennsylvania, May 8, 1992).

Table 3.
On-Budget Obligations and Offsetting Collections of the Pension Benefit Guaranty Corporation, 1981-1991 (By fiscal year, in thousands of dollars)

	1981	1982	1983	1984	1985	1986
Obligations						
Pension payments to participants	41,934	75,184	131,409	141,880	161,029	238,794
Administrative expenses	21,499	22,911	27,881	32,650	31,508	30,808
Capital investment[a]	112	92	1,159	3,149	2,745	2,465
Other[b]	15,825	6,085	739	2,336	0	0
Total	79,370	104,272	161,188	180,015	195,282	272,067
Offsetting Collections						
Payment from the off-budget account	18,661	39,134	55,310	63,108	76,338	79,107
Premiums	86,463	91,633	93,861	95,012	95,300	216,122
Income from investments	17,574	26,073	32,355	30,625	37,564	47,769
Other[c]	335	125	899	1,034	1,148	924
Total	123,033	156,965	182,425	189,779	210,350	343,922
Obligations Minus Offsetting Collections	-43,663	-52,693	-21,237	-9,764	-15,068	-71,855
Net Outlays[d]	-29,000	-66,900	-9,500	-9,900	-19,100	-105,900

(Continued)

SOURCE: Office of Management and Budget.

a. Capital investment is made up of equipment purchases and financial assistance.

b. Other obligations include losses on the sale of government securities and various service costs related to the termination of pension plans.

ter 2), higher premiums mean higher income. Second, the premium structure can affect the risks the sponsor takes. If the level of underfunding in a pension plan does not affect the premiums PBGC charges, the plan's sponsor will have little incentive to allocate funds to the pension plan rather than to other uses. The pension fund will receive monies above the legal minimum only if it is the most profitable after-tax alternative for the firm. A premium structure more closely related to the likelihood that PBGC will have to assume a plan's pension payments would help align PBGC's premium income with its costs.[6]

Lags Occur in Policy Adjustment

The Congress establishes PBGC's premium rates, premium structure, and covered benefits, and it has modified these components of the program on several occasions to try to halt PBGC's losses. But by the time these changes are agreed to, legislated, and implemented, additional losses have accumulated and become part of PBGC's growing deficit.

PBGC reports that four years elapsed between the time it requested an increase—from $2.60 to $8.50—in the insurance premium per plan participant and the Congress's enactment of the increase, effective January 1,

6. A study of risk-related premiums for PBGC found that the average plan in 1985 should have paid $65 per participant; 19 plans sponsored by 11 firms should have paid a premium greater than $500 per participant; and 2 firms should have paid more than $8,000 per participant. When the study was conducted, the premium was $16 per participant, with $6 per $1,000 of underfunding up to a maximum of $50 per participant. See Jack VanDerhei, "An Empirical Analysis of Risk-Related Premiums for the Pension Benefit Guaranty Corporation" (report submitted to the Pension Benefit Guaranty Corporation, 1988).

Table 3.
Continued

	1987	1988	1989	1990	1991
Obligations					
Pension payments to participants	471,211	449,593	716,646	671,581	517,047
Administrative expenses	35,443	37,122	61,770	67,689	40,901
Capital investment[a]	1,947	2,030	1,425	1,154	2,688
Other[b]	0	694	0	4,223	38,296
Total	508,601	489,439	779,841	744,647	598,932
Offsetting Collections					
Payment from the off-budget account	306,102	17,058	487,906	387,468	281,162
Premiums	284,366	481,705	623,604	680,621	763,575
Income from investments	42,065	60,099	71,696	106,438	277,470
Other[c]	4,280	1,399	6,849	805	17,173
Total	636,813	560,261	1,190,055	1,175,332	1,339,380
Obligations Minus Offsetting Collections	-128,212	-70,822	-410,214	-430,685	-740,448
Net Outlays[d]	-71,900	-277,700	-149,100	-679,900	-787,900

c. Other offsetting collections consist mainly of a payment from the off-budget account to the on-budget account for services rendered.

d. Net outlays equal obligations minus offsetting collections adjusted for funds that are committed but for which checks have yet to be issued. A negative net outlay reduces the budget deficit.

1986. By then it could be seen that even $8.50 would not be sufficient to cover PBGC's costs. The four-year delay reduced PBGC's premium income by more than $500 million from what it would have been if the increase had gone into effect when it was proposed.[7]

The Pension Insurance Program Has Inadequate Systems of Information and Control

Neither PBGC's financial statements nor the federal budget provides a comprehensive measure of PBGC's financial condition. PBGC's financial statements, which are prepared according to generally accepted accounting principles for commercial firms, are incomplete descriptions of its financial status and the extent of its exposure to claims. Moreover, although budget projections may include some information about PBGC's premiums and its expectations regarding pension claims, they have only limited value because the projection period is short in relation to the payment period for terminated pension plans.

The way the budget accounts for federal pension insurance further diminishes the usefulness of budgetary information in assessing the system's performance. The budget uses a cash-basis method of accounting. Cash basis means that transactions are recognized only when cash is received or paid out by the government. The difference between these two cash flows for a program is its contribution to the federal budget's surplus or deficit.

7. Pension Benefit Guaranty Corporation, *Promises at Risk* (April 1987), pp. 7, 21, and 24.

PBGC collects cash premiums now in exchange for the obligation to pay pensions later. Its cash inflows reduce the budget deficit, whereas its obligation to pay pensions in the future has no effect on the deficit. In 1991, PBGC's activities reduced the reported federal budget deficit by $788 million.

The budget's reporting of PBGC's financial performance is further complicated by its use of two accounts: an off-budget fund, which receives and holds all assets that can be recovered from terminated, underfunded plans, and an on-budget fund, which pays out the guaranteed benefits that PBGC insures (see Figure 1 on page 21). The off-budget account makes an annual payment to the on-budget account; the amount of the payment is determined by a formula based on the ratio of assets to liabilities in the off-budget account. This payment, along with the premiums the on-budget account receives from pension sponsors and the interest it earns on balances held at the U.S. Treasury, counts as an offsetting collection of the on-budget account. The on-budget account also records payments to retirees and to PBGC's suppliers and employees. This budgetary treatment depicts PBGC in terms of the net annual cash flows between the on-budget account and all other entities. It does not disclose the level of or changes in the imbalance between PBGC's assets and liabilities.

