



AMERICAN ACADEMY *of* ACTUARIES

**Committee on Ways and Means
Subcommittee on Select Revenue Measures**

Hearing on:

Challenges Facing Pension Plan Funding

Testimony Presented By:

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The American Academy of Actuaries is the public policy organization for actuaries of all specialties within the United States. In addition to setting qualification standards and standards of actuarial practice, a major purpose of the Academy is to act as the public information organization for the profession. The Academy is nonpartisan and assists the public policy process through the presentation of clear, objective analysis. The Academy regularly prepares testimony for Congress, provides information to federal elected officials and congressional staff, comments on proposed federal regulations, and works closely with state officials on issues related to insurance.

Chairman McCrery, Ranking Member McNulty, and distinguished committee members, good afternoon and thank you for inviting us to testify on “The Challenges Facing Pension Plan Funding.” My name is Ron Gebhardtsbauer, and I am the Senior Pension Fellow at the American Academy of Actuaries. The Academy is the non-partisan public policy organization for all actuaries in the United States.

My written statement covers five important issues for this hearing, namely:

- (1) Problems of the current funding rules and the need for a quick permanent fix,
- (2) Alternatives for discounting liabilities,
- (3) Concerns with current lump sum rules,
- (4) Pension Benefit Guaranty Corporation (PBGC) issues, and
- (5) Allowing greater contributions when employers are able to make them.

Background and Problem: Defined benefit (DB) plans are beneficial to employees, employers, and the nation.¹ However, as you know, a problem in pension funding rules arose in 1998 due to Treasury bond rates becoming inordinately low in comparison to corporate bond rates and annuity prices. As pointed out in our 2001 paper on this subject,² the rules’ use of 30-year Treasury rates has dramatically increased minimum pension contributions (to levels much higher than Congress ever intended), at a time when employers are seriously constrained financially.

Temporary Fix: Fortunately, Congress acted quickly in March of 2002 to remedy this problem by allowing employers to use a higher discount rate in 2002 and 2003 for determining their pension liabilities and PBGC premiums. However, the pension rules revert back to the low discount rates in 2004. Meanwhile, major financial decisions are being made today, which depend on what next year’s pension contribution will be. In addition, bankruptcy judges are being forced to decide today whether employers can afford their pension plans in 2004 and beyond. Courts may decide the employer cannot afford its pension plan, and later find out that the rule had been corrected and the employer could have afforded the pension plan. Bad decisions can come from uncertainty. Thus, a permanent fix is desperately needed for the funding rules quickly. Delaying the fix will continue to allow the bad decisions being made in courts, in board rooms, and on trading floors today that are adverse to the future of our voluntary retirement system.

Selecting an appropriate target: The first step to resolving this issue (and perhaps the most challenging) is to select an appropriate target. Any interest rate alternative should be judged based on the results it produces relative to this target. An appropriate target should:

¹ See our earlier testimony on the advantages of defined benefit plans at the June 20, 2002 hearing of the Ways and Means Subcommittee on Oversight on “Retirement Security and Defined Benefit Pension Plans” at http://www.actuary.org/pdf/pension/testimony_20june02.pdf

² See our paper, “The Impact of Inordinately Low 30-Year Treasury Rates on Defined Benefit Plans,” which can be found at http://www.actuary.org/pdf/pension/treasurybonds_071101.pdf

- Produce contributions that will adequately address participant and PBGC security concerns without forcing ongoing companies to put more assets into their pension plans than needed;
- Encourage the continuation of voluntary plans for the benefit of their participants - which is one of the three stated purposes of ERISA's Title IV (section 4002(a)(2)) - and avoid discouraging the formation of defined benefit plans because of overwhelming or unpredictable funding requirements;
- Avoid funding requirements that unnecessarily divert funds that could otherwise go to increasing other benefits and wages, retaining employees, or keeping the company from financial distress; and
- Maintain PBGC premiums at the lowest level consistent with carrying out their obligations per ERISA section 4002(a)(3).

