

CRS Report for Congress

The Financial Health of the Pension Guaranty Benefit Corporation (PBGC)

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Summary

The Pension Benefit Guaranty Corporation (PBGC) is a federal government agency created by the Employee Retirement Income Security Act of 1974 (ERISA) to protect the pensions of participants covered by most private sector, defined benefit pension plans. The PBGC receives no appropriated funds. The agency's costs are offset by the assets of the plans that the PBGC takes over and premiums paid by the sponsors of covered pension plans. The premiums are established by Congress. The PBGC's single-employer program posted an all-time high deficit of \$23 billion in 2004; as of September 30, 2006, the deficit was \$18 billion. The PBGC discloses an additional, off-balance sheet liability for reasonably possible terminations; as of September 30, 2006, it was \$73 billion.

Although the PBGC's net position (measured as assets minus liabilities) improved \$5.2 billion since 2004, it fell \$31.0 billion from 2001 to 2004. Many factors have contributed to the PBGC's worsening financial condition. Primary among them was the termination of several large underfunded pension plans between 2002 and 2005 in the steel and airline industries. Plan terminations by airlines continue to threaten the PBGC's finances. Poor stock market returns (in 2001 and 2002) and falling interest rates also contributed to the PBGC's recent problems.

As the PBGC's condition worsened, Congress and the Bush Administration considered reforms to address the salient issues. On August 17, 2006, the President signed the Pension Protection Act as P.L. 109-280. It has been called the most comprehensive reform of the nation's pension laws since the enactment of ERISA. The law establishes new rules that strengthen funding requirements for most plans; however, it provides funding relief for plans sponsored by commercial airlines. It also includes reforms that affect cash balance plans, defined contribution plans, and other forms of deferred compensation.

Although the PBGC currently receives no appropriations, many expect that because it insures the pensions of 44 million Americans, its failure could require a taxpayer funded bailout. The Government Accountability Office (GAO) added the PBGC's single-employer insurance program to its list of high-risk areas in July of 2003. As of January 2007, it remains on GAO's list because of its high deficit and because the ultimate impact of recent reforms on the PBGC's finances is unclear.

This report focuses on the financial condition of the PBGC and the effects of the Pension Protection Act; it will be updated upon major developments affecting the PBGC's financial condition.

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Background¹

The Pension Benefit Guaranty Corporation (PBGC) is a federal government agency created by the Employee Retirement Income Security Act (ERISA) of 1974 to protect the pensions of participants covered by most private sector, defined benefit pension plans. The PBGC receives no appropriated funds. The agency's costs are offset by the assets of the plans that the PBGC takes over and premiums paid by the sponsors of covered pension plans. PBGC premiums are established by Congress.

From 2002 to 2005, the termination of several large underfunded pension plans sponsored by steel companies and airlines contributed to a steadily worsening financial position for the PBGC. Although low interest rates and low stock market returns also contributed to the recent losses, the primary threat to the PBGC's financial condition is underfunding in pension plans of financially weak sponsors. In some cases, plan terminations were preceded by years of low contributions — or no contributions — which significantly increased underfunding. The Pension Protection Act of 2006 (PPA) addressed these issues by establishing new pension funding rules.²

Funded Status of the PBGC Single Employer Program³

The PBGC's single-employer program posted a deficit of \$23.3 billion as of September 30, 2004, the largest deficit in its history. **Table 1** illustrates how quickly the funded status (or net position) of this program deteriorated and shows the program's status as of September 30, 2006.

¹ Parts of this report are based on an archived CRS Report RL32702, *Can the Pension Benefit Guaranty Corporation Be Restored to Financial Health?*, by Neela Ranade.

² For a more information, see CRS Report RL33703, *Summary of the Pension Protection Act of 2006*, by Patrick Purcell, or CRS Report RS22513, *Pension Protection Act of 2006: Summary of the PBGC Guarantee and Related Provisions*, by Jennifer Staman and Erika Lunder.

³ The PBGC covers both single-employer and multiemployer pension plans. Multiemployer plans are collectively bargained plans to which more than one company makes contributions. The laws and issues relating to multiemployer plans are quite different than for single-employer plans. As of September 30, 2006, the single-employer program accounted for 96% of the PBGC's deficit. This report will focus on the single-employer program.

Table 1. PBGC Single-Employer Program Funded Status
(amounts in billions)

	Sept. 30, 2001	Sept. 30, 2002	Sept. 30, 2003	Sept. 30, 2004	Sept. 30, 2005	Sept. 30, 2006
Assets	\$21.8	\$25.4	\$34.0	\$39.0	\$56.5	\$60.0
Liabilities	\$14.0	\$29.1	\$45.3	\$62.3	\$79.2	\$78.1
Net position	\$7.7	(\$3.6)	(\$11.2)	(\$23.3)	(\$22.8)	(\$18.1)
Net gain (loss)	—	(\$11.4)	(\$7.6)	(\$12.1)	\$0.5	\$4.6
Reasonably possible exposure	\$10.9	\$35.4	\$83.9	\$96.0	\$108.0	\$73.3

Sources: PBGC, *Annual Management Report, 2006*; PBGC, *Annual Reports, 2002-2005*.