Each year since its creation in 1974, PBGC has received more in offsetting collections than it has paid out. Table 3 shows the cash-

Table 4.
Financial Statement of the Pension Benefit Guaranty Corporation's Off-Budget Account (By fiscal year, in thousands of dollars)

	1981	1982	1983	1984	1985	1986
Assets						
Investments	212,962	333,073	498,340	643,379	689,768	1,084,047
Monies due from PBGC	293,160	585,382	701,246	811,991	1,596,597	2,722,930
Monies due from terminated pension plans	49,776	62,915	79,396	58,500	128,538	168,810
Monies due from pension plans not yet terminated	0	2,000	2,000	0	0	41,647
Assets from terminated pension plans	85,732	126,499	113,490	30,400	53,445	19,117
Assets of pension plans not yet terminated	0	34,000	33,000	0	207,200	456,281
Other[a]	12,702	12,597	68,993	27,730	13,146	13,146
Total	654,332	1,156,466	1,496,465	1,572,000	2,688,694	4,505,978
Liabilities						
Future pension payments to participants of terminated plans	586,000	1,070,933	1,376,100	1,552,600	2,004,700	3,480,437
Future pension payments to participants of plans not yet terminated	65,613	84,000	100,000	0	671,200	1,012,739
Other[b]	2,719	1,533	20,365	19,400	12,794	12,802
Total	654,332	1,156,466	1,496,465	1,572,000	2,688,694	4,505,978

(Continued)

SOURCE: Office of Management and Budget.

basis surpluses (the negative net outlays) for the on-budget account since PBGC was brought on-budget. Because of the cash-basis treatment of the on-budget account, PBGC has reduced the reported federal budget deficit by $2.2 billion since 1981—even as it was accumulating a deficit of $2.5 billion. The on-budget account will report more payments than collections (and increase the deficit) only when PBGC's premiums for the current year, the interest it receives on its Treasury balances, and payments from the off-budget account are less than the year's pension payments and administrative costs. But by that point, PBGC will have built up an even larger deficit. In the meantime, the budget gives little indication of PBGC's deteriorating financial condition and scant incentive to adopt policies that would balance premium income and program costs.

The current budgetary treatment also makes PBGC vulnerable to "creative" budgetary accounting that can distort the cost of proposed policy changes. For example, some in the Congress have proposed policies that would increase PBGC's payments from the on-budget account to retirees. Under these proposals, the new payments would be offset by an equal transfer from the off-budget account to the on-budget one. With PBGC's current budgetary treatment, the on-budget account would show a change in net outlays of zero—even though PBGC has taken on additional

Table 4.
Continued

	1987	1988	1989	1990	1991
Assets					
Investments	1,351,296	2,081,884	1,599,604	1,010,509	2,361,178
Monies due from PBGC	1,799,345	3,484,251	2,002,012	3,401,741	4,559,661
Monies due from terminated pension plans	434,189	1,289,165	383,236	342,457	271,041
Monies due from pension plans not yet terminated	0	0	4,280	0	180,729
Assets from terminated pension plans	43,022	53,967	48,118	27,780	549,955
Assets of pension plans not yet terminated	123,737	121,153	243,091	3,234,128	595,098
Other[a]	6,865	10,505	7,998	91,465	232,752
Total	3,758,454	7,040,925	4,288,339	8,108,080	8,750,414
Liabilities					
Future pension payments to participants of terminated plans	3,330,426	6,801,814	3,758,542	3,694,271	7,084,782
Future pension payments to participants of plans not yet terminated	417,096	218,453	489,480	4,345,432	1,551,536
Other[b]	10,932	20,658	40,317	68,377	114,096
Total	3,758,454	7,040,925	4,288,339	8,108,080	8,750,414

a. Other assets are monies owed to PBGC from providers of services and from financial transactions that have not yet been completed.

b. Other liabilities are mainly financial transactions that have not yet been completed and expenses that have not yet been paid.

liabilities and acquired no new assets. In reality, PBGC's financial deficit would increase, but this increase would not appear in the federal budget for many years.[8]

As Table 4 shows, the off-budget account also reports a misleading balance between its assets and liabilities. This balance is not the result of somehow rehabilitating and fully funding what were underfunded, terminated pension plans. Rather, it reflects the account's largest single category of assets, "Monies Due from PBGC." This amount measures the extent to which terminated plans were underfunded by their sponsors and is the lump-sum amount needed to cover all of PBGC's current liabilities for pension payments. However, PBGC has only $2.1 billion in the on-budget account to meet this $4.6 billion claim.

As an agency of the federal government, PBGC will not default on its pension guarantees; consequently, its accumulated losses do not threaten the pension security of America's insured workers. Instead, they portend the need to adjust the government's pension insurance policies—to move toward financial stability in the short term and a capacity to sustain balance in the future.

8. See, for example, the Congressional Budget Office cost estimate for S. 243, the Older Americans Act Reauthorization Amendments of 1991, as ordered reported by the Committee on Labor and Human Resources on July 17, 1991.

Chapter Four

Stabilizing Federal Pension Insurance

At least three conditions must be met to transform the federal pension insurance program into a fiscally balanced, stable insurance pool:

- Past losses (sunk costs) must be financed through some form of involuntary assessment.
- The insurance pool must be protected from the heightened moral hazard posed by insolvent insured firms.
- The terms of the insurance must be set—and reset as necessary—so that the income expected in the future is adequate to cover PBGC's expected future costs.

Financing Past Losses and Restoring Fiscal Balance

The process by which firms and their employees agree to establish, maintain, and fund defined-benefit pensions is not well understood.[1] What is clear, however, is that the sponsor of a pension plan will not continue the plan if the expected costs of doing so exceed the expected benefits. An element likely to be important in a sponsor's decision is the level of Pension Benefit Guaranty Corporation premiums the plan must pay. The insurance pool will be more stable if the premiums and regulatory costs for PBGC's insurance coverage are no greater than the benefits it provides to the insured.

If the sponsor of a pension plan will voluntarily pay only as much in premiums as equals the benefits it expects to receive from the insurance, then some involuntary source of financing will need to be tapped to pay for PBGC's past unfunded losses. Two important questions about these costs are, which of them are indeed past, or "sunk," and who should cover them?

Identifying Sunk Costs

Sunk costs are those costs that cannot be avoided by actions taken now. For example, once someone acquires an asset that has no resale value, the money paid for the asset is "sunk." No action taken by the owner can retrieve this expenditure. In pension termination insurance, however, sunk costs are more difficult to identify. For example, one could regard the underfunding of a pension plan sponsored by a firm that was teetering on the brink of insolvency as a sunk cost for PBGC and unavoidable now. Of course, if the firm recovers and fully funds its plan, PBGC incurs no cost.

1. See Alan Gustman, "Comments on 'Innovations and Trends in Pension Plan Coverage, Pension Type and Plan Design' " (paper presented at the Pension Research Council Symposium, Philadelphia, Pennsylvania, May 8, 1992).

