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PENSION BENEFIT GUARANTY CORPORATION

Single-Employer Pension Insurance Program Faces Significant Long-Term Risks

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Highlights

Highlights of GAO-03-873T, a testimony before the Committee on Education and the Workforce, U.S. House of Representative

PENSION BENEFIT GUARANTY CORPORATION

Single-Employer Pension Insurance Program Faces Significant Long-Term Risks

Why GAO Did This Study

More than 34 million participants in 30,000 single-employer defined benefit pension plans rely on a federal insurance program managed by the Pension Benefit Guaranty Corporation (PBGC) to protect their pension benefits, and the program's long-term financial viability is in doubt. Over the last decade, the program swung from a $3.6 billion accumulated deficit (liabilities exceeded assets), to a $10.1 billion accumulated surplus, and back to a $3.6 billion accumulated deficit, in 2002 dollars. Furthermore, despite a record $9 billion in estimated losses to the program in 2002, additional severe losses may be on the horizon. PBGC estimates that financially weak companies sponsor plans with $35 billion in unfunded benefits, which ultimately might become losses to the program.

This testimony provides GAO's observations on the factors that contributed to recent changes in the single-employer pension insurance program's financial condition, risks to the program's long-term financial viability, and options to address the challenges facing the single-employer program.

www.gao.gov/cgi-bin/getrpt?GAO-03-873T.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Barbara Bovbjerg at (202) 512-7215 or bovbjergb@gao.gov.

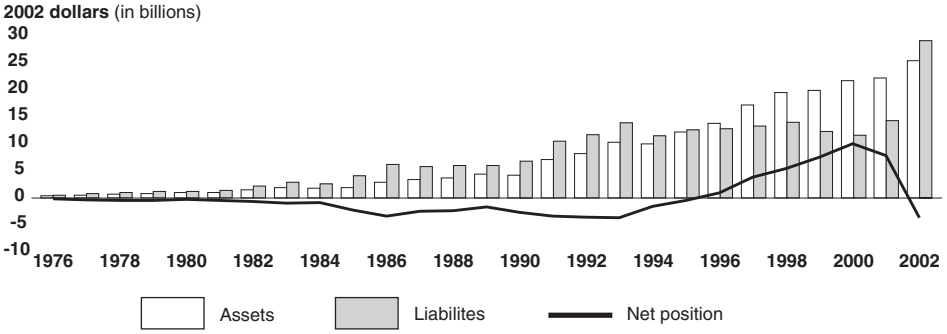
What GAO Found

The single-employer pension insurance program returned to an accumulated deficit in 2002 largely due to the termination, or expected termination, of several severely underfunded pension plans. Factors that contributed to the severity of plans' underfunded condition included a sharp stock market decline, which reduced plan assets, and an interest rate decline, which increased plan termination costs. For example, PBGC estimates losses to the program from terminating the Bethlehem Steel pension plan, which was nearly fully funded in 1999 based on reports to IRS, at $3.7 billion when it was terminated in 2002. The plan's assets had decreased by over $2.5 billion, while its liabilities had increased by about $1.4 billion since 1999.

The single-employer program faces two primary risks to its long-term financial viability. First, the large losses in 2002 could continue or accelerate if, for example, structural problems in particular industries result in additional bankruptcies. Second, revenue from premiums and investments might be inadequate to offset program losses. Participant-based premium revenue might fall, for example, if the number of program participants decreases. Because of these risks, we have recently placed the single-employer insurance program on our high-risk list of agencies with significant vulnerabilities to the federal government.

While there is not an immediate crisis, there is a serious problem that relates to the need to protect the retirement security of millions of American workers and retirees and should be addressed. Agency officials and others have suggested taking a more proactive approach and have identified a variety of options to address the challenges facing the single-employer program that should be considered. The first, would be to improve the transparency of information about plan funding, plan investments, and PBGC guarantees; a second would be to strengthen funding rules to ensure that poorly funded plans are better funded in the future; and a third would be to reform PBGC by restructuring certain unfunded benefit guarantees, such as so-called “shutdown benefits,” and program premiums.

Program Assets, Liabilities, and Net Position, Fiscal Years 1976-2002



Source: PBGC annual reports.

Mr. Chairman and Members of the Committee:

I am pleased to be here today to discuss the serious financial challenges facing the Pension Benefit Guaranty Corporation's single-employer insurance program. This federal program insures the benefits of the more than 34 million workers and retirees participating in private defined-benefit pension plans.[1] Over the last few years, the finances of PBGC's single-employer insurance program,[2] have taken a severe turn for the worse. From a $3.6 billion accumulated deficit in 1993, the program registered a $10.1 billion accumulated surplus (assets exceeded liabilities) in 2000 before returning to a $3.6 billion accumulated deficit, in 2002 dollars.[3] More fundamentally, the long-term viability of the program is at risk. Even after assuming responsibility for several severely underfunded pension plans and recording over $9 billion in estimated losses in 2002, PBGC estimates that as of September 30, 2002, it faces exposure to approximately $35 billion in additional unfunded liabilities from ongoing plans that are sponsored by financially weak companies and may terminate.[4]

[1]A defined-benefit plan promises a benefit that is generally based on an employee's salary and years of service. The employer is responsible for funding the benefit, investing and managing plan assets, and bearing the investment risk. In contrast, under a defined contribution plan, benefits are based on the contributions to and investment returns on individual accounts, and the employee bears the investment risk.

[2]There are two federal insurance programs for defined-benefit plans: one for single-employer plans and another for multiemployer plans. Our work was limited to the PBGC program to insure the benefits promised by single-employer defined-benefit pension plans. Single-employer plans provide benefits to employees of one firm or, if plan terms are not collectively bargained, employees of several related firms.

[3]PBGC estimates that its deficit had grown to about $5.4 billion at the end of March 2003 based on the midyear financial report.

[4]According to PBGC, for example, companies whose credit quality is below investment grade sponsor a number of plans. PBGC classifies such plans as reasonably possible terminations if the sponsors' financial condition and other factors did not indicate that termination of their plans was likely as of year-end. See PBGC 2002 Annual Report, p. 41. The independent accountants that audited PBGC's financial statement reported that PBGC needs to improve its controls over the identification and measurement of estimated liabilities for probable and reasonably possible plan terminations. According to an official, PBGC has implemented new procedures focused on improving these controls. See Audit of the Pension Benefit Guaranty Corporation's Fiscal Year 2002 and 2001 Financial Statements in PBGC Office of Inspector General Audit Report, 2003-3/23168-2 (Washington, D.C.: Jan. 30, 3003).

This involves an issue beyond PBGC's current and future financial condition it also relates to the need to protect the retirement security of millions of American workers and retirees. I hope my testimony will help clarify some of the key issues in the debate about how to respond to the financial challenges facing the federal insurance program for single-employer defined-benefit plans. As you requested, I will discuss (1) the factors that contributed to recent changes in the single-employer pension insurance program's financial condition, (2) risks to the program's long-term financial viability, and (3) options to address the challenges facing the single-employer program.

To identify the factors that contributed to recent changes in the single-employer program's financial condition, we discussed with PBGC officials, and examined annual reports and other available information related to, the funding and termination of three pension plans: the Anchor Glass Container Corporation Service Retirement Plan, the Pension Plan of Bethlehem Steel Corporation and Subsidiary Companies, and the Polaroid Pension Plan. We selected these plans because they represented the largest losses to PBGC in their respective industries in fiscal year 2002. PBGC estimates that, collectively, the plans represented $4.2 billion in losses to the program at plan termination. In particular, I will focus on the experience of the Bethlehem Steel plan because it provides such a vivid illustration of the immediate and long-term challenges to the program and the need for additional reforms. To identify the primary risks to the long-term viability of the program and options to address the challenges facing the single-employer program, we interviewed pension experts at PBGC, at the Employee Benefits Security Administration of the Department of Labor, and in the private sector and reviewed analyses and other documents provided by them.

Let me first summarize my responses to your questions. The termination, or expected termination, of several severely underfunded pension plans was the major reason for PBGC's single-employer pension insurance program's return to an accumulated deficit in 2002. Several underlying factors contributed to the severity of plans' underfunded condition at termination, including a sharp decline in the stock market, which reduced plan asset values, and a general decline in interest rates, which increased the cost of terminating defined-benefit pension plans. Falling stock prices and interest rates can dramatically reduce plan funding as the sponsor approaches bankruptcy. For example, while annual reports indicated the Bethlehem Steel Corporation pension plan was almost fully funded in 1999 based on reports to IRS, PBGC estimates that the value of the plan's assets was less than 50 percent of the value of its guaranteed liabilities by the

time it was terminated in 2002. The current minimum funding rules and other rules designed to encourage sponsors to fully fund their plans were not effective at preventing it from being severely underfunded at termination.

Two primary risks could affect the long-term financial viability of the single-employer program. First, and most worrisome, the high level of losses experienced in 2002, due to the bankruptcy of companies with large underfunded defined-benefit pension plans, could continue or accelerate. This could occur if the economy recovers slowly or weakly, returns on plan investments remain poor, interest rates remain low, or the structural problems of particular industries with pension plans insured by PBGC result in additional bankruptcies. Second, PBGC might not receive sufficient revenue from premium payments and its own investments to offset the losses experienced to date or those that may occur in subsequent years. This could happen if participation in the single-employer program falls or if PBGC's return on assets falls below the rate it uses to calculate the present value of benefits promised in the future. Because of its current financial weaknesses, as well as the serious, long-term risks to the program's future viability, we recently placed PBGC's single-employer insurance program on our high-risk list.

While there is not an immediate crisis, there is a serious problem that needs to be addressed. Some pension professionals have suggested a "wait and see" approach, betting that brighter economic conditions might ameliorate PBGC's financial challenges. However, the recent trends in the single-employer program's financial condition illustrate the fragility of PBGC's insured plans and suggest that an improvement in plan finances due to economic recovery may not address certain fundamental weaknesses and risks facing the single-employer insurance program. Agency officials and other pension professionals have suggested taking a more proactive approach and have identified a variety of options to address the challenges facing PBGC's single-employer program. In our view, several types of reforms should be considered. The first would be to improve the availability of information available to plan participants and others about plan funding, plan investments, and PBGC guarantees. A second would be to strengthen funding rules applicable to poorly funded plans to help ensure plans are better funded should they be terminated in the future. A third would be to reform PBGC by restructuring its benefit guarantees and premiums. Guarantees for certain unfunded benefits, such as so-called "shutdown benefits," could be modified. With respect to variable-rate premiums, in addition to the plan's funding status, consideration should be given to the economic strength of the plan's

sponsor, the allocation of the plan's investment portfolio, the plan's benefit structure, and participant demographics. These options are not mutually exclusive, either in combination or individually and several variations exist within each. Each option also has advantages and disadvantages. In any event, any changes adopted to address the challenge facing PBGC should improve the transparency of the plan's financial information, provide plan sponsors with incentives to increase plan funding, and provide a means to hold sponsors accountable for adequately funding their plans.

Background

Before enactment of the Employee Retirement and Income Security Act (ERISA) of 1974, few rules governed the funding of defined-benefit pension plans, and there were no guarantees that participants of defined-benefit plans would receive the benefits they were promised. When Studebaker's pension plan failed in the 1960s, for example, many plan participants lost their pensions.[5] Such experiences prompted passage of ERISA to better protect the retirement savings of Americans covered by private pension plans. Along with other changes, ERISA established PBGC to pay the pension benefits of participants, subject to certain limits, in the event that an employer could not.[6] ERISA also required PBGC to encourage the continuation and maintenance of voluntary private pension plans and to maintain premiums set by the corporation at the lowest level consistent with carrying out its obligations.[7]

Under ERISA, the termination of a single-employer defined-benefit plan results in an insurance claim with the single-employer program if the plan does not have sufficient assets to pay all benefits accrued under the plan

[5] The company and the union agreed to terminate the plan along the lines set out in the collective bargaining agreement: retirees and retirement-eligible employees over age 60 received full pensions and vested employees under age 60 received a lump-sum payment worth about 15 percent of the value of their pensions. Employees whose benefit accruals had not vested, including all employees under age 40, received nothing. James A. Wooten, "'The Most Glorious Story of Failure in Business:' The Studebaker – Packard Corporation and the Origins of ERISA." *Buffalo Law Review*, vol. 49 (Buffalo, NY: 2001): 731.