Annuities and/or Lump Sum Values: Congress may have intended the interest rate used in current liability calculations to reflect a plan sponsor's cost of plan termination - the actual cost of annuities and lump sums. In the Omnibus Budget Reconciliation Act of 1987 (OBRA '87), Congress specified that the interest rate used should be “consistent with the assumptions which reflect the purchase rates which would be used by insurance companies to satisfy the liabilities under the plan.”³ Note that the law uses the word “liabilities,” and not “annuities.” Thus, we are not sure why the cost of lump sums should be ignored, as per IRS Notice 90-11. Currently, lump sum amounts can be larger than the respective annuity premiums due to interest rate requirements in IRC section 417(e). We recommend that Notice 90-11 be revised to specify that benefit liabilities equal the lump sum amounts for participants expected to elect lump sums. Without this modification, plans can be underfunded when, as now, lump sums are greater than the value of the annuity using the current liability discount rate.

It appears that, at the very least, Congress believed that interest rates inherent in annuity purchase prices and lump sums would be within the range specified by the new law for determining current liability (a 10 percent corridor on either side of a four-year average of 30-year Treasury rates). In fact, we note that the highest permissible discount rate by law has consistently been quite close to corporate bond rates, and above annuity discount rates. In fact, when the highest permissible discount rate fell below the corporate bond rate, Congress fixed it temporarily by putting it back up with corporate bond rates.

Alternatives: An Academy paper in 2002 provided three alternative discount rates for fixing this problem,⁴ and they are set forth on the accompanying graph. They are:

- The pension plan's expected long-term rate of return (orange line);
- A high-quality long-term corporate bond rate of return (blue line); and
- Discount rates used in pricing annuities (green line).

The Academy's Pension Practice Council suggests that a corporate bond, an annuity-pricing rate, or something between the two may be appropriate for discounting liabilities

³ Internal Revenue Code (IRC) section 412(b)(5)(B)(iii)(II).

⁴ Please read “Alternatives to the 30-Year Treasury Rate” at http://www.actuary.org/pdf/pension/rate_17july02.pdf for more details.

for underfunded plans. Although these rates are only about 70 basis points apart, we do not take a position on exactly which index is the “correct” one, since Congress is the appropriate body to decide how to balance the competing interests of benefit security and the employers’ ability to maintain the plan. A lower discount rate will improve benefit security (and help the PBGC), while a higher discount rate will help employers’ ability to maintain the plan. The next four sections discuss these rates and the long-term Treasury rate (red line).

Expected Long-Term Rate of Return (Orange Line): The Employee Retirement Income Security Act (ERISA) has allowed the enrolled actuary since 1974 to choose a reasonable interest rate (taking into account reasonable expectations) for pension funding calculations. As you can see from the first chart, actuaries have chosen a long-term rate averaging around 8 percent for at least the last 15 years.

In the 1980s, the PBGC noted that the funding rules, taken as a whole, were still allowing pension plans to be underfunded. The biggest problem was in the amortization periods, not in the interest rates for minimum funding. (In the 1980s, the average interest rates used by actuaries were significantly below Treasury rates.) The rules allowed pension plans to improve benefits frequently and pay for them over 30 years (even though the associated benefit increase could be paid out before 30 years). Thus, benefit improvements could defund underfunded pension plans (and provide deferred compensation, possibly at PBGC’s expense). Consequently, OBRA ’87 changed the rules not only to shorten the funding periods for underfunded plans, but also to require a separate discount rate for the calculation based on the 30-year Treasury rate. The rules specified that pension liabilities for this calculation (known as current liabilities or CL) be determined using a discount rate no larger than 110 percent of the 30-year Treasury rate, averaged over the prior four years (the brown line in the chart). As you can see, it was close to corporate bond rates and, in fact, was actually *higher* than the average interest rates used by actuaries at the time. You can also see that Treasury rates, annuity pricing rates, corporate bond rates, and the maximum allowable rate were closer back then.

Treasury Rates (Red Line): Why was the 30-year Treasury rate chosen? Among other reasons, the Treasury rate was easy to obtain, had a duration similar to pension plans, and wasn’t easily subject to manipulation (or, at least, that was the perception at that time). In addition, the rate could be rationalized by employers for funding purposes because the law allowed use of 110 percent of the Treasury rate (which allowed a rate near corporate bond rates), and it was smoothed (by using a four-year average of the rate) so it would not cause excessively volatile contributions and was predictable in advance.

