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PRIVATE PENSIONS

Funding Rule Change Needed to Reduce PBGC's Multibillion Dollar Exposure

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Health, Education, and
Human Services Division

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The Honorable J. J. Pickle
Chairman, Subcommittee on Oversight
Committee on Ways and Means
House of Representatives

Dear Mr. Chairman:

In 1990, we began a special effort to review and report on federal government program areas that we considered "high risk." We identified 17 such program areas. One was the Pension Benefit Guaranty Corporation (PBGC), which was included because of its large and growing deficit and the large exposure (potential claims) it faces from underfunded plans.

PBGC recently reported that underfunding in the single employer defined benefit plans it insures grew from $38 billion in 1991 to $53 billion in 1992. The underfunding increased despite the more stringent funding requirements for underfunded plans that were put in place by the Pension Protection Act (PPA) in 1987.[1]

Because of your concern about pension promises being funded, you requested that we analyze (1) the efficacy of the PPA provisions in reducing underfunding and (2) the potential impact of the proposed Pension Funding Improvement Act (PFIA) of 1993 (H.R. 298/S. 105) and the administration's proposed Retirement Protection Act (RPA) of 1993 (H.R. 3396/S. 1780) on improving plan funding.

Background

The Employee Retirement Income Security Act of 1974 (ERISA) was enacted to protect the benefits of participants in defined benefit pension plans.[2] Before ERISA, many plan participants lost promised benefits when their underfunded pension plans terminated.

ERISA created the PBGC to insure the pensions of participants in defined benefit plans. When an underfunded insured plan terminates, PBGC trustees the plan and becomes responsible for paying guaranteed benefits to its participants.

[1]The PPA was a part of the Omnibus Budget Reconciliation Act of 1987.

[2]ERISA also provides certain protections for participants in other pension and welfare benefit plans.

ERISA also established minimum funding rules for defined benefit pension plans. The minimum funding contribution comprises two amounts—normal cost (the cost of benefits allocated to the current year) and an amount to reduce the plan's unamortized liabilities (see app. I). The latter amount is the net of charges to amortize sources that increase underfunding less credits to amortize factors that reduce underfunding.

Because of PBGC's growing deficit and continued underfunding in many plans, the Congress passed the PPA in 1987. The PPA was designed to improve plan funding and protect PBGC from growing deficits. Among the PPA provisions to improve plan funding was a new additional contribution requirement for sponsors of large (101 or more participants) underfunded plans.[3]

Under the additional contribution requirement, sponsors of large underfunded plans must calculate an additional contribution amount. This contribution can be reduced by subtracting specified components of the plan's minimum funding contribution under ERISA. We call this amount the "offset." The offset provision is designed to give credit for payments the sponsor is already making in its minimum contribution to reduce the plan's underfunding.

Despite the PPA changes, many large plans remain underfunded, with underfunding increasing in some, and PBGC's deficit and level of exposure continue to grow. We have testified that to reduce PBGC's exposure, and ultimately its deficit, plan funding should be improved.[4]

Improving the funding in underfunded plans should benefit the following parties: plan participants, who may lose some of their pension benefits should their underfunded plan terminate; PBGC, which faces exposure to the risk of terminated pension plans; sponsors of financially sound plans, who may otherwise see their PBGC premiums increase to offset PBGC's growing losses; and taxpayers, who may have to pay should PBGC exhaust the assets it has for paying its obligations.

Lawmakers introduced several pieces of legislation in the 102nd Congress to increase contributions from sponsors of underfunded plans and to

[3]Plans with fewer than 101 participants are not subject to the additional contribution provision of PPA.

[4]Assessing PBGC's Short-Run and Long-Run Conditions (GAO/T-HRD-93-1, Feb. 2, 1993).

improve PBGC's financial condition, though none was enacted.[5] Currently, the Congress is considering the PFIA and the RPA.

The PFIA would eliminate the current additional contribution provision and require a minimum contribution equal to the greatest of three alternatives—the current funding rules without any additional contributions (ERISA requirement), rules based primarily on plan disbursements (solvency maintenance requirement or SMR), and rules based primarily on the plan's funding ratio (underfunding reduction requirement or URR).

The RPA would strengthen current law funding provisions and add a requirement that plan liquid assets equal at least 3 years' disbursements. (See app. I for a detailed explanation of the funding and other provisions contained in the PFIA and RPA.)

We used a PBGC data file to select a random sample from the 4,968 large plans paying the PBGC variable rate premiums in 1990. We used this sample to determine how current funding rules affect underfunded plans and how provisions in the PFIA and RPA would affect them. Fifty-seven of the 93 plans in our sample had unfunded current liabilities in 1990 and were subject to the additional contribution provision of PPA.[6] These 57 plans project to a population of 3,045 underfunded large plans.[7] (See app. II for details of our scope and methodology.)

Results in Brief

The current funding rules for underfunded plans are not working well. Despite the PPA's intent that funding in underfunded plans be improved, sponsors of most underfunded plans in our sample made no additional contributions to reduce underfunding in 1990.

Although the PPA requires sponsors of all underfunded plans to calculate an additional contribution amount, it also allows this contribution to be reduced or offset. In 1990, these offsets eliminated the additional contribution for 60 percent of the underfunded plans in our sample and substantially reduced them for another 30 percent.

[5] These bills were S. 2014, S. 2485, S. 3162, H.R. 3843, H.R. 4545, and H.R. 5800.

[6] Thirty-three of the 93 plans in our sample were not underfunded on a current liability basis. Three additional plans were exempt from making additional contributions. (See app. III.)

[7] The confidence interval is plus or minus 523 plans.

Plan sponsors in our sample paid less than 10 percent of the originally calculated additional contribution amount to their underfunded plans, and these contributions reduced total underfunding in the plans receiving them by less than 3 percent. As a result, the additional contribution provision advanced few underfunded plans toward full funding.

Our examination of the current additional funding rules revealed a design flaw in the offset that makes it too large for many underfunded plans. However, simply correcting that flaw will not result in additional contributions from sponsors of many underfunded plans. For many plans, the offset will continue to eliminate any additional contributions.

The proposed PFIA would actually reduce the percent of sponsors making increased contributions to their underfunded plans. However, the PFIA would cause substantial increases for the few sponsors affected by its solvency maintenance provision.

The administration's proposed RPA would increase the percentage of underfunded plan sponsors making additional contributions to about 50 percent. Affected sponsors would make sizable additional contributions; however, the increases would not be as large as those of sponsors paying under PFIA's solvency maintenance rule. In our opinion, the RPA moves in the right direction to strengthen funding in underfunded plans.

However, our analysis indicates that about half the sponsors of underfunded plans will not make additional contributions if the RPA is enacted as it stands.[8] For this reason, we believe that changes to current funding rules beyond those proposed in RPA should be considered to protect PBGC and plan participants from the consequences of underfunded plan terminations. The rules would need to balance such changes with the budget's pay-as-you-go (PAYGO) requirements.[9]

[8]The 95-percent confidence interval indicates that between 39 and 65 percent of underfunded plans would receive additional contributions under the RPA.

[9]Under the Budget Enforcement Act, PAYGO requires that all direct spending and tax legislation enacted during a session of the Congress must be deficit-neutral in the aggregate.

Current Rules Do Little to Reduce Underfunding

Sponsors of 34 of the 57 plans in our sample that had unfunded current liabilities made no additional contributions in 1990 because of the size of their offsets. And the offsets substantially reduced the additional contributions for 16 of the 22 sponsors that made them (see app. III).[10,11]

Forty-five of the 93 plans in our sample were so-called flat benefit plans.[12] Flat benefit plans are more likely than other plans in our sample to have unfunded current liabilities (34 plans versus 23) but less likely to be receiving additional contributions from their sponsors (9 plans versus 13). The 1990 additional contributions were equivalent to 2.6 percent of underfunding in our sample plans that received them—11 percent of the underfunding in the nonflat benefit plans but only about 1.5 percent in the flat benefit plans. This difference is caused in large part by the greater offsets available to flat benefit plans.

The offset has a powerful effect, in part, because of a design flaw. The offset is intended as a credit for the payment the sponsor is already making to reduce underfunding through ERISA's minimum funding requirement. However, the offset includes only a subset of the plan's amortization charges and credits—the components of this payment. For most plans in our sample, the offset included most amortization charges and ignored most amortization credits. Thus, for most plans, the offsets were larger, often much larger, than payments the sponsors were actually making in their minimum funding contributions to reduce plan underfunding. Additional contributions were reduced or eliminated in these plans as a result.

The offset could be corrected by setting it equal to the underfunding reduction payment in the minimum funding contribution—the difference between the total amortization charges and the total amortization credits. In our sample, using this modified offset would have increased the number of plan sponsors making additional contributions in 1990 from 22 to 32 (20 of the 32 would have been sponsors of flat benefit plans). Total additional contributions would have increased from $2.8 million to $19.9 million.

[10]One sponsor should have made an additional contribution but did not because it misinterpreted Form 5500 (Annual Return/Report of Employee Benefit Plan) instructions.

[11]The 22 sponsors making additional contributions represent sponsors of 1,175 (plus or minus 460) of the approximately 3,045 plans subject to the additional contribution provision.

[12]In these plans, monthly benefits are determined by multiplying years of service by a specified dollar amount (for example, years of service times $20).

Even with this modification, however, sponsors of many underfunded plans, including some of the most underfunded, would not be required to make any additional contributions to improve their plans' funding (25 of the 57 underfunded plans in our sample). As a result, this modification alone would not diminish PBGC's exposure to the underfunding in many underfunded plans.

The additional contribution provision will need additional changes if sponsors of most underfunded plans are to speed up their plans' funding. This could be accomplished in various ways. For example, restricting offsets to be no greater than 50 percent of the additional contribution before offsets would cause sponsors of all underfunded plans to make additional contributions. In our sample, the sponsors of the 57 underfunded plans would make $23.5 million in additional contributions.

Because pension contributions are a tax deductible expense, any increase in contributions will cause a decrease in federal revenues, and PAYGO restrictions will apply. The revenue loss from the increased additional contributions would have to be offset by other new revenues or by expenditure cuts.

The PFIA Could Require Excessive Contributions

Our analysis of the plans in our sample indicates that the funding provisions proposed in PFIA—contributions equal to the greatest amount calculated under three different methods—would have reduced the number of sponsors of underfunded plans making increased contributions in 1990. However, the provisions would have substantially increased the amount of contributions affected sponsors would have paid.

Sponsors of 59 plans in our sample would be subject to the funding rules under PFIA,[13] but only 16 sponsors would make contributions that exceed the current ERISA minimum contribution, compared with 22 under current law. However, under PFIA, total contributions for sponsors of these 16 plans would increase by $44.7 million, from $17.4 million under the ERISA minimum contribution requirement to $62.1 million (see app. IV). Compare this with $2.8 million in additional contributions for 22 sponsors under current law.

The PFIA contains a proposed offset provision that, in our opinion, is unnecessary and would effectively exempt many sponsors from making

[13]PFIA restrictions on the allowable range of interest rates to be used when calculating current liabilities would cause two additional plans to have unfunded current liabilities.

increased contributions. Without this proposed offset provision, 43 of the 59 sponsors would be required to make increased contributions. Total required contributions for these 43 sponsors would more than quadruple—from $31.2 million under the ERISA provision to $126.7 million.

Most of the increase in contributions, whether the proposed offset provision is in effect or not, would come from sponsors that would contribute under the PFIA's SMR. This requirement would cause benefits and other disbursements to be paid from current cash flow rather than from plan assets, no matter how well funded the plan is. Thus, although the proposed SMR would be an especially powerful tool for increasing plan funding, we have concerns about this provision.

In our opinion, the proposed SMR is overly punitive. Because each $1 of benefit payments decreases both plan liabilities and assets by $1, only the unfunded portion of disbursements needs to be replaced to maintain the plan's funding ratio. Requiring full replacement of disbursements will have a greater impact on plans with high funding ratios (the better funded underfunded plans) than on plans with low funding ratios. Also, as written, this provision could pose a severe hardship for financially troubled sponsors with cash flow problems.

The RPA of 1993 Addresses the Offset Problem but Is Not a Complete Solution

The RPA contains several provisions that would improve the current law funding rules. It would add a solvency rule, which would require plan liquid assets to equal at least 3 years' worth of plan disbursements,[14] and would address the offset design problems. The solvency rule would increase assets for one plan in our sample (see app. V). As with the PFIA, additional contributions under the RPA would increase for sponsors making them, but almost 50 percent of underfunded plan sponsors would not initially make additional contributions under the proposal.

The RPA would address the flaw we found in the current law offset by including all amortization charges and credits in the offset. However, it would also include the plan's normal costs in the offset. In our sample, including normal costs in the offset would result in fewer sponsors making additional contributions than if normal costs were not included.

Two transitional limitations proposed in the RPA would restrict the size of the additional contribution through the 2001 plan year. Without these

[14]Liquid assets are defined in the RPA as cash, marketable securities, and other assets specified by the Secretary of the Treasury.

limitations, 38 of the sponsors in our sample, almost 60 percent of the 65 subject to the additional contribution provisions under RPA, would make $29.2 million in additional contributions.[15] The transitional limitations would eliminate the additional contribution for 4 of these 38 sponsors and reduce them for 11 others. With the limitations in place, 34 sponsors would make additional contributions of $28.0 million.

In 1990, the proposals contained in the RPA would have affected only about half the sponsors in our sample. All plans in our sample that were less than 50-percent funded would have received additional contributions. However, sponsors of about half the plans with funding ratios between 50 and 80 percent would not have been required to make additional contributions because offsets would have continued to eliminate their additional contributions.

The goals of the RPA are to improve pension plan funding and limit the growth in PBGC insurance exposure. Our analysis indicates that, if the RPA had been in effect in 1990, only about half of all underfunded plans would have improved funding. Neither the underfunding in the remaining plans nor the risk these plans pose to PBGC would have been reduced. We conclude that additional strengthening of the additional contribution provision, beyond that contained in the RPA, is necessary to ensure that sponsors of most underfunded plans make additional contributions to improve their plans' funding.