[6] Some defined-benefit plans are not covered by PBGC insurance; for example, plans sponsored by professional service employers, such as physicians and lawyers, with 25 or fewer employees.

[7] See section 4002(a) of P.L. 93-406, Sep. 2, 1974.

up to the date of plan termination.[8] PBGC may pay only a portion of the claim because ERISA places limits on the PBGC benefit guarantee. For example, PBGC generally does not guarantee annual benefits above a certain amount, currently about $44,000 per participant at age 65.[9] Additionally, benefit increases in the 5 years immediately preceding plan termination are not fully guaranteed, though PBGC will pay a portion of these increases.[10] The guarantee is limited to certain benefits, including so-called "shut-down benefits," -- significant subsidized early retirement benefits that are triggered by layoffs or plant closings that occur before plan termination. The guarantee does not generally include supplemental benefits, such as the temporary benefits that some plans pay to participants from the time they retire until they are eligible for Social Security benefits.

Following enactment of ERISA, however, concerns were raised about the potential losses that PBGC might face from the termination of underfunded plans. To protect PBGC, ERISA was amended in 1986 to require that plan sponsors meet certain additional conditions before terminating an underfunded plan. (See app I.) For example, sponsors could voluntarily terminate their underfunded plans only if they were bankrupt or generally unable to pay their debts without the termination.

Concerns about PBGC finances also resulted in efforts to strengthen the minimum funding rules incorporated by ERISA in the Internal Revenue Code (IRC). In 1987, for example, the IRC was amended to require that

[8]The termination of a fully funded defined-benefit pension plan is termed a standard termination. Plan sponsors may terminate fully funded plans by purchasing a group annuity contract from an insurance company under which the insurance company agrees to pay all accrued benefits or by paying lump-sum benefits to participants if permissible. The termination of an underfunded plan is termed a distress termination if the plan sponsor requests the termination or an involuntary termination if PBGC initiates the termination. PBGC may institute proceedings to terminate a plan if, among other things, the plan will be unable to pay benefits when due or the possible long-run loss to PBGC with respect to the plan may reasonably be expected to increase unreasonably if the plan is not terminated. See 29 U.S.C. 1342(a).

[9]The amount guaranteed by PBGC is reduced for participants under age 65.

[10]The guaranteed amount of the benefit increase is calculated by multiplying the number of years the benefit increase has been in effect, not to exceed 5 years, by the greater of (1) 20 percent of the monthly benefit calculated in accordance with PBGC regulations or (2) $20 per month. See 29 C.F.R. 4022.25(b).

plan sponsors calculate each plan's current liability,[11] and make additional contributions to the plan if it is underfunded to the extent defined in the law.[12] As discussed in a report[13] we issued earlier this year, concerns that the 30-year Treasury bond rate no longer resulted in reasonable current liability calculations has led both the Congress and the administration to propose alternative rates for these calculations.[14]

Despite the 1987 amendments to ERISA, concerns about PBGC's financial condition persisted. In 1990, as part of our effort to call attention to high-risk areas in the federal government, we noted that weaknesses in the single-employer insurance program's financial condition threatened

[11]Under the IRC, current liability means all liabilities to employees and their beneficiaries under the plan. See 26 U.S.C. 412(l)(7)(A). In calculating current liabilities, the IRC requires plans to use an interest rate from within a permissible range of rates. See 26 U.S.C. 412(b)(5)(B). In 1987, the permissible range was not more than 10 percent above, and not more than 10 percent below, the weighted average of the rates of interest on 30-year Treasury bond securities during the 4-year period ending on the last day before the beginning of the plan year. The top of the permissible range was gradually reduced by 1 percent per year beginning with the 1995 plan year to not more than 5 percent above the weighted average rate effective for plan years beginning in 1999. The top of the permissible range was increased to 20 percent above the weighted average rate for 2002 and 2003. The weighted average rate is calculated as the average yield over 48 months with rates for the most recent 12 months weighted by 4, the second most recent 12 months weighted by 3, the third most recent 12 months weighted by 2, and the fourth weighted by 1.

[12]Under the additional funding rule, a single-employer plan sponsored by an employer with more than 100 employees in defined-benefit plans is subject to a deficit reduction contribution for a plan year if the value of plan assets is less than 90 percent of its current liability. However, a plan is not subject to the deficit reduction contribution if the value of plan assets (1) is at least 80 percent of current liability and (2) was at least 90 percent of current liability for each of the 2 immediately preceding years or each of the second and third immediately preceding years. To determine whether the additional funding rule applies to a plan, the IRC requires sponsors to calculate current liability using the highest interest rate allowable for the plan year. See 26 U.S.C. 412(l)(9)(C).

[13]U.S. General Accounting Office, *Private Pensions: Process Needed to Monitor the Mandated Interest Rate for Pension Calculations*, GAO-03-313 (Washington, D.C.: Feb. 27, 2003).

[14]*The Pension Preservation and Savings Expansion Act of 2003*, H.R. 1776, introduced April 11, 2003, would make a number of changes to the IRC to address retirement savings and private pension issues, including replacing the interest rate used for current liability calculations (currently, the rate on 30-year Treasury bonds) with a rate based on an index or indices of conservatively invested, long-term corporate bonds. In July of 2003, the Department of the Treasury unveiled *The Administration Proposal to Improve the Accuracy and Transparency of Pension Information*. Its stated purpose is to improve the accuracy of the pension liability discount rate, increase the transparency of pension plan information, and strengthen safeguards against pension underfunding.

PBGC's long-term viability.[15] We stated that minimum funding rules still did not ensure that plan sponsors would contribute enough for terminating plans to have sufficient assets to cover all promised benefits. In 1992, we also reported that PBGC had weaknesses in its internal controls and financial systems that placed the entire agency, and not just the single-employer program, at risk.[16] Three years later, we reported that legislation enacted in 1994 had strengthened PBGC's program weaknesses and that we believed improvements had been significant enough for us to remove the agency's high-risk designation.[17] Since that time, we have continued to monitor PBGC's financial condition and internal controls. For example, in 1998, we reported that adverse economic conditions could threaten PBGC's financial condition despite recent improvements;[18] in 2000, we reported that contracting weaknesses at PBGC, if uncorrected, could result in PBGC paying too much for required services;[19] and this year, we reported that weaknesses in the PBGC budgeting process limited its control over administrative expenses.[20]

PBGC receives no direct federal tax dollars to support the single-employer pension insurance program. The program receives the assets of terminated underfunded plans and any of the sponsor's assets that PBGC recovers

[15]Letter to the Chairman, Senate Committee on Governmental Affairs and House Committee on Government Operations, GAO/OCG-90-1, Jan. 23, 1990. GAO's high risk program has increasingly focused on those major programs and operations that need urgent attention and transformation to ensure that our national government functions in the most economical, efficient, and effective manner. Agencies or programs receiving a "high risk" designation receive greater attention from GAO and are assessed in regular reports, which generally coincide with the start of each new Congress.

[16]U.S. General Accounting Office, *High Risk Series: Pension Benefit Guaranty Corporation*, GAO/HR-93-5 (Washington, D.C.: Dec. 1992).

[17]U.S. General Accounting Office, *High-Risk Series: An Overview*, GAO/HR-95-1 (Washington, D.C.: Feb. 1995).

[18]U.S. General Accounting Office, *Pension Benefit Guaranty Corporation: Financial Condition Improving but Long-Term Risks Remain*, GAO/HEHS-99-5 (Washington, D.C.: Oct. 16, 1998).

[19]U.S. General Accounting Office, *Pension Benefit Guaranty Corporation: Contracting Management Needs Improvement*, GAO/HEHS-00-130 (Washington, D.C.: Sep. 18, 2000).

[20]U.S. General Accounting Office, *Pension Benefit Guaranty Corporation: Statutory Limitation on Administrative Expenses Does Not Provide Meaningful Control*, GAO-03-301 (Washington, D.C.: Feb. 28, 2003).

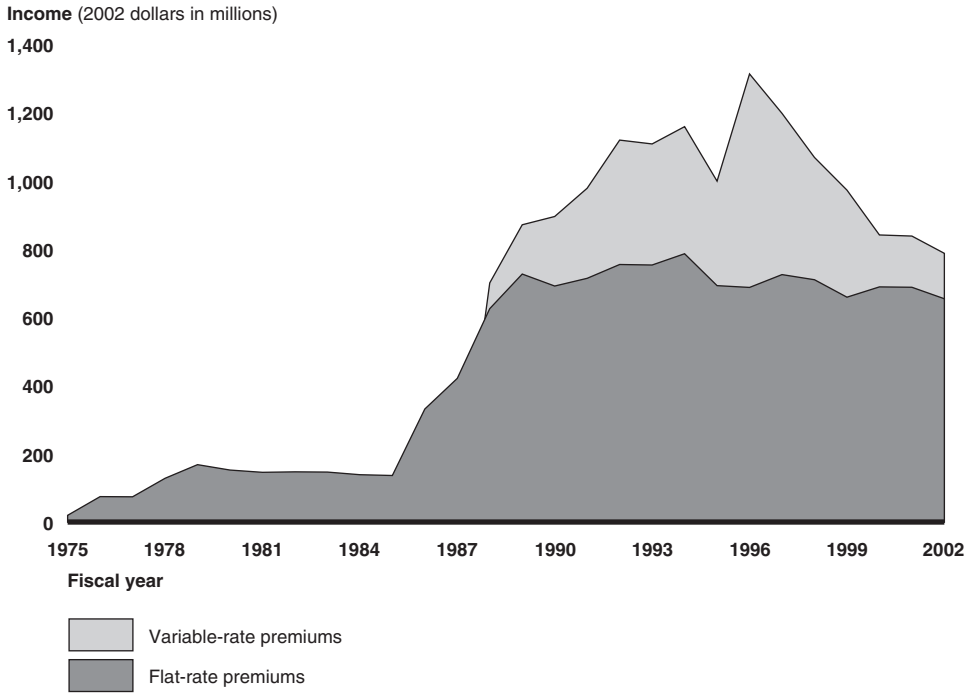
during bankruptcy proceedings.[21] PBGC finances the unfunded liabilities of terminated plans with (1) premiums paid by plan sponsors and (2) income earned from the investment of program assets.

Initially, plan sponsors paid only a flat-rate premium of $1 per participant per year; however, the flat rate has been increased over the years and is currently $19 per participant per year. To provide an incentive for sponsors to better fund their plans, a variable-rate premium was added in 1987. The variable-rate premium, which started at $6 for each $1,000 of unfunded vested benefits, was initially capped at $34 per participant. The variable rate was increased to $9 for each $1,000 of unfunded vested benefits starting in 1991, and the cap on variable-rate premiums was removed starting in 1996. After increasing sharply in the 1980s, flat-rate premium income declined from $753 million in 1993 to $654 million in 2002, in constant 2002 dollars.[22] (See fig. 1.) Income from the variable-rate premium fluctuated widely over that period.

[21]According to PBGC officials, PBGC files a claim for all unfunded benefits in bankruptcy proceedings. However, PBGC generally recovers only a small portion of the total unfunded benefit amount in bankruptcy proceedings, and the recovered amount is split between PBGC (for unfunded guaranteed benefits) and participants (for unfunded nonguaranteed benefits).

[22]In 2002 dollars, flat-rate premium income rose from $605 million in 1993 to $654 million in 2002.