Today, the Treasury rate is used for determining pension funding amounts, PBGC variable premiums, lump sum amounts, and many other pension items.⁵ Unfortunately, Treasury rates have fallen much more than corporate bond rates and annuity rates.⁶ For example, from 1983 through 1997, Treasury rates were around 100 basis points below Moody's composite corporate bond rate (except for 1986), but by the year 2000 they were 200 basis points lower. In addition, we now know that Treasuries can be manipulated by the private sector and by the government. A major investment banking firm manipulated prices in August of 1991 and the Treasury showed it could manipulate prices in November of 2001, when it said it would stop issuing 30-year Treasuries. By comparison, a composite corporate bond rate would be much more difficult to manipulate. Corporations would be unlikely to manipulate it upwards to reduce pension costs, because that would increase borrowing costs. In fact, if corporate bond rates ever were manipulated up, annuity prices would presumably be decreased in the same way as bond prices, so the resulting liabilities would still be appropriate.

As noted above, using the Treasury rate increases today's contributions. If today's low Treasury rates are used to determine liabilities,⁷ current costs could increase by up to 50 percent over those using long-term expectations.⁸ In effect

⁵ See a complete list on page 13 of our paper entitled "Alternatives to the 30-year Treasury Rate" at http://www.actuary.org/pdf/pension/rate_17july02.pdf. We recommend that the discount rate be changed for every calculation of current liability (both the RPA94 version and the OBRA87 version) so that there is only one current liability number. There is no reason to have two versions.

⁶ Why did Treasury rates fall so much compared to corporate bond rates? In August 1998, the CBO's Economic and Budget Outlook suggested that, for the first time in 30 years, the U.S. unified budget would show a surplus; and, in fact, that the surplus would pay off the U.S. debt by 2006 and then build up assets for the government. The government would need to buy back its outstanding Treasury bonds, even if they were non-callable. The law of supply and demand suggests that with reduced supply (and continued demand), prices will go up. Treasury bond prices did go up and their interest rates dropped. In fact, they dropped faster than corporate bond rates, and that has continued since then. (This may also be due to the market's perception of increased risk for corporate debt, particularly at certain firms). This has continued, even as budget surpluses have turned to deficits, probably due to increased demand caused by investors turning from stocks and corporate bonds to the safety of Treasury bonds, and because of decreased supply in the wake of the government's decision in 2001 to stop issuing 30-year bonds.

⁷ Even though pension contributions for underfunded plans are determined using 105 percent of Treasury rates (except for 2002 and 2003), lump sums are determined using 100 percent of Treasury rates, which also affects the cost of the plan.

⁸ Comparing liabilities using long-term expected costs as a baseline is not intended to imply endorsement of that particular rate. It was merely used because many employers designed their pension plans using those returns. For purposes of these calculations, we assume that the plan is invested 60 percent in equities and 40 percent in bonds, and would yield approximately 200 basis points over corporate bond rates, and that the plan's duration is a typical duration of 12 (i.e., decreasing the interest rate by 1 percent would increase liabilities by 1.01 raised to the twelfth power or 12 percent). The 50 percent comes from $(1 + 8.1 \text{ percent} - 4.7 \text{ percent})^{12} - 1 = 50$ percent. Plans with mostly retirees could have a duration of about 8 (i.e., a 1 percent decrease in the interest rate would increase liabilities by about 8%), while a plan with mostly young

requiring a Treasury rate says, this is what the contribution should be if the pension plan is invested solely in Treasury bonds.⁹ The next section discusses the cost assuming the pension plan is invested solely in corporate bonds.

Long-Term High-Quality Corporate Bond Rates (Blue Line): Pension liabilities for financial statements are generally discounted using current long-term high-quality corporate bond rates due to the requirements in Financial Accounting Standard 87 (FAS87) paragraph 44.

In response to statements by the Securities and Exchange Commission, some corporations use a discount rate that is quite close to a high-quality long-term corporate bond index¹⁰. In fact, the highest permissible discount rate for funding has also been quite close to this corporate bond index (see chart of discount rates). When the permitted rate fell, Congress fixed it by putting it back up near the corporate bond rates.¹¹ Thus, using this rate (or something close to it) would be in accord with the original intent of the rule, and could be considered not to increase the discount rate and lower contributions. If this corporate bond index is used, liabilities are estimated to be around 27 percent higher than if expected returns are used.¹² Except in the case of bankruptcy, a terminating plan that is funded to this amount generally does not provide a risk to the PBGC because, if additional amounts are needed, they are small, and employers have often made the additional contributions to avoid distress terminations (which can be very complex and entail benefit cuts to employees).