Potential measures of sunk cost form a spectrum from almost certain to probable to possible. First, for plans that PBGC has already taken over, the difference between the value of the assets and the value of the pension liabilities in those plans, minus PBGC's accumulated premiums, might be considered unequivocally sunk and beyond recovery. Yet few events have a probability of occurrence of exactly zero. It is highly improbable, but possible, that the assets held by PBGC as the plan's trustee could rise in value and wipe out the accumulated deficit. It is also improbable, but possible, that firms that had turned their pension plans over to PBGC might rise, phoenix-like, from their financial ruins. If this were to happen, PBGC could return the plans to their sponsors and avoid the costs of providing pensions. On balance, however, PBGC's accumulated deficit of $2.5 billion is almost certainly sunk and beyond recovery.

A second category of losses that might be considered sunk costs is the underfunding in plans sponsored by firms that cannot afford to pay a fair premium for their insurance. Again, a "resurrection" is not wholly impossible, even though it is extremely unlikely. Similarly, a case could be made for including in this category the underfunding in plans sponsored by firms that are in distress but not yet eligible to make a claim. An operational difficulty with this estimate is that with its current information system, PBGC cannot always identify these firms.

Each year, PBGC estimates the amount of underfunding in plans that have a "reasonably possible" chance of terminating. By current accounting standards, this class of expected terminations consists of cases that, though not likely to occur, nevertheless have more than a slight chance of occurring. PBGC currently classifies $12 billion in underfunding as reasonably possible losses. Yet at least some of these losses appear to be avoidable and hence are not fixed. Consequently, a reasonable estimate of PBGC's sunk costs falls between $2.5 billion and $14.5 billion.

One measure of sunk costs that might be estimated in the future is the underfunding in defined-benefit plans in excess of the net worth of the sponsor, figured at its market value but excluding the value of the pension insurance. Thus, for example, a pension plan with $10 in underfunding, sponsored by a firm whose market value net worth is $1 (excluding the value the firm receives from being able to shift its pension liabilities to PBGC), constitutes a sunk cost to the insurance system of $9. This kind of measure is appealing because it places an expected value on PBGC's loss that incorporates the market's valuation of the firm and the financial position of the pension plan. It is not especially useful now, however, because PBGC cannot calculate these measures with the information available to it.

Financing Sunk Costs

An insurance system is limited in its ability to recover past losses from current premiums. In general, firms will not voluntarily pay for something from which they can expect no present or future benefit. As a result, the government will probably need to finance past losses with a tax, rather than through premiums—which firms can avoid by leaving the insurance program.

Financing past losses through an assessment levied on all insured firms, independent of any attribute that they have now—a lump-sum tax—avoids the adverse selection that follows a surcharge on premiums. Assessing all firms in this manner renders the levy, like the loss, unavoidable by those who must bear it. This lump-sum approach, however, strikes some observers—and most of those who would be required to pay—as inequitable. Because surviving premium payers have already subsidized to some extent the insurance of firms who built up the sunk costs, they have been at a competitive disadvantage in relation to those firms; with a lump-sum tax, these same healthy firms will be harmed again by having to pay what are really deferred costs of wages

incurred by their competitors. Furthermore, to the extent that firms come to anticipate these taxes, the insurance pool will experience adverse selection similar to that resulting from premium surcharges.

Pension recipients could also constitute a taxable source of funding. All those who receive defined-benefit pensions could be taxed using the rationale that they benefited from the insurance program in the past. An alternative would be to focus the assessment more narrowly on those who have actually received PBGC assistance. Yet despite these direct or indirect benefits from PBGC, it will still strike many pensioners and policymakers as unfair to expect pension recipients to pay for underfunding that they did not cause and against which they were explicitly insured.

Another option is to provide a subsidy funded by all taxpayers to cover PBGC's past losses. The main argument against choosing this option is that it runs counter to the long-standing statutory declaration that pension insurance is to be fully funded through premiums. In addition, assessing taxpayers for these losses raises concerns about equity, given that some evidence suggests that pension plan participants have higher-than-average incomes.[2] Another disadvantage of assessing taxpayers is its potential for weakening the government's resolve to control costs, which in turn could stimulate the demand for more subsidies.

Confronting Insolvency and Moral Hazard

Insured firms on the brink of financial failure are extraordinarily dangerous to any insurance pool they are part of because their owners now have nothing to lose from high-risk business strategies. PBGC must have both the authority and the structural incentives to stop these firms from imposing their gambling losses on the pension insurance system.

One way PBGC can limit these losses is to initiate the involuntary termination of an insolvent firm's pension plan.[3] Under ERISA, as amended, PBGC can terminate an insured pension plan without the agreement of the sponsor to avoid either an unreasonable deterioration in the plan's financial condition or an increase in PBGC's liability.[4] Once a plan has been terminated, the firm can no longer increase its pension liability or dissipate its pension assets. PBGC may be reluctant to rely heavily on involuntary terminations, however, because it is often unaware of the true financial condition of the sponsors of its 65,000 insured plans. An additional factor is a concern that such terminations could lead creditors and shareholders to believe—perhaps incorrectly—that the failure of the firm was imminent.

Another method of preventing weakened firms from increasing PBGC's costs is to limit the amount of pension benefits PBGC will insure if a plan is underfunded. The Bush Administration offered a reform proposal along these lines, which would have denied insurance for any increase in benefits offered by an underfunded plan. Legislation offered by Congressman J.J. Pickle (D., Tex.) and Senators James M. Jeffords (R., Vt.) and David Durenburger (R., Minn.) in the last Congress would have prevented most underfunded plans from offering increased pension benefits

2. See David Ellwood, "Pensions and the Labor Market," in David Wise, *Pensions, Labor and Individual Choice* (Chicago: University of Chicago Press, 1985), pp. 19-49.

3. PBGC can limit the type of benefits offered by a firm that has just terminated a pension plan. For example, a firm cannot begin another pension plan solely to make up the gap between the benefits offered under the terminated plan and the benefits covered by PBGC.

4. To proceed with an involuntary termination, PBGC must have a court order. In addition to the criteria already mentioned for an involuntary termination, PBGC can institute court proceedings if the pension plan did not meet its minimum funding requirements or cannot pay benefits, if the firm's owner receives a pension payment from the plan of more than $10,000, or if the liability of PBGC may be expected to increase if the plan is not terminated.

that were not backed by the collateral of the firm.[5] Forcing firms to pay for new benefits before they can grant them would limit PBGC's losses from go-for-broke strategies.

Adjusting Policy to Maintain Balance

Most sponsors of defined-benefit pension plans are financially healthy, and their plans would be fully funded if they were terminated today. The objective of the pension insurance system with respect to these firms must be to structure the insurance contract over their remaining life to minimize the risk of underfunding in their pension plans and to ensure that the premiums they pay are sufficient to cover their costs to the insurance pool. Various policy adjustments have been proposed to control or fund PBGC's future losses.[6] These options include more stringent funding rules and greater use of coinsurance to reduce costs, and higher premiums to raise PBGC's revenues. At least one option—risk-based premiums—would do both.