Figure 1: Flat- and Variable- Rate Premium Income for the Single-Employer Pension Insurance Program, Fiscal Years 1975-2002

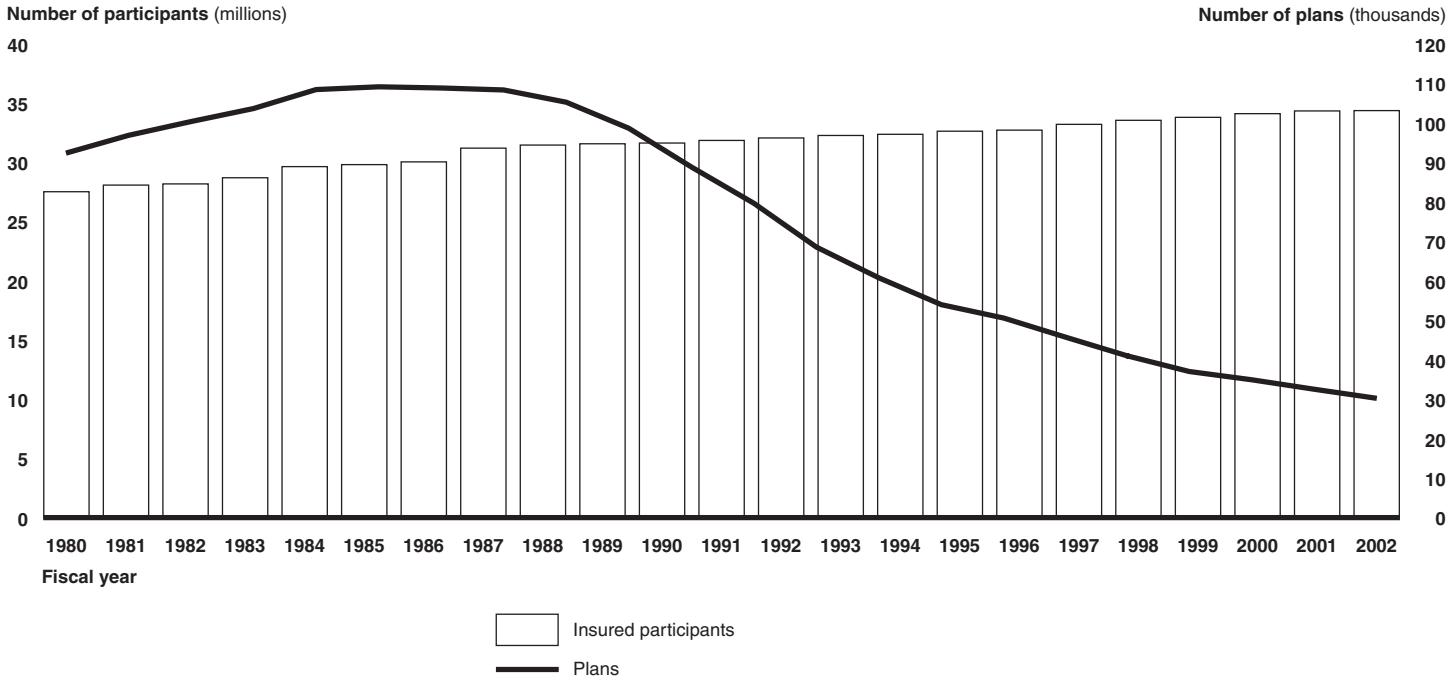


Source: PBGC.

Note: We adjusted PBGC data using the Consumer Price Index for All Urban Consumers: All Items.

The slight decline in flat-rate premium revenue over the last decade, in real dollars, indicates that the increase in insured participants has not been sufficient to offset the effects of inflation over the period. Essentially, while the number of participants has grown since 1980, growth has been sluggish. Additionally, after increasing during the early 1980s, the number of insured single-employer plans has decreased dramatically since 1986. (See fig. 2.)

Figure 2: Participants and Plans Covered by the Single-Employer Insurance Program, 1980-2002



Source: PBGC.

The decline in variable-rate premiums in 2002 may be due to a number of factors. For example, all else equal, an increase in the rate used to determine the present value of benefits reduces the degree to which reports indicate plans are underfunded, which reduces variable-rate premium payments. The Job Creation and Worker Assistance Act of 2002 increased the statutory interest rate for variable-rate premium calculations from 85 percent to 100 percent of the interest rate on 30-year U.S. Treasury securities for plan years beginning after December 31, 2001, and before January 1, 2004.[23]

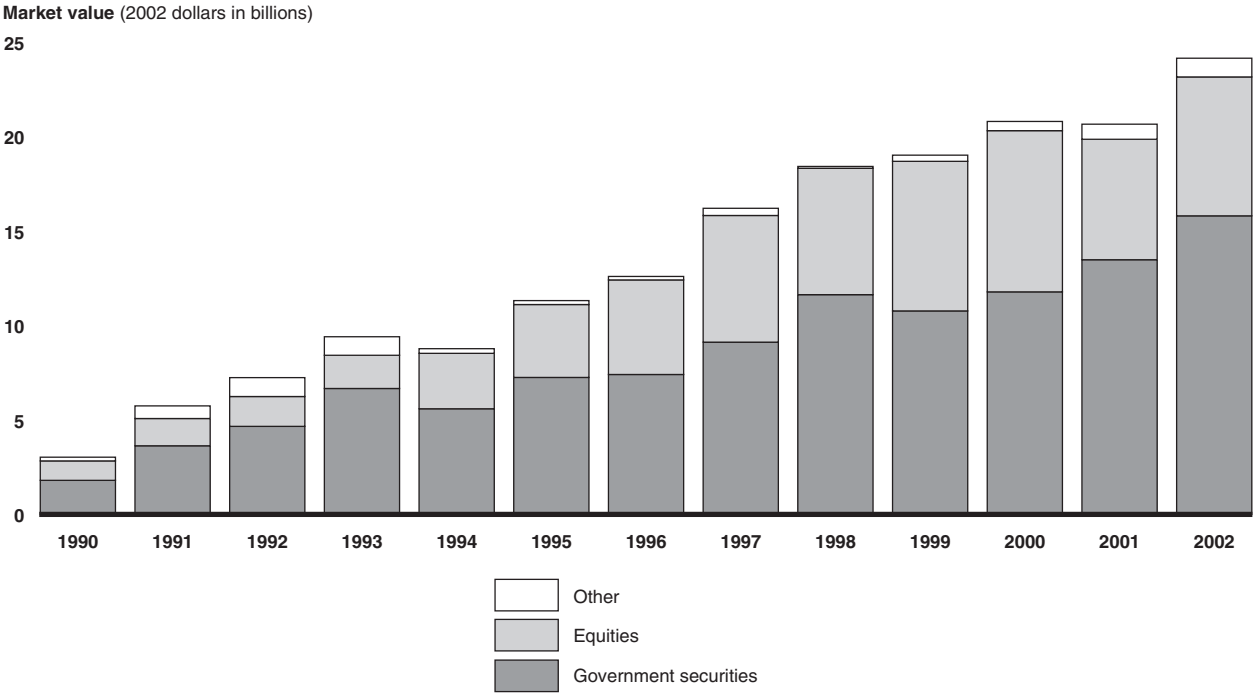
Investment income is also a large source of funds for the single-employer insurance program. The law requires PBGC to invest a portion of the funds generated by flat-rate premiums in obligations issued or guaranteed by the United States, but gives PBGC greater flexibility in the investment of other

[23]See section 405, P.L. 107-147, Mar. 9, 2002.

assets.[24] For example, PBGC may invest funds recovered from terminated plans and plan sponsors in equities, real estate, or other securities and funds from variable-rate premiums in government or private fixed-income securities. According to PBGC, however, by policy, it invests all premium income in Treasury securities. As a result of the law and investment policies, the majority of the single-employer program's assets are invested in Treasury securities. (See fig. 3.)

[24]PBGC accounts for single-employer program assets in separate trust and revolving funds. PBGC accounts for the assets of terminated plans and plan sponsors in a trust fund, which, according to PBGC, may be invested in equities, real estate, or other securities. PBGC accounts for single-employer program premiums in two revolving funds. One revolving fund is used for all variable-rate premiums, and that portion of the flat-rate premium attributable to the flat-rate in excess of $8.50. The law states that PBGC may invest this revolving fund in such obligations as it considers appropriate. See 29 U.S.C. 1305(f). The second revolving fund is used for the remaining flat-rate premiums, and the law restricts the investment of this revolving fund to obligations issued or guaranteed by the United States. See 29 U.S.C. 1305(b)(3).

Figure 3: Market Value of Single-Employer Program Assets in Revolving and Trust Funds at Year End, Fiscal Years 1990-2002

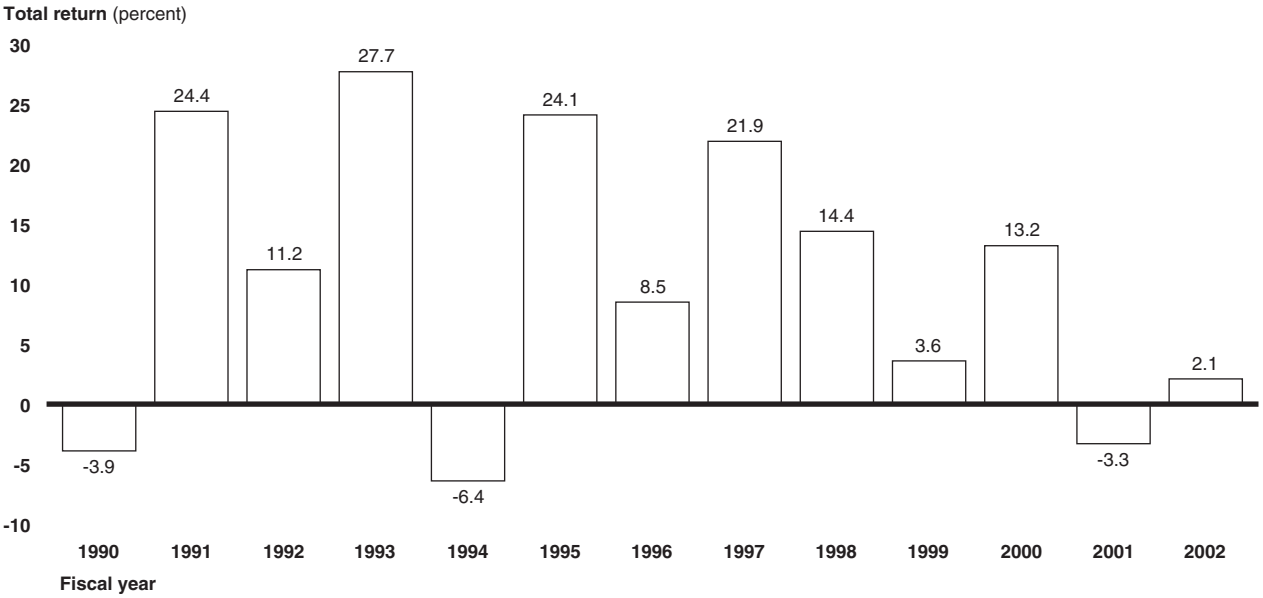


Source: PBGC annual reports.

Note: We adjusted PBGC data using the Consumer Price Index for All Urban Consumers: All Items.

Since 1990, except for 3 years, PBGC has achieved a positive return on the investments of single-employer program assets. (See fig 4.) According to PBGC, over the last 10 years, the total return on these investments has averaged about 10 percent.

Figure 4: Total Return on the Investment of Single-Employer Program Assets, Fiscal Years 1990-2002



Source: PBGC annual reports.

For the most part, liabilities of the single-employer pension insurance program are comprised of the present value of insured participant benefits. PBGC calculates present values using interest rate factors that, along with a specified mortality table, reflect annuity prices, net of administrative expenses, obtained from surveys of insurance companies conducted by the American Council of Life Insurers.[25] In addition to the estimated total liabilities of underfunded plans that have actually terminated, PBGC includes in program liabilities the estimated unfunded liabilities of underfunded plans that it believes will probably terminate in the near future.[26] PBGC may classify an underfunded plan as a probable termination when, among other things, the plan's sponsor is in liquidation under federal or state bankruptcy laws.