Some corporations use (for their financial statements) a discount rate based on a bond portfolio that would match plan benefits with the cash flows from bond coupons and maturity values of this bond portfolio. This means that an employer could hedge its interest rate risk if it held the appropriate bonds (i.e., if interest rates changed, the liabilities could still be matched by the bond cash flows). The investment yield from this bond portfolio would most likely be between the high-quality corporate bond index and the interest rate used by insurance companies to price annuities (which has been approximated by the index minus 70 basis points,

employees could have a duration of about 25 (for an increase of about 25 percent for each 1 percent decrease in the discount rate).

⁹ Of course, pension plans are not invested solely in Treasury bonds. They are also invested in equities and corporate bonds, with the expectation that they will earn a larger return over the long term. (Ibbotson data from the past 76 years shows that over any 20-year period, stocks have performed better than bonds.) Of course, that is not a guarantee, so employers have taken on a risk that the future may not be like the past.

¹⁰ As noted later, some bond indices do not include items such as call risk, etc.

¹¹ Graphs of these interest rates show that using a four-year average of this index would be quite close to the OBRA87 interest rates, and the two-year average (or 95 percent of the four-year average or 100 percent of the index minus 40 basis points) would be quite close to the RPA94 and JCWAA rates.

¹² This assumes that expected returns would be around 2 percent greater than corporate bond returns. The 27 percent comes from $1.02^{12} - 1 = 27$ percent. See footnote 8 for further details.

as discussed in the next section).¹³ Using this rate could improve benefit security further for participants and means the pension plan should be less likely to need trusteeship by the PBGC. If this plan qualified for a distress termination, the PBGC would generally not experience an economic loss (even if PBGC holds those bonds) because PBGC does not guarantee the full benefit, and it does not buy annuities. The PBGC, like employers, self-insures (i.e., does not buy annuities) in order to reap higher returns and avoid the larger expenses, risk margins, and profit loadings of the insurance company.

Discount Rates Used in Pricing Group Annuities (green line): The discount rates used in pricing annuities are similar to the corporate bond rates, because when someone buys an annuity, the insurance company invests the money in corporate bonds (often with lower credit ratings of A and Baa, in order to reap the credit risk premium), private placements, and mortgages. A study for the Society of Actuaries by Victor Modugno suggested that these discount rates could be approximated by Bloomberg's A3 option-adjusted corporate bond index minus 70 basis points (for the insurance company expenses, risk margins, and profits). The adjustment is less than 70 basis points if one uses the high quality composite rate suggested by the ERISA Industry Committee (ERIC). Liabilities determined using an annuity discount rate could be approximately one-third higher than those determined using expected returns (or about 7 percent higher than those determined using a high-quality corporate index), assuming the appropriate mortality table is used.¹⁴ A terminating plan with assets equal to this liability amount would be able to buy annuities for everyone, and thus would be less likely to require the help of the PBGC.

Dynamic Process for Setting Discount Assumption: Determining annuity prices is not an easy or exact science, and no one index will work forever without adjustment. Discount rates (and mortality assumptions) vary among insurance companies, and over time companies change their pricing methods, so it is difficult to fix a formula in law that is appropriate for all time. Our 2002 paper and a recent GAO report¹⁵ both suggest that if

¹³ This rate would be less than the corporate bond rate because it is reduced for default risk (the risk that the debtor will default), call risk (the risk that the bond will be paid off early – generally the last 3 years), and possibly for expenses. (As discussed later, the rate can also be lower if the yield curve is steep and the benefits are front-weighted, due to having a high proportion of retirees, or it can be larger if the duration is long, due to having mostly younger employees.) This rate would be larger than the annuity rate because it would not be reduced for other charges that insurance companies charge, such as profit loadings, risk margins, and commissions. It could be close to the corporate bond index if defaults are very few, the yield curve is flat or inverted or the duration of benefit liabilities is greater than the duration of the long-term bond index, or benefits are large (so that expenses are small as a percent of liabilities), or interest rates are not lower than coupon rates when the call provision is in effect, or lump sums are less than the current liability if/when smoothed interest rates are lower than the current interest rate. On the other hand, the rate could be closer to the annuity rates, for the opposite reasons.