Tighten Funding Rules

Several proposals would raise the level of funding for pension plans. These options include requiring flat-benefit plans to prefund any anticipated benefit increases; tying pension plan contributions to the funding required to fund the plan fully at termination; reducing the amortization period for certain pension funding gaps; increasing the minimum annual payments sponsors must make to the plan; requiring sponsors to prefund liabilities that are contingent on future events, such as shutdown benefits; and basing the required funding of a pension plan on the amount of its cash outlays—funding over a year would have to equal at least as much as was paid out that same year.

Although these funding rules could reduce PBGC's losses, they could also have certain negative consequences. First, increases in the funding required for pension plans lower the collection of federal taxes, because pension contributions are classified as a business expense and are deducted from corporate income before taxes are calculated. Second, if the funding required for pensions is increased, it will divert resources from other uses. If a firm can earn a higher rate of return on investments outside the pension plan, increasing the plan's required funding may not allow the firm to use its funds as efficiently as it might and will limit its financial flexibility. Finally, some pension analysts argue that raising the level of funding in pension plans would weaken the bond joining employers and workers when pension plans are underfunded—that is, their mutual interest in the firm's continued existence.[7]

Increase Coinsurance

PBGC can reduce its future losses by greater use of coinsurance. One such option is to restrict the extent of the liability PBGC assumes for pensions in underfunded plans—in essence, making employees coinsurers of their own benefits. For example, PBGC could lower the cap on benefit payments (from its current rate of $2,437.50 a month) in proportion to the underfunding present in a particular plan. PBGC insurance coverage could also exclude pension contingencies, such as shutdown benefits, if underfunding reaches a specified, critical level. Limiting the insurance coverage on new benefits offered by underfunded pension plans (discussed earlier) is another

5. H.R. 5800 and S. 3162, 102nd Cong., 2nd Sess. (1992).

6. For a more complete discussion of many of these reforms, see Congressional Budget Office, *Federal Insurance of Private Pension Benefits* (October 1987).

7. See Richard A. Ippolito, "The Economic Function of Underfunded Pension Plans," *Journal of Law and Economics*, vol. 28 (October 1985), pp. 611-651.

form of coinsurance. A disadvantage of this option is that it appears to hurt the workers who were meant to benefit from PBGC insurance.

The coinsurer need not be an employer or an employee; it can be a third party. When a firm goes bankrupt, the debt it owes its pension fund is usually only one among many debts. Bankruptcy proceedings and the law establish priorities for payment among a firm's creditors. If PBGC received funds from the firm that otherwise would go to these third parties, those creditors would experience losses that would constitute coinsurance payments. The Bush Administration sought this priority status for PBGC in its proposed reform legislation.

PBGC's claims might be given an even higher priority in bankruptcy proceedings to enlarge the coinsurance contribution of the other creditors. The rationale for this option is that creditors have both the incentive and the power to restrain the risks a debtor assumes, especially as the debtor's credit rating deteriorates.[8] Ensuring that PBGC has substantial standing in bankruptcy proceedings should increase the amount of money PBGC receives on its claims at the expense of other creditors. However, this ability to shift costs to third parties will not remain constant. If a PBGC claim against a firm appears likely, creditors will demand collateral from the firm or simply not make loans to it. Increasing the status of PBGC in bankruptcy proceedings will thus hamper the ability of troubled firms to raise capital.

Base Premiums on Risk

Setting premiums that fully reflect the risk of the loss posed to PBGC by the firms it insures would limit PBGC's losses in two ways: it would raise the income PBGC received from premiums, and it would be an incentive to firms to take fewer risks with their pension funding.

The Congress could structure premiums in one of several ways to reflect more closely the risks a firm assumes. First, it could relax or drop altogether the current annual cap on premiums (set at $72 per plan participant). Second, it could tie a plan's premiums to the probability that its sponsor will fail by charging financially weak firms more than healthy firms. Third, it could vary premiums according to the extent to which plans provide benefits that are contingent on future events, such as a plant shutdown. In the same vein, it could adjust premiums to reflect the risk to PBGC posed by flat-benefit plans—as a result of their lower funding levels. Finally, it could link premiums to growth in wages so that premiums would increase as pensions grew.

One disadvantage of risk-based premiums is the difficulty in determining precisely how and over what period to compute them. The task first requires that PBGC reliably identify those factors associated with its losses, and although some progress has been made in this direction, their identification is still incomplete. Recently, PBGC began an intensive research project to measure these factors.

Some policymakers oppose the idea of risk-based premiums in the belief that forcing firms to pay a fair premium for pension insurance will push some of them needlessly into bankruptcy. But levying a risk-adjusted premium in exchange for insurance coverage does not affect the net worth of a firm. If the premium is exactly equal to the value of the insurance, the simultaneous grant of insurance and the collection of a cash premium leaves the firm's total assets unaffected.[9] This

8. Daniel Keating advances a proposal for a PBGC "superpriority" claim in "Pension Insurance, Bankruptcy and Moral Hazard," *Wisconsin Law Review*, vol. 1991, no. 1 (1991), pp. 65-108. For a broader discussion of this issue, see David C. Lindeman and Michael W. Rae, "Pensions and Bankruptcy," *American Enterprise* (forthcoming).

9. See Peter A. Abken, "Corporate Pensions and Government Insurance: Deja Vu All Over Again?" *Economic Review*, Federal Reserve Bank of Atlanta (March/April 1992), pp. 1-16. Abken develops this point by treating the insurance as an option, conferred on the insured, to shift the assets of the insured to the government at a price equal to the nominal value of the liabilities the government will assume.

means that an insured firm that cannot pay a premium appropriate to the risk it poses to PBGC is already insolvent and continues to function only because of the subsidy it receives from its involuntary creditor, the federal government through PBGC. It is not true, therefore, that risk-based premiums cause bankruptcy; rather, the inability of the firm to pay its insurance premium is the result of bankruptcy brought on by other factors.

Although using a premium structure based on risk poses technical challenges to those who must calculate it, such a structure may be worth the effort on the grounds of equity and program stability. With the way PBGC's premiums are structured now, some firms pay more than a fair premium, and weak firms with underfunded plans pay too little. The overcharged firms have an incentive to leave the system, and the high-risk, undercharged firms have an incentive to stay until they can bequeath their underfunded plans to PBGC. To improve the equity and long-term financial balance of the system, the Congress and PBGC must link the premiums for pension insurance to those characteristics of the sponsoring firms and their pension plans that lead to losses.

