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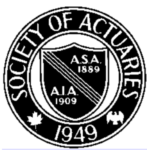

PENSION SECTION NEWS

NUMBER 37 AUGUST 1998

Chairperson's Corner

by Carolyn E. Zimmerman

At the risk of stating the obvious, I am becoming more and more concerned about the trend toward "do-it-yourself" pensions—defined contribution and hybrid plans, IRAs, lump-sum distributions, and so on. I am certainly not the first—nor the last—person to comment on this, but I see this as a crisis in the making as more and more retirees are dependent on their own ability (and discipline) to manage a portfolio to provide lifetime retirement income.

We've seen many employers change to defined-contribution or hybrid plans. We have seen employees embrace these even though they may be receiving smaller benefits, because while they do not understand the value of their defined-benefit pension they can see the value of their defined-contribution account increasing year after year. (In the words of a recent Presidential candidate, they can "see it, touch it, feel it!") I had one client who changed from a defined-benefit to a defined-contribution plan and some of its older

continued on page 8, column 1

Excerpts from the PBGC Actuarial Valuation Report—1997 Fiscal Year

Editors Note: *The 1997 Annual Report of the PBGC and the complete 1997 Actuarial Valuation Report, including additional actuarial data tables, are available from Loretta Berg at the PBGC, 202–326–4040, upon request.*

☆☆☆

The 1997 Annual Report of the Pension Benefit Guaranty Corporation (PBGC) contains a summary of the results of the September 30, 1997 actuarial valuation. The purpose of this separate Actuarial Valuation Report is to provide greater detail on the valuation of future benefits than is possible in PBGC's Annual Report.

Overview

The PBGC calculated and validated the present value of future benefits (PVFB) for both the single-employer and multiemployer programs and of non-recoverable financial assistance under the multiemployer program. For the single-employer program, the liability as of September 30, 1996 consisted of:

- $10.50 billion for the 2,500 plans that have terminated
- $2.59 billion for 23 probable terminations.

Liabilities for "probable terminations" reflected reasonable estimates of the losses for plans that are likely to terminate in a future year. These estimated losses were based on conditions that existed as of PBGC's fiscal year-end. It is likely that one or more events subsequent to PBGC's fiscal year-end will occur, confirming the fact of the loss. In addition, the liability for reasonably possible terminations has been calculated and is discussed in Note 9 to the financial statements on page 37 of PBGC's 1997 Annual Report. A 10-year forecast of PBGC's financial condition is discussed on pages 18 and 19 of that report.

continued on page 4, column 1

In This Issue

	page
33rd ARC at Georgia State	3
Additional Web Site Addresses	9
Administration on Aging Needs Your Help!	17
Articles Needed for the *News*	6
Call for Papers—"Fair Value of Insurance Business"	3
Chairperson's Corner *by Carolyn E. Zimmerman*	1
Continuing Education Update *by Barbara Choyke*	18
Excerpts from the PBGC Actuarial Valuation Report—1997 Fiscal Year	1
JBEA Advisory Committee Seeks Applicants *by Carl Shalit*	10
Letters to the Editor:	
• Engagement of the Enrolled Actuary on Behalf of All Plan Participants: Where's the Engagement?	2
• Incidence of Disability for U.S. Government Employees: 1988–1993	2
• Retirement Planning and Women	2
Minutes of the Joint Meeting of the Committee on Retirement Systems Research and Committee on Retirement Systems Professional Education and Development, March 31, 1998	15
Minutes of the Mortality Projection Working Group Meeting, March 30, 1998	14
Minutes of the Pension Section Council Meeting, March 22, 1998	13
Minutes of the Retirement Plans Experience Committee Meeting	
March 25, 1998	11
May 14, 1998	12
NIA Publication Order Form	11
A Paper to Note: Retirement Age—Increasing or Phasing out?	9
SAVER Summit Looks at Retirement Needs and Savings Plans *by Anna Rappaport*	7
Statistics for Employee Benefits Actuaries Available	3
Study Note Corner: "A Technical Analysis of Pension Equity Plans" (Course P–362U Study Note)	6

Excerpts from the PBGC Report
continued from page 1

For the multiemployer program, the liability as of September 30, 1997 consisted of:

- $7 million for 10 pension plans that terminated before passage of the Multiemployer Pension Plan Amendments Act (MPPAA) and of which the corporation is trustee
- $361 million for probable and estimable post-MPPAA losses due to financial assistance to 45 multi-employer pension plans that were, or were expected to become, insolvent.

Actuarial Assumptions, Methods, and Procedures

The PBGC continues to review the actuarial assumptions used in the valuation to ensure that they remain consistent with current market conditions in the insurance industry and with PBGC's experience. The actuarial assumptions that are used in both the single- employer and multiemployer valuations are presented in the table (on page 5). Assumptions concerning data that were not available are discussed in the data section of this report.

As in previous valuations, the select and ultimate interest rates used to value PBGC liabilities were derived by using an assumed underlying mortality basis and current annuity purchase prices. The interest rates so determined for the 1997 valuation were 6.20% for the first 25 years after the valuation date and 5.50% thereafter. For the 1996 valuation, the interest rates were 6.6% for the first 25 years and 4.75% thereafter. These interest rates are dependent upon PBGC's mortality assumption which changed from FY 1996 to FY 1997 (see next paragraph).