¹⁴ The 7 percent comes from $(1 + 60\text{bp})^{12} - 1 = 7$ percent.

¹⁵ The GAO (General Accounting Office) report, "Process Needed to Monitor the Mandated Interest Rate for Pension Calculations."

Congress desires such a rate, it should allow a dynamic process to set it. For example, if Congress carefully defines the rate in law to be the discount rate used in pricing the average annuity, a committee with annuity pricing actuaries, pension actuaries, investment professionals, and government actuaries could set the discount rate. Alternatively, our paper also suggested that Congress could define the discount carefully in law and allow the plan's enrolled actuary to determine it. Either of these methods could also be used to set a high-quality long-term corporate bond rate.

Smoothing: As in our paper, we suggest policy-makers investigate reducing the four-year smoothing rule for discount rates in IRC Section 412(b)(5)(B)(ii)(I) to something less; for example, two-year smoothing (with greater weighting to more recent rates). Otherwise, if interest rates go back up quickly (as they did in the late 1970s and early 1980s), then plans would have to use a discount rate *lower* than Treasury rates to determine their contributions (i.e., employers would have to increase their contributions even though the plans would have enough funds to buy annuities to cover all plan liabilities.) The Academy's Pension Practice Council believes this suggestion would produce funding requirements that would be reasonably predictable in advance and have enough smoothing to satisfy sponsor concerns. However, if this issue would slow down passage of legislation, it should be deferred for further study. For example, it could take time for regulations to be proposed and finalized, and employers need to know now what the discount rate will be for 2004.

Yield Curves and Hedging: Some actuaries suggest using a current yield curve (i.e., using different rates for different periods in the future, not just one average long-term rate) so that volatility can be hedged by investing in certain asset classes. On the other hand, many other actuaries are concerned about the volatility that could ensue if a plan sponsor did not want to change its investment philosophy and move away from stocks. Thus, they prefer using a smoothed average rate. Therefore, our paper suggested that Congress not mandate a yield curve for funding,¹⁶ but rather allow for it. The IRC could accommodate both if plan sponsors could elect to use the then-current corporate bond yield curve. The use of a yield curve (which could have 30 or more rates) will take time to propose in regulations and finalize, and will add complexity to an already very complex set of minimum funding rules (without necessarily changing the results appreciably, especially when the yield curve is flat). Clearly, it would be too complex for lump sum calculations,¹⁷ and Congress might want to exempt small plans from the

¹⁶ A yield curve has the advantage of pricing liabilities more like the financial markets would (lower discount rates for short duration liabilities). When the yield curve is steep, it would increase the liabilities of hourly plans with large retiree populations by around 5 percent. However, we note that it may not increase liabilities as much as expected since interest rates have less effect on plans with shorter durations. In addition, a more precise calculation might also use a blue-collar mortality table for the hourly plan, which could decrease costs by 2 to 3 percent, and would fully offset the effects of using the yield curve, except when it is unusually steep (e.g., 1992, 1993, 2002, and 2003).

¹⁷ See the reasons suggested on page 12 of our paper on alternatives located at http://www.actuary.org/pdf/pension/rate_17july02.pdf

calculations or create simplified alternatives, such as one rate for actives and one rate for retirees.

Changing the Discount Rate and Mortality Table at the Same Time. It is widely understood that minimum funding calculations will soon be required to reflect an updated mortality table, which would further increase the required funding for pension plans. It makes sense to make any change in interest rates effective at the same time the mortality table is changed for funding, so that calculation methods only need to be revised once. In addition, because the change in the discount rate and the mortality table affect the liability calculations in the opposite direction, they will have offsetting effects on each other.¹⁸

Retroactivity: Permitting a change in interest rates retroactively to 2001 could reduce the contributions for some employers immediately by retroactively reducing the contributions that would have been required in 2001 and allowing the reduction in the mandated contribution to increase the credit balance. This increase in the credit balance could then be used to reduce the current-year minimum contribution, which could reduce the current severity of cash flow problems affecting employment, compensation, and other benefit issues (and it would increase government tax revenues). However, the retroactivity provision should be optional, so that employers do not have to incur the cost of revising past actuarial valuations or have to change their budgeting of contributions – or lose the deduction for contributions made in good faith on the basis then in effect.