Notes: Due to rounding, Assets minus Liabilities may not exactly equal Net position. Definitions for the terms used in **Table 1** are provided in **Appendix A**.

PBGC's asset sources include premium income, assets obtained from the trusts of terminated plans, assets recovered from plan sponsors and investment earnings. The PBGC asset holdings include cash, equities (stocks), and fixed income securities (bonds). Large losses in the stock market in 2001 and 2002 led the PBGC to change its allocation between stocks and bonds starting in 2004. The following press release from January 2004 describes the policy change:

“The PBGC's liabilities — the fixed annuities the agency must pay to participants in trustee pension plans — are bond-like in nature. PBGC's liabilities move in the opposite direction of interest rates, increasing as interest rates fall and decreasing as interest rates rise. Under the new investment policy, the PBGC will increase its investment in duration matched fixed-income securities over the next two years. As a result, the portion of invested assets allocated to equities is expected to decline to between 15 percent and 25 percent of total invested assets, from 37 percent as of the end of fiscal year 2003.”⁴

The liabilities shown in **Table 1** include claims for plans that have already terminated as well as claims for terminations that the PBGC deemed probable (i.e., that the PBGC expected to occur within the next twelve months). In general, these terminations are associated with plans whose sponsors are in bankruptcy and are unlikely to emerge from bankruptcy as going concerns without terminating their pension plans. Other probable claims include plans whose sponsors have indicated that they intend to file for a distress plan termination. These liabilities appear on the balance sheet of the PBGC's financial statement.⁵

⁴ PBGC, “PBGC Announces New Investment Policy,” press release, Jan. 29, 2004, [http://www.pbtc.gov/media/news-archive/news-releases/2004/pr04-25.html].

⁵ For plans that have already terminated, asset and liabilities are reported separately in **Table 1**. However, for plans whose terminations are ‘probable,’ liabilities are reported net of (continued...)

The net position equals the difference between assets and liabilities at a given point in time. When assets exceed liabilities, the PBGC is in a surplus position. When liabilities exceed assets, the PBGC is in a deficit. The change in net position from one year to the next is called the net gain (or loss if negative) for the year. For example, in FY2002, the PBGC's net position decreased from a \$7.7 billion surplus to a \$3.6 billion deficit resulting in a net loss of \$11.4 billion for that year. From 2001 to 2005, the PBGC's net position declined \$30.5 billion, which can be largely attributed to record-setting claims. Eight of the PBGC's 10 largest claims since 1975 occurred during this period; they accounted for more than \$18 billion in claims to the PBGC.⁶

The last row of **Table 1** shows reasonably possible exposure (RPE), which is a risk measure that appears in the footnotes — and not on the balance sheet — of the PBGC's financial statement. RPE cannot be derived from the other values in the table. In general, it represents underfunding in plans sponsored by companies that are experiencing financial difficulty and whose plans are not expected to terminate in the near future (i.e., not within the next 12 months).⁷

Some of the plans included in the exposure for reasonably possible terminations can be expected to end up under PBGC trusteeship in the next few years. The PBGC once used this measure as an estimate of expected future claims over a 10-year period (see **Appendix B**). From 2001 to 2005, RPE increased nearly ten-fold. It declined 32% from 2005 to 2006, which the PBGC attributes to a net reduction in sponsors' unfunded vested benefit liabilities.⁸ According to the PBGC, the current level of RPE suggests that large claims against the single-employer pension insurance program may continue.⁹

As a result of the airline relief provisions of the PPA, "some large plans that were previously classified as probable terminations have been changed from the probable classification to the reasonably possible classification in FY2006."¹⁰ This effectively removed a portion of the PBGC's liabilities from the balance sheet and placed them in the footnotes of the financial statement.

⁵ (...continued)

assets (i.e., liabilities for 'probable' terminations are equal to the sum of assets minus liabilities for all plans included in this category).

⁶ PBGC, *Pension Insurance Databook, 2005*, p. 32.

⁷ The liability for RPE is reported net of assets, i.e., it is equal to the sum of assets minus liabilities for all plans included in this category.

⁸ PBGC, *Annual Management Report, 2006*, p. 4.