Conclusions

The current rules to improve funding in underfunded plans did not result in additional contributions from most sponsors of underfunded plans in 1990. In part, this is due to an unanticipated design flaw in the current offset that yields offsets that are too large for many plans. Modifying the offset design to correct the flaw will increase both the number of sponsors making additional contributions and the amount of such contributions. This is an important first step. However, on the basis of our analysis, the modified offset would have continued to eliminate any additional contributions for sponsors of about half the underfunded plans in 1990. We believe more of these sponsors should make additional contributions and, therefore, additional steps are needed.

The proposed legislation in the PFIA would reduce the number of sponsors making increased contributions compared with current law. The RPA

[15]Restrictions on both the interest rates and mortality table that could be used to calculate plan liabilities would increase the number of plans subject to the additional contribution provision to 65 (compared with 57 under current law).

would increase both the number of plans subject to the additional contribution provisions and the average additional contribution for sponsors making them, but would not require sponsors of many underfunded plans to make additional contributions. Based on our random sample of underfunded plans, only about 50 percent of the sponsors of underfunded plans would have done so in 1990.

While we believe that the RPA would help strengthen funding, changes to the current funding rules beyond those proposed in either the PFIA or the RPA are necessary to improve funding in most underfunded plans. We believe that the Congress should consider such additional changes to protect PBGC and plan participants from the consequences of underfunded plan terminations.

Any changes to the RPA that increase contributions from sponsors of additional underfunded plans will also reduce federal revenues because these new contributions will be a tax deductible expense for plan sponsors. We believe the incremental revenue loss from modifying the RPA would be small and would be a modest price to pay for the reduced exposure to PBGC and risk of benefit loss to plan participants. PAYGO requires that any lost revenue be offset by other revenue-generating measures or expenditure cuts. The Congress would have to balance the budget's PAYGO considerations with the improved protections for PBGC and participants in underfunded plans, however.

Matters for Consideration

In view of the persistent and growing underfunding in pension plans insured by PBGC, the Congress should consider redesigning funding standards to bolster contributions for underfunded plans. Many provisions in the RPA, such as the solvency rule, the offset redesign, and the immediate recognition of benefit increases, should be included in any new legislation.

In addition, the Congress may wish to consider limiting the amount of offset that can be used to reduce the additional contribution, thus increasing the percentage of underfunded plans receiving such contributions. If this offset were limited to 80 percent of the initially calculated additional contribution, for example, then sponsors of each underfunded plan would make a contribution in addition to the minimum contribution required under ERISA of at least 20 percent of the initially calculated additional contribution amount. If the Congress wants to exempt almost fully funded plans from this automatic funding requirement, it should consider applying the requirement only to plans with funding ratios below a specified threshold. These changes would have to be made in accordance with the budget's PAYGO requirements.

Agency Comments and Our Evaluation

In commenting on a draft of this report, PBGC's Executive Director agreed with our findings. However, he does not believe the RPA needs to be strengthened to require that sponsors of additional underfunded plans make an additional contribution. He acknowledges that some underfunded plans would not be required to make additional contributions under the RPA provisions and states that this "represents a considered approach on the Administration's part." He believes that most underfunded plans not affected by the RPA's provisions "will progress toward full funding at a satisfactory pace under current law" and "should not be burdened with an unnecessary requirement." He points out that our proposed strengthening of the RPA was not based on a long-term analysis of the projected impact on funding in these plans. Finally, he indicates that the agency will reexamine the transitional phase-in rules in light of our comments and those of others.

Both PBGC and GAO recognize that problems exist in current regulations affecting pension plan funding. Both agree that action must be taken to solve these funding problems, but we in GAO believe action stronger than that proposed in the RPA is necessary for these problems to be eliminated. Sponsors of 31 underfunded plans in our sample would not make additional contributions under RPA. Fifteen of these plans are less than 80 percent funded. Our analysis indicates that, for 2 of these 15 plans, the portion of the sponsor's contribution designed to reduce underfunding would not be sufficient to amortize this underfunding over a 20-year period. Therefore, we do not consider that these two plans are satisfactorily progressing toward full funding. In our view, a mechanism stronger than those proposed in the RPA is necessary to move all underfunded plans to full funding in a timely manner.

We are sending copies of this report to the Executive Director of the Pension Benefit Guaranty Corporation; the Secretaries of Labor, the Treasury, and Commerce in their capacities as Chairman and Members of the Board of Directors of the Pension Benefit Guaranty Corporation; the chairmen of interested committees and subcommittees; and the Director of the Office of Management and Budget. Copies will be made available to others upon request.

Sincerely yours,

Joseph F. Delfico

Joseph F. Delfico
Director, Income Security Issues

Contents

Tables

Figures

Abbreviations

DRC	deficit reduction contribution
ERISA	Employee Retirement Income Security Act
FSA	Funding Standard Account
IRS	Internal Revenue Service
OBRA 87	Omnibus Budget Reconciliation Act of 1987
PAYGO	pay-as-you-go
PBGC	Pension Benefit Guaranty Corporation
PFIA	Pension Funding Improvement Act of 1993
PPA	Pension Protection Act
RPA	Retirement Protection Act of 1993
SMR	solvency maintenance requirement
URR	underfunding reduction requirement

Funding Provisions for Defined Benefit Pension Plans

The Employee Retirement Income Security Act of 1974 was enacted to protect the pension benefits of participants in most private, defined benefit pension plans.[16] A defined benefit plan pays a retirement benefit on the basis of a specific formula that generally takes into account employee earnings and/or job tenure. ERISA prescribed vesting and funding standards for defined benefit pension plans.[17] It also established a program to insure the payment of vested benefits, up to a maximum guarantee level, for participants in defined benefit plans that terminate with unfunded liabilities.[18] Today, the insurance program, which is administered by the Pension Benefit Guaranty Corporation, covers about 41 million participants in 66,000 plans. As of September 30, 1993, PBGC reported a deficit (the present value of future benefits PBGC is responsible for paying less its assets) in its single-employer program fund of $2.9 billion.

Despite funding requirements enacted by ERISA and modified by the Pension Protection Act, a part of the Omnibus Budget Reconciliation Act of 1987 (OBRA 87), many defined benefit plans remain underfunded, and the level of total underfunding has been growing. PBGC has reported that at the end of calendar year 1992 it faced an exposure of $53 billion in underfunded single-employer plans. Of this total, about $14 billion was in plans sponsored by companies with below-investment grade bond ratings and represented a risk to PBGC. The underfunding is primarily concentrated in pension plans in the steel, airline, tire, and automobile industries.

In previous congressional testimonies, we expressed our concern about the large unfunded liabilities in the ongoing single-employer plans PBGC currently insures.[19] We testified that to protect PBGC the Congress should focus on ways to improve the funding of underfunded plans and methods to ensure that fully funded plans remain that way.

[16]ERISA also provides certain protections for participants in other pension and welfare benefit plans.

[17]ERISA requires that plan participants, after meeting certain requirements, be given a nonforfeitable right to the pension benefits they have earned, even if they leave the employment of the plan sponsor before retirement. These nonforfeitable benefits are known as vested benefits, and the requirements, as vesting standards. Funding standards define the minimum (and maximum) contributions the plan sponsor must (may) make to the plan to ensure that pension promises will be honored.

[18]Unfunded liability measures the extent that plan liabilities exceed plan assets.

[19]See Underfunded Pension Plans: Federal Government's Growing Exposure Indicates Need for Stronger Funding Rules (GAO/T-HEHS-94-149, Apr. 19, 1994); Private Pensions: Most Underfunded Plan Sponsors Are Not Making Additional Contributions (GAO/T-HRD-93-16, Apr. 20, 1993); Assessing PBGC's Short-Run and Long-Run Conditions (GAO/T-HRD-93-1, Feb. 2, 1993); Improving the Financial Condition of the Pension Benefit Guaranty Corporation (GAO/T-HRD-92-60, Sept. 25, 1992); and Financial Condition of the Pension Benefit Guaranty Corporation (GAO/T-HRD-92-52, Aug. 11, 1992).

Improving the funding in underfunded plans should benefit each of the following parties:

- plan participants, who may lose some of their pension benefits should their underfunded plan terminate;
- PBGC, which faces exposure to the risk of terminated pension plans;
- sponsors of financially sound plans, who may otherwise see their PBGC premiums increase to offset PBGC's growing losses; and
- taxpayers, who may have to pay should PBGC exhaust the assets it has for paying its obligations.

Lawmakers introduced several legislative proposals in the 102nd Congress to improve PBGC's financial condition (S. 2014, S. 2485, S. 3162, H.R. 3843, H.R. 4545, and H.R. 5800). Three of these proposals involved revising the minimum funding standards for underfunded single-employer defined benefit pension plans by essentially requiring larger contributions from some underfunded plans. None of these bills was enacted. Two sets of bills that would strengthen pension funding requirements for underfunded plans have been introduced in the 103rd Congress—the Pension Funding Improvement Act of 1993 (H.R. 298/S. 105) and the administration's Retirement Protection Act of 1993 (H.R. 3396/S. 1780).

ERISA's Funding Standards

Before the enactment of ERISA, only minimal pension funding rules existed. The government imposed restrictions on pension funding through maximum contribution limits to prevent firms from depositing too much into tax-exempt pension trust funds. Prior law required that contributions be sufficient to pay a plan's normal costs (representing the cost of benefits allocated to the current year under the plan's funding method) plus interest on unfunded past service liabilities. This was not always sufficient to ensure that the plan could pay all promised benefits because a reduction in underfunding was not required. As a result, many participants lost benefits when their pension plans terminated. ERISA was enacted to protect the benefits of pension plan participants.

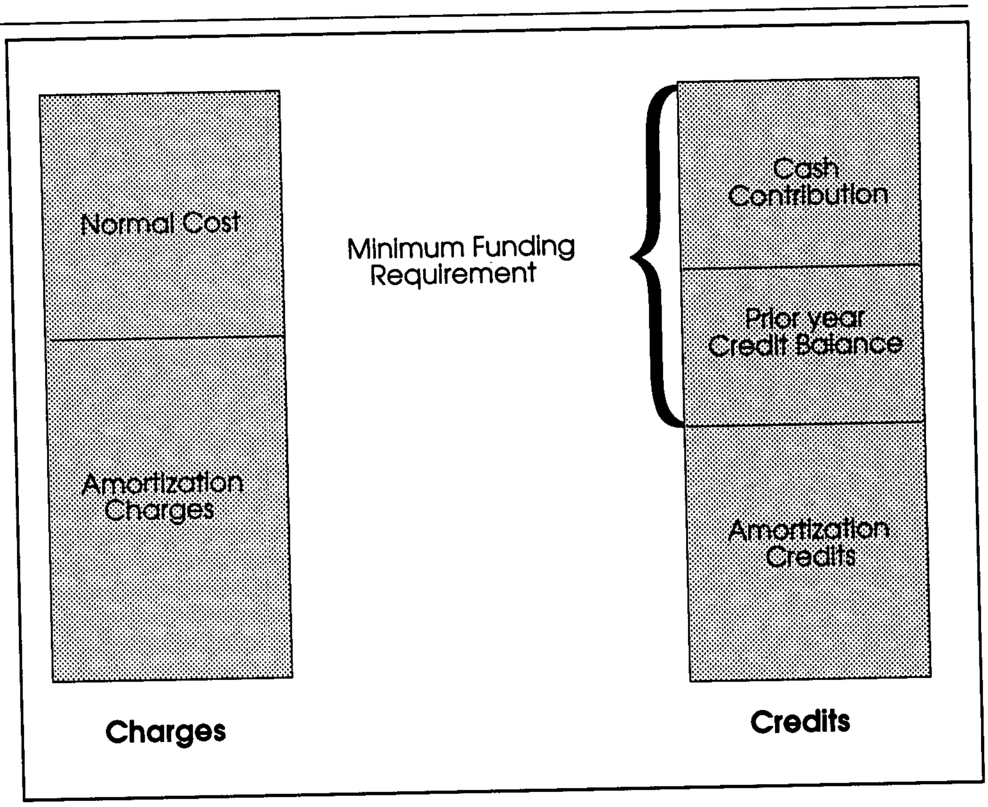
Among other provisions, ERISA established firm minimum funding rules and created the PBGC to insure the pension benefits of participants in defined benefit plans. These funding rules required that a plan's minimum contribution consist of normal costs and a payment to amortize any unamortized liabilities. From a simplified point of view, normal costs cover benefits accruing during the plan year, and the amortized amount is the payment to reduce plan underfunding. A number of factors affect the amount of a plan's unamortized liabilities—past service liabilities, experience losses and gains, changes in plan liabilities due to actuarial assumption changes, and contribution waivers. Under ERISA, each of these factors was amortized over a specified period:

- unfunded liabilities as of January 1, 1974, were amortized over 40 years;
- unfunded liabilities of plans established after January 1, 1974, and changes in plan liability caused by plan amendments (usually benefit increases) were amortized over 30 years;
- differences between experience and expectations based on actuarial assumptions (that is, experience gains and losses) were amortized over 15 years;
- changes in plan liability caused by changes in actuarial assumptions were amortized over 30 years; and
- waived funding contributions were amortized over 15 years.

If a factor increases plan liabilities, an amortization charge ensues; if it reduces liabilities, an amortization credit is given. The net of the amortization charges and credits is the portion of the minimum contribution that is used to reduce the plan's unamortized liabilities.

ERISA requires each defined benefit plan to maintain a bookkeeping account called the "Funding Standard Account" (FSA). Each year, this account is charged with the normal costs and amortization charges for the above factors (see fig. I.1). It is credited with amortization credits for the above factors, any credit balance carryover from the previous year, and cash contributions. As a general rule, a plan's minimum funding requirement for the year is the amount by which all charges to the account would exceed the amortization credits to the account. The minimum funding requirement can be satisfied by the plan's credit balance carryover, cash contributions, or a combination of the two.