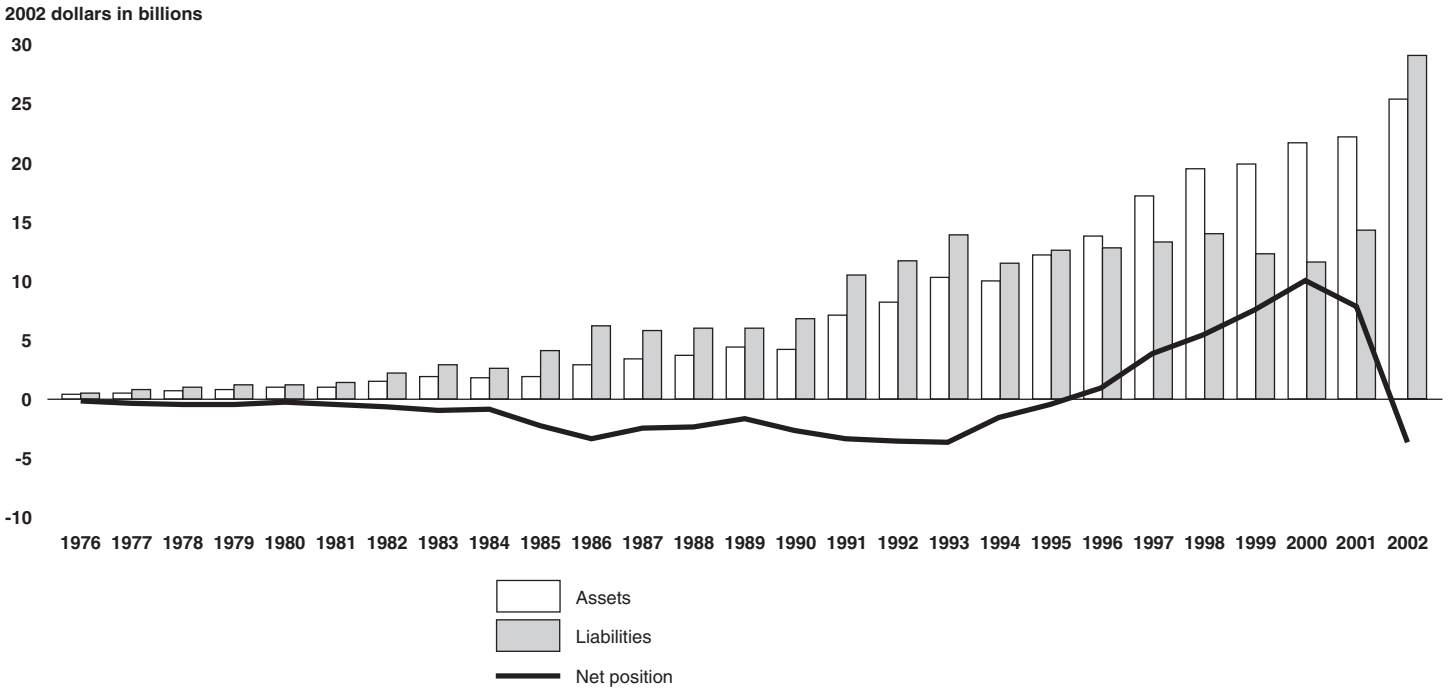
The single-employer program has had an accumulated deficit—that is, program assets have been less than the present value of benefits and other liabilities—for much of its existence. (See fig. 5.) In fiscal year 1996, the

[25]In 2002, PBGC used an interest rate factor of 5.70 percent for benefit payments through 2027 and a factor of 4.75 percent for benefit payments in the remaining years.

[26]Under Statement of Financial Accounting Standard Number 5, loss contingencies are classified as probable if the future event or events are likely to occur.

program had its first accumulated surplus, and by fiscal year 2000, the accumulated surplus had increased to almost $10 billion, in 2002 dollars. However, the program's finances reversed direction in 2001, and at the end of fiscal year 2002, its accumulated deficit was about $3.6 billion.

Figure 5: Assets, Liabilities, and Net Position of the Single-Employer Pension Insurance Program, Fiscal Years 1976-2002



Source: PBGC annual reports.

Note: Amounts for 1986 do not include plans subsequently returned to a reorganized LTV Corporation. We adjusted PBGC data using the Consumer Price Index for All Urban Consumers: All Items.

Termination of Severely Underfunded Plans Was Primary Factor in Financial Decline of Single-Employer Program

The financial condition of the single-employer pension insurance program returned to an accumulated deficit in 2002 largely due to the termination, or expected termination, of several severely underfunded pension plans. In 1992, we reported that many factors contributed to the degree plans were underfunded at termination, including the payment at termination of additional benefits, such as subsidized early retirement benefits, which have been promised to plan participants if plants or companies ceased operations.[27] These factors likely contributed to the degree that plans terminated in 2002 were underfunded. Factors that increased the severity of the plans' unfunded liability in 2002 were the recent sharp decline in the stock market and a general decline in interest rates. The current minimum funding rules and variable-rate premiums were not effective at preventing those plans from being severely underfunded at termination.

PBGC Assumed Responsibility for Several Severely Underfunded Plans in 2002

Total estimated losses in the single-employer program due to the actual or probable termination of underfunded plans increased from $1.5 billion in fiscal year 2001 to $9.3 billion in fiscal year 2002, in 2002 dollars. In addition to $3.0 billion in losses from the unfunded liabilities of terminated plans, the $9.3 billion included $6.3 billion in losses from the unfunded liabilities of plans that were expected to terminate in the near future. Some of the terminations considered probable at the end of fiscal year 2002 have already occurred; for example, in December 2002, PBGC involuntarily terminated an underfunded Bethlehem Steel Corporation pension plan, which resulted in the single-employer program assuming responsibility for about $7.2 billion in PBGC-guaranteed liabilities, about $3.7 billion of which was not funded at termination.

Much of the program's losses resulted from the termination of underfunded plans sponsored by failing steel companies. PBGC estimates that in 2002, underfunded steel company pension plans accounted for 80 percent of the $9.3 billion in program losses for the year. The three largest losses in the single-employer program's history resulted from to the termination of underfunded plans sponsored by failing steel companies: Bethlehem Steel, LTV Steel, and National Steel. All three plans were either completed terminations or listed as probable terminations for 2002. Giant vertically integrated steel companies, such as Bethlehem Steel, have faced

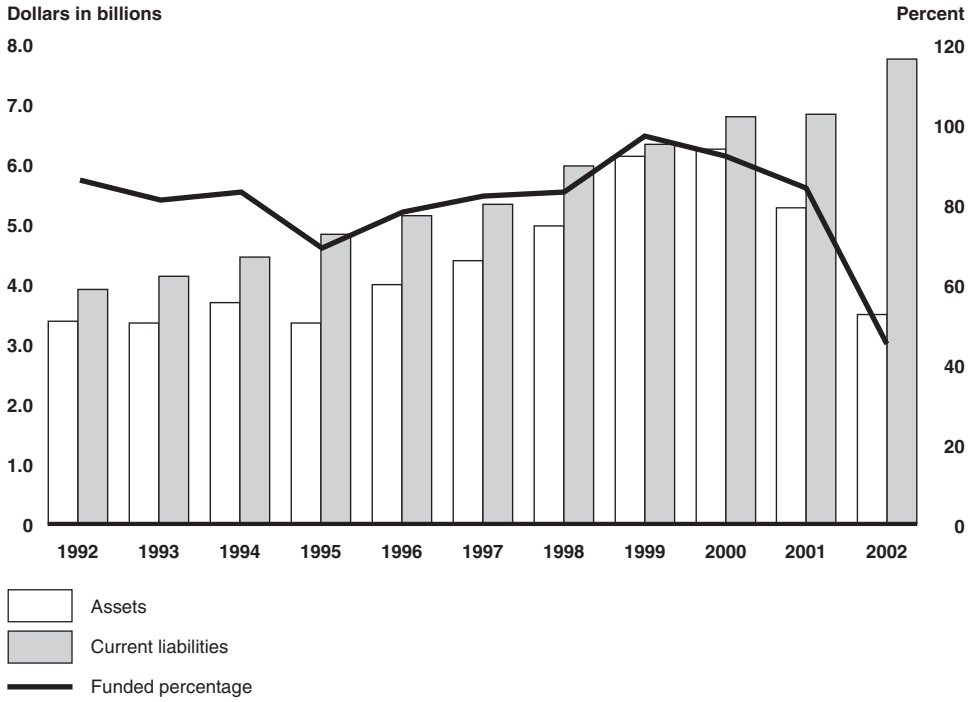
[27]U.S. General Accounting Office, *Pension Plans: Hidden Liabilities Increase Claims Against Government Insurance Programs*, GAO/HRD-93-7 (Washington, D.C.: Dec. 30, 1992).

extreme economic difficulty for decades, and efforts to salvage their defined-benefit plans have largely proved unsuccessful. According to PBGC's executive director, underfunded steel company pension plans have accounted for 58 percent of PBGC single-employer losses since 1975.

Plan Unfunded Liabilities Were Increased by Stock Market and Interest Rate Declines

The termination of underfunded plans in 2002 occurred after a sharp decline in the stock market had reduced plan asset values and a general decline in interest rates had increased plan liability values, and the sponsors did not make the contributions necessary to adequately fund the plans before they were terminated. The combined effect of these factors was a sharp increase in the unfunded liabilities of the terminating plans. According to annual reports (Annual Return/Report of Employee Benefit Plan, Form 5500) submitted by Bethlehem Steel Corporation, for example, in the 7 years from 1992 to 1999, the Bethlehem Steel pension plan went from 86 percent funded to 97 percent funded. (See fig. 6.) From 1999 to plan termination in December 2002, however, plan funding fell to 45 percent as assets decreased and liabilities increased, and sponsor contributions were not sufficient to offset the changes.

Figure 6: Assets, Liabilities, and Funded Status of the Bethlehem Steel Corporation Pension Plan, 1992-2002



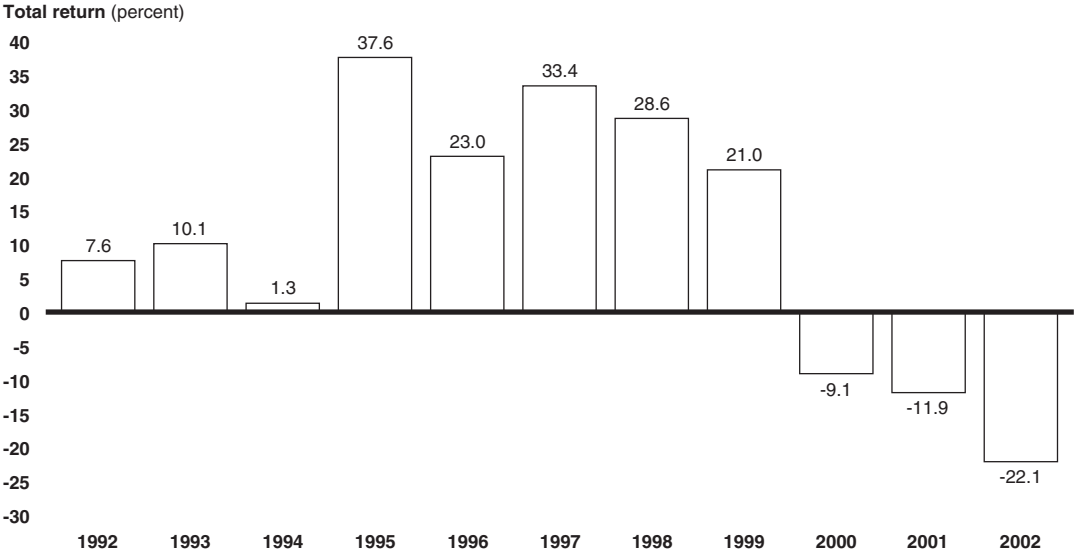
Source: Annual form 5500 reports and PBGC.