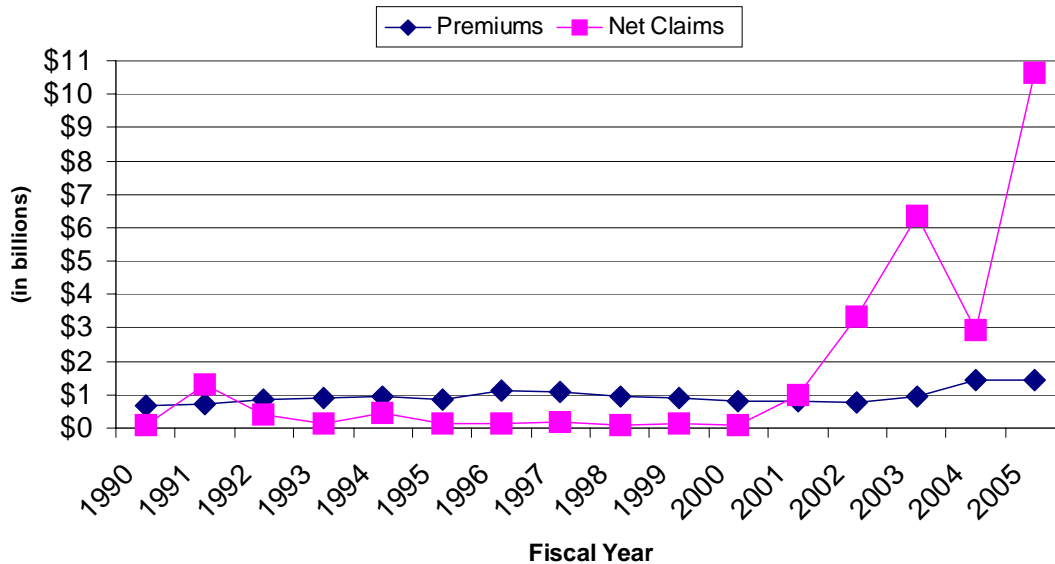
⁹ PBGC, *Annual Management Report, 2006*, p. 15.

¹⁰ PBGC, *Annual Management Report, 2006*, p. 3.

Recent Large Claims on the PBGC

Since 2001, the PBGC's annual net claims have risen dramatically. A comparison of annual premiums and annual net claims from 1990 to 2005 is shown in **Figure 1**.

Figure 1. PBGC Annual Premiums and Net Claims, 1990-2005



Source: PBGC, *Pension Insurance Databook 2005*, pp. 29, 30.

From 1990 to 2000, the PBGC collected annual average premiums of \$902 million (in nominal dollars) and incurred average annual net claims of \$290 million. From 2001 to 2005, premiums averaged \$1.2 billion, and net claims averaged \$4.8 billion. Thus, from one period to the next, premiums grew by a factor of 1.3, but net claims grew by a factor of 16.6.¹¹ The highest annual net claims amount prior to 2000 was \$1.3 billion in 1991; however, from 2002 to 2005, net claims averaged over \$5.8 billion. More than one-third the PBGC's nearly \$30 billion in total net claims since its inception are attributable to terminations in 2005 alone.¹²

In 2005, United Airlines and USAirways terminated pension plans, which accounted for nearly all of the record claims in that year. United cancelled four plans with a total of \$16.8 billion in liabilities and \$7.0 billion in assets, which equates to

¹¹ The growth factors of 1.3 and 16.6 are based on a comparison of premiums and net claims over two periods: 1990-2000 and 2001-2005. If the earlier period is extended back to the inception of the PBGC (i.e., 1975-2000 is compared to 2001-2005) the growth factors become 1.6 and 12.3 for premiums and net claims, respectively.

¹² PBGC, *Pension Insurance Databook*, pp.29-30.

\$9.8 billion in underfunding.¹³ US Airways cancelled one plan with \$4.2 billion in liabilities and \$1.7 billion in assets.¹⁴ In all, these plans were more than \$12.3 billion underfunded. The net claim on the PBGC was somewhat less, \$8.9 billion, because the PBGC imposes a maximum guaranteed benefit limit (\$45,614 per employee per year in 2005) on the plans it insures.¹⁵

The magnitude of these claims can be traced to the airlines' eroded profit margins after September 11, 2001, and to the "perfect storm" of falling interest rates combined with an underperforming stock market, but there was another contributing factor. The funding rules in place prior to the passage of the PPA enabled sponsors of underfunded plans to make no contributions to their plans if certain conditions applied, a practice that exacerbated plan underfunding and increased the level of claims made on the PBGC. A cursory description of pension funding rules before and after the PPA follows.

¹³ PBGC, "PBGC Reaches Pension Settlement with United Airlines," press release, Apr. 22, 2005, [<http://www.pbgc.gov/media/news-archive/2005/pr05-36.html>].

¹⁴ PBGC, "PBGC Takes \$2.3 Billion Pension Loss from US Airways," press release, Feb. 2, 2005, [<http://www.pbgc.gov/media/news-archive/news-releases/2005/pr05-22.html>].

¹⁵ PBGC, "Maximum monthly guarantee tables," available at [<http://www.pbgc.gov/workers-retirees/find-your-pension-plan/content/page789.html>]. This particular maximum applies to those who choose to retire at age 65; other maximums apply to those who retire at different ages. On January 5, 2007, the PBGC announced the takeover of Delta Airlines Inc. Pilots Retirement Plan which terminated with \$1.7 billion in assets to cover \$4.7 billion in liabilities (i.e., \$3 billion in unfunded liabilities). The net claim against the PBGC was significantly less, \$920 million, due to a low guaranteed maximum (\$30,979 per employee per year in 2006) that applies in this case because pilots' normal retirement age is 60 (vs. 65 in most plans).