The mortality assumptions were updated by adopting the recommendations contained in the Addendum to the 1994 PBGC Mortality Expense Study, which was completed during FY 1997 by an independent consulting firm. This study recommended that, when conducting valuations for its financial statements, the PBGC use the male and female 1994 Group Annuity Mortality Static Tables (with margins), set forward two years, for healthy males and females. The study also recommended that continuing mortallity improvements be taken into account by using Projection Scale AA, also set forward two years, to project these tables a fixed number of years. At each valuation date, the fixed number of years will be determined as the sum of the elapsed time from the date of the table (1994) to the valuation date, plus the period of time from the valuation date to the average date of payment of future benefits (the duration). This is an approximation to a fully projected table. Thus, the mortality table used for healthy lives in the 1997 valuation is the 1994 Group Annuity Mortality Static Table (with margins), set forward two years, projected 12 years to 2006 using Scale AA. For FY 1996 the healthy lives mortality table was the 1983 Group Annuity Mortality Table (with margins), projected 10 years to 1993 using Scale H, with six-year age setback for females. The disabled lives mortality tables used in the 1997 valuation were derived from the Social Security disability table and from healthy lives mortality in a manner similar to the 1996 valuation.

The model used to determine the reserve for future administrative expenses was also changed. Based on a thorough expense study conducted during 1997 by an independent consultant, a new model was developed that more properly reflects the structure of PBGC's administrative expenses. The expense reserve was assumed to be 1.3% of the liability for benefits plus additional reserves for cases where plan asset determinations, participant database audits, and actuarial valuations were not complete. The factors to determine these additional reserves are based on case size, number of participants, and time since trusteeship. This information is obtained directly from PBGC's case administration system, reflecting consistent reporting throughout PBGC. The expense assumptions for FY 1997 are shown in detail in Table 2C. For FY 1996 the expense assumptions were $26,000 per plan and $650 per participant phased out over the first four years after the plan's date of trusteeship plus 3.25% of the liability for benefits.

The Small Plan Average Recovery Ratio (SPARR) assumptions as shown in Table 2B were updated to reflect the actual SPARRs calculated for FY 1992 (7.73%) and for FY 1993 (7.44%). The SPARRs for subsequent years are assumed to equal the FY 1993 SPARR.

There was no change in the assumptions for retirement ages.

Efforts continued into 1997 to improve the quality of the seriatim data. In addition, changes were made to improve the accuracy, speed, and auditability of the calculations as well as to integrate with the evolving PBGC computer environment.

Statement of Actuarial Opinion

This valuation has been prepared in accordance with generally accepted actuarial principles and practices and, to the best of my knowledge, fairly reflects the actuarial present value of the corporation's liabilities for the single-employer and multiemployer plan insurance programs as of September 30, 1997.

In preparing this valuation, I have relied upon information provided to me regarding plan provisions, plan participants, plan assets, and other matters.

In my opinion, (1) the techniques and methodology used for valuing these liabilities are generally accepted within the actuarial profession; (2) the assumptions used are appropriate for the purposes of this statement and are individually my best estimate of expected future experience discounted using current settlement rates from insurance companies; and (3) the resulting total liability represents my best estimate of anticipated experience under these programs.

Joan M. Weiss, FSA
Chief Valuation Actuary
Pension Benefit Guaranty Corporation
Washington, D.C.
March 31, 1998

Excerpts from the PBGC Report
continued from page 4

ACTUARIAL ASSUMPTIONS

	Previous Valuation as of 9/30/96	Current Valuation as of 9/30/97
Interest Rate	Select and Ultimate • 6.6% for 25 years • 4.75% thereafter	Select and Ultimate • 6.2% for 25 years • 5.5% thereafter
Mortality • Healthy Lives	• 1983 Group Annuity Mortality Table (with margins), projected 10 years to 1993 using Scale H, with 6-year age setback for females	• 1994 Group Annuity Mortality Static Table (with margins), set forward two years, projected 12 years to 2006 using Scale AA
• Disabled Lives Not Receiving Social Security	• Healthy Lives Table set forward three years	• Healthy Lives Table set forward three years
• Disabled Lives Receiving Social Security	• Social Security disability table as described in PBGC regulations on Valuation of Plan Benefits for persons up to age 65, adjusted to parallel the healthy lives table for ages above 65.	• Social Security disability table as described in subpart B of PBGC regulations on Allocation of Assets in Single-Employer Plans for persons up to age 64, adjusted to parallel the table for disabled lives not receiving Social Security benefits for ages above 64.
SPARR	Actual SPARR for fiscal years for which it has been calculated. The most recent actual SPARR is assumed for years for which the calculation is not yet completed (most recent SPARR: FY 1991 = 12.01%).	Actual SPARR for fiscal years for which it has been calculated. The most recent actual SPARR is assumed for years for which the calculation is not yet completed (most recent SPARR: FY 1993 = 7.44%). See Table 2B for values.
Retirement Ages	(a) Earliest possible for shutdown companies. (b) Expected retirement age (XRA) tables from 29 CFR 4044 for ongoing companies. (c) Participants past XRA are assumed to be in pay status. (d) Unlocated participants past normal retirement age (NRA) are phased out over three years to reflect lower likelihood of payment.	Same
Expenses	All terminated plans and single-employer probable terminations: (a) $26,000 per plan, plus (b) $650 per participant, plus (c) 3.25% of the liability for benefits. Expense elements (a) and (b) are phased out over the first four years from the plan's date of trusteeship.	All terminated plans and single-employer probable terminations: 1.30% of the liability for benefits plus additional reserves as shown in Table 2C for cases where plan asset determinations, participant database audits, and actuarial valuations were not complete.