Figure I.1: The Funding Standard Account



The ERISA funding rules worked as intended for many plans, but by the mid-1980s it became apparent that the funding in some plans needed increased contributions. In the latter plans, the minimum contribution under ERISA funding rules was not sufficient to improve plan funding. Funding levels for some plans declined even though sponsors were making their minimum required contributions. PBGC and GAO found falling funding ratios (defunding) to be common among plans that eventually terminated.[20] Defunding frequently resulted from plan sponsors' obtaining contribution waivers from the Internal Revenue Service (IRS), providing shutdown benefits, granting new benefits before old benefit increases were funded, changing actuarial assumptions, and not making contributions.

[20] Pension Plans: Hidden Liabilities Increase Claims Against Government Insurance Program (GAO/HRD-93-7, Dec. 30, 1992) and Pension Plans: Government Insurance Program Threatened by Its Growing Deficit (GAO/HRD-87-42, Mar. 19, 1987).

PPA Funding Standards

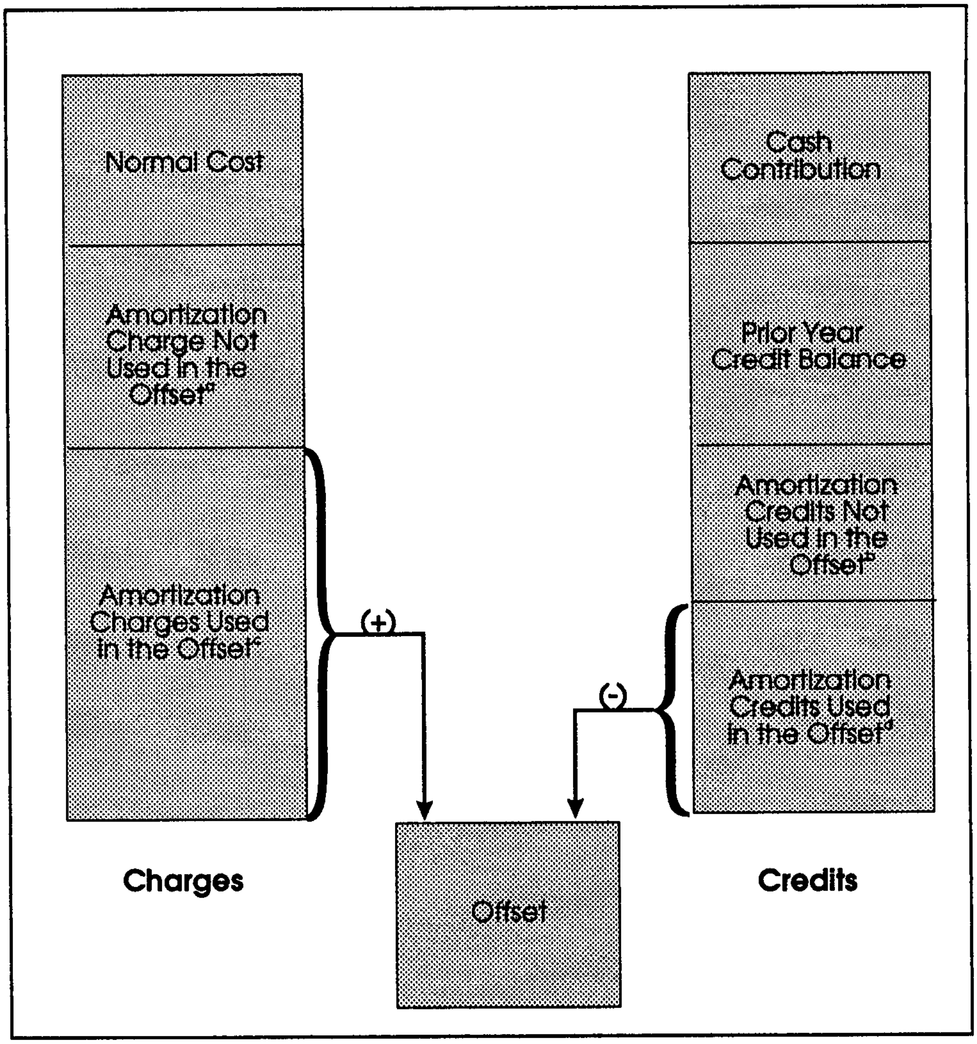
The PPA introduced certain reforms to ERISA to improve plan funding and protect PBGC. The PPA established an additional funding requirement for underfunded plans, instituted an additional premium for underfunded plans (the variable rate premium), modified the waiver process, introduced quarterly contributions, and required notification to PBGC of missed contributions. PPA also reduced some amortization periods and revised guidelines for using actuarial assumptions.

The additional funding requirement[21] obligates sponsors of plans that have an unfunded current liability to calculate an additional contribution amount.[22] This amount can be reduced by the net of specified amortization charges and credits the sponsor is already making to satisfy the plan's minimum contribution requirement. We call this net reduction amount the "offset." The FSA amortization charges and credits not included in the offset are charges for experience losses, credits for experience gains, and the charges and credits arising from changes in actuarial assumptions (see fig. I.2).

[21]This requirement is described in Sec. 302(d) of ERISA and Sec. 412(l) of the Internal Revenue Code.

[22]A plan's current liability is calculated using the plan's actuarial assumptions except that the interest rate assumption must be selected from a range of rates specified by the Secretary of the Treasury. This range of rates is 90 to 110 percent of a weighted 4-year average of the 30-year U.S. Treasury bill rate ending on the last day before the beginning of the plan year.

Figure I.2: Components of the Funding Standard Account Used in the Additional Contribution Offset



[a]Amortization charges not used in the offset include those for the unamortized portion of the plan's experience losses and increases in plan liability caused by changes in actuarial assumptions.

[b]Amortization credits not used in the offset include those for the unamortized portion of the plan's experience gains and decreases in plan liability caused by changes in actuarial assumptions.

[c]Amortization charges used in the offset include those for the unamortized portion of (1) the initial underfunding in the plan, (2) any benefit increases granted through plan amendments, and (3) waived funding contributions.

[d]Amortization credits used in the offset include those for the unamortized portion liability reductions made through plan amendments.

The plan's deficit reduction contribution (DRC)—the unreduced additional contribution requirement—is calculated by splitting the unfunded current liability into two components—unfunded old liability and unfunded new liability. Unfunded old liability is the unamortized portion of the unfunded current liability at the beginning of the plan's 1988 plan year. This unfunded old liability is amortized over 18 years beginning with the 1989 plan year. The unfunded new liability is the difference between the total unfunded current liability and the sum of the unfunded old liability plus the liability with respect to any unpredictable contingent event benefits[23]. The payment required for the unfunded new liability varies from 14 percent to 30 percent of the unfunded new liability, depending on the plan's funding ratio. The better funded the plan, the lower the required payment for its unfunded new liability.

A plan's DRC is the sum of the payments for its unfunded old liability (the amortization payment) and its unfunded new liability. The DRC is reduced by the offset described above. The payment for the unpredictable contingent event benefit, if any, is added to the adjusted DRC to determine the additional funding requirement for most underfunded plans. The additional funding requirement can be no larger than the underfunding in the plan at the beginning of the plan's fiscal year.

Sponsors of underfunded plans with fewer than 101 participants throughout the previous plan year are not required to make an additional contribution. Sponsors of underfunded plans with 101 to 149 participants during the previous plan year need pay only 2 percent of the additional funding requirement calculated above for each participant in excess of 100.

Special provisions apply to steel industry plans until the 1994 plan year. These provisions limit the additional contribution that sponsors of steel plans must make and extend the amortization period for unpredictable contingent event benefits that arise after December 17, 1987.

Proposed Standards in the PFIA of 1993

As a result of PBGC's growing deficit, several bills were introduced in the 102nd Congress to increase contributions from sponsors of underfunded

[23]Unpredictable contingent event benefits, commonly called "shutdown" benefits, are found primarily in steel and automobile industry plans and are usually paid only when all or part of a plant or facility closes down. The payment for this liability under the additional contribution provision is the greater of the liability amortized over 7 years or an amount based on the yearly benefit payments, the funding level of the plan, and a phase-in factor that does not reach 100 percent until the year 2001. None of the plans in our sample had unpredictable contingent event benefits in effect.

plans and to improve PBGC's financial condition (S. 2014, S. 2485, S.3162, H.R. 3843, H.R. 4545, and H.R. 5800). None was enacted. PBGC's deficit and level of exposure to underfunded plans continued to increase, so the PFIA was introduced in the 103rd Congress.

General Provisions

The PFIA, introduced in the Congress in January 1993, aims to increase the minimum funding requirements for underfunded plans, change the security requirements concerning plan amendments, modify the PBGC's reporting obligations to the Congress, and authorize the PBGC to obtain additional information from certain plan sponsors.

Minimum Funding Rules

The PFIA proposes to improve funding for most plans with unfunded current liabilities. Current liability is determined as under current law, except that the allowable interest rate range is restricted to between 90 and 100 percent of the weighted average of the rates of interest on 30-year Treasury securities during the 4-year period ending on the last day before the beginning of the plan year. These bills would require sponsors of such underfunded plans to make minimum contributions equal to the highest of the contributions required under three different funding provisions—the ERISA requirement, the URR, and the SMR. The current additional funding requirement would be repealed.

ERISA Requirement

The ERISA requirement is the existing funding requirement for plans that are fully funded on a current liability basis, the 412(b) provision under the Internal Revenue Code. This provision requires contributions equal to the plan's normal costs plus a payment to amortize any funding deficiency—the net of the plan's amortization charges less amortization credits. This funding requirement is the same as the current minimum contribution requirement under ERISA without the existing additional funding requirement.

Underfunding Reduction Requirement

The URR is the sum of (1) an amount equal to the unfunded current liability of the plan multiplied by the applicable factor, (2) the expected increase in the current liability attributable to benefits accruing during the plan year, (3) the amount necessary to amortize any waived funding deficiency, and (4) the unpredictable contingent event benefits being paid (if any) for the plan year. The URR contribution cannot exceed the amount necessary to increase the beginning-of-year funding ratio to 100 percent plus the expected increase in the current liability attributable to benefits accruing during the plan year.

The applicable factor varies from 14 to 30 percent depending on the funding ratio in the plan. It is the same as the factor used to determine the payment for unfunded new liabilities under current law. If the funding ratio is less than 35 percent, then the applicable factor is 30 percent. The applicable factor decreases by .25 of 1 percentage point for each 1 percentage point by which the plan's funded current liability percentage exceeds 35 percent.

Solvency Maintenance Requirement

The SMR is the sum of (1) all applicable disbursements from the plan for the plan year, (2) interest on the unfunded current liability of the plan, (3) the expected increase in current liability attributable to benefits accruing during the plan year, and (4) the amount necessary to amortize any waived funding deficiency. The SMR contribution cannot exceed the amount necessary to increase the beginning-of-year funding ratio to 100 percent plus the expected increase in current liability attributable to benefits accruing during the plan year.

For purposes of this rule, "disbursements from the plan" means benefit payments, including purchases of annuities and payment of lump sums in satisfaction of liabilities, administrative expenditures, or any other disbursements from the plan. In determining the applicable amounts attributable to purchases of annuities and the payment of lump sums, the actual purchase price or lump-sum amount paid is multiplied by the excess of one over the funding ratio of the plan. Thus, for example, if the funding ratio of the plan at the beginning of the plan year is 80 percent, then the applicable amount of annuity purchases and lump-sum payments is 20 percent of such actual disbursements.

The amount by which the proposed SMR exceeds the proposed URR is to be phased in at 20 percent per year over 5 years. This is intended to prevent any severe contribution increases for affected plan sponsors in the initial years the provision is in effect.

Offset Provision

The amounts required to be contributed under either the URR or the SMR may be reduced, at the sponsor's election, by the net of credits to the funding standard account arising due to experience gains and changes in actuarial assumptions, plus contributions made by the employer to avoid an accumulated funding deficiency, minus charges to the FSA arising due to experience losses and changes in actuarial assumptions.

Miscellaneous Provisions

Plans making a benefit increase through a plan amendment would be required to provide a security if the additional benefits increased the plan's current liability and the plan's funding ratio, after the amendment, was below 90 percent. The amount of the security would be the amount over $1 million necessary to increase the plan's funding ratio to 90 percent.

As under the current law, the rules that could increase contributions above the ERISA requirement would not apply to plans with 100 or fewer participants and would apply only partially for plans with 101 to 149 participants.

Proposed Standards in the RPA of 1993

Title I of the RPA (H.R. 3396/S. 1780), first introduced in the 103rd Congress on October 28, 1993, makes several changes to the ERISA funding rules to strengthen the minimum funding requirements for underfunded plans. Among the provisions of titles II, III, and IV are proposals to make changes in reportable events and in the information required to be furnished to plan participants and PBGC, give authority to PBGC to bring civil actions to enforce minimum funding standards, and phase out the cap on the variable rate premium.

Minimum Funding Rules

The RPA provisions would strengthen the minimum funding rules in two ways. First, certain provisions restricting allowable actuarial assumptions could increase a plan's current liability. This will subject more plans to the additional contribution requirement and increase the amount of additional contributions some sponsors will pay. Second, other provisions would add a solvency test for underfunded plans and make other changes that would increase the DRCs for some sponsors.

Provisions Affecting Plan Liabilities

The bill would restrict the actuarial assumptions that plans could use when calculating current liabilities. Like the PFIA, the RPA would restrict interest rates to the lower half of the current liability interest rate range. It would also require plans to use uniform mortality assumptions. Each restriction will increase current liabilities for some plans. Liabilities can also increase because of a proposed requirement that employers immediately recognize any benefit increases negotiated under a collective bargaining agreement. Under current law, employers are permitted, but not required, to recognize these increases immediately.

Provisions Affecting Additional Contributions

The bill would change the DRC by changing the formula for the unfunded new liability amount and by adding the expected increase in current liability due to benefits accruing during the plan year. The unfunded new liability amount formula would extend the 30-percent amount to plans with funding ratios of 60 percent and lower. For plans that are more than 60-percent funded, the applicable DRC percentage would decrease gradually to 20 percent as the plans became 100-percent funded.

The bill would modify the offset to the DRC. The offset would equal the plan's normal cost plus all amortization charges less all amortization credits.

The bill provides a transition rule to limit increases in additional contributions. Under this rule, the increase in a plan's additional contribution would be limited to the amount necessary to increase the plan's funding ratio by a specified percentage that depends on the initial funding ratio of the plan and the particular plan year or the additional contribution that would be required under current law, whichever is greater. The transition rules would be in effect for the 1995 through 2001 plan years.