Most of the policy adjustments discussed here would lessen the risk of losses to PBGC. It is not sufficient, however, merely to identify those policies that, if adopted, would restore and maintain financial balance. To increase the likelihood that the government will adopt appropriate policies with sufficient speed to avoid the accumulation of sunk costs in the future, the Congress needs to improve the process for managing federal pension insurance. Several structural reforms deserve consideration, including improved information systems, better budgetary information and incentives for cost control, and changes in allocating responsibility for PBGC's financial condition.

Chapter Five

Restructuring Pension Insurance to Control Future Losses

The Pension Benefit Guaranty Corporation, in its present form, is prone to deficits. This tendency reflects a management structure that is poorly suited to the task of maintaining fiscal balance in this complex system. The system often needs prompt policy adjustments to offset the change in risk posed by some pension plans, but these adjustments must be made by the Congress, which is deliberative rather than quickly responsive. Even if the needed adjustment is simply to change the insurance premiums paid by a few sponsors, it requires a legislated change in the law. At its best, the Congress is not institutionally suited to a managerial role. In the case of pension insurance, however, it suffers from an additional disadvantage: the budget—one of the most important instruments for informing and motivating Congressional action—misstates the financial condition of PBGC. At the same time that the pension insurance program is accumulating losses, the budget shows this activity as not only self-supporting but contributing to a lower federal deficit as well.

The current structure of the system makes inadequate provision for gathering, evaluating, and using information to achieve its objective of financial balance. These capabilities need to be strengthened if future losses are to be controlled.

Improving Information

Information is the lifeblood of a pension insurance system, particularly when the objective is to protect those it insures without simply shifting pension losses to some other group of citizens. Today, the Congress finds itself in the same uninformed, disadvantaged position as the participants of defined-benefit plans in the period before the pension insurance program was established. As the manager of the insurance system, the Congress can perceive only dimly the extent to which this program is accumulating unfunded future claims.

The capacity to monitor the financial condition of both pension plans and their sponsoring firms is the first prerequisite to avoiding unanticipated, unfunded program losses. This information enables the government to anticipate the pension claims for which it is likely to be liable and to compare those claims with the expected flow of income from premiums. These comparisons of expected costs and premiums for individual pension plans and in total for all plans measure the financial performance of the pension insurance program. They also signal the need for policy adjustments to shift the expected costs of risky pension funding strategies back onto those sponsors who decided to adopt these methods—either through changes in premiums, additional restrictions on funding, or further limitations on the coverage the insurance program will provide.

If the Congress wishes to retain its managerial role in the federal pension insurance system, it may also wish to change the budgetary treatment of PBGC so that the information in the budget more accurately depicts the financial performance of the system. One possibility is to modify the budgetary accounting for pension insurance so that PBGC's

annual contribution to the federal deficit is its increase in unfunded pension liabilities. This change would provide the Congress with a more accurate measure of the program's net use of federal financial resources. As an alternative option, the Congress might simply require more frequent and more detailed supplementary reports from PBGC.

Linking Information and Corrective Action

Once the government detects financial imbalance in the pension insurance program, it should adopt corrective measures promptly. Otherwise, losses will accumulate. The timeliness of Congressional action to restore financial balance may improve significantly with a more appropriate budgetary treatment of pension insurance. One way to ensure prompt action is to create automatic linkages between financial shortfalls in the program and the appropriate policy adjustments. For example, the Congress could make provisions in advance for offsetting policy actions to be triggered by a reported deficit for PBGC. These offsets might consist of an appropriation of general tax revenues, a change in premiums, or a reduction in insured benefits. A difficulty with predetermined corrective actions, however, is that the prescribed response may not always be appropriate to what are often unforeseeable initiating circumstances.

Another approach would be to delegate to PBGC some of the responsibility for maintaining a balance between premium income and costs. Under this strategy, the Congress would provide general policy guidance to PBGC and oversee its management of the pension insurance system. As yet another option, the Congress may conclude that the private sector would be more effective than a government entity in managing the pension insurance system.

Before the Congress considers enacting any of these structural reforms, it may wish to make some minor changes to reduce the perverse incentives that now affect the federal management of pension insurance. First, it could take PBGC completely off-budget. Doing so would prevent PBGC's current cash flow, which is positive, from reducing the budget deficit when in reality PBGC is accumulating losses. However, this change is inconsistent with the concept of a comprehensive, unified budget. In addition, if it were carried out without adopting other measures to improve the quality of the information reported to and by PBGC, the Congress might receive even less information than it does now and, in turn, might react even more slowly to PBGC's financial imbalances.

Second, the Congress could remove PBGC from the pay-as-you-go (PAYGO) scorecard, a strategy used for deposit insurance.[1] This change would prevent policy adjustments that improve PBGC's cash flow from financing spending increases in other programs (because the policy adjustments reduce the federal deficit in the short term). But this step has limitations as well: although this change would remove an obstacle to appropriate policy adjustments, it would do nothing to actively inform the Congress about the costs of the program or to promote the control of these costs.

Options

Several specific options could address the structural weaknesses in the pension insur-

1. The Budget Enforcement Act of 1990, part of the Omnibus Budget Reconciliation Act of 1990, established pay-as-you-go rules for mandatory spending (such as Social Security and Aid to Families with Dependent Children) and tax revenues. Under these rules, legislation that affects these two budget categories cannot add to the budget deficit. If one provision of a piece of legislation would increase the deficit, another must reduce outlays or raise revenues so that the net effect is zero. Pay-as-you-go violations lead to cutbacks in designated mandatory programs. The PAYGO scorecard is the tally of all these changes, which must add up to zero.

ance system. They all attempt to tie the need for policy adjustments more closely to their actual implementation.

The Information Option

Controlling federal losses in pension insurance first requires that the government develop a measure of the program's financial performance to reveal those losses. At present, the budget displays—but only as supplementary information—a commercial-type statement of PBGC's financial condition, which includes its assets and liabilities for insured, underfunded plans that have already been terminated and those whose termination is imminent. The statement therefore discloses PBGC's accumulated deficit—the difference between the assets it has on hand and the present value of the pension benefits it expects to pay under plans that have already been or are about to be terminated. This measure of financial performance is superior to the current budgetary "bottom line" for pension insurance, which uses net outlays from the on-budget account.

However, policymakers also need a measure of the imbalance between PBGC's expected collections and outlays. Specifically, PBGC could report the present value of the losses it expects to incur on pension plans whose termination is not now reflected in PBGC's balance sheet, as well as the present value of the premiums it expects to collect. The key is to provide a measure that is both credible and easy to understand.