Pension Funding Rules: Basic Concepts

According to ERISA, defined benefit pension plans must be funded during participants' working careers. Accordingly, each participant earns (i.e., accrues) some portion of his projected pension benefit with each year of employment (i.e., year of service to the company). The amount of projected benefits earned in a given year is called the *normal cost* for that year; the total (i.e., cumulative) amount of benefits earned by an employee for all past service — as of a given date — is called the *accrued actuarial liability* (also referred to as accrued liability, actuarial liability, or liability).

Normal costs and actuarial liabilities represent the value — in present-day dollars — of benefit payments that will be made many years in the future. Converting a stream of future benefit payments into a single value is done by using an interest rate (or discount rate) to reflect the time value of money. For example, using a 6% interest rate, the present value of a \$1,000 payment made 10 years in the future is $\$1,000/(1.06)^{10} = \558.39 ; if the payment is made 20 years in the future, the present value is $\$1,000/(1.06)^{20} = \311.80 . Using a higher interest rate, say 7%, will produce lower present values: \$508.35 for a payment made in 10 years, \$258.42 for a payment in 20 years.

The comparison of accrued liabilities to the value of plan assets determines the plan's funded status. If the plan's assets equal or exceed accrued liabilities, the plan can be referred to as fully funded. If accrued liabilities exceed plan assets, then the plan can be described as being underfunded, having a funded ratio of less than 100%, or having unfunded liabilities. The amount of unfunded liabilities (UL) is the difference between accrued liabilities (AL) and plan assets (V), that is: $UL = AL - V$.

Unfunded liabilities can arise from a variety of sources: experience losses (e.g., when actual interest rates are different than assumed interest rates), changes in assumptions (e.g., when the assumed interest rate changes from one year to the next), plan amendments (e.g., plan design changes that increase the future benefits promised by the plan), and unfunded past service liabilities (e.g., a plan change that grants increased benefits attributable to past service). In order to pay off unfunded liabilities, an amortization installment payment is calculated for each category described above. The sum — over all categories — of installment payments is the plan's *amortization payment* for the year. The sum of the normal cost contribution and the amortization payment (as described above) constitute a plan's minimum required contribution amount under ERISA.

The basic concepts described above provide a framework for understanding pension funding concepts. However, actual pension funding rules are much more complex. This is due, in part, to an ad-hoc approach to pension reform that prevailed from 1975 until the passage of the Pension Protection Act (PPA) of 2006.

Pension Funding Rules Prior to the PPA¹⁶

An employer maintaining a single-employer defined benefit pension plan must make an annual minimum funding contribution to ensure that the plan has sufficient assets with which to pay promised post-retirement benefits. The amount of the contribution must be sufficient to fund the plan's normal cost and to amortize the plan's unfunded liabilities over a period not to exceed 30 years. As indicated above, unfunded liabilities arise for several reasons and fall into several categories; old funding rules required different amortization periods for different types of losses. For example, experience losses were amortized over five years; whereas, losses due to plan amendments were amortized over 30 years.

Funding rules require plans with unfunded liabilities to be funded more rapidly than fully funded plans; however, prior funding rules deemed a plan to be "fully funded" if its funding ratio exceeded 90%. That is, plans only needed to fund up to 90% of their plan's liabilities. For the PBGC, this meant a higher risk exposure. If a plan terminated while it was less than 100% funded, the result was a loss for the PBGC.

If a plan contributes more than the minimum amount, the excess is referred to as a credit balance. Credit balances are notional accounts that grow at the plan's assumed interest rate and can be used to offset subsequent required contributions to the plan. As interest rates began to fall in the early 2000s, liabilities grew which resulted in increased levels of minimum required contributions. Some plans — with sufficient credit balances — chose to "use up" their credit balances rather than make cash contributions to their plans, which resulted in rapidly declining funding ratios for those plans.

Prior funding rules imposed a maximum limit on plan contributions called the full funding limit. The maximum was intended to prevent companies from using tax deductible excess pension contributions as a means of tax avoidance, but it had unintended results. "The effect of the full funding limit is to prevent employers from making additional contributions to a fully funded plan even if the accrued liability of the plan is greater than plan assets."¹⁷

Pension Funding Rules Under the PPA

Funding Rules

The PPA implements a target funding level that is 100% of plan liabilities; this requirement is phased in as follows: 92% in 2008, 94% in 2009, 96% in 2010, and 100% in 2011 and later years. Compared with the prior funding target of 90%, this will

¹⁶ The Pension Protection Act of 2006, "*Law, Explanation and Analysis*," CCH Editorial Staff Publications, p. 91 (as excerpted from ERISA Sec. 302 and Code Sec. 412).

¹⁷ "*Pension Protection Act of 2006: Law Explanation and Analysis*," CCH publications, p. 91.

require larger contributions for many plan sponsors. It will directly address the PBGC's exposure to risk due to plan underfunding. This is perhaps the most visible funding rule change made by the PPA.