The bill also proposes a new solvency rule that would require underfunded plans to maintain liquid assets equal to 3 years' worth of benefit payments and other disbursements. The determination would be made on a quarterly basis. If a plan's liquid assets fell below this amount, the employer would be obligated to contribute enough to the plan to raise assets to the required level.

Selection of GAO's Sample of Underfunded Pension Plans and Description of Our Analyses

This appendix describes the process we used to select our sample of 93 underfunded pension plans. It also describes the analyses we performed to determine (1) how well the current funding provisions are working (see app. III), (2) the likely effects of funding provisions proposed in the Pension Funding Improvement Act of 1993 (H.R. 298/S. 105) (see app. IV), and (3) the likely effects of the proposed standards in title I of the Retirement Protection Act of 1993 (H.R. 3396/S. 1780) (see app. V). We did our work between January 1992 and April 1994 in accordance with generally accepted government auditing standards.

Data Selection

We used a database of plans paying the variable rate premium that the Pension Benefit Guaranty Corporation provided to define our population of underfunded plans and selected a random sample for our analyses. We used information from the Form 5500 (Annual Return/Report of Employee Benefit Plan) data for this sample of plans to (1) identify plans receiving additional contributions, (2) analyze factors that affected the amounts of these additional contributions, and (3) estimate the effects of current pension plan funding proposals.

The Pension Protection Act, a part of the Omnibus Budget Reconciliation Act of 1987, defines pension plan underfunding for variable rate premium purposes differently from underfunding for additional contribution purposes. The differences arise primarily because the interest rates that plans are allowed to use for the two purposes differ. The interest rate used to calculate plan liabilities for the variable rate premium has been lower than the range of allowable rates that plans must use to calculate their current liabilities since the two rates became effective.[24] This increases the liabilities for the variable rate premium relative to those for additional contributions. As a result, to date all plan sponsors required to make additional contributions to reduce their plan's underfunding should have paid the variable rate premium. Thus, we used the OBRA 87 definition of pension plan underfunding and selected these plans from PBGC's list of sponsors who pay the variable rate premium as the universe of plans for our analysis.

[24] The interest rate plans must use for the variable rate premium is 80 percent of the 30-year Treasury bill rate on the day before the beginning of the plan year. The range of allowable rates is 90 to 110 percent of a weighted 4-year average of the 30-year Treasury bill rate. If long-term interest rates are steady or falling, as they have been in the past few years, then the interest rate for the variable rate premium liabilities will be lower than the allowable range of rates used to calculate current liabilities. Should long-term interest rates rise, the interest rate used to calculate the variable rate premium liabilities could fall within, or exceed, the allowable range used to calculate current liabilities.

PBGC provided us a data tape of plan information for all plans that paid the variable rate premium in 1990, the most recent year for which relatively complete premium payment data were available. We did not verify the accuracy of these data though we found they contained several inconsistencies.

The PBGC premium payment data tape contained 15,472 plans whose sponsors paid the variable rate premium in plan year 1990. Of these plans, 10,203 plans, or about 66 percent, had fewer than 101 participants and were thus exempt from making additional plan contributions. We randomly selected a sample of 105 plans that could be subject to the additional contribution requirement from the remaining 5,269 plans.

Because the additional contribution requirement became effective with plan years beginning in January 1, 1989, we collected Form 5500 and related Schedule B (Actuarial Information) data for plan years 1987 through 1990. However, our analysis focused on the 1990 plan year. No one agency had all Form 5500s for all the plans in our sample, so we contacted the Department of Labor, the Internal Revenue Service, and/or individual pension plan administrators to obtain these forms.

We eliminated 12 plans from our sample of 105. We could not obtain sufficient plan data for six of these plans. The remaining six plans were misidentified on the PBGC data tape and should not have been included in our universe because three were multiemployer plans, two were defined contribution plans, and one had fewer than 101 participants.[25] This left us with a final sample of 93 plans on which we performed our analyses.

The sampling error of the estimates made from the final sample of 93 plans is no greater than plus or minus 11 percentage points at the 95-percent confidence level. That is, the chances are 19 out of 20 that the actual number of plans or percentage of plans being estimated falls within plus or minus 11 percentage points of our estimate. For certain parts of our analysis, we analyze data pertaining to subsets of our 93 plan sample; for example, the 57 plans with unfunded current liabilities. In these cases, the sampling error will be larger than that for the full sample of 93 plans.

[25]Sponsors report the number of plan participants on two forms—the form used to calculate the variable rate premium and the form to calculate additional contributions. This plan sponsor reported over 101 participants on the form submitted for determining the variable rate premium. Therefore, we initially included this plan in the universe of 5,269 plans. However, it reported fewer than 101 participants on the form for determining additional contributions. As a result, we eliminated this plan from our final universe.

To account for the six plans that we identified from our sample that should not have been included in our universe, we adjusted the universe to which our analysis applied to 4,968 plans. We did this by reducing our sample size by the six that should not have been included (105-6), dividing the result by the original sample size (99/105), and multiplying our original universe (5,269) by that ratio. Therefore, the 93 sample plans represent an adjusted universe of 4,968 plans. We implicitly assumed that the six defined benefit plans for which we could not obtain sufficient data have similar characteristics to the 93 plans included in our final sample.

We reviewed summary plan descriptions to identify plans by benefit type, such as flat benefit plans or salary-based plans. We use the term "flat benefit plans" to identify plans whose monthly benefits are determined by multiplying years of service by a specified dollar amount (for example, years of service times $20). Of our sample of 93 plans, 45, almost half, were flat benefit plans. The remaining 48 plans consisted of 28 salary-based plans, 14 combination salary/flat benefit plans (usually salary-based plans with a flat benefit-based minimum benefit), and 6 other types of plans. For our analysis, we considered the pure flat benefit plans as one group and combined all other plans into a second group identified as nonflat benefit plans.

Data Analyses

We used the sample of 93 plans to determine what portion of sponsors were making additional contributions to reduce the underfunding in their plans. For the plans not receiving additional contributions, we determined what portion was not underfunded on a current liability basis, what portion had sufficient offsets to eliminate any required additional contribution, what portion miscalculated the size of the required additional contribution, and what portion did not make the additional contribution calculation. We contacted the plan administrators for all plans in this last group to determine why the calculations were not made. We did not determine if the contributions aside from the additional contributions were correctly calculated.

Sensitivity Analysis of PPA Requirements

We performed a sensitivity analysis to assess the impact of various components of the PPA requirements—the current funding provisions—on plan sponsors making additional contributions and the size of those contributions. These components can affect the size of the resulting additional contribution. In our sensitivity analysis, we assessed the impact of three of these components—offsets, amortization of old and new plan underfunding over different time periods, and interest rates used to calculate the current liability—on the size of additional contributions for the 93 plans in our sample. We identified the impact of each of these components on flat and nonflat benefit plans in the above sample.

Analysis of Proposed Funding Rules Changes in the PFIA

Next, we used our sample of 93 plans to identify the impact of proposed changes in pension plan funding rules contained in PFIA. Among other provisions, these bills would restrict the allowable interest rate range that could be used to determine plan liabilities. We calculated the effect this restricted range would have on the underfunded status of the plans in our sample. We also calculated the amount of additional contributions that the plans with unfunded current liabilities would make under the three alternative contribution rules contained in the bills.

PFIA provides a 5-year phase-in period for the SMR alternative to ease its impact on plan sponsors. Because we are interested in the ultimate impact of these bills, we only briefly report anticipated effects during the phase-in period and, instead, concentrate on the anticipated effects once the phase-in is complete.

We determined the probable effects of PFIA on mature rather than young pension plans. We defined a mature plan as one having 40 percent or more of its liabilities attributable to retirees. We did this analysis to address our concern that the bills in their current form would be more burdensome on mature plans than on young plans. Additionally, we compared the probable effects of PFIA on flat benefit plans as opposed to nonflat benefit plans.

We then analyzed PFIA's section 102(d)—the transition use of credit balances (offsets that affect two of the contribution alternatives)—to determine how large an impact this provision would have on reducing the increase in contributions that these bills would otherwise provide.

Analysis of Proposed Standards in the RPA

Finally, we performed an analysis of the proposed standards in title I of the RPA—H.R. 3396/S. 1780. RPA would make several changes to the ERISA funding rules to strengthen the minimum funding requirements for underfunded plans.

We estimated how the current liability of the 93 plans in our sample would change because of the proposed restrictions on the mortality and interest rates. We calculated how many sponsors of these plans would subsequently be subject to the modified additional contribution provisions and how many would be required to make additional contributions. We then estimated the size of these additional contributions after accounting for the proposed changes in the rules for calculating the DRC, offset, and the transitional limitation that would be in effect through the 2001 plan year. We also determined the effects of the proposed solvency rule in RPA that would require underfunded plans to maintain liquid assets equal to 3 years' worth of benefit payments and other disbursements. Finally, we performed a sensitivity analysis to determine how each of several modifications to the RPA provisions would affect the number of sponsors making additional contributions and the size of those contributions.

We did not have sufficient data to estimate the effects on plan funding of either the proposal that sponsors immediately recognize all negotiated benefit increases or the proposal that some sponsors be exempt from IRS excise taxes for certain nondeductible contributions.

Analysis of the Current Additional Contribution Provision

This appendix describes how well current funding rules are working to reduce unfunded current liabilities in single-employer defined benefit plans. We determined what portion of sponsors of underfunded plans are making additional contributions and the reasons why some sponsors do not make additional contributions. We also performed a sensitivity analysis to identify which characteristics of the current funding rules have the greatest impact on the number of sponsors making additional contributions and on the amount of their additional contributions.

Description of the Provision

The additional contribution provision requires sponsors of defined benefit pension plans with unfunded current liabilities to determine if they need to make additional contributions to reduce underfunding in their plan.[26] Unfunded liabilities are separable into three components—liability arising with respect to unpredictable events, the residue of the total underfunding extant at the start of the 1988 plan year (the unfunded old liability), and the balance after accounting for the first two components (the unfunded new liability).

The first step in determining a plan's additional contribution is to calculate the deficit reduction contribution. The DRC is the sum of the amount needed to amortize the unfunded old liability over 18 years (beginning in 1989) and the payment for the unfunded new liability, which depends on the total funding level of the plan. The second step is to reduce the DRC by subtracting amortization payments the sponsor is making for liabilities arising from original plan benefits, subsequent benefit improvements, and any past contributions deferred by Internal Revenue Service waivers. We call these payments "offsets." Finally, the remainder is increased by a payment for any unpredictable events liability. This sum, limited to the underfunding in the plan at the beginning of the plan year, is the required additional contribution for plans with 150 or more participants. Plans with 101 to 149 participants receive a reduced additional contribution, and plans with 100 or fewer participants the previous year are not subject to the additional contribution provision.

[26]See appendix I for a detailed discussion of the specifics of this provision.

Most Underfunded Plans Do Not Receive Additional Contributions

The additional contribution provision lacks efficacy because sponsors of most underfunded plans are not required to make additional contributions. In 1990, more than 15,000 defined benefit plans paid the Pension Benefit Guaranty Corporation's variable rate premium because they were underfunded. Sponsors of about two-thirds of these plans were exempt from making additional contributions because they had 100 or fewer participants in the plans throughout the 1989 plan year. We drew a random sample of 93 plans from the remaining 4,968 "large" plans to determine how many sponsors were making additional contributions. We also identified the reasons some sponsors were not making additional contributions to their underfunded plans.

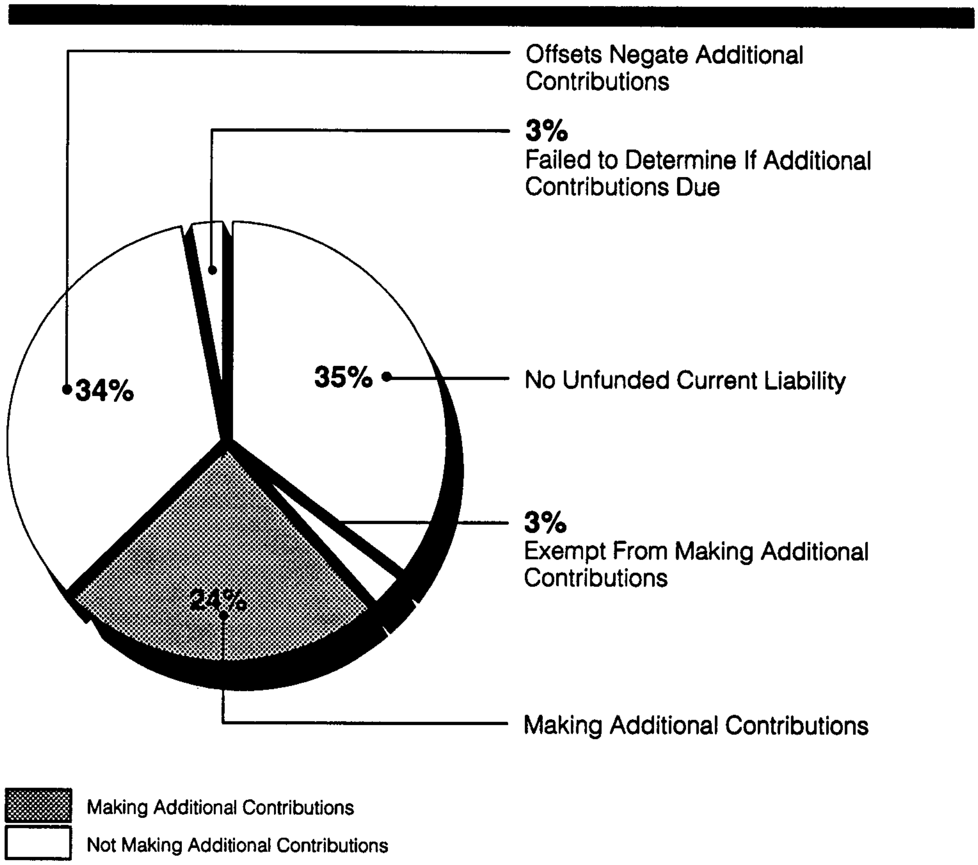
Sponsors of less than 25 percent of the 93 plans were making additional contributions to their plans. Fig. III.1 shows the distribution of these plans by additional contribution status. Of the 93 plans,

- 33 were not underfunded on a current liability basis,
- 22 were underfunded on a current liability basis and receiving additional contributions from the plan sponsor,
- 32 were underfunded on a current liability basis but had sufficient offsets to nullify any required additional contributions, and
- 6 were underfunded on a current liability basis but did not determine if they owed additional contributions.[27]

In addition, three of these last six plans were exempt from making the determination, but the other three should have made the determination; one of these, we calculate, should have received additional contributions.