Estimating these present-value amounts is a challenging assignment, but PBGC already provides the Congress with an annual estimate of its expected liabilities for 10 years into the future. In addition, analysts can project the expected life of a sponsor of a pension plan from the level and variance of its equity position—the net value of the firm's assets after subtracting the value of its debt. Smaller amounts of equity combined with big swings in earnings imply a shorter life for a firm than would be expected from a large equity cushion and little variation in earnings. Analysts use the expected life of the sponsor, along with the level and variance of the plan's underfunding, to project the government's estimated losses from pension plan terminations. They also estimate the present value of future insurance premiums by using the premium schedule and the expected number of insured employees who would be subject to each premium rate.

No signal of this kind comes without the noise of uncertainty, however, and consequently, all of the estimates produced by such methods inevitably contain errors. For example, failures of firms cannot be forecast with anything approaching precision. Estimates of the future balance between program income and expense will also be uncertain. But then any reasonable measure of an insurance program's financial health requires such estimates.[2] Although no forecast of this kind can be precisely accurate, the current practice of using estimates of zero for future claims and premiums is bound to be even less precise.

One way to avoid the analytical difficulties of determining the future cost of today's risk is to ignore the long term and set annual premiums for the insurance equal to the deficit in terminated plans for the previous year. A postassessment system like this would "solve" the projection problem, but it ignores the need to control costs and puts exclusive emphasis on financing losses when they can no longer be controlled. The prospect of uncontrolled losses and explosive premium assessments in the future could trigger an exodus of sponsors now from the defined-benefit system.

2. The President's budget for fiscal year 1993 uses simulations and option pricing models to estimate future claims for deposit insurance and PBGC. Several researchers have used these approaches as well. See Alan Marcus, "Corporate Pension Policy and the Value of PBGC Insurance," in Zvi Bodie, John Shoven, and David Wise, eds., *Issues in Pension Economics* (Chicago: National Bureau of Economic Research, 1987); and Mark Flood, "On the Use of Option Pricing Models to Analyze Deposit Insurance," *Review*, Federal Reserve Bank of St. Louis, vol. 72, no. 1 (January/February 1990), pp. 19-35.

The General Tax Revenue Option

The general tax revenue option is a way to link the financial condition of the pension insurance program with the provision of resources. When PBGC reports more liabilities than assets, the Congress would have a choice. It could modify pension insurance policy, using some combination of adjustments to restore fiscal balance (see Chapter 4). Or it could allow the activation of a mandatory appropriation to PBGC from general tax revenues. This appropriated subsidy would equal the amount of the shortfall in the program. The budget would report it as an outlay when the payment was made to the off-budget PBGC account, and total budget outlays and the deficit would increase by the amount of the appropriation. In the case of an excess of assets over liabilities, the off-budget account would make a payment to the on-budget account. Budget outlays and the deficit would decrease by the amount of this payment. The objective is to make it costly to ignore the need for changes in policy.

The Congressional committee with jurisdiction over the terms of the insurance would have to absorb the appropriation, which would count against its budgetary allocation of funds. Faced with a deficit in the insurance program, the committee could adjust premiums, change the terms of the insurance to reduce costs, or do nothing. Because of the automatic adjustment—the mandatory subsidy—the do-nothing option would be an explicit decision to use general tax revenues to subsidize the insurance program.

This kind of policy would solidify the Congressional commitment to fiscal balance within PBGC—first, through an improved flow of information and adjustments in policy, but failing that, through appropriations of general federal funds. With this commitment, the budgetary significance of the annual cash flows into and out of PBGC's on-budget account would diminish. Instead, the fiscal measure that would assume primary budgetary importance would be PBGC's annual subsidy appropriation (if any) from general tax revenues.

On the principle that the budget should highlight the government's use of funds provided by taxpayers and give less emphasis to ancillary cash flows, the subsidy PBGC receives should be included in the reporting of budget outlays and the deficit—that is, in an on-budget account (see Figure 2). In contrast, the cash flows into and out of PBGC from insurance premiums, pension payments, interest earnings, and administrative expenses could be accounted for in an off-budget account, rather than on-budget, as is the current practice.[3] (Of course, interest paid by the Treasury on PBGC's holdings of Treasury debt will be on-budget.)

An alternative would be to treat premiums as equivalent to federal taxes by crediting them to an on-budget account before paying them to the off-budget one. Passing the money through the budget records the premiums as part of the budget's receipts and outlays, just as the budget would record taxes collected and paid to PBGC. The underlying rationale is that the government collects pension insurance premiums through a coercive process that is equivalent to taxation. The rationale for accounting for premiums only in the off-budget fund is that premiums are voluntary payments for insurance services.

One requirement of this option is a precise operational measure of fiscal imbalance, because of its key role in activating the subsidy. Several alternatives are available, each with substantially different implications for policy. For example, the Congress could define imbalance as an excess of PBGC's liabilities over assets, using generally accepted accounting principles for commercial firms as a basis of measurement. This alternative would speed the Congress's recognition of sunk costs, com-

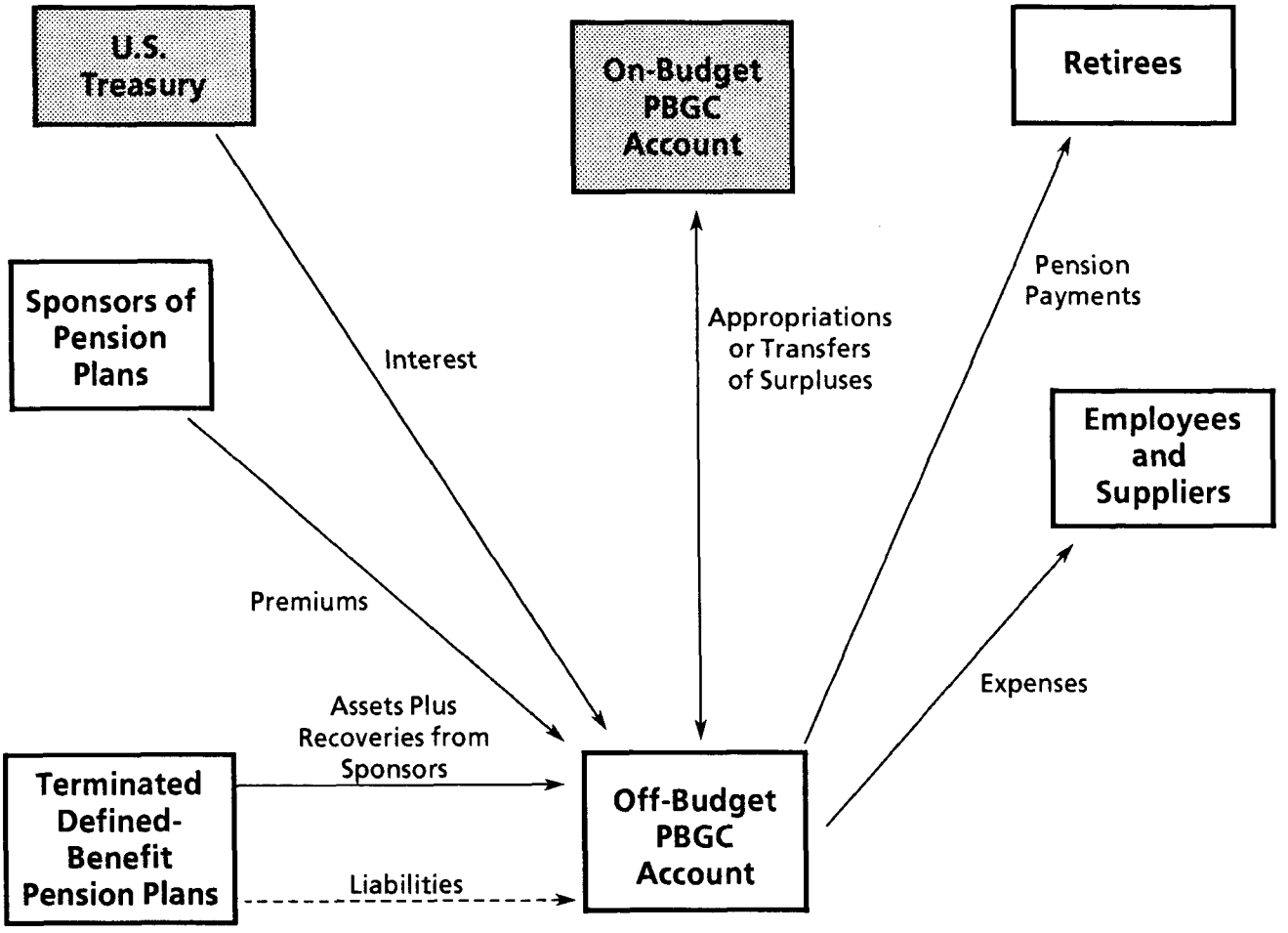
3. See Congressional Budget Office, "Function and Purpose: The Key to Good Budgetary Accounting," Chapter 2 in *Budgetary Treatment of Deposit Insurance: A Framework for Reform* (May 1991), pp. 9-14.