In addition, the PPA requires all unfunded liabilities to be amortized over seven years; prior rules used amortization periods ranging from 5 to 30 years (depending on the "type" of liability being amortized). This change simplifies some of the amortization rules and is expected to remove plans' unfunded liabilities more quickly.

The new law requires all plans that are less than 100% funded to pay variable-rate premiums (VRP) equal to \$9 per \$1,000 of underfunding. VRPs existed under prior law, but some plans were exempt from paying them, which resulted in lost premium income to the PBGC and lower contributions by sponsors of underfunded plans. The PBGC collected \$550 million in 2006 in VRP.¹⁸ With fewer exemptions due to the PPA, the PBGC's revenue from VRPs is expected to increase starting in 2008.

The PPA establishes an "at risk" category for plans that are less than 80% funded on a standard basis or less than 70% funded on an adjusted basis, where the adjusted basis assumes that employees eligible to retire will do so as early as possible. (The 80% test will be phased in from 65% in 2008 to 80% in 2011.) These plans will be subject to a higher funding target and a higher target normal cost, and consequently will need to make larger funding contributions.

Credit Balances

As previously stated under prior rules, plans that contributed more than the minimum required amount built up credit balances that could be used to offset subsequent contributions. The new law does not eliminate credit balances, but it changes their use in two important ways: (1) plans that are less than 80% funded may not use credit balances, and (2) as of 2008, credit balances must be adjusted for subsequent investment gains and losses. Previously, severely underfunded plans could forego contributions if they had sufficient credit balances. The changes made by the PPA attempt to curtail this behavior in hopes of reducing both plan underfunding and the magnitude of future claims on the PBGC.

In addition to establishing minimum required contributions, ERISA also imposes a maximum on contributions. Plans may contribute more than the maximum, but they will not get a tax deduction for doing so. Maximums were imposed to prevent companies from using large contributions as a means of reducing taxes. However, the limits were defined in such a way that certain underfunded plans were prevented from making contributions. Starting in 2008, the maximum deductible contributions will increase to

- (1) the plan's normal cost *plus*
- (2) 150% of the funding target *plus*
- (3) an allowance for future pay or benefit increases *minus*
- (4) the value of the plan's assets.

¹⁸ PBGC, *Annual Management Report, 2006*, p. 10.

Contributions in excess of this limit are subject to a 10% excise tax. This replaces the full funding limit described above, which is based on 90% of the plan's current liability. The change should increase the maximum deductible contribution amount and enable plans to make larger contributions without hitting the maximum.

Benefit Limitations on Underfunded Plans

The PPA places benefit limits and other restrictions on plans that fail to meet certain funding thresholds. Shutdown benefits (unfunded payments made when a factory shuts down) and benefit accruals are prohibited by the PPA for plans that are less than 60% funded. Plan changes that increase benefits are not allowed for plans that are less than 80% funded. Lump sum payments are not allowed for plans that are less than 60% funded and for any underfunded plan whose sponsor is in bankruptcy. These restrictions prevent sponsors from various forms of "raiding" pension funds prior to termination, which would leave the PBGC with less money to pay benefits.

Smoothing

One of the components of the "perfect storm" that contributed to the PBGC's financial problems was poor performance in the stock market. For funding purposes, plans were allowed to use asset values that were averaged over several years, a process called "smoothing." Since plan sponsors generally prefer plan contribution amounts that are stable and predictable, they are proponents of smoothing; it dampens fluctuations in asset values and therefore in plan contributions from year to year. When financial markets underperformed for several consecutive years, however, smoothing had a different effect: smoothed asset values exceeded market asset values for a number of years. As a result, plan underfunding was understated, and contributions calculated using these values were inadequate, which further exacerbated underfunding. The Administration proposed the complete removal of smoothing from funding rules. Congress chose to retain smoothing but reduced the duration from four years to two years. The shortened smoothing period also applies to the practice of setting discount rates.

Interest Rates

Interest rates are used to determine the value of a plan's liabilities (i.e., the present value of future benefits promised by the plan). Historically, the rate used was based on 30-year Treasury bond rates, but in 2001 the Treasury Department stopped issuing these bonds, which caused the rates on existing bonds to drop and plan liabilities to increase.¹⁹ The Pension Funding Equity Act (P.L. 108-218) allowed the use of long-term corporate bond rates (which are generally higher than Treasury bond rates) but only for the plan years 2004 and 2005. Without revision of P.L. 108-218, interest rates would have reverted to Treasury bond rates in 2006, which would have increased

¹⁹ In the absence of newly issued 30-year bonds, interest rates were extrapolated from the interest rates, or yields, on existing bonds (e.g., 30-year bonds issued in the prior year that were due to mature in 29 years). With no new issues, the supply of the 30-year bonds decreased which caused their prices to increase and their yields to decrease. Treasury resumed issuing 30-year bonds in Feb. 2006.

liabilities once again. The PPA makes permanent the use of corporate bond rates to determine plan liabilities.