[27] In our testimony before the Subcommittee on Oversight, House Committee on Ways and Means (Private Pensions: Most Underfunded Plan Sponsors Are Not Making Additional Contributions GAO/T-HRD-93-16, Apr. 20, 1993), we reported that 11 underfunded plans had not determined if they should have made additional contributions. The data we received from the Department of Labor for five of these plans were abridged and did not contain the additional contribution determinations reported by the plans. The sponsor of one plan made additional contributions, but the other four plans had sufficient offsets so that additional contributions were not required. The remaining six plans are those discussed above.

Figure III.1: Distribution of 93 Plans Paying PBGC's Variable Rate Premium, by Additional Contributions Payment Status, 1990



Source: 1990 IRS Form 5500, Schedule Bs of the 93 plans.

Percents do not sum to 100 due to rounding.

Of the 93 plans in our sample, 57 were underfunded and subject to the additional contribution provision. Twenty-three plans, only 25 percent of our sample or 40 percent of the plans subject to the provision, made, or should have made, additional contributions. Twenty-two sponsors paid $2.8 million in additional contributions. These additional contributions increased the total 1990 minimum contributions for the 22 sponsors by 26 percent but erased only 2.6 percent of their plans' underfunding.

Projections to the Population

Our sample size indicates with 95-percent confidence that between 2,522 and 3,568 of the 4,968 large plans paying PBGC variable rate premiums are subject to the additional contribution provision. We estimate that sponsors of between 715 and 1,635 of these plans actually made additional contributions in 1990. Looked at another way, only 5 to 11 percent of the more than 15,000 plans paying the PBGC variable rate premium were also receiving additional contributions to improve their funding.

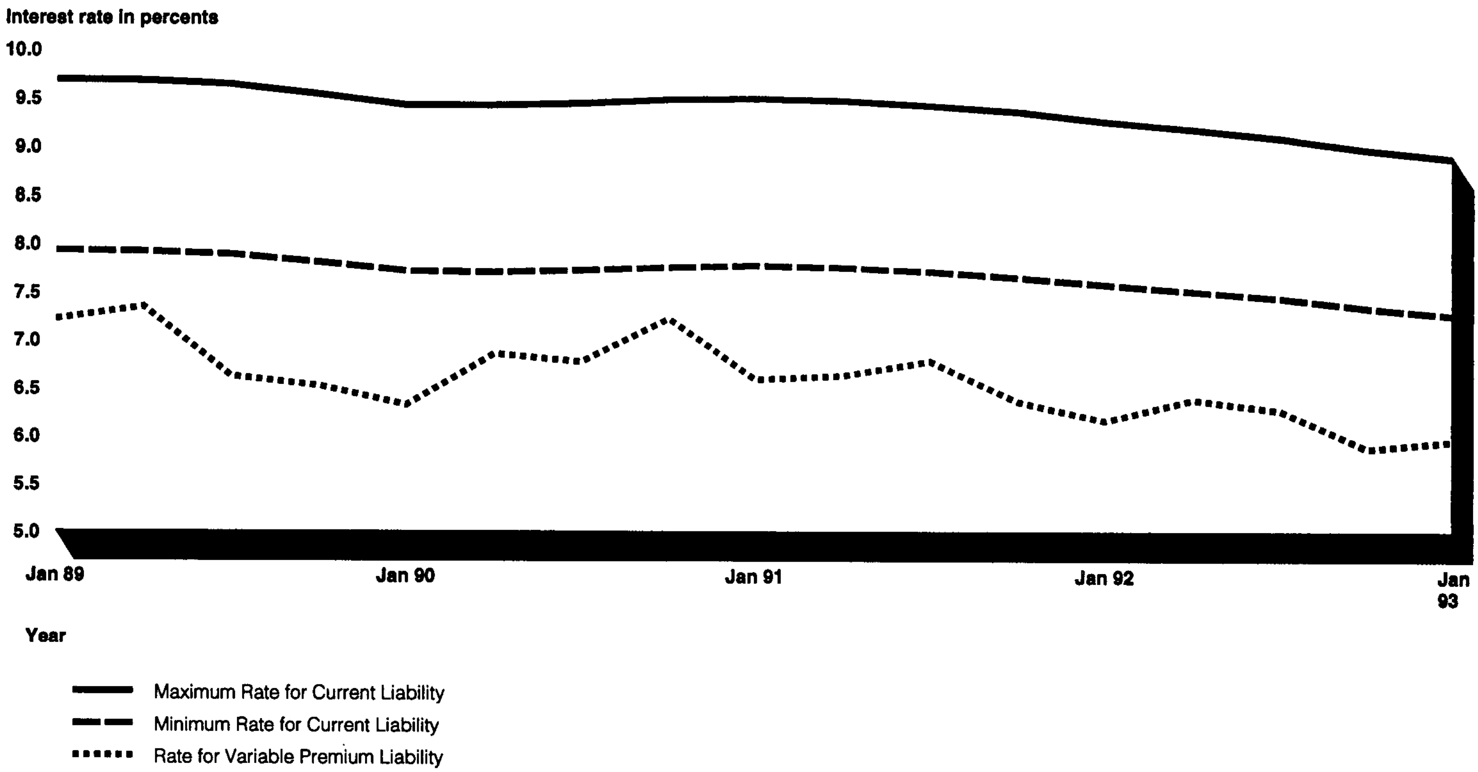
Plans With No Current Liability Underfunding

A plan may have an unfunded liability for the variable rate premium and be fully funded for purposes of the additional contribution. This occurs because in 1990 plans were required to use an interest rate to calculate their liabilities for PBGC's premium payment purposes that was lower than any rate in the range of allowable rates that had to be used to calculate current liabilities. The lower the interest rate used to calculate plan liabilities, other things equal, the higher will be the resulting liability.

To demonstrate the effects of interest rates on plan liabilities, assume that the plan has promised to pay a participant $100 one year from now. How much money does it need to have now to pay the $100 next year (assuming no additional sponsor contributions)? It depends on the interest rate. If the interest rate is 5 percent, the plan needs $95.24 today to pay the $100 next year ($95.24 times 1.05 = $100). This $95.24 is the plan's current liability when the interest rate is 5 percent. However, if the interest rate is 10 percent, it needs only $90.91 today to pay $100 next year. The interest rate increased and today's liability decreased.

The interest rate plans are required to use when calculating their liability for PBGC premium purposes is 80 percent of the 30-year U.S. Treasury bill rate for the month before the beginning of the plan's fiscal year. This rate has been below the range of rates from which plans select when calculating their current liabilities since the two interest rate measures became effective in January 1988 (see fig. III.2). We discuss interest rates further in the sensitivity analysis below.

Figure III.2: Interest Rates for Determining the Variable Rate Premium Liabilities and the Range of Allowable Rates for Determining Current Liabilities, January 1989 - January 1993



Offsets

Offsets allow sponsors subject to the additional contribution provision to reduce or eliminate such contributions. The offsets eliminated the additional contribution for 32 of the 57 plans in our sample that had unfunded current liabilities and would have eliminated them for two plans that did not make the calculation. The offsets were sufficient to eliminate the $16.3 million DRC from these 34 plans. In addition, 16 of the 22 plan sponsors making additional contributions in 1990 claimed offsets of $13.0 million. These 16 sponsors made only $2.6 million in additional contributions.

Plans That Did Not Determine Their Additional Contribution Requirements

Six plans that were underfunded on a current liability basis did not calculate their additional contributions. Three of these plans were exempt from making the determination—one was a contributory plan whose employee contributions were not included in the funding standard account assets measure (the plan was fully funded counting these contributions), one was a new plan whose sponsor was exempt from making additional contributions for the first plan year (and will be required to make only partial additional contributions for the next 4 years), and one had fewer than 101 participants on each day of the 1989 plan year even though it reported more than 100 for the 1990 plan year.[28]

The remaining three plans should have made the additional contribution determination but probably did not do so because the instructions were unclear. The instructions for the Form 5500, Schedule B item 13, state that "Multiemployer plans or plans with NO unfunded current liability or plans with 100 or fewer participants" need not make the additional contribution determination. For each of these three plans, the market value of assets (reported on line 6c of the Form 5500 Schedule B) exceeded the plan's current liability (line 6d). Thus, the plans appear fully funded by this comparison. However, the funding standard account asset level (line 8b) less the prior year's credit balance (line 9h), the correct asset value to use for this purpose, did not exceed the plans' current liabilities. If the person preparing the Schedule B did not read beyond the quoted portion of the instructions, he or she might not have realized that the market value of assets is not the correct asset measure to use when determining whether the plan is fully funded on a current liability basis.

The sponsors of two of these three plans had sufficient offsets to negate the DRC. The third, we estimate, should have made a small additional contribution of less than $8,500.

Flat Versus Nonflat Benefit Plans

Forty-five of the 93 plans in our sample were so-called flat benefit plans.[29] Of the other 48 plans, 28 were salary-based plans, 14 were a combination of flat benefit and salary-based plans—most were salary-based plans with a flat benefit minimum benefit, and 6 plans were other types of plans. For this analysis, we grouped the pure flat benefit plans together and put all other plans into the second, nonflat benefit group.

[28]In our opinion, basing the additional contributions due this year on the maximum number of participants in the plan last year is unwise from an enforcement standpoint. First, plans do not report the maximum number of participants in the plan during the year. Second, the compliance auditor should not be required to find the previous year's Form 5500 filing to determine if the underfunded plan had fewer than 101 participants that year and, thus, might be exempt from the additional contribution requirement.

[29]In these plans, monthly benefits are determined by multiplying years of service by a specified dollar amount (for example, years of service times $20).

Table III.1 shows that flat benefit plans are more likely than other plans in our sample to be underfunded on a current liability basis (76 percent versus 48 percent), but less likely to be receiving additional contributions from their sponsors. Only one-quarter of the flat benefit plans with unfunded current liabilities were receiving additional contributions compared with over half the nonflat benefit plans.

Table III.1: Underfunded Plans Making Additional Contributions, by Plan Type

	All plans	Flat benefit plans	Nonflat benefit plans
Total number	93	45	48
Number of plans with unfunded current liabilities	57	34	23
Total amount of underfunding	$201,550,000	$128,335,000	$73,216,000
Number of plans receiving additional contributions	22	9	13
Total amount of additional contributions	$2,809,000	$1,327,000	$1,482,000

The additional contributions had a larger impact on the funding of nonflat benefit plans. The additional contributions were equivalent to 2.6 percent of the underfunding in plans that received them—11 percent in nonflat benefit plans but only about 1.5 percent in the flat benefit plans. This difference is caused in large part by the greater offsets available to flat benefit plans. These offsets arise, in part, because flat benefit plans regularly give benefit increases through plan amendments, and the amortization payments for these benefit increases are used to offset any additional contribution requirement.

Sensitivity Analysis

Several components of the additional contribution determination process can affect the size of the resulting additional contribution requirements. In this sensitivity analysis, we examined three of these components—interest rates used to calculate current liability, separation of plan underfunding into old and new components, and the offsets—to estimate the relative effects for the 93 plans in our sample.

Interest Rates

Using higher interest rates reduces a plan's calculated liabilities, other things equal. To calculate its current liability, a plan can select any interest rate from the allowable range of rates. The range can change monthly to reflect changes in the 30-year U.S. Treasury bill rate. During 1990, the range was relatively stable with the midpoint of the range only varying from 8.55 percent to 8.63 percent.

If plan sponsors were trying to avoid the additional contribution, we would expect to see a large portion of the plans, especially plans with unfunded current liabilities, using an interest rate near the top of the range. To test this, we divided the monthly interest rate ranges for our plans into five groups—we divided the range into thirds and added groups for the top and bottom of the range. Table III.2 shows that few plans used high interest rates to calculate their liabilities. Less than 25 percent of the plans in our sample used an interest rate in the top third of the allowable range, and only two plans used the highest interest rate allowable. Flat benefit plans in our sample were more likely than nonflat plans to use an interest rate in the top third (29 percent versus 17 percent).

Table III.2: Interest Rates Used to Calculate Current Liabilities for 93 Plans, by Plan Type and Funding Level

		Flat benefit		Nonflat benefit	
Interest rate	All plans	Fully funded	Underfunded	Fully funded	Underfunded
Top of range	2	1	0	1	0
Top one-third	19	3	9	4	3
Middle one-third	30	4	11	6	9
Bottom one-third	37	3	14	13	7
Bottom of range	5	0	0	1	4
Total	93	11	34	25	23

The implication of the relative lack of use of the highest allowable interest rates is that a slight restriction of the allowable range is not likely to have a great impact on increasing additional contributions. Legislation has been introduced (S. 105/H.R. 298 and S. 1780/H.R. 3396) that would limit the allowable range for calculating current liabilities to the bottom half of the current range.[30] We calculated that such a halving of the allowable range would have made only two additional plans underfunded on a current liability basis (one flat benefit plan and one nonflat benefit plan) and that total plan underfunding would have increased by only 7 percent (see table III.3). Such a change would not cause any additional plan sponsors in our sample to make additional contributions,[31] but total additional

[30]The current allowable range is 90 to 110 percent of the 4-year weighted average of the 30-year U.S. Treasury bill rate. The proposals would reduce the allowable range to 90 to 100 percent of this weighted average rate.

[31]The additional plan shown in table III.3 that would receive additional contributions is the plan that we determined should have received additional contributions under current law.

contributions would increase by 20 percent from $2.8 million to $3.4 million.