pared with the current method of measurement, and would be easy to implement; however, it would fail to recognize losses or premiums that are expected in the future but are not now reported on PBGC's balance sheet.

A more inclusive measure of fiscal imbalance could also be used. In this case, liabilities would include the present value of the future losses PBGC expects to incur from existing plans, and assets would include the present value of all expected future premiums. Using this measure of fiscal imbalance could require annual appropriations for some losses that are still avoidable, as well as for all sunk costs.

The measure satisfies the requirement for an assessment that considers the future as well as the present, but it also has disadvantages. One of these is that it is susceptible

Figure 2.
How Funds Would Flow to and from the Pension Benefit Guaranty Corporation Under the General Tax Revenue Option



SOURCE: Congressional Budget Office.

NOTE: Shaded boxes indicate on-budget entities.

to large swings in the value of assets and liabilities as a result of changes in economic variables such as interest rates. This susceptibility would produce corresponding swings—and undesirable instability—in budget outlays.

To sum up, the advantages of the general tax revenue option are that it would be quicker to spot an imbalance; it would mandate an automatic correction; and it would clearly disclose all payments to the program from general taxpayer funds and all receipts from the program that constituted a surplus. Moreover, this option would not only permit but encourage the Congress to manage the pension insurance program actively to prevent PBGC's losses from increasing the deficit.

Adopting the option, however, would modify a critical aspect of pension insurance: the fundamental policy decision made by the Congress to use premiums, and not general taxpayer funds, to pay for the program's anticipated costs. If the taxpayers, rather than the payers of premiums, finance the pension insurance program, those funds would constitute a subsidy for the labor costs of high-risk firms.

Proponents of such subsidies sometimes defend them on the grounds that subsidies are necessary to avoid the even larger cost to the government that would result from the bankruptcy of a pension plan sponsor. One difficulty with this claim is the lack of evidence that the subsidy will avoid more cost than it adds. In the past, subsidies have tended to delay, rather than avoid, the failure of firms—a pattern that recent experience in the savings and loan industry has shown may result in enormous costs.[4]

4. See Congressional Budget Office, "The Cost of Forbearance During the Thrift Crisis," CBO Staff Memorandum (June 1991).

The Premium Option

The Congress could avoid the automatic, mandatory use of general taxpayer funds to subsidize pension insurance by explicitly empowering and directing PBGC to maintain a balance between premium income and the costs of the insurance. This alternative, the premium option, would retain the current emphasis on financing the program through premiums rather than general tax revenues but would shift significant management authority from the Congress to PBGC. The role of the Congress then would be to define the objectives of federal pension insurance, oversee the execution of the resulting policy, and intervene in the insurance system, at its discretion, by providing general subsidies.

The most important element in this option is the unequivocal direction to PBGC to manage the pension insurance system in a manner consistent with its objectives: to protect retirement benefits, finance the insurance system from premiums, and promote the availability of defined-benefit plans. The first two goals require no explanation; the importance of the third, however, is easy to overlook. This objective is essential to moderate the unconstrained pursuit of the other two and thereby protect the public interest.

It would be relatively easy to provide enough premium income to pay for protecting retirees, but it would mean adopting premiums and regulations so burdensome to the sponsors of defined-benefit plans that all of them would terminate their plans. The third objective is therefore critical—not to suggest that a subsidy should be provided to defined-benefit plans but to shape policies for federal pension insurance so that they do not discourage the voluntary, unsubsidized use of these plans. Defined-benefit plans may continue to decline in popularity with workers and firms, but it would not enhance the public welfare for the federal government to accelerate this trend beyond the pace that results from the voluntary actions of labor and management. PBGC needs to limit its pursuit of fiscal balance to the extent that it provides no

subsidy to these plans; it need not disadvantage them.

In its role of overseeing the management of the pension insurance system, the Congress could choose to supply a subsidy. For example, it might wish to subsidize the premiums of troubled firms or firms in strategic industries, or it might wish to provide an across-the-board subsidy to all pension plan sponsors. The budget would count these subsidies as outlays when they are paid, just as it counted the automatic subsidies paid under the general tax revenue option as outlays. This method of accounting makes any subsidies provided to pension plan sponsors explicit, highly visible, and, in the case of the premium option, discretionary.

The premium option would also require the Congress to invest PBGC with additional authority to carry out its new responsibilities. These new powers would include prohibiting some pension funding practices and imposing risk-based insurance premiums. The Federal Deposit Insurance Corporation (FDIC) offers a model of this approach. FDIC can now monitor and regulate some of the practices of those it insures; it can also levy risk-based premiums and take prompt corrective action against the most virulent instances of moral hazard. Within the boundaries of established policy, FDIC is responsible for ensuring the financial viability of the federal deposit insurance system. Under the premium option, PBGC would be expected to play a similar role for federal pension insurance.