In addition, the PPA replaces the traditional use of a single rate with several rates taken from a yield curve. The Administration proposed the use of many different rates; in the end, Congress adopted a three rate version of the yield curve. One rate will apply to payments due in 0-5 years, a second rate will apply to payments due in 6-19 years, and a third rate will apply to payments due in 20 years or more. The rates will be based on the yields of high-rated corporate bonds with similar maturities.

PBGC Premiums

The PBGC collects flat-rate premiums (\$30 per participant in 2006)²⁰ from all plan sponsors and variable-rate premiums (VRPs) from sponsors of underfunded plans (\$9 per \$1,000 of underfunding). The PBGC collected \$550 million in VRPs in 2006.²¹ With the PPA allowing fewer exemptions, however, VRP collections are expected to increase starting in 2008.

The PPA makes permanent a surcharge premium for certain distress terminations, which was added by the Deficit Reduction Act of 2005 (P.L. 109-171) and was set to expire in 2010. A surcharge of \$1,250 per participant will be assessed for three years against any firm that terminates an underfunded pension plan during bankruptcy and later emerges from bankruptcy.

While some advocate wholesale premium increases to address the PBGC's financial condition, significant premium increases are problematic. A major cause of premium inadequacy is large claims from past terminations, but terminated plans do not make premium payments. Through premium increases, the underfunding of past terminations is borne by ongoing plans, many of which keep their plans fully funded. More broadly, PBGC premiums are seen as one of the many burdens that sponsors of defined benefit pension plans face. Significant premium increases could dissuade employers from sponsoring defined benefit plans and perhaps lead some sponsors to terminate existing plans.

Relief for Airlines Under the PPA

Although the PPA generally requires plan sponsors to make larger contributions than required under previous law, it establishes an optional set of rules for plans sponsored by commercial airlines and by catering businesses that principally serve commercial passenger airlines. Concerned that the standard requirements would consume cash that the airlines need to keep their businesses in operation, Congress

²⁰ Flat premiums are indexed to average national wage growth; accordingly, the rate for 2007 is \$31 per participant per year. The term participants refers to plan members who are active employees, retirees, and deceased persons with surviving beneficiaries.

²¹ PBGC, *Annual Management Report, 2006*, p. 15.

created alternative requirements in hopes of avoiding bankruptcies and plan terminations in the airline industry.

The alternative rules allow airlines more time (17 years instead of 7 years) to amortize their unfunded liabilities and let them value their liabilities at an interest rate of 8.85% instead of at market-based rates, which are currently lower (see **Table 3**). Sponsors who avail themselves of these rules must freeze benefit accruals in their plans, which means their employees will not earn additional retirement benefits during the freeze. Furthermore, if those sponsors declare bankruptcy and terminate their pension plans within five years — and then later emerge from bankruptcy — they will be subject to higher termination surcharges: \$2,500 instead of \$1,250 payable per participant for three years.²² **Table 2** shows plan information taken from the most recently available SEC filings for three airlines with significant unfunded liabilities.

Table 2. Plan Information from SEC Filings for Select Airlines
(\$ in billions)

	Liabilities	Assets	Unfunded Liabilities	Interest Rate
American	\$10.2	\$8.6	\$1.6	6.00%
Delta	\$7.6	\$4.6	\$3.0	5.88%
Northwest	\$9.4	\$5.8	\$3.7	5.71%
Combined	\$27.1	\$18.9	\$8.2	5.87%

Sources: SEC 10-K filings for American, Delta, and Northwest airlines at [http://www.sec.gov/Archives/edgar/data/1058033/000110465906017402/a06-1849_110k.htm], [http://www.sec.gov/Archives/edgar/data/27904/000118811207000582/t13049_10k.htm], [<http://www.sec.gov/Archives/edgar/data/4515/000095013407004261/d43808ae10vkza.htm>], respectively.

Notes: Delta and American values are for plan year 2007; Northwest values are for plan year 2006. While combining asset and liability values from different plan years is problematic, the point being made is illustrative. The primary use of these values is not meant to accurately represent the level of unfunded liabilities for these airlines or for the PBGC; the point is to demonstrate the impact of using an interest rate of 8.85% on reported unfunded liabilities.

These values can be used to illustrate the impact of the alternative PPA funding rules on reported unfunded liabilities. Combined, these airlines report \$8 billion in unfunded liabilities based on \$19 billion in assets, \$27 billion in liabilities, and a (weighted average) interest rate of roughly 5.87% — a rate that is tied to existing corporate bond rates. Under the alternative rules, however, the interest rate used to value liabilities would be 8.85%. This could reduce the *reported* liabilities by as much as \$8 billion (i.e., from \$27 billion to \$19 billion) and the *reported* unfunded liabilities from \$8 billion to \$0.