Table III.3: Effects of Alternative Interest Rate Ranges on Plan Underfunding and Additional Contributions, by Plan Type

Effective interest rate range	All plans	Flat benefit plans	Nonflat benefit plans
Total number	93	45	48
Number of plans with unfunded current liabilities			
Current law	57	34	23
S. 105/H.R. 298	59	35	24
Bottom of range	69	41	28
Number of plans receiving additional contributions			
Current law	22	9	13
S. 105/H.R. 298	23	10	13
Bottom of range	36	19	17
Amount of additional contributions			
Current law	$2,809,000	$1,327,000	$1,482,000
S. 105/H.R. 298	3,364,000	1,869,000	1,495,000
Bottom of range	8,398,000	5,869,000	2,529,000

The estimated increase in additional contributions when using the range of interest rates specified in S. 105/H.R. 298 comes from the plans whose current liabilities increased as the result of using a lower interest rate. The higher liabilities increased the plans' underfunding, which lowered their funding ratios. For most plans, all the additional underfunding would be unfunded new liability.[32] The combination of a lower funding ratio, increase in unfunded new liability, and no additional offsets is responsible for the large percentage increase in the additional contributions for all plans.

We also estimated the impact on additional contributions of requiring plans to use the interest rate at the bottom of the allowable range of rates. This alternative would increase current liabilities for the 88 plans that selected interest rates above the bottom of the range. Sixty-nine of the 93 plans would be underfunded on a current liability basis, and more than half of these (36) would be receiving additional contributions from their sponsors. The number of flat benefit plans receiving additional contributions would more than double to 19 plans, and the total additional

[32]For 21 plans in our sample, the unfunded old liability was greater than the plan's unfunded current liability. The unfunded new liability for these plans was $0 when using their selected interest rate and will increase only to the extent that the increased unfunded current liability exceeds the unfunded old liability.

contributions to these plans would increase by almost 350 percent to $5.9 million. In contrast, the number of nonflat benefit plans making additional contributions would increase by less than one-third to 17 plans, and total additional contributions would not quite double to $2.5 million (see table III.3).

Reducing interest rates used to calculate current liabilities is one way to increase additional contributions. However, to have a major impact, some rather severe reductions in the allowable range will be necessary.[33]

Eliminating Unfunded Old Liability

A plan's unfunded current liabilities can be divided into three components under current law—unpredictable contingent event benefits, unamortized unfunded old liability, and unfunded new liability. The unfunded old liability amount is amortized over 18 years (beginning with the 1989 plan year) while the unfunded new liability is amortized over a substantially shorter period that depends on the plan's funding ratio.

We estimated the impact on our 93 sample plans of amortizing the remaining unfunded old liability over the shorter unfunded new liability period. This change does not affect the number of plans that are underfunded on a current liability basis nor does it affect the total underfunding in these underfunded plans. It does affect the size of the DRC before applying any offsets.[34] This change increases the DRC by amortizing the unfunded old liability over a period shorter than 18 years. Sponsors of plans that had an unfunded old liability and who were making additional contributions under current law would make increased additional contributions. Some sponsors that had offsets sufficient to negate the DRC under current law would have to pay additional contributions if unfunded old liability is treated like unfunded new liability.

Treating unfunded old liability like unfunded new liability has a substantial impact on the number of plans receiving additional contributions and the total amount of these contributions, especially for flat benefit plans. The number of plans in our sample that would receive additional contributions

[33]Falling interest rates over the past 3 years and the "stickiness" of actuarial assumptions suggests that in 1994 a greater portion of underfunded plans will be using an interest rate in the top half of the allowable range. Therefore, we would expect a larger impact today from restricting the interest range than we estimate would have occurred in 1990.

[34]As time passes, the unfunded old liability will diminish (and be eliminated after 2006) and a greater portion of a plan's total unfunded liability will be from unfunded new liability. If total plan underfunding remains constant or increases, the DRC and additional contributions will increase.

would increase from 22 to 32, and the total additional contributions would almost quadruple to $10.1 million (see table III.4).

Table III.4: Effects of Alternative Treatment of Unfunded Old Liabilities, Offsets, and Allowable Interest Rates on Plan Underfunding and Additional Contributions, by Plan Type

	All plans	Flat benefit plans	Nonflat benefit plans
Total number	93	45	48
Number of plans with unfunded current liabilities			
Current law	57	34	23
Bottom of range	69	41	28
Number of plans receiving additional contributions			
Current law	22	9	13
No old underfunding	32	18	14
No offsets	57	34	23
Modified offsets	32	20	12
Offsets limited to 50 percent of DRC	57	34	23
Modified offsets and no old underfunding	37	25	12
Bottom of range, modified offsets, and no old underfunding	50	34	16
Amount of additional contributions			
Current law	$2,809,000	$1,327,000	$1,482,000
No old underfunding	10,084,000	7,402,000	2,682,000
No offsets	34,438,000	18,327,000	16,112,000
Modified offsets	19,875,000	10,203,000	9,672,000
Offsets limited to 50 percent of DRC	23,455,000	12,151,000	11,304,000
Modified offsets and no old underfunding	26,893,000	18,306,000	8,587,000
Bottom of range, modified offsets, and no old underfunding	50,054,000	31,530,000	18,523,000

Note: Dollar amounts may not sum to "All plans" total due to rounding.

Offsets

Offsets were allowed against the DRC because plan sponsors already amortize the costs associated with the plan's underfunding in the FSA.[35]

[35]The offset does not appear in the proposed PPA legislation but was added during the conference agreement. Amortizing underfunding over 18 or fewer years in the DRC would result in a larger payment than amortizing it over the amortization periods used in the FSA, those who designed the offset believed. (The 30-year amortization period for benefit increases was thought to be the main cause for poor plan funding.) Those designing the offset did not want plan sponsors to make two amortization payments per year for the same underfunding, so they allowed the DRC payment to be reduced by the FSA charges (and increased by the FSA credits) that were amortized over 30 years or longer.

The underfunding reduction contribution in the FSA is total amortization charges less the total amortization credits. However, for most plans, the offsets include most, but not all, amortization charges and ignore most amortization credits. Thus, the offsets used to adjust the additional contribution for most plans are larger, often much larger, than the payments the sponsor is actually making to the FSA to reduce its plan's underfunding. This explains why offsets are sufficient to nullify the DRC for 34 of the 57 underfunded plans in our sample.

As an example, one plan in our sample was underfunded by $1.7 million and its preoffset DRC was about $230,000. The $660,000 in offsets for this plan was based on an outstanding cost balance of $7.2 million.[36] The plan's underfunding is substantially less than the cost basis for the offsets because the balance on which the plan's amortization credits is based ($7.2 million) is not taken into account. The $675,000 in amortization credits reduced the net amortization payment to the plan's FSA to $225,000. This is $5,000 less than the preoffset DRC, yet no additional contributions were made because the amortization credits were not used to reduce the offset.

Offsets also reduced the additional contributions of 16 of the 22 plans making them. If there were no offsets, all 57 plans that had unfunded current liabilities would have received additional contributions. We estimated that without the offsets the aggregate additional contributions for the 57 plans would have been $34.4 million, more than 12 times the additional contributions actually received (see table III.4). The minimum contribution for these 57 plans was $33.2 million, not counting current law additional contributions, so eliminating the offset would more than double plan contributions, on average.

In our opinion, the design of the current law offset is flawed. Our concern is that plan sponsors can use amortization charges to reduce or eliminate their additional contributions and then use amortization credits to reduce those same charges in the FSA. The current procedures result in a double reduction of the sponsor's contributions that are designed to decrease plan underfunding. If the design flaw, which we believe is the unanticipated and unintended consequence of the offset's last-minute insertion into the PPA, is not corrected, offsets will continue to reduce required additional contributions.

[36]The plan had an additional cost balance of $1.6 million, but the $240,000 amortization payments for these additional costs are not used to offset the plan's DRC.

As long as a plan is underfunded, its sponsor should make a specific contribution to reduce the underfunding that is, at a minimum, no less than the DRC. If sponsors are allowed to use offsets that eliminate the DRC and, as a result, total underfunding reduction contributions are less than the DRC (as can be the case under current law), then plan underfunding may continue.

We believe that the difference between the total amortization charges and the total amortization credits is a more appropriate offset measure. This is the amount the sponsor is actually contributing to reduce plan underfunding under the old ERISA funding rules. Using this offset measure would ensure that the DRC would be the minimum underfunding reduction contribution.

This modified offset would not allow a double reduction in contributions, and contributions for sponsors of many underfunded plans would consequently increase. In our sample, using the modified offset would increase the number of plan sponsors making additional contributions from 22 to 32. The number of sponsors of flat benefit plans making additional contributions would more than double to 20. Total additional contributions for all plans would increase from $2.8 million to $19.9 million.

This large increase in additional contributions indicates that the amortization credits currently excluded from the additional contribution calculations, but used to reduce sponsor contributions in the FSA, are far greater than the amortization charges that are not currently used to offset the DRC.

The modified offset is not sufficient to ensure that all sponsors of underfunded plans make additional contributions to improve plan funding. To achieve such assurances, the offsets must be either eliminated or restricted so that they cannot eliminate the entire DRC.

One way to ensure that all sponsors of underfunded plans make at least some additional contributions would be to limit the offset to a specified percentage of the DRC. For example, we estimated the impact of limiting the modified offset to be no greater than 50 percent of each plan's DRC. At a minimum, all sponsors of underfunded plans would make an additional contribution equal to 50 percent of the DRC. If such a restriction were in effect, the 57 sponsors in our sample would make additional contributions of $23.5 million.

Because pension contributions are a tax deductible expense, any increase in contributions will result in a decrease in federal revenues, which will cause the pay-as-you-go restrictions to apply.[37] The revenue loss from the new additional contributions will have to be offset by other revenues or by expenditure reductions.

Combining Changes

If two or all three of these components were changed as above, the impact would be greater than if only one were changed. For example, by treating unfunded old liability like unfunded new liability and making the offset equal to all amortization charges minus all amortization credits, we estimate that 37 of the 57 sponsors of underfunded plans would be making $26.9 million in additional contributions (see table III.4). Compare this with the 22 plan sponsors making $2.8 million in additional contributions under current law. If the sponsors were also required to use the interest rate at the bottom of the allowable range, the number of underfunded plans would increase to 69, and sponsors of 50 would be making a total of over $50 million in additional contributions.

Conclusions

The current funding provision designed to improve funding in underfunded pension plans is not particularly effective. Most underfunded plans are not subject to this provision because they have fewer than 101 participants. Sponsors of less than half the large underfunded plans subject to this provision were making additional contributions in 1990 because allowable offsets eliminated any additional contributions that otherwise would have been made. The offsets also substantially reduced the additional contributions for most of the sponsors that made them.

The offset provision is poorly designed in our opinion because it is not equal to the payment the plan's sponsor is actually making to the FSA to reduce plan underfunding. FSA amortization credits are generally not incorporated into the offsets. The unanticipated flaw in the current offset design results in offsets that can be several multiples of the DRC for many plans. Because of this, many underfunded plans will never receive additional contributions from their sponsors unless the current offset provision is changed.

We also examined two other features of the additional contribution provision to determine what impact they have on the size of additional

[37]Under the Budget Enforcement Act, PAYGO requires that all direct spending and tax legislation enacted during a session of the Congress must be deficit neutral in the aggregate.

contributions that sponsors of underfunded plans make. Splitting the plan's underfunding into old and new components has the second largest effect on the size of additional contributions after the offset provision. Combining the two underfunding components and treating the total as unfunded new liabilities are now treated would increase the number of sponsors making additional contributions by almost 50 percent and the size of the additional contributions made by 300 percent. Modifying the current interest rate range has the least effect. Substantial reductions in the allowable interest rate range would be needed to have an appreciable effect on the number of plan sponsors making additional contributions or the size of total additional contributions.

Matters for Consideration

Because of persistent and growing underfunding in certain pension plans insured by the PBGC, the Congress should consider increasing funding requirements to bolster contributions for underfunded plans. This can be partially accomplished by correcting the design flaw in the current offsets, but many underfunded plans will continue to receive no additional contributions with this correction alone. Therefore, the Congress may wish to consider limiting the size of the offset that plan sponsors can use to reduce their additional contributions. For example, if the Congress limited the offset to be no greater than 80 percent of the DRC, then sponsors of every underfunded plan would make an additional contribution to improve their plan's funding of at least 20 percent of their DRC.

Analysis of the Proposed Pension Funding Improvement Act of 1993

This appendix describes our analysis of the probable effects of the proposed funding rule changes contained in the Pension Funding Improvement Act of 1993 (H.R. 298/S. 105). The PFIA would replace the current funding provisions with a requirement that sponsors of underfunded plans base their contributions on the greatest of three funding provisions—the ERISA requirement (the current funding requirement for most plans), the underfunding reduction requirement (a proposed new funding requirement based primarily on the level of underfunding in the plan), and the solvency maintenance requirement (a proposed new funding requirement based primarily on disbursements from the plan). The URR and SMR values could be reduced by prescribed offsets before the plan sponsor determines the appropriate funding requirement. (See app. I for details on the provisions in these bills.)

Analysis

The PFIA would restrict the range of allowable interest rates that could be used to calculate current plan liabilities to the lower half of the current range. This would raise the calculated liabilities of the 24 plans in our 93-plan sample that currently select an interest rate from the top half of the current range. We estimated that, if this restriction had been in effect in 1990, 59 of these 93 plans would have been subject to the proposed funding provisions of these bills instead of the 57 subject to current law additional contribution provisions. The analysis that follows is based on this subsample of 59 plans.

Enactment of PFIA would reduce the number of sponsors of unfunded plans who are making increased contributions compared with current law, but it would substantially increase the amount of the contributions those affected would pay (see table IV.1).[38] The new proposals would cause sponsors of 16 plans to make contributions greater than the ERISA requirement. These 16 sponsors include only 6 of the 22 sponsors making additional contributions under current law.[39] Total contributions for these 16 plans would increase from $17.4 million under the ERISA requirement to $62.1 million under the applicable URR or SMR.