Note: Assets and liabilities for 1992 through 2001 are as of the beginning of the plan year. During that period, the interest rate used by Bethlehem Steel to value current liabilities decreased from 9.26 percent to 6.21 percent. Assets and liabilities for 2002 are PBGC estimates at termination in December 2002. Termination liabilities were valued using a rate of 5 percent.

A decline in the stock market, which began in 2000, was a major cause of the decline in plan asset values, and the associated increase in the degree that plans were underfunded at termination. For example, while total returns for stocks in the Standard and Poor's 500 index (S&P 500) exceeded 20 percent for each year from 1995 through 1999, they were negative starting in 2000, with negative returns reaching 22.1 percent in 2002. (See fig. 7.) Surveys of plan investments by Greenwich Associates indicated that defined-benefit plans in general had about 62.8 percent of their assets invested in U.S. and international stocks in 1999.[28]

[28]2002 U.S. Investment Management Study, Greenwich Associates, Greenwich, CT.

Figure 7: Total Return on Stocks in the S&P 500 Index, 1992-2002



Source: Standard and Poor's.

A stock market decline as severe as the one experienced from 2000 through 2002 can have a devastating effect on the funding of plans that had invested heavily in stocks. For example, according to a survey,[29] the Bethlehem Steel defined-benefit plan had about 73 percent of its assets (about $4.3 billion of $6.1 billion) invested in domestic and foreign stocks on September 30, 2000. One year later, assets had decreased $1.5 billion, or 25 percent, and when the plan was terminated in December 2002, its assets had been reduced another 23 percent to about $3.5 billion—far less than needed to finance an estimated $7.2 billion in PBGC-guaranteed liabilities.[30] Over that same general period, stocks in the S&P 500 had a negative return of 38 percent.

In addition to the possible effect of the stock market's decline, a drop in interest rates likely had a negative effect on plan funding levels by increasing plan termination costs. Lower interest rates increase plan

[29]Pensions & Investments, Vol. 29, Issue 2 (Chicago; Jan. 22, 2001).

[30]According to the survey, the Bethlehem Steel Corporation pension plan made benefit payments of $587 million between Sept. 30, 2000, and Sept. 30, 2001. Pensions and Investments, www.pionline.com/pension/pension.cfm (downloaded on June 13, 2003).

termination liabilities by increasing the present value of future benefit payments, which in turn increases the purchase price of group annuity contracts used to terminate defined-benefit pension plans.[31] For example, a PBGC analysis indicates that a drop in interest rates of 1 percentage point, from 6 percent to 5 percent, increased the termination liabilities of the Bethlehem Steel pension plan by about 9 percent, which indicates the cost of terminating the plan through the purchase of a group annuity contract would also have increased.[32]

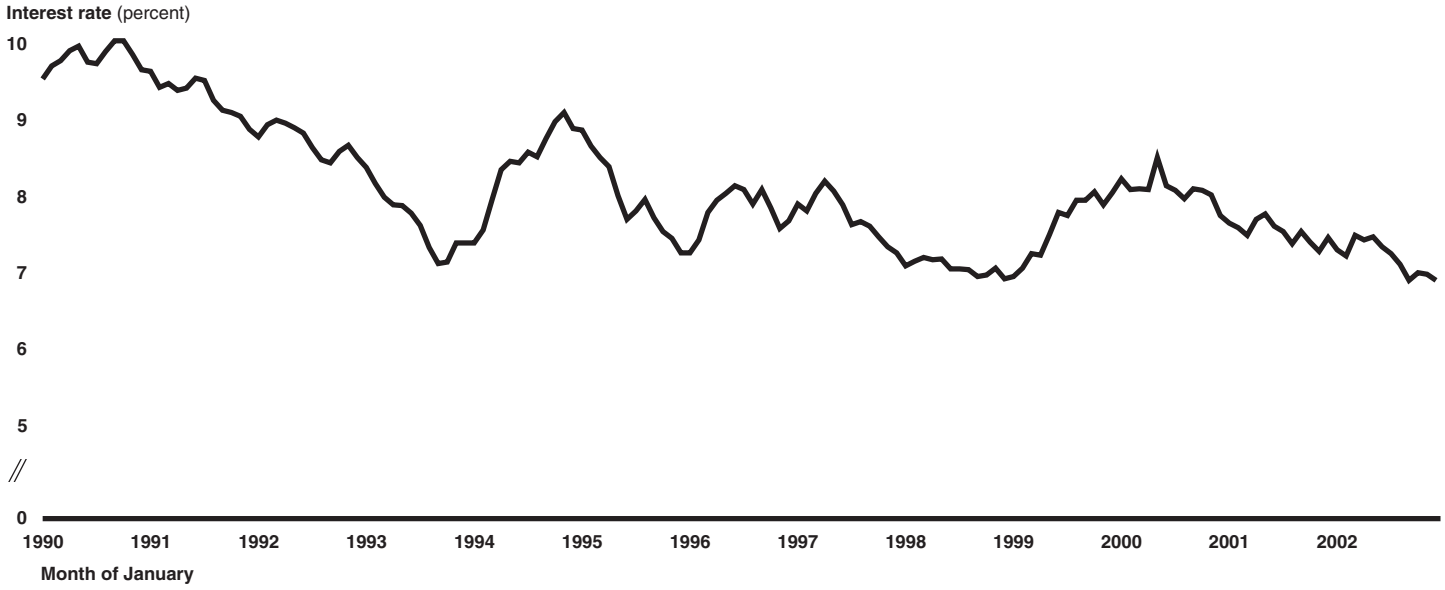
Relevant interest rates may have declined 3 percentage points or more since 1990.[33] For example, interest rates on long-term high-quality corporate bonds approached 10 percent at the start of the 1990s, but were below 7 percent at the end of 2002. (See fig. 8.)

[31]Present value calculations reflect the time value of money: a dollar in the future is worth less than a dollar today because the dollar today can be invested and earn interest. The calculation requires an assumption about the interest rate, which reflects how much could be earned from investing today's dollars. Assuming a lower interest rate increases the present value of future payments.

[32]The magnitude of an increase or decrease in plan liabilities associated with a given change in discount rates would depend on the demographic and other characteristics of each plan.

[33]To terminate a defined-benefit pension plan without submitting a claim to PBGC, the plan sponsor determines the benefits that have been earned by each participant up to the time of plan termination and purchases a single-premium group annuity contract from an insurance company, under which the insurance company guarantees to pay the accrued benefits when they are due. Interest rates on long-term, high-quality fixed-income securities are an important factor in pricing group annuity contracts because insurance companies tend to invest premiums in such securities to finance annuity payments. Other factors that would have affected group annuity prices include changes in insurance company assumptions about mortality rates and administrative costs.

Figure 8: Interest Rates on Long-Term High-Quality Corporate Bonds, 1990-2002



Source: Moody's Investor Services.

Minimum Funding Rules and Variable-Rate Premiums Did Not Prevent Plans from Being Severely Underfunded

IRC minimum funding rules and ERISA variable rate premiums, which are designed to ensure plan sponsors adequately fund their plans, did not have the desired effect for the terminated plans that were added to the single-employer program in 2002. The amount of contributions required under IRC minimum funding rules is generally the amount needed to fund benefits earned during that year plus that year's portion of other liabilities that are amortized over a period of years.[34] Also, the rules require the sponsor to make an additional contribution if the plan is underfunded to the extent defined in the law. However, plan funding is measured using current liabilities, which a PBGC analysis indicates have been typically less than termination liabilities.[35] Additionally, plans can earn funding credits, which can be used to offset minimum funding contributions in

[34]Minimum funding rules permit certain plan liabilities, such as past service liabilities, to be amortized over specified time periods. See 26 U.S.C. 412(b)(2)(B). Past service liabilities occur when benefits are granted for service before the plan was set up or when benefit increases after the set up date are made retroactive.

[35] For the analysis, PBGC used termination liabilities reported to it under 29 C.F.R. sec 4010.

later years, by contributing more than required according to minimum funding rules. Therefore, sponsors of underfunded plans may avoid or reduce minimum funding contributions to the extent their plan has a credit balance in the account, referred to as the funding standard account, used by plans to track minimum funding contributions.[36]

While minimum-funding rules may encourage sponsors to better fund their plans, the rules require sponsors to assess plan funding using current liabilities, which a PBGC analysis indicates have been typically less than termination liabilities. Current and termination liabilities differ because the assumptions used to calculate them differ. For example, some plan participants may retire earlier if a plan is terminated than they would if the plan continues operations, and lowering the assumed retirement age generally increases plan liabilities, especially if early retirement benefits are subsidized.

Other aspects of minimum funding rules may limit their ability to affect the funding of certain plans as their sponsors approach bankruptcy. According to its annual reports, for example, Bethlehem Steel contributed about $3.0 billion to its pension plan for plan years 1986 through 1996. According to the reports, the plan had a credit balance of over $800 million at the end of plan year 1996. Starting in 1997, Bethlehem Steel reduced its contributions to the plan and, according to annual reports, contributed only about $71.3 million for plan years 1997 through 2001. The plan's 2001 actuarial report indicates that Bethlehem Steel's minimum required contribution for the plan year ending December 31, 2001, would have been $270 million in the absence of a credit balance; however, the opening credit balance in the plan's funding standard account as of January 1, 2001, was $711 million. Therefore, Bethlehem Steel was not required to make any contributions during the year.

Other IRC funding rules may have prevented some sponsors from making contributions to plans that in 2002 were terminated at a loss to the single-employer program. For example, on January 1, 2000, the Polaroid pension plan's assets were about $1.3 billion compared to accrued liabilities of about $1.1 billion—the plan was more than 100-percent funded. The plan's actuarial report for that year indicates that the plan sponsor was precluded by the IRC funding rules from making a tax-deductible

[36]See 26 U.S.C. 412(b).

contribution to the plan.[37] In July 2002, PBGC terminated the Polaroid pension plan, and the single-employer program assumed responsibility for $321.8 million in unfunded PBGC-guaranteed liabilities for the plan. The plan was about 67 percent funded, with assets of about $657 million to pay estimated PBGC-guaranteed liabilities of about $979 million.

Another ERISA provision, concerning the payment of variable-rate premiums, is also designed to encourage employers to better fund their plans. As with minimum funding rules, the variable-rate premium did not provide sufficient incentives for the sponsors of the plans that we reviewed to make the contributions necessary to adequately fund their plans. None of the three underfunded plans that we reviewed, which became losses to the single-employer program in 2002 and 2003, paid a variable-rate premium in the 2001 plan year. Plans are exempt from the variable-rate premium if they are at the full-funding limit in the year preceding the premium payment year, in this case 2000, after application of any contributions and credit balances in the funding standard account. Each of these four plans met this criterion.

PBGC Faces Long-Term Financial Risks from a Potential Imbalance of Assets and Liabilities

Two primary risks threaten the long-term financial viability of the single-employer program. The greater risk concerns the program's liabilities: large losses, due to bankrupt firms with severely underfunded pension plans, could continue or accelerate. This could occur if returns on investment remain poor, interest rates stay low, and economic problems persist. More troubling for liabilities is the possibility that structural weaknesses in industries with large underfunded plans, including those greatly affected by increasing global competition, combined with the general shift toward defined-contribution pension plans, could jeopardize the long-term viability of the defined-benefit system. On the asset side, PBGC also faces the risk that it may not receive sufficient revenue from premium payments and investments to offset the losses experienced by the single-employer program in 2002 or that this program may experience in the future. This could happen if program participation falls or if PBGC earns a return on its assets below the rate it uses to value its liabilities.

[37]See 26 U.S.C. 404(a)(1) and 26 U.S.C. 412(c)(7). The sponsor might have been able to make a contribution to the plan had it selected a lower interest rate for valuing current liabilities. Polaroid used the highest interest rate permitted by law for its calculations.