However, in the event that these plans terminate, the losses to the PBGC would not be similarly reduced. Although the PBGC's loss is not identical to that plan's

²² Airlines also have the option of choosing to amortize their current unfunded liabilities over a ten year period (instead of 17 years). However, in all other respects the standard funding rules would apply, i.e., future gains and losses would be amortized over seven years.

reported unfunded liabilities under standard rules, the two values are related; both values are based on actual interest rates found in the market place. Allowing airlines to use an interest rate of 8.85% when actual market rates are significantly lower effectively masks the threat that these plans pose to the PBGC. Over the long term, airline relief could result in improved funding for plans sponsored by airlines, but it does not preclude the possibility that these plans will terminate and leave the PBGC with significant losses.

Prognosis for the PBGC

Projecting the PBGC's financial future is a difficult task. The PBGC's annual reports include a 10-year projection from their Pension Insurance Modeling System (PIMS). The PIMS results express the future expected net position of the PBGC in terms of a distribution. For example, the 2005 Annual Report projects a median deficit in 2015 of \$22 billion, with a 5% chance that the deficit could be as high as \$55 billion and a 6% chance that the PBGC will be in a surplus position.²³ These results do not reflect the effects of the PPA; they will be included in the 2006 Annual Report's PIMS projections.

A critical assumption used in projecting the PBGC's financial condition is the level of net claims expected in the future. A review of the claims assumptions used in past financial projections raises questions about recent PIMS results.

Table 3. PBGC Actual and Average Expected Net Claims, 1995-2005
(\$ in millions)

Fiscal Year	Actual Fiscal Year Claims	Annual Average Expected Claims for the Next Decade
1995	\$155	\$608
1996	136	571
1997	196	545
1998	70	900
1999	155	850
2000	85	1,050
2001	972	1,150
2002	3,319	2,250
2003	6,335	2,600
2004	2,931	2,000
2005	10,629	1,700

Source: Actual Claims: PBGC, *Pension Insurance Databook, 2005*, p. 30. Assumed Claims: PBGC, *Annual Reports, 1996-2005*.

Note: Expected future claims, for projection purposes, are not based on a single value but on a distribution of claims. The claims shown in the table represent the mean of the distribution. A more detailed description of assumed claims distributions can be found in **Appendix A**.

²³ PBGC, *Annual Report, 2005*, p. 11.

In **Table 3**, the actual fiscal year claims represent historical claims on the PBGC for that fiscal year. The annual average expected claims represent the PBGC's average expected claims for the ensuing decade. For example, the expected average claims of \$1,700 million for 2005 indicates that PIMS projects total claims of \$1.7 billion annually from 2006 to 2015 (i.e., \$17 billion for the 10-year period).²⁴ Given that claims in 2005 alone were more than \$10 billion, some feel that the PIMS assumed claims levels and its projected results are optimistic. In its September 2005 projection, the Congressional Budget Office (CBO) assumed average claims of \$4.87 billion from 2004 to 2013, which is much higher than what PIMS assumed.²⁵

The Government Accountability Office (GAO) placed the PBGC's single-employer program on its list of government programs and operations that it identifies as "high risk" in July of 2003. GAO cited the PBGC's premium structure, weak pension funding rules, and large potential losses as threats to the PBGC's financial health. As of January 2007, the PBGC remains on the high-risk list. GAO recognizes that the PPA addresses many of its concerns but contends that the ultimate impact of the new law is unclear. "Many of these reforms will be phased in gradually, postponing their potentially positive effect on plan funding, while other changes could have the effect of increasing PBGC's financial exposure."²⁶

Conclusion

Recently, the PBGC's financial results have shown improvement. In 2005, the PBGC's net position improved by \$529 million (see **Table 1**), even though it experienced more than \$10 billion in claims that year. Offsetting those claims were rising interest rates (which lowered liabilities) and positive investment gains. The private sector has seen a similar improvement in the funding status of its pensions due to improving financial conditions. Fortune 100 companies ended 2006 with an aggregate funded status of 102%, up from 82% in 2002.²⁷ This highlights the degree to which pension finances can fluctuate over time and helps explain why they are difficult to predict.

²⁴ As indicated above, PIMS results express the future expected net position of the PBGC in terms of a distribution. Similarly, PIMS assumptions express expected future claim levels in terms of a distribution. From that distribution, the PBGC reports the mean, the median and the 90th percentile claims levels. The values in **Table 3** represent the mean of the assumed claims distribution. For 2005, the 90th percentile claims were \$3,100 million, i.e., the distribution assumed that there was a 10% chance that claims from 2006 to 2015 would be as high as \$31 billion. A more detailed description of assumed claims distributions can be found in **Appendix B**.

²⁵ U.S. Congressional Budget Office, *The Risk Exposure of the Pension Benefit Guaranty Corporation*, Sept. 2005, p. 6.

²⁶ U.S. Government Accountability Office, *High-Risk Series, An Update*, Jan. 2007, p. 35.

²⁷ Theo Francis, "Pension Plans Take a Healthy Turn," *Wall Street Journal*, Jan. 23, 2007, p. A4.