[38]PFIA provides for a 5-year phase-in of the SMR. Twenty percent of the excess of the SMR over the URR would be counted in each of the first 5 years after enactment. The analysis presented here assumes no phase-in period and indicates how the 59 plans would be affected if they had their 1990 funding characteristics once the provisions of the bills are fully phased in.

[39]See appendixes I and III for descriptions of how additional contributions are calculated under current law. Under PFIA, the plan sponsor would compare his contributions requirement under three alternatives and pay the greatest amount. The current law paradigm and the PFIA paradigm affect plans differently.

Table IV.1: Impact of PFIA on the Funding of 59 Plans, With and Without the Offset Provision

	Relevant funding provision	Contributions due under the ERISA provision (millions of dollars)	Increase in contributions under relevant funding provision (millions of dollars)	Number of plans paying under relevant provision
Contributions with offset provision	Total	$38.8	$44.7	59
	ERISA	21.4	0.0	43
	URR	0.8	0.3	2
	SMR	16.5	44.5	14
Contributions without offset provision	Total	$38.8	$95.5	59
	ERISA	7.5	0.0	16
	URR	2.7	2.4	11
	SMR	28.6	93.1	32

Notes: Dollar values may not sum to totals due to rounding.

The data in this table are based on the assumption that the SMR 5-year phase-in period is not in force.

The SMR, based on plan disbursements, will cause more sponsors to make increased contributions than the URR, which is based on the funding ratio of the plan. The 14 plan sponsors who would contribute under the SMR provision would contribute $44.5 million more than their ERISA requirement, a 269-percent increase.[40] Five of 14 sponsors who would pay under the SMR provision would have to contribute at least twice as much as they would under the ERISA requirement, and two such sponsors would experience more than a fivefold increase in contributions (see table IV.2).

[40]Only five of the sponsors would make a contribution under the SMR provision during the first year of the 5-year phase-in. The other nine would make contributions based on the ERISA requirement. The required contributions of the five sponsors who would be subject to the SMR provision in the first year would increase from $7.4 million (the ERISA requirement) to $10.9 million (the SMR requirement), a 48-percent increase.

Table IV.2: Number of Plans by Percentage Increase in URR and SMR Contributions Over ERISA Contributions, With and Without the Offset Provision

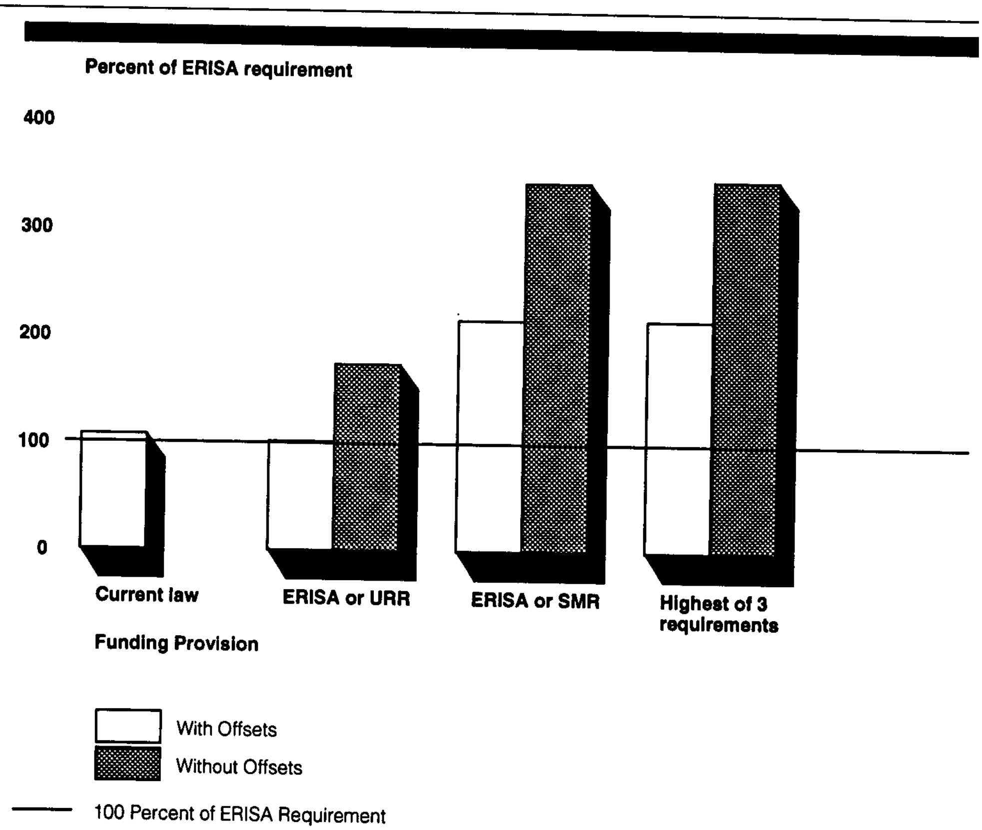
	Percentage increase						
Effective funding provision	No increase	0%-50%	51%-100%	101%-200%	201%-500%	500% or more	Average increase in contributions
With offsets							
ERISA	43	•	•	•	•	•	0%
URR	•	2	0	0	0	0	30%
SMR	•	5	4	1	2	2	269%
Total	43	7	4	1	2	2	115%
Without offsets							
ERISA	16	•	•	•	•	•	0%
URR	•	6	3	1	1	0	91%
SMR	•	11	5	7	3	6	326%
Total	16	17	8	8	4	6	246%

Note: A "•" indicates that the specified percentage increase cannot occur with the designated effective funding provision.

By comparison, the two sponsors contributing under the URR provision would have increased contributions of $0.2 million, about a 30-percent increase in contributions. Neither of these sponsors would have a contribution increase as high as 50 percent.

Figure IV.1 shows the total contributions for the 59 plans under (1) current law; (2) the ERISA requirement (the normal contribution requirement used here as the base against which the other provisions are compared); (3) the higher of the ERISA or URR contribution; (4) the higher of the ERISA or SMR contribution; and (5) the highest of the ERISA, URR, or SMR contribution. Most of the increase in total contributions that would occur would be attributable to the 14 sponsors that would make contributions under the SMR provision. The increase in the required contribution for these 14 sponsors would be sufficient to more than double the total contributions going to all 59 underfunded plans in our sample.

Figure IV.1: Effect of Funding Proposals on Contributions to 59 Underfunded Pension Plans, With and Without Offsets



Note: Based on GAO sample of 59 underfunded pension plans (in 1990).

If plans paid only the greater of the ERISA or URR contribution, total contributions would increase by only 1 percent (see table IV.3). And only 4 plans would be affected, far fewer than the 22 plans receiving additional contributions under current law. Current additional contribution provisions, in contrast, increase total contributions of the 59 plans by 7 percent over the ERISA requirement.

Table IV.3: Number of Plans by Percentage Increase Paying Under ERISA, URR, and SMR, With and Without the Offset Provision

Effective funding provision	Percentage increase: No increase	0%-50%	51%-100%	101%-200%	201%-500%	500% or more	Average increase in contributions
ERISA requirement versus the URR							
With offsets							
ERISA	55	•	•	•	•	•	0%
URR	•	3	1	0	0	0	38%
Total	55	3	1	0	0	0	1%
Without offsets							
ERISA	27	•	•	•	•	•	0%
URR	•	15	7	6	4	0	99%
Total	27	15	7	6	4	0	73%
ERISA requirement versus the SMR							
With offsets							
ERISA	45	•	•	•	•	•	0%
SMR	•	5	4	1	2	2	269%
Total	45	5	4	1	2	2	115%
Without offsets							
ERISA	20	•	•	•	•	•	0%
SMR	•	15	7	8	3	6	310%
Total	20	15	7	8	3	6	243%

Note: A "•" indicates that the specified percentage increase cannot occur with the designated effective funding provision.

Aggregative Impact of PFIA Without Offsets

Removing the proposed offset provision of PFIA would more than double the number of sponsors making additional contributions compared to the number that would make them if the offsets were allowed. Total contributions for the 43 affected plans would increase from $31.2 million under the ERISA rules alone to $126.7 million. Again, the SMR would be the dominating provision, applying to sponsors of 32 of the 43 plans and accounting for 97.5 percent of the $95.5 million increase in contributions over the ERISA requirement.

Fifty-five percent of those who would pay under the URR provision would make contributions that increased by less than 50 percent from the ERISA requirement levels while half those who would pay under the SMR provision would see their contributions more than double. One sponsor paying under the SMR provision would find that its contributions would increase by almost 900 percent, from the current $3.2 million under the ERISA requirement to over $32 million.

Effects on Mature Versus Young Plans

The SMR provision will have a larger impact on mature plans than on young plans. We define mature plans as plans in which retiree liabilities account for 40 percent or more of total liabilities. Our 59-plan sample of underfunded plans contains 22 mature plans and 37 young plans.

PFIA would increase the contributions to mature plans in our sample by 175 percent over their base ERISA contributions. By contrast, the contributions to young plans in the sample would increase by only 5 percent. Half of the mature plan sponsors in our sample would make increased contributions while less than 15 percent of the sponsors of young plans would.

Eliminating the offsets would markedly increase the number of sponsors of both mature and young plans who make contributions under the SMR provision (to 21 of the 22 mature plans and 22 of the 37 young plans). On the basis of our sample, if there were no offsets, sponsors of mature plans would experience a 360-percent increase in contributions compared with a 35-percent increase for sponsors of young plans.

Effects on Flat Benefit Plans Versus Nonflat Benefit Plans

Analysis of the 35 flat benefit plans and 24 nonflat benefit plans in our sample shows that PFIA in its current form will have a somewhat larger impact on flat plans than on nonflat plans. PFIA would increase contributions to our sample of flat plans in aggregate by approximately 140 percent. The increase for sample nonflat plans would be about 90 percent. By contrast, excluding the offset provision of PFIA would increase the contributions to sample flat plans by approximately 290 percent and to sample nonflat plans by about 210 percent. Thus, PFIA would appear to have a greater impact on flat benefit plans, the plans most likely to be underfunded because benefits are often regularly increased through plan amendments.

Concerns About the Impact of Proposed Funding Rules in PFIA

Concerns With the Offset Provision

The amortization charges and credits included in the offsets under PFIA are precisely those that are not included in the current law offsets. In addition, allowing an offset "for amounts considered contributed by the employer . . . to the extent necessary to avoid an accumulated funding deficiency" (Sec. 102(d)) suggests that, if there were no amortization charges and credits and no prior-year credit balance, the contribution requirement under URR or SMR, before the offset, would have to be at least twice the ERISA contribution for the sponsor to make an increased contribution.

In addition, the amortization charges and credits could phase out by 2017, but the "amounts considered contributed" component of the offset is not designed to phase out, so the proposed offset would be in effect indefinitely.

We contacted individuals who designed the offset to determine why it was designed as it was and how they intended it to work. One of these people told us that the proposed offset may be "defectively constructed" and would not be included in any revision of the legislation.

In our opinion, the requirement that sponsors pay the greatest of the contributions required under three distinct funding requirements makes an offset provision unnecessary. The offset provision under current law is designed to account for payments that the sponsor is already making to reduce its plan's underfunding. However, these payments are already accounted for by the ERISA contribution under the proposal. Therefore, a modified offset like the one proposed to replace the current law offset is unnecessary.

Concerns With the SMR

The proposed SMR is an especially powerful tool for increasing plan funding. We are concerned, however, about three aspects of this requirement.

First, the proposed SMR is not based primarily on either the level of underfunding in the plan or the plan's funding ratio. The primary component of the SMR for most plans affected by this provision will be plan disbursements. For most plans, the major component of disbursements is benefit payments. What is not recognized in this provision is that $1 of benefit payments reduces both assets and liabilities by $1. The only portion of the benefit payment that needs to be replaced to maintain the plan's funding ratio is the unfunded portion, not the entire payment. If the funding ratio is to improve, more than this replacement amount must be contributed to the plan. However, the SMR provision, as written, is overly punitive. It could require two sponsors with equal disbursements to make equal contributions to their underfunded plans, even if one plan were significantly better funded than the other. Perversely, the SMR will have a larger impact on a better funded underfunded plan than on a worse funded one because contributions in excess of the amount needed to replace unfunded disbursements will be larger for the former.

Second, the proposed SMR places a larger burden on underfunded mature plans than on equally underfunded young plans. Because mature plans will be making more benefit payments, their disbursements, and hence required contributions, will be higher.

Finally, the proposed SMR produces contribution requirements that can be several multiples of current contribution requirements and could pose a large burden to some plan sponsors, even though their plans are only slightly underfunded.

Sponsors affected by this provision would be required to pay plan disbursements out of their current cash flow instead of from plan assets, essentially forcing them into a pay-as-you-go funding situation. This requirement that affected sponsors fund benefit payments from current cash flow, regardless of how well funded their plan is, could pose special difficulties for financially troubled sponsors experiencing cash flow problems.[41]

Plan Amendments That Increase Underfunding

PFIA would require sponsors of underfunded plans granting a benefit increase through plan amendment to provide security if the plan's funding ratio after the amendment was less than 90 percent. The amount of the security would be the excess over $1,000,000 of the amount necessary to bring the funding ratio, including the unfunded current liability attributable to the plan amendment, to 90 percent.

[41] These sponsors could apply for a funding waiver from the IRS if the situation warranted.

We did not determine how this provision might affect the plans in our sample. All 93 plans could be affected, but we believe flat benefit negotiated plans (at least 33 of the 45 flat benefit plans in our sample) would be the most affected because these are the plans most likely to receive regular periodic benefit increases.[42]

We acknowledge the problem that such benefit increases cause and the increased exposure they pose for PBGC. However, the proposed solution will fall most heavily on one type of plan—negotiated flat benefit plans—and can be expected to retard benefit growth for their participants. Benefits in plans with salary-based benefits will increase automatically with increases in the participants' earnings, but most will not be affected by this provision. Underfunding arising in flat and nonflat benefit plans or negotiated and nonnegotiated plans should be addressed by the same set of rules as much as possible.