The budgetary treatment of PBGC under the premium option would be very much like its treatment under the general tax revenue option (see Figure 2 on page 37). Specifically, PBGC would have an on-budget account to keep track of any discretionary subsidies the Congress might provide. All other transactions would be recorded in the off-budget account. The pension insurance program would affect federal outlays and the deficit only when PBGC received subsidies. The one major difference between the budgetary treatment of PBGC in the general tax revenue option and its treatment in the premium option is that in the first case, subsidies would be provided automatically; in the second, only by an explicit Congressional decision. Without these subsidies, the responsibility for fiscal balance would rest entirely with PBGC.

An advantage of the premium option is that it would allow PBGC to account for the present value of long-term projections of claims and revenues, without the budgetary instability this kind of accounting would produce under the general tax revenue option. With the premium option, short-term surpluses or deficits would not require automatic payments to or from the on-budget PBGC account. Instead, fiscal imbalance would trigger adjustments in the terms of the insurance, especially in the level and structure of premiums. If annual premiums vary dramatically, however, these swings could impose a cash flow burden on sponsors.

Although this option expands PBGC's authority, the Congress would retain the power to mitigate the effects of PBGC's decisions. Thus, if the Congress wanted premiums set lower than those PBGC had established, it could buy them down—provide a discretionary appropriation to assist all or some of the premium payers. In particular, it would retain the authority to buy down the premium for "uninsurable" sponsors—those that would be forced into bankruptcy without such a subsidy. The Congress could also modify PBGC's regulations, but it would have to pay for these modifications through an appropriation.

In sum, the premium option permits the use of a more comprehensive measure of assets and liabilities than the general tax revenue option allows without triggering budget instability; both options, however, incorporate the means to make corrective adjustments to ensure fiscal balance. The premium option relies on premium income, rather than subsidies from taxpayer funds, and is therefore more in line with the legislative history of PBGC. Most important, this option offers some hope

to the federal government of an institutional capacity and incentives for controlling losses in its pension insurance program.

The Privatization Option

The Congress could decide to overcome the difficulties of managing a pension insurance system by engaging private capital and private incentives in the effort. A variety of means are available including the increased use of coinsurance and the reinsurance of pensions by private firms. All such alternatives rely primarily on premium financing, although none of them rule out the possibility of an explicit federal subsidy to the system.

Privatization does not have to involve a private insurance company. Some forms of coinsurance engage private interests in controlling costs without using firms that are recognizable as insurance companies. For example, PBGC could be given a "superpriority" claim in bankruptcy (see Chapter 4). For the other creditors of a firm, PBGC's priority would mean an increased possibility of loss if the firm went bankrupt. The creditors would probably counter this risk by adjusting the interest rates they charged sponsors of underfunded, and otherwise risky, pension plans to reflect more accurately the risk they were assuming. The Congress and PBGC, in turn, could use this information about interest rates to determine the risk of a firm's making a PBGC claim. Essentially, private creditors would take on part of the monitoring and premium-setting functions of PBGC.

Alternatively, the Congress could require the sponsors of pension plans to purchase private pension insurance for a first layer of coverage. Exposing a private insurer to losses from these plans would guarantee the insurer's vigorous control of such losses through its insurance contracts and its monitoring and premium structures. Even if private insurers provided only a limited degree of insurance, the terms and premiums they set for individual sponsors would give PBGC valuable information about the risks associated with each of those firms. Furthermore, if no insurer was willing to provide coverage for any part of a firm's pension plan at a price the firm could pay, this unwillingness would signal the extreme risks posed by insuring the plan. The Congress could then, if it wished, provide subsidies for these uninsurable firms by buying down both the private and PBGC insurance premiums to a level the firm could pay.

Another, more radical approach would be to require the sponsors of defined-benefit plans to purchase private insurance to replace the coverage that PBGC now provides. This approach would restrict the federal role to reinsuring private insurers (for an estimated fair market premium) and serving as the insurer of last resort for pension plans that were commercially uninsurable.[5] In the latter capacity, PBGC might agree to insure all pension plans that could not obtain insurance from a private supplier for less than a specified premium rate. To control its losses from firms in this high-risk pool, PBGC could restrict the sponsor's ability to grant new pension benefits and delay payment of insured pensions until employees reached a certain age (for example, age 63).[6]

Options for privatization have certain disadvantages that also must be taken into account. For example, giving PBGC a priority claim in bankruptcy is likely to raise the cost of borrowing for all firms, which could have an adverse effect on investment and productivity. In addition, doubts persist that private firms would be willing—because of their fear of widespread pension plan failures—to provide the levels of insurance required by some of the more extreme versions of this option. In fact, ERISA established a program for contingent employer liability insurance (CELI) under which an employer could insure a portion of its pension liabilities with a private insurer. In

5. See Congressional Budget Office, *Federal Insurance of Private Pension Benefits* (October 1987), pp. 51-52.

6. Richard A. Ippolito discusses this idea in his "Proposal for an Economic Insurance System," in *The Economics of Pension Insurance* (Homewood, Ill.: Irwin, 1989), pp. 175-203.

Table 5.
Summary of Options for Reforming the Pension Benefit Guaranty Corporation

Criteria	Maintain Status Quo	Improve Supplemental Information	Adopt General Tax Revenue Option	Adopt Premium Option	Use Private Insurance
Pension Benefits at Risk?	No	No	No	No	No
Improved Congressional Oversight?	No	Yes	Yes	Yes	No
Quicker Recognition of Losses?	No	Yes	Yes	Yes	Yes
Faster Funding of Losses?	No	Uncertain	Yes	Yes	Yes
Higher Federal Administrative and Monitoring Costs?	No	Yes	Yes	Yes	No
Likely to Reduce Future Federal Losses?	No	Uncertain	Yes	Yes	Yes
Primary Responsibility for Expected Losses?	Uncertain	Uncertain	Uncertain	Firms Causing Losses	Firms Causing Losses

SOURCE: Congressional Budget Office.

1980, however, the Multi-employer Pension Plan Amendments Act repealed the program. The legislative history of the act reports that "private insurers have not shown an interest in developing a CELI program." Some analysts attribute this lack of interest to the inability of private insurers to avoid catastrophic losses from the failure of many pension plans at the same time. After ERISA was enacted, PBGC's low premiums and comprehensive coverage may have added another reason for private insurers to forgo offering pension insurance.

The range of options for restructuring federal pension insurance to control its losses extends from the relatively low-cost option of improving the flow of economically meaningful information about the system to strategies for fundamental change (see Table 5). As one moves past the option for improving information, the departure from current practice becomes more pronounced. At the same time, however, the prospects for effectively correcting the structural deficiencies of the current system become more favorable.