Several Factors Affect the Degree to Which Plans Are Underfunded and the Likelihood That Plan Sponsors Will Go Bankrupt

Plan terminations affect the single-employer program's financial condition because PBGC takes responsibility for paying benefits to participants of underfunded terminated plans. Several factors would increase the likelihood that sponsoring firms will go bankrupt, and therefore will need to terminate their pension plans, and the likelihood that those plans will be underfunded at termination. Among these are poor investment returns, low interest rates, and continued weakness in the national economy and or specific sectors. Particularly troubling may be structural weaknesses in certain industries with large underfunded defined-benefit plans.

Poor investment returns from a decline in the stock market can affect the funding of pension plans. To the extent that pension plans invest in stocks, the decline in the stock market will increase the chance that plans will be underfunded should they terminate. A Greenwich Associates survey of defined-benefit plan investments indicates that 59.4 percent of plan assets were invested in stocks in 2002.[38] Clearly, the future direction of the stock market is very difficult to forecast. From the end of 1999 through the end of 2002, the stock market, as measured by the S&P 500, declined by about 40 percent, but has since partially recovered those losses, increasing by over 13 percent (of a smaller base) during 2003, as of August. From January 1975, the beginning of the first year following the passage of ERISA, through July 2003, the S&P 500 grew at an average compounded nominal annual rate of 9.8 percent.

A decline in asset values can be particularly problematic for plans if interest rates remain low or fall, which raises plan liabilities, all else equal. The interest rate on 30-year U.S. Treasury securities, from which discount rates to value plan current liabilities are derived, has remained below 5 percent since September 2002, its lowest level in over 25 years.[39] Falling interest rates raise the price of group annuities that a terminating plan must purchase to cover its promised benefits and increase the likelihood that a terminating plan will not have sufficient assets to make such a

[38] 2002 U.S. Investment Management Study, Greenwich Associates, Greenwich, CT.

[39] The U.S. Treasury stopped publishing a 30-year Treasury bond rate in February 2002, but the Internal Revenue Service publishes rates for pension calculations based on rates for the last-issued bonds in February 2001. Interest rates to calculate plan liabilities must be within a "permissible range" around a 4-year weighted average of 30-year Treasury bond rates; the permissible range for plan years beginning in 2002 and 2003 was 90 to 120 percent of this 4-year weighted average.

purchase.[40] An increase in liabilities due to falling interest rates also means that companies may be required under the minimum funding rules to increase contributions to their plans. This can create financial strain and increase the chances of the firm going bankrupt, thus increasing the risk that PBGC will have to take over an underfunded plan.

Economic weakness can also lead to greater underfunding of plans and to a greater risk that underfunded plans will terminate. For many firms, slow or declining economic growth causes revenues to decline, which makes contributions to pension plans more difficult. Economic sluggishness also raises the likelihood that firms sponsoring pension plans will go bankrupt. Three of the last five annual increases in bankruptcies coincided with recessions, and the record economic expansion of the 1990s is associated with a substantial decline in bankruptcies. Annual plan terminations resulting in losses to the single-employer program rose from 83 in 1989 to 175 in 1991, and, after declining to 65 in 2000, the number reached 93 in 2001.[41]

Weakness in certain industries, particularly the airline and automotive industries, may threaten the viability of the single-employer program. Because PBGC has already absorbed most of the pension plans of steel companies, it is the airline industry, with $26 billion of total pension underfunding, and the automotive sector, with over $60 billion in underfunding, that currently represent PBGC's greatest future financial risks. In recent years, profit pressures within the U.S. airline industry have been amplified by severe price competition, recession, terrorism, the war in Iraq, and the outbreak of Severe Acute Respiratory Syndrome (SARS), creating recent bankruptcies and uncertainty for the future financial health of the industry. As one pension expert noted, a potentially exacerbating risk in weak industries is the cumulative effect of bankruptcy; that is, if a critical mass of firms go bankrupt and terminate their underfunded pension plans, others, in order to remain competitive, may also declare bankruptcy to avoid the cost of funding their plans.

[40]A potentially offsetting effect of falling interest rates is the possible increased return on fixed-income assets that plans, or PBGC, hold. When interest rates fall, the value of existing fixed-income securities with time left to maturity rises.

[41]The last three recessions on record in the United States occurred during 1981, 1990-91, and 2001. (See www.bea.gov/bea/dn/gdpchg.xls.)

Because the financial condition of both firms and their pension plans can eventually affect PBGC's financial condition, PBGC tries to determine how many firms are at risk of terminating their pension plans and the total amount of unfunded vested benefits. According to PBGC's fiscal year 2002 estimates, the agency is at potential risk of taking over $35 billion in unfunded vested benefits from plans that are sponsored by financially weak companies and could terminate.[42] Almost one-third of these unfunded benefits, about $11.4 billion, are in the airline industry. Additionally, PBGC estimates that it could become responsible for over $15 billion in shutdown benefits in PBGC-insured plans.

PBGC uses a model called the Pension Insurance Modeling System (PIMS) to simulate the flow of claims to the single-employer program and to project its potential financial condition over a 10-year period. This model produces a very wide range of possible outcomes for PBGC's future net financial position.[43]

Revenue from Premiums and Investments May Not Offset Program's Current Deficit or Possible Future Losses

To be viable in the long term, the single-employer program must receive sufficient income from premiums and investments to offset losses due to terminating underfunded plans. A number of factors could cause the program's revenues to fall short of this goal or decline outright. For example, fixed-rate premiums would decline if the number of participants covered by the program decreases, which may happen if plans leave the system and are not replaced. Additionally, the program's financial condition would deteriorate to the extent investment returns fall below the assumed interest rate used to value liabilities.

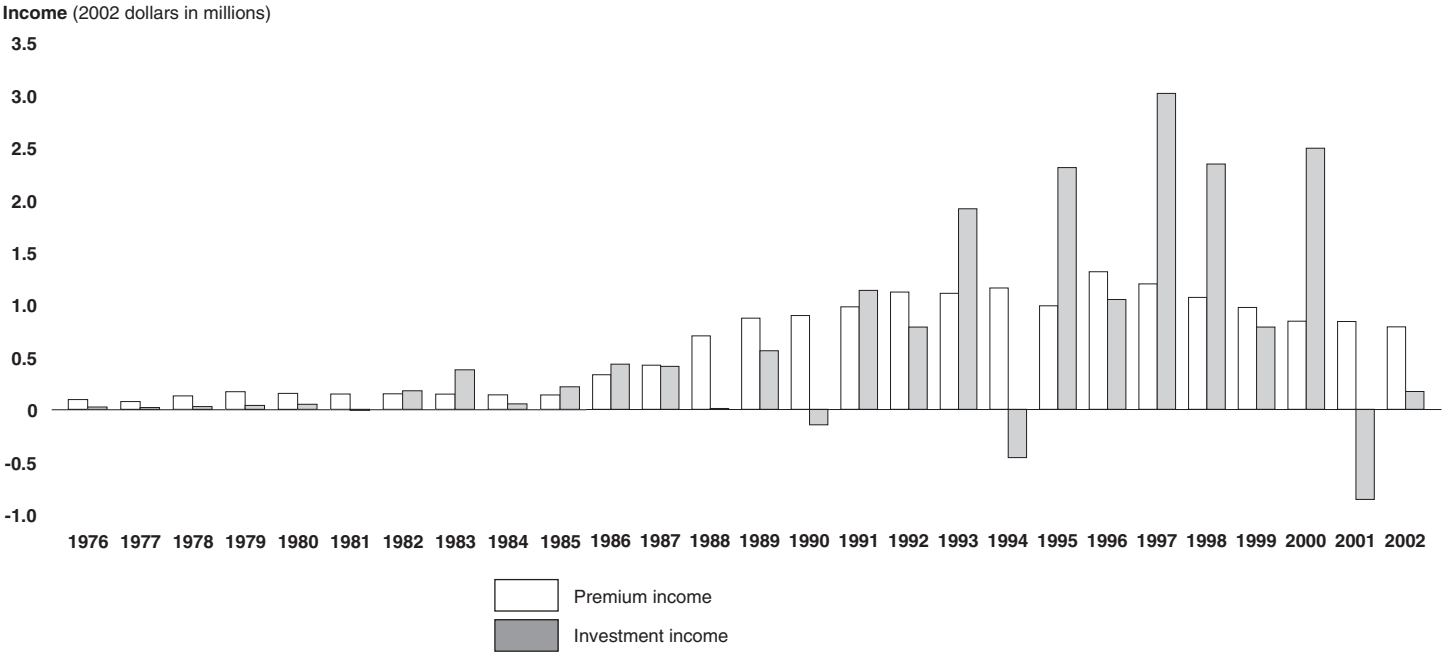
Annual PBGC income from premiums and investments averaged $1.3 billion from 1976 to 2002, in 2002 dollars, and $2 billion since 1988, when variable-rate premiums were introduced. Since 1988, investment income has on average equaled premium income, but has varied more than premium income, including 3 years in which investment income fell below

[42]This estimate comprises "reasonably possible" terminations, which include plans sponsored by companies with credit quality below investment grade that may terminate, though likely not by year-end. Plan participants have a nonforfeitable right to vested benefits, as opposed to nonvested benefits, for which participants have not yet completed qualification requirements.

[43]PBGC began using PIMS to project its future financial condition in 1998. Prior to this, PBGC provided low-, medium-, and high-loss forecasts, which were extrapolations from the agency's claims experience and the economic conditions of the previous 2 decades.

zero. (See fig. 9.) In 2001, total premium and investment was negative and in 2002 equaled approximately $1 billion.

Figure 9: PBGC Premium and Investment Income, 1976-2002



Source: PBGC annual financial reports.

Note: We adjusted PBGC data using the Consumer Price Index for All Urban Consumers: All Items.

Premium revenue for PBGC would likely decline if the total number of plans and participants terminating their defined-benefit plans exceeded the new plans and participants joining the system. This decline in participation would mean a decline in PBGC's flat-rate premiums. If more plans become underfunded, this could possibly raise the revenue PBGC receives from variable-rate premiums, but would also be likely to raise the overall risk of plans terminating with unfunded liabilities. Premium income, in 2002 dollars, has fallen every year since 1996, even though the Congress lifted the cap on variable-rate premiums in that year.

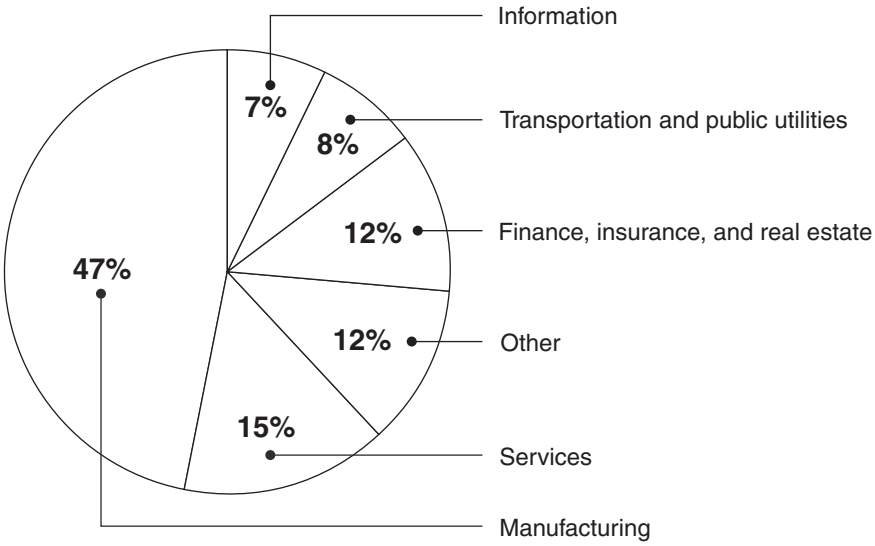
The decline in the number of plans PBGC insures may cast doubt on its ability to increase premium income in the future. The number of PBGC-insured plans has decreased steadily from approximately 110,000 in 1987

to around 30,000 in 2002.[44] While the number of total participants in PBGC-insured single-employer plans has grown approximately 25 percent since 1980, the percentage of participants who are active workers has declined from 78 percent in 1980 to 53 percent in 2000. Manufacturing, a sector with virtually no job growth in the last half-century, accounted for almost half of PBGC's single-employer program participants in 2001, suggesting that the program needs to rely on other sectors for any growth in premium income. (See fig 10.) In addition, a growing percentage of plans have recently become hybrid plans, such as cash-balance plans, that incorporate characteristics of both defined-contribution and defined-benefit plans. Hybrid plans are more likely than traditional defined-benefit plans to offer participants the option of taking benefits as a lump-sum distribution. If the proliferation of hybrid plans increases the number of participants taking lump sums instead of retirement annuities, over time this would reduce the number of plan participants, thus potentially reducing PBGC's flat-rate premium revenue.[45] Unless something reverses these trends, PBGC may have a shrinking plan and participant base to support the program in the future and that base may be concentrated in certain, potentially more vulnerable industries.