The best solution to the problem of benefit increases is to correct and strengthen the current additional contribution provision so that a greater proportion of underfunded plans receive additional contributions from their sponsors. Increases in plan liability from benefits provided through plan amendment will be included in the plan's unfunded new liability and subject to speedier amortization under the improved additional contribution provision. In addition, allowing sponsors of negotiated plans to advance fund their plans up to perhaps 120 or 125 percent of current liability without penalty could help alleviate the large increase in underfunding that occurs whenever benefit increases are negotiated.

[42]Four salary plans and four salary/flat benefit combination plans in our sample are also negotiated plans.

Analysis of the Proposed Retirement Protection Act of 1993

This appendix describes our analysis of the probable effects of the proposed funding rule changes contained in the Retirement Protection Act of 1993 (H.R. 3396/S. 1780). The RPA's funding rule proposals include, among others (1) a solvency rule for plans with liquid assets equal to less than 3 years' disbursements, (2) a correction of the offset design, and (3) an increase in the deficit reduction contribution. (See app. I for details on the provisions in these bills.)

The RPA moves in the right direction to strengthen funding in underfunded plans and will result in substantial improvements over current law, but, in our opinion, does not go far enough. Many underfunded plans will continue to receive no additional contributions to bolster their funding if this bill is enacted. The RPA could and should be strengthened so that sponsors of a larger percentage of underfunded plans make additional contributions to bolster their plans' funding.

Analysis

Enactment of RPA would increase both the number of plans subject to the additional contribution provision and the number of sponsors required to make additional contributions. However, the transitional provision that would limit the size of the additional contribution would initially limit the number of sponsors making additional contributions to about 50 percent of those subject to the provision.

Changes in Actuarial Assumptions

The RPA would restrict the allowable interest rate range that plans could use when calculating their current liabilities to the same range specified in the Pension Funding Improvement Act (H.R. 298/S. 105). Twenty-four of the 93 plans in our sample would have increased current liabilities because of this restriction. RPA would also restrict the mortality table that plans could use for calculating current liabilities to the commissioner's standard mortality table that would be used to determine reserves for group annuity contracts. We were able to adjust plan liabilities for these mortality table differences for 50 of the 93 plans in our sample.[43] Twenty-nine of the remaining 43 plans already used the specified mortality table. We did not have sufficient data for the 14 remaining plans to make this adjustment.

[43]To make this adjustment, we calculated the present value, at single year ages through the plan's retirement age, of a $1 annuity, payable monthly, using the plan's actuarial assumptions and again using the plan's assumptions but substituting the commissioner's mortality table. We multiplied the current liability for retirees by the ratio of these present values at the plan's retirement age and for nonretirees by the ratio at an age 15 years younger than the plan's retirement age.

Liabilities would increase for 62 of the 93 plans as a result of the restrictions on interest and mortality rates. Underfunding would increase for 38 of the 57 plans subject to the provision under current law. Eight additional plans would also become underfunded and subject to the additional contribution provision. The analysis in the remainder of this appendix is based on this sample of 65 plans. Thirty-nine of these 65 plans are flat benefit plans and 26 are nonflat benefit plans.

Proposed Solvency Rule

RPA contains a provision that would require underfunded plans to maintain liquid assets equal to at least 3 years' worth of plan disbursements. If liquid assets fall below this amount, sponsors would be required to make a solvency contribution to bring assets up to that amount.[44] We estimate that only one of the plans in our sample would be affected by this provision. We much prefer this solvency rule to the SMR proposed in PFIA as a method of curtailing a sponsor's ability to defund its plan during an economic hardship.

Calculating the New Additional Contribution

The RPA would modify the method of computing the DRC in several ways. First, the increase in liabilities from restricting the interest and mortality rate assumptions would be added to the unfunded old liability and amortized over 12 years beginning in 1995. Second, the unfunded new liability amount would be increased for all sponsors whose plans' funding ratios exceed 35 percent. Finally, the DRC would include a new component, the expected value of benefit accruals for the plan year, in addition to the unfunded old and new liability amounts.

The offset amount would also be modified under RPA. It would include all amortization charges and credits, which would correct the design flaw we found in the current law offset. It would also include the plan's normal costs.

A plan's normal costs may not be equal to the expected value of accrued benefits for the plan year because they can be calculated using different interest rates and the normal costs will depend on the funding method the plan uses. If the two values are equal, they will cancel each other out when the offsets are subtracted from the DRC. If they are not equal, the additional contribution will be larger (when expected benefit accruals are larger than normal costs) or smaller than if these amounts had been excluded from

[44]If only certain types of assets are counted as meeting the proposed solvency rule, then this rule may affect plans' portfolio management.

the DRC and offset. When the amounts differ, the difference can be viewed, and justified, as the amount needed to adjust the normal costs to a current liability basis.

For 30 of the 65 underfunded plans in our sample, normal costs exceeded expected benefit accruals. For these 30 plans, additional contributions would be higher, or the probability of making additional contributions would be greater, if normal costs and expected benefit accruals were not included in the offset and DRC, respectively. However, an almost equal number, 27 plans, have expected benefit accruals that exceed normal costs. Sponsors of these plans would be more likely to make additional contributions under the proposal as written. For the remaining eight plans, normal costs equal expected benefit accruals.

We estimate that, if the transitional limitations in the bill were not in effect, sponsors of 38 of the 65 plans that would be subject to the additional contribution provisions under RPA would make $29.2 million in additional contributions. These limitations, which would be in effect through the 2001 plan year, would restrict the additional contribution to be no greater than the larger of the additional contribution that would be required under current law or the additional contribution that would be required to increase plan funding by no more than a specified percentage increase.

These limitations would initially eliminate any additional contributions for 4 plans and would reduce them for 11 others. With the limitations in effect, 34 sponsors would make additional contributions of $28.0 million. Only 16 of the 22 sponsors making additional contributions under current law would make them under RPA and 6 of these 16 sponsors would pay less. The average additional contribution under RPA would be more than six times the average amount paid under current law, however (see table V.1).[45]

[45]Should the sponsor experience financial hardship because of the increase in required contributions (a maximum increase of 283 percent in our sample), the sponsor can apply for a funding waiver from IRS.

Table V.1: Comparison of the Additional Funding Provision Under Current Law and RPA, Based on a Sample of 93 Plans

	Current law	RPA
Number of plans with unfunded current liabilities	57	65
Number of plans whose sponsors are making, or would make, additional contributions	22	34
Amount of additional contributions (dollars in millions)	$2.8	$28.0
Average additional contribution (dollars in thousands)	$127.7	$823.8

Twenty-three of the 34 plans that would receive additional contributions with the transition rules in place are flat benefit plans, but they receive only half of all additional contributions. Without the transition rules, half of all additional contributions would continue to go to flat benefit plans even though 27 of the 38 plans that would receive additional contributions are flat benefit plans.

Under RPA initially, sponsors of about half the underfunded plans would not be making additional contributions to improve funding in their plans.[46] Sponsors of all nine plans in our sample with funding ratios below 50 percent would make additional contributions if the RPA is enacted, but only about half of the 31 plans that are 50- to 80-percent funded would do so. Moreover, the additional contribution for five of the nine most underfunded plans would be less than 5 percent of the underfunding at the beginning of the plan year. We conclude that additional strengthening of the additional contribution provision, beyond that contained in the RPA, is needed to ensure that sponsors of most underfunded plans make additional contributions to improve their plans' funding.[47]

Sensitivity Analysis

A number of modifications to the RPA could be used to increase the number of sponsors of underfunded plans that make additional contributions. Table V.2 shows the estimated impact of six such modifications.

[46]The 95-percent confidence interval indicates that between 39 and 65 percent of underfunded plans subject to the RPA provisions would receive additional contributions.

[47]We note that such a strengthening will invoke PAYGO considerations that the Congress will have to address.

Table V.2: The Number of Sponsors Making Additional Contributions and the Size of These Contributions Under Various Modifications to RPA, Based on a Sample of 65 Underfunded Plans

	With transitional limitations		Without transitional limitations	
Modification	Number	Thousands of dollars	Number	Thousands of dollars
No modification	34	$28,010	38	$29,241
Offsets exclude normal costs	37	25,590	39	26,856
No old underfunding	42	42,171	46	56,864
Limit offsets to 90% of DRC	61	28,690	61	30,244
Eliminate offsets	61	49,610	61	62,879
Limit offsets to 90% of DRC for plans that are less than 80% funded	49	28,542	49	29,729
Limit offsets to 50% of DRC for plans that are less than 80% funded	49	31,781	49	35,086

If normal costs were excluded from the offset and expected benefit accruals were excluded from the DRC, the number of sponsors of underfunded plans in our sample who initially would make additional contributions would increase from 34 to 37, but total additional contributions would decline slightly.

Treating all underfunding as new underfunding and subjecting it to the proposed provisions would increase the number of sponsors making additional contributions by about 25 percent, to 42. Total additional contributions would increase by about 50 percent to $42 million. This illustrates the large impact the transition rule of splitting underfunding into old and new components has on the size of additional contributions. Because this transition rule is scheduled to phase out in 2006, it does not need to be modified, in our opinion.

Six of the eight sponsors that would begin making additional contributions if all underfunding were treated as new underfunding have plans that are 50- to 75-percent funded, and seven of the eight are sponsors of flat benefit plans. Without the proposed transitional limitations, this change would require sponsors of 46 of the 65 underfunded plans to make total additional contributions of $57 million, 23 percent of the beginning-of-year underfunding in these 46 plans.

The final four modifications shown in table V.2 would limit the offset that could be used to reduce the DRC. In the first of these, the offset would be limited to a maximum of 90 percent of the DRC, and in the second the offset would be eliminated. In each instance, 61 of the 65 sponsors of underfunded plans would make additional contributions.[48] In the other two modifications, the offset would be limited (to 90 and 50 percent of the DRC, respectively) only for plans that were less than 80-percent funded. In these cases, 49 of the 65 sponsors of underfunded plans would need to make additional contributions.

Limiting the offset to 90 percent of the DRC for all underfunded plans would have only a small impact on the total amount of additional contributions received (about a 2.5-percent increase for our sample) but would cause nearly all sponsors of underfunded plans to make an additional contribution. Thirty-one of the 34 sponsors that would make additional contributions under the RPA as proposed would not have increased additional contributions under this modification because the offsets for their plans are already less than 90 percent of their DRCs. The additional contribution under this modification would equal less than 2 percent of the beginning-of-year underfunding for 21 of the 61 affected plans, so it would not likely pose a hardship for most sponsors.

More severe restrictions on the offset would result in increased additional contributions for an increasingly larger portion of the affected sponsors. In the extreme case where there is no offset,[49] total additional contributions for the 61 affected sponsors in our sample would climb to nearly $50 million, almost 20 percent of the beginning-of-year underfunding in these 61 plans.

If the Congress decides that the RPA would not cause enough sponsors of underfunded plans to make additional contributions, and it does not want to burden all such sponsors with making additional contributions if their plans are only slightly underfunded, it can specify a threshold funding ratio below which the offset would be limited. For example, the Congress could decide that sponsors of all plans that were less than 80-percent funded would make some additional contributions to improve their plans' funding, but that sponsors of plans 80-percent funded or better would make additional contributions only if their unrestricted offsets were insufficient to eliminate their plans' DRCs.

If the funding ratio threshold were set at 80 percent and offsets were restricted to be no greater than 90 percent of the DRC, then 49 sponsors in

[48]We estimate that the other four sponsors would make sufficient contributions to bring their plans to full funding without any additional contributions.

[49]We do not advocate this extreme case but present it only to illustrate how powerful the offset would remain under the RPA.

our sample would make $28.5 million in additional contributions. This is less than a 2-percent increase in total additional contributions over the RPA as proposed, but the number of sponsors making additional contributions would increase by almost 45 percent. Obviously, as the limit on the offset is reduced, additional sponsors would be affected and the total amount of additional contributions would increase. If the sponsors of plans that are less than 80-percent funded had their offsets capped at 50 percent of their DRC, then the same 49 sponsors in our sample would make total additional contributions of $31.8 million, about a 13-percent increase over the current RPA proposal.

Again, we note that modifying the RPA to increase the percent of sponsors of underfunded plans that would make additional contributions will result in a PAYGO issue. We estimated that the incremental revenue loss from a reasonable modification will be small (for example, about $60 million if the offset were limited to 50 percent of the DRC for plans that were less than 80-percent funded). The Congress will have to balance the budget's PAYGO considerations against the improved protections for PBGC and plan participants when deciding whether or by how much the RPA should be strengthened.

Concerns About the RPA

We have several concerns about the RPA. On the basis of our analysis, we find the RPA will not require increased contributions for many sponsors of underfunded plans. If the RPA had been in effect in 1990, almost half the sponsors with plans subject to the revised additional contribution provision would not have made additional contributions to reduce their plans' underfunding. Even if the transitional limitations were not in effect, more than 40 percent of the sponsors in our sample with underfunded pension plans would not have made additional contributions. Additional actions, such as limiting the offset to a percentage of the DRC, are necessary if underfunding is to be speedily reduced in most underfunded plans.

We are concerned with the impact the transitional limitation will have on the number of sponsors initially making additional contributions and the size of those contributions. At a minimum, the design flaw in the current law offset should be corrected before the current law's additional contribution requirement is used as a limitation.

In addition, we believe the limitations on the percentage increases in plan funding contained in the alternative transitional limitation are too low. If this were the sole transitional limitation, only 24 sponsors would make additional contributions, and 9 of these would make additional contributions smaller than those they would make without this limitation. This compares with the 38 sponsors that would make additional contributions in the absence of any transitional limitations. In our view, the restriction on the increase in a plan's funding ratio is too limiting. We believe that the cap should be set 2 or 3 percentage points higher than proposed in the RPA. All 38 sponsors that would make additional contributions in the absence of any transitional limitations would make additional contributions with the limitations in place if the caps were set 3 percentage points higher.

If target increases in funding are to be used, we prefer that, instead of limiting additional contributions by a maximum increase in a plan's funding ratio, a minimum increase in this ratio be adopted. If minimum contributions in the absence of additional contributions are not sufficient to increase the plan's funding ratio by the specified percentage (which could be dependent on the plan's beginning-of-year funding ratio), then an additional contribution sufficient to attain the target would be required.

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