The PBGC's financial risk is directly related to underfunding in pension plans sponsored by financially weak entities. The record losses from 2002 to 2005 were attributable to falling interest rates, an underperforming stock market, financially weakened industries, as well as pension funding rules that enabled and exacerbated plan underfunding. Interest rates and the stock market have rebounded of late, and the PBGC's net gains from 2004 to 2006 reflect this. In addition, the Pension Protection Act (PPA) has reformed funding rules by increasing the primary funding threshold from 90% to 100%, requiring plans to amortize their unfunded liabilities over seven years, and overhauling rules that enabled plan sponsors to forego plan contributions while their liabilities increased. Because the new funding rules apply to plan years starting after 2007 (with some rules phasing in over a number of years starting in 2008), their full impact on the PBGC's financial condition will unfold over the next few years.

For plans maintained by commercial airlines, the PPA creates special rules that provide funding relief to eligible plans. These plan sponsors may elect to amortize their unfunded liabilities over a long period of time (17 years instead of 7) and to value their liabilities at an interest rate (8.85%) that is nearly 3% higher than some airlines are currently using (see **Table 3**). Congress created these rules out of concern that funding requirements would consume cash that these sponsors need to keep their businesses in operation; the hope is that bankruptcies and plan terminations might be avoided. Although these rules have already enabled the PBGC to remove some airlines' liabilities from their balance sheet (by reclassifying them as 'reasonably possible'), the pension plans of commercial airlines continue to threaten the financial condition of the PBGC.

Appendix A. Glossary of PBGC Related Terms

Accrued Actuarial Liability	The value of retirement benefits earned by a plan participant attributable to all past service.
Amortization payment	An installment to pay off a debt — with interest — in level payments over a number of payment periods.
Assets	The cumulative value of PBGC’s invested assets for the single employer program; asset sources include premium revenues, assets from terminated pension plans and assets recovered from their sponsors.
Benefit Payments	Benefits paid by the PBGC to retirees and beneficiaries in trusteed plans.
Liabilities	The present value of net guaranteed benefits for plans that have terminated as well as those that are expected to terminate in the next twelve months; the latter category is also known as ‘probable terminations’. Assets and liabilities for terminated plans are reported separately; whereas, liabilities for ‘probable terminations’ are net of assets, i.e., they are equal to the sum of assets minus liabilities for all plans in the ‘probable’ category.
Net Position	Excess of assets over liabilities.
Normal Cost	The portion of retirement benefits earned by plan participants in a given year.
Reasonably Possible Exposure	A liability that measures the potential loss to the PBGC from underfunded pension plans sponsored by companies that are experiencing financial difficulty and whose plans are not expected to be terminated in the next twelve months. This liability is reported net of assets, i.e., it is equal to the sum of assets minus liabilities for all plans in the ‘reasonably possible’ category.

Appendix B. PBGC Claims Assumptions for Projection Purposes

This appendix explicates the claims assumptions provided in **Table 3**.

For projections performed prior to 1998, three projection results were reported based on three distinct assumptions regarding the level of claims over a 10-year period:

- (1) Low-level claims = Average annual net claims over PBGC's entire history
- (2) Mid-level claims = Average annual net claims over a shorter period
- (3) Pessimistic claims = Reasonably possible exposure divided by ten

In 1998, the PIMS became the PBGC's modeling system. It substituted distributions for the three-part nature of the prior model. That is, both the assumed claims levels and the projection results were expressed in terms of distributions. For the expected claims level, the PBGC reported the distribution's: (1) mean, (2) median, and (3) 90th percentile claims levels. A comparison of these assumptions to actual historical claims levels is shown in **Table B1**.

Table B1. PBGC Actual and Assumed Net Claims, 1995-2005
(amounts in millions)

Fiscal Year	Actual Claims	Assumed Claims		
		(1)	(2)	(3)
1995	\$155	\$463	\$608	\$1,390
1996	\$136	\$481	\$571	\$2,180
1997	\$196	\$467	\$545	\$2,100
1998	\$70	\$600	\$900	\$2,100
1999	\$155	\$550	\$850	\$2,000
2000	\$85	\$650	\$1,050	\$2,600
2001	\$972	\$850	\$1,150	\$2,500
2002	\$3,319	\$1,850	\$2,250	\$4,300
2003	\$6,335	\$2,200	\$2,600	\$4,700
2004	\$2,931	\$1,700	\$2,000	\$3,500
2005	\$10,629	\$1,400	\$1,700	\$3,100

Source: Actual Claims: PBGC, *Pension Insurance Databook, 2005*, p. 30. Assumed Claims: PBGC, *Annual Reports, 1996-2005*

Notes: For 1995-1997, Assumed Claims (1), (2), and (3) = Low-level claims, Mid-level claims, and Pessimistic claims, respectively. For 1998-2005, Assumed Claims (1), (2), and (3) = Mean, Median, and 90th percentile, respectively, taken from the PIMS's assumed claims distribution.