[44]In contrast, defined-contribution plans have grown significantly over a similar period—from 462,000 plans in 1985 to 674,000 plans in 1998.

[45]If a plan sponsor purchases an annuity for a retiree from an insurance company to pay benefits, this would also remove the retiree from the participant pool, which would have the same effect on flat-rate premiums.

Figure 10: Distribution of PBGC-Insured Participants by Industry, 2001



Source: PBGC.

Note: Percentages do not sum to 100 due to rounding.

Even more problematic than the possibility of falling premium income may be that PBGC's premium structure does not reflect many of the risks that affect the probability that a plan will terminate and impose a loss on PBGC. While PBGC charges plan sponsors a variable-rate premium based on the plan's level of underfunding, premiums do not consider other relevant risk factors, such as the economic strength of the sponsor, plan asset investment strategies, the plan's benefit structure, or the plans demographic profile. Because these affect the risk of PBGC having to take over an underfunded pension plan, it is possible that PBGC's premiums will not adequately and equitably protect the agency against future losses. The recent terminations of some plans that showed credit balances shortly before terminating with large underfunded balances lend some evidence to this possibility. Sponsors also pay flat-rate premiums in addition to variable-rate premiums, but these reflect only the number of plan participants and not other risk factors that affect PBGC's potential exposure to losses. Full-funding limitations may exacerbate the risk of underfunded terminations by preventing firms from contributing to their plans during strong economic times when asset values are high and firms are in the best financial position to make contributions.

Also, it may be difficult for PBGC to diversify its pool of insured plans among strong and weak sponsors and plans. In addition to facing firm-specific risk that an individual underfunded plan may terminate, PBGC faces market risk that a poor economy may lead to widespread underfunded terminations during the same period, which potentially could cause very large losses for PBGC. Similarly, PBGC may face risk from insuring plans concentrated in vulnerable industries that may suffer bankruptcies over a short time period, as has happened recently in the steel and airline industries. One study estimates that the overall premiums collected by PBGC amount to about 50 percent of what a private insurer would charge because its premiums do not account for this market risk.[46]

The net financial position of the single-employer program also depends heavily on the long-term rate of return that PBGC achieves from the investment of the program's assets. All else equal, PBGC's net financial condition would improve if its total net return on invested assets exceeded the discount rate it used to value its liabilities. For example, between 1993 and 2000 the financial position of the single-employer program benefited from higher rates of return on its invested assets and its financial condition improved. However, if the rate of return on assets falls below the discount rate, PBGC's finances would worsen, all else equal. As of September 30, 2002, PBGC had approximately 65 percent of its single-employer program investments in U.S. government securities and approximately 30 percent in equities. The high percentage of assets invested in Treasury securities, which typically earn low yields because they are considered to be relatively "risk-free" assets, may limit the total return on PBGC's portfolio.[47] Additionally, PBGC bases its discount rate on surveys of insurance company group annuity prices, and because PBGC invests differently than do insurance companies, we might expect some divergence between the discount rate and PBGC's rate of return on assets. PBGC's return on total invested funds was 2.1 percent for the year ending September 30, 2002, and 5.8 percent for the 5-year period ending on that date. For fiscal year 2002, PBGC used an annual discount rate of 5.70 percent to determine the present value of future benefit payments through 2027 and a rate of 4.75 percent for payments made in the remaining years.

[46]Boyce, Steven and Richard A. Ippolito, "The Cost of Pension Insurance," *The Journal of Risk and Insurance*, (2002) Vol. 69, No.2, p. 121-170.

[47]The return on fixed-income assets sold before maturity may also be affected by capital gains (or losses). The price of a bond moves in the opposite direction as interest rates, and so if interest rates fall, bondholders may reap capital gains.

The magnitude and uncertainty of these long-term financial risks pose particular challenges for the PBGC's single-employer insurance program and potentially for the federal budget. In 1990, we began a special effort to review and report on the federal program areas we considered high risk because they were especially vulnerable to waste, fraud, abuse, and mismanagement. In the past, we considered PBGC to be on our high-risk list because of concern about the program's viability and about management deficiencies that hindered that agency's ability to effectively assess and monitor its financial condition. The current challenges to PBGC's single-employer insurance program concern immediate as well as long-term financial difficulties, which are more structural weaknesses rather than operational or internal control deficiencies. Nevertheless, because of serious risks to the program's viability, we have placed the PBGC single-employer insurance program on our high-risk list.

Options That Address Challenges to PBGC Have Advantages and Disadvantages

Although some pension professionals have suggested a "wait and see" approach, betting that brighter economic conditions improving PBGC's future financial condition are imminent, agency officials and other pension professionals have suggested taking a more prudent, proactive approach, identifying a variety of options that could address the challenges facing PBGC's single-employer program. In our view, several types of reforms should be considered. The first would be to improve the availability of information about plan funding, plan investments, and PBGC guarantees available to plan participants and others. A second would be to strengthen funding rules applicable to poorly funded plans to help ensure plans are better funded should they be terminated in the future. A third would be to reform PBGC by restructuring its benefit guarantees and premiums. Guarantees for certain unfunded benefits, such as so-called shutdown benefits, could be modified. With respect to variable-rate premiums, in addition to the plan's funding status, consideration should be given to the economic strength of the plan's sponsor, the allocation of the plan's investment portfolio, the plan's benefit structure, and participant demographics. Several variations exist within these options and each option has advantages and disadvantages. In any event, the changes adopted to address the challenges facing PBGC should improve the transparency of the plan's financial information, provide plan sponsors with incentives to increase plan funding, and provide a means to hold sponsors accountable for adequately funding their plans.

To address challenges to PBGC's financial condition include, we could:

Increase transparency of plan information. Improving the availability of information to plan participants and others about plan funding, plan investments, and PBGC guarantees may give plan sponsors additional incentives to increase plan funding and make participants better able to plan for their retirement.

ERISA could be amended to require:

- **Disclosing termination liability.** Under a recent administration proposal,[48] sponsors would be required to report plan termination liability annually. Under current law, sponsors are required to report a plan's current liability for funding purposes, which often can be less than termination liability. In addition, only participants in plans below a certain funding threshold – based on current liability rather than termination liability – receive annual notices of the funding status of their plans. In either case, plan participants may be unaware of the degree to which their plan is underfunded until it terminates. However, representatives of plan sponsors have stated that financially strong companies that are able to make good on their pension promises should not be burdened with additional complex and costly disclosure requirements that could be confusing or irrelevant to plan participants.

- **Disclosing plan investments.** Disclosing plan asset allocation information may give plan sponsors an incentive to increase funding of underfunded plans or limit the level of equity investments in their plans. Currently, only participants in plans below a certain funding threshold receive annual notices of the funding status of their plans, and the information plans currently must provide does not reflect how the plan's assets are invested. For example, notices to participants could include how much is invested in the sponsor's securities.

- **Disclosing plan funding status and benefit guarantee limitations to additional participants.** Expanding the circumstances under which sponsors must notify participants of plan underfunding and PBGC guarantee limitations might give sponsors an additional incentive to increase plan funding and would enable more participants to better plan their retirement. The ERISA requirement that plan sponsors notify participants and beneficiaries of the plan's funding status and limits on the PBGC guarantee currently goes into effect

[48] *The Administration Proposal to Improve the Accuracy and Transparency of Pension Information.* (July 8, 2003).

when plans are required to pay variable-rate premiums and meet certain other requirements.[49] As a result, many plan participants, including participants of the Bethlehem Steel pension plan, have not received such notifications in the years immediately preceding plan termination. Termination of a severely underfunded plan can significantly reduce the benefits participants receive. For example, 59-year old pilots were expecting annual benefits of $110,000 per year on average when the US Airways plan was terminated in 2003, while the maximum PBGC-guaranteed benefit at age 60 is $28,600 per year.[50]

Strengthen funding rules. Funding rules could be strengthened to increase minimum contributions to underfunded plans and to allow

[49] See 29 U.S.C. 1311 and 29 C.F.R. 4011.3.

[50] However, the actual benefit paid by PBGC depends on a number of factors and may exceed the maximum guaranteed benefit. For example, PBGC expects that the average annual benefit paid to U.S. Airways pilots who are 59 years of age with 29 years of service will be about $85,000, including nonguaranteed amounts. PBGC said that many US Airways pilots will receive more that the $28,600 maximum limit because, according to priorities established under ERISA, pension plan participants may receive benefits in excess of the guaranteed amounts if there are enough assets or recoveries from the plan sponsors. For example, a participant who could have retired three years prior to plan termination (but did not) may be eligible to receive both guaranteed and nonguaranteed amounts. PBGC letter in response to follow-up questions from the Committee on Finance, United States Senate (Washington, D.C.: Apr.1, 2003).

additional contributions to fully funded plans.[51] This approach would improve plan funding over time, while limiting the losses PBGC would incur when a plan is terminated. However, even if funding rules were to be strengthened immediately, it could take years for the change to have a meaningful effect on PBGC's financial condition. In addition, such a change would require some sponsors to allocate additional resources to their pension plans, which may cause the plan sponsor of an underfunded plan to provide less generous wage or other benefits than would otherwise be provided.

The IRC could be amended to strengthen the funding rules by:

- **Basing minimum contributions on termination liabilities.** One way to strengthen funding rules is to require plans to base minimum funding contributions and full-funding limits on plan termination liabilities, rather than current liabilities. Since plan termination liabilities are typically higher than current liabilities, such a change would likely reduce potential claims against PBGC. One problem with

[51]If the Congress chooses to replace the 30-year Treasury rate used to calculate pension plan liabilities, the level of the interest rate selected can also affect plan funding. For example, if a rate that is higher than the current rate is selected, plan liabilities would appear better funded, thereby decreasing minimum and maximum employer contributions. In addition, some plans would reach full-funding limitations and avoid having to pay variable-rate premiums. Therefore, PBGC would receive less revenue. Conversely, a lower rate would likely improve PBGC's financial condition. In 1987, when the 30-year Treasury rate was adopted for use in certain pension calculations, the Congress intended that the interest rate used for current liability calculations would, within certain parameters, reflect the price an insurance company would charge to take responsibility for the plans pension payments. However, in the late 1990s, when fewer 30-year Treasury bonds were issued and economic conditions increased demand for the bonds, the 30-year Treasury rate diverged from other long-term interest rates, an indication that it also may have diverged from group annuity purchase rates. In 2001, Treasury stopped issuing these bonds altogether, and in March 2002, the Congress enacted temporary measures to alleviate employer concerns that low interest rates on the remaining 30-year Treasury bonds were affecting the reasonableness of the interest rate for employer pension calculations. Selecting a replacement rate is difficult because little information exists on which to base the selection. Other than the survey conducted for PBGC, no mechanism exists to collect information on actual group annuity purchase rates. Compared to other alternatives, the PBGC interest rate factors may have the most direct connection to the group annuity market, but PBGC factors are less transparent than market-determined alternatives. Long-term market rates may track changes in group annuity rates over time, but their proximity to group annuity rates is also uncertain. For example, an interest rate based on a long-term market rate, such as corporate bond indexes, may need to be adjusted downward to better reflect the level of group annuity purchase rates. However, as we stated in our report earlier this year, establishing a process for regulatory adjustments to any rate selected may make it more suitable for pension plan liability calculations. See GAO-03-313.

this approach is the difficulty plan sponsors would have determining the appropriate interest rate to use in valuing termination liabilities. As we reported, selecting an appropriate interest rate is difficult because little information exists on which to base the selection.[52] In addition, requiring financially strong sponsors to fund a plan's termination liabilities may encourage them to curtail or terminate those plans.

- **Strengthening minimum funding rules.** Altering the threshold for the additional funding rule or the accumulation and use of credit balances would likely increase contribution requirements for some underfunded plans. To determine whether the additional funding rule applies to a plan, the IRC requires sponsors to calculate current liability using the highest interest rate allowable for the plan year, which results in the lowest possible value for current liability. Basing the threshold on a termination liability rate rather than the highest possible current liability rate, might help prevent the sponsor of an underfunded plan to avoid making an additional contribution. In addition, if a sponsor makes a contribution in any given year that exceeds the minimum required contribution, the excess plus interest would be credited against future required contributions. Limiting the use of credit balances to offset contribution requirements might also prevent sponsors of significantly underfunded plans from avoiding contributions. Such limitations might also be applied on the basis of the plan sponsor's poor cash flow position or credit rating. However, significantly reducing the existing funding flexibility of financially strong sponsors might encourage them to curtail or terminate their plans.

- **Raising full-funding limitations**. Raising full-funding limitations may help decrease the level of underfunding in pension plans. The IRC and ERISA impose full-funding limitations that restrict certain tax-deductible contributions to prevent plan sponsors from contributing more to their plan than is necessary to cover accrued future benefits.[53] The advantage to raising these limitations is that such additional contributions might result in pension plans being better funded, decreasing the likelihood that they will be underfunded should they terminate. In addition, increasing full-funding limitations may be

[52]GAO-03-313.

[53]Employers are generally subject to an excise tax for failure to make required contributions or for making contributions in excess of the greater of the maximum deductible amount or the ERISA full-funding limit.

advantageous to plan sponsors because contributions made during times of prosperity may carry over, allowing them to avoid minimum funding contributions during less prosperous times. For example, the current limitation on tax-deductible contributions for plans with assets at 100 percent of current liability could be increased.[54] The disadvantage of raising the full-funding limitations is that the federal government would receive less tax revenue because of increases in tax-deductible contributions.

Reform PBGC's benefit guarantee and premium structure.

Reduce benefit guarantees. Reducing certain guaranteed benefits that plan sponsors are not currently required to fund could decrease losses incurred by PBGC from underfunded plans. This approach could preserve plan assets by preventing additional losses that PBGC would incur when a plan is terminated. However, participants would lose benefits provided by some plan sponsors. In addition, PBGC's premium rates could be increased or restructured to improve PBGC's financial condition. Changing premiums could increase PBGC's revenue or provide an incentive for plan sponsors to better fund their plans. However, premium changes that are not based on the degree of risk posed by different plans may force financially healthy companies out of the defined-benefit system and discourage other plan sponsors from entering the system. Various actions could be taken to reduce guaranteed benefits. These include:

- **Phasing-in the guarantee of shutdown benefits**. PBGC is concerned about its exposure to the level of shutdown benefits that it guarantees. Shutdown benefits provide additional benefits, such as significant early retirement benefit subsidies to participants affected by a plant closing or a permanent layoff. Such benefits are primarily found in the pension plans of large unionized companies in the auto, steel, and tire industries. In general, shutdown benefits cannot be adequately funded before a shutdown occurs. Phasing in guarantees from the date of the applicable shutdown could decrease the losses incurred by

[54] For example, one way to do this would be to allow deductions within a corridor of up to 130 percent of current liabilities. Gebhardtsbauer, Ron. American Academy of Actuaries testimony before the Subcommittee on Employer-Employee Relations, Committee on Education and the Workforce, U.S. House of Representatives, Hearing on *Strengthening Pension Security: Examining the Health and Future of Defined Benefit Pension Plans*. (Washington, D.C.: June 4, 2003), 9.

PBGC from underfunded plans.[55] However, modifying these benefits would reduce the early retirement benefits for participants who are in plans with such provisions and are affected by a plant closing or a permanent layoff. Dislocated workers, particularly in manufacturing, may suffer additional losses from lengthy periods of unemployment or from finding reemployment only at much lower wages.

- **Eliminating or reducing unfunded benefit increases**. Currently, plan sponsors must meet certain conditions before increasing the benefits of plans that are less than 60 percent funded.[56] Eliminating benefit increases or increasing this percentage could decrease the losses incurred by PBGC from underfunded plans. Plan sponsors have said that the disadvantage of such changes is that they would limit an employer's flexibility with regard to setting compensation, making it more difficult to respond to labor market developments. For example, a plan sponsor might prefer to offer participants increased pension payments or shutdown benefits instead of offering increased wages because pension benefits can be deferred—providing time for the plan sponsor to improve its financial condition—while wage increases have an immediate effect on the plan sponsor's financial condition.

Two actions that could be taken to change premiums are

- **Increasing fixed-rate premium**. The current fixed rate of $19 per participant annually could be increased. Since the inception of PBGC, this rate has been raised four times, most recently in 1991 when it was raised from $16 to $19. Such increases generally raise premium income for PBGC, but the current fixed-rate premium has not reflected the changes in inflation since 1991. By indexing the rate to the consumer price index, changes to the premium would be consistent with inflation. However, any increases in the fixed-rate premium would affect all plans regardless of the adequacy of their funding.

- **Increasing or restructuring variable-rate premium**. The current variable-rate premium of $9 per $1,000 of unfunded liability could be

[55]Currently, some measures exist to limit the losses incurred by PBGC from newly terminated plans. PBGC is responsible for only a portion of all benefit increases that the sponsor adds in the 5 years leading up to termination.

[56]IRC provides generally that a plan less than 60 percent funded on a current liability basis may not increase benefits without either immediately funding the increase or providing security. See 26 U.S.C. 401(a)(29).

increased. The rate could also be adjusted so that plans with less adequate funding pay a higher rate. Premium rates could also be restructured based on the degree of risk posed by different plans, which could be assessed by considering the financial strength and prospects of the plan's sponsor, the risk of the plan's investment portfolio, participant demographics, and the plan's benefit structure – including plans that have lump-sum,[57] shutdown benefit, and floor-offset provisions.[58] One advantage of a rate increase or restructuring is that it might improve accountability by providing for a more direct relationship between the amount of premium paid and the risk of underfunding. A disadvantage is that it could further burden already struggling plan sponsors at a time when they can least afford it, or it could reduce plan assets, increasing the likelihood that underfunded plans will terminate. A program with premiums that are more risk-based could also be more challenging for PBGC to administer.

Conclusion

The current financial challenges facing PBGC and the array of policy options to address those challenges are more appropriately viewed within the context of the agency's overall mission. In 1974, ERISA placed three important charges on PBGC: first, protect the pension benefits so essential to the retirement security of hard working Americans; second, minimize the pension insurance premiums and other costs of carrying out the agency's obligations; and finally, foster the health of the private defined-benefit pension plan system. While addressing one or even two of these goals would be a challenge, it is a far more formidable endeavor to fulfill all three. In any event, any changes adopted to address the challenges facing PBGC should provide plan sponsors with incentives to increase plan funding, improve the transparency of the plan's financial information, and provide a means to hold sponsors accountable for funding their plans adequately. Ultimately, however, for any insurance program, including the single-employer pension insurance program, to be self-financing, there must be a balance between premiums and the program's exposure to losses.

[57]For example, a plan that allows a lump-sum option—as is often found in a cash-balance and other hybrid plan—may pose a different level of risk to PBGC than a plan that does not.

[58]Under the floor-offset arrangement, the benefit computed under the final pay formula is "offset" by the benefit amount that the account of another plan, such as an Employee Stock Ownership Plan, could provide.

A variety of options are available to the Congress and PBGC to address the short-term vulnerabilities of the single-employer insurance program. Congress will have to weigh carefully the strengths and weaknesses of each option as it crafts the appropriate policy response. However, to understand the program's structural problems, it helps to understand how much the world has changed since the enactment of ERISA. In 1974, the long-term decline that our nation's private defined-benefit pension system has experienced since that time might have been difficult for some to envision. Although there has been some absolute growth in the system since 1980, active workers have comprised a declining percentage of program participants, and defined-benefit plan coverage has declined as a percentage of the national private labor force. The causes of this long-term decline are many and complex and have turned out to be more systemic, more structural in nature, and far more powerful than the resources and bully pulpit that PBGC can bring to bear.

This trend has had important implications for the nature and the magnitude of the risk that PBGC must insure. Since 1987, as employers, both large and small, have exited the system, newer firms have generally chosen other vehicles to help their employees provide for their retirement security. This has left PBGC with a risk pool of employers that is concentrated in sectors of the economy, such as air transportation and automobiles, which have become increasingly vulnerable. As of 2002, almost half of all defined-benefit plan participants were covered by plans offered by firms in manufacturing industries. The secular decline and competitive turmoil already experienced in industries like steel and air transportion could well extend to the other remaining strongholds of defined-benefit plans in the future, weakening the system even further.

Thus, the long-term financial health of PBGC and its ability to protect workers' pensions is inextricably bound to this underlying change in the nature of the risk that it insures, and implicitly to the prospective health of the defined-benefit system. Options that serve to revitalize the defined-benefit system could stabilize PBGC's financial situation, although such options may be effective only over the long term. Our greater challenge is to a more fundamental consideration of the manner in which the federal government protects the defined-benefit pensions of workers in this increasingly risky environment. We look forward to working with the Congress on this crucial subject.

Appendix I: Key Legislative Changes That Affect the Single-Employer Insurance Program

As part of the Employee Retirement and Income Security Act (ERISA) of 1974, the Congress established the Pension Benefit Guaranty Corporation (PBGC) to administer the federal insurance program. Since 1974, the Congress has amended ERISA to improve the financial condition of the insurance program and the funding of single-employer plans (see table 1).

Table 1: Key Legislative Changes to the Single-Employer Insurance Program Since ERISA Was Enacted

Year	Law	Number	Key provisions
1974	ERISA	P.L. 93-406	Created a federal pension insurance program and established a flat-rate premium and minimum and maximum funding rules.
1986	Single-Employer Pension Plan Amendments Act of 1986 enacted as Title XI of the Consolidated Omnibus Budget Reconciliation Act of 1985	P.L. 99-272	Raised the flat-rate premium and established financial distress criteria that sponsoring employers must meet to terminate an underfunded plan.
1987	Pension Protection Act enacted as part of the Omnibus Budget Reconciliation Act of 1987	P.L. 100-203	Increased the flat-rate premium and added a variable-rate premium based on 80 percent of the 30-year Treasury rate. In addition, established a permissible range around the 30-year Treasury rate as the basis for current liability calculations, increased the minimum funding standards, and established a full-funding limitation based on 150 percent of current liability.
1994	Retirement Protection Act enacted as part of the Uruguay Rounds Agreements Act, also referred to as the General Agreement on Tariffs and Trade	P.L. 103-465	Raised the basis for variable-rate premium calculation from 80 percent to 85 percent of the 30-year Treasury rate (effective July 1997). Phased out the cap on the variable-rate premium. Strengthened funding requirements by narrowing the permissible range of the allowable interest rates and standardizing mortality assumptions for the current liability calculation. Also, established 90 percent as the minimum full-funding limitation.
2001	The Economic Growth and Tax Relief Reconciliation Act of 2001	P.L. 107-16	Accelerated the phasing out of the 160 percent full-funding limitation and repealed it for plan years beginning in 2004 and thereafter.
2002	The Job Creation and Worker Assistance Act of 2002	P.L. 107-147	Temporarily expanded the permissible range of the statutory interest rates for current liability calculations and temporarily increased the PBGC variable-rate premium calculations to 100 percent of the 30-year Treasury rate for plan years beginning after December 31, 2001, and before January 1, 2004.

Source: Public Law.

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