Pension Calculations Affected: As in our paper, we encourage Congress to change the interest rate for every calculation of current liability. Replacing the reference to the 30-year Treasury rate in all of the RPA94 and OBRA87 calculations listed on page 13 of our “Alternatives” paper would increase consistency and simplicity. The use of multiple interest rates and multiple liability numbers is confusing to actuaries, employers, participants, and other interested parties in the general public, such as investors.

Changing the current liability interest rate would not affect certain other calculations, which policy-makers may wish to also consider, including:

- Lump sums under IRC section 417(e), maximum lump sums under section 415, and automatic lump sums under \$5,000 under section 411(a)(11), which all use the 30-year Treasury rate.
- The projection of employee contributions under IRC section 411(c), which uses 120 percent of the federal mid-term applicable rate and the 30-year Treasury rate.

Lump Sums: There are reasons for using one corporate bond rate or annuity price (not a complex yield curve) in every place where the 30-year Treasury rate is currently used. For example:

- Simplicity – Only one rate is used, instead of the multitude of rates now used.

¹⁸ Changing from the 83GAM to the most recent mortality table, RP2000, has the same effect as lowering the discount rate by up to 0.5 percent for males, 0 percent for females (because their mortality rates haven’t improved much since 1983), and 0.25 percent for unisex rates (if 50/50). Thus, changing the mortality table also justifies increasing the discount rate.

- Spousal benefits – The use of Treasury rates for determining lump sums makes the lump sum option more valuable than the qualified joint and survivor annuity. This conflicts with the original intent of ERISA – to encourage pensions to surviving spouses.
- Public policy – The current rules mandating the Treasury rate make it impossible for plans to provide an actuarially equivalent lump sum. Thus, the economic decision to take a lump sum is not a neutral one. Workers can take the lump sum and buy a larger annuity with it (which they rarely do). Thus, the rules encourage workers to take lump sums, which may be viewed negatively from a public policy perspective because more retirees will spend down their lump sum too quickly and end up falling on government assistance (Supplemental Security Income and Medicaid).
- Plan funding – The payment of a lump sum in an underfunded plan decreases the funding ratio, particularly if the lump sum is subsidized by the unusually low Treasury rate. In addition, plans will tend to be less well funded, because Notice 90-11 prohibits the subsidy from being included in the current liability calculation. This is not only a concern for participants,¹⁹ but also for the PBGC.
- Increased costs beyond amounts intended – Plan sponsors have to contribute more funds to the plan because the low Treasury rate made lump sums larger (not because the employer decided to increase lump sums). Thus, the plan is more expensive than the employer originally intended.
- Obstruction of bargaining process – Due to the expense of paying larger lump sums, plan sponsors are less likely to make plan improvements suggested by workers at the next bargaining period. Thus, requiring the Treasury rate ignores the collective bargaining process and discriminates against participants that don't take lump sums. If employees were permitted to decide where the funds should go, staff in labor organizations have told us that bargainers would probably use the funds to improve the benefit formula for all workers, instead of just for those workers who take lump sums.

Changing to a higher interest rate can reduce a worker's lump sum, so a transition rule may be helpful. For example, ERIC and ABC suggest phasing in the interest rate change over three years. Their phase-in could limit the increase in the interest rate to about 0.5 percent per year.²⁰ We note that Treasury rates have increased in the past, so this would not be the first time that lump sum interest rates have increased. The Treasury rate went up in the 1990's by more than 1 percent three times (i.e., 1994, 1996, and 1999). Furthermore, with this transition, a worker's lump sum may not go down. It may still grow because each year a worker gets additional service and pay increases, and their age gets closer to the normal retirement age (NRA).^{21 22}

¹⁹ For example, retirees of Polaroid are suing their former employer for paying the mandated, subsidized lump sums to recent retirees, because they are defunding the plan. This means the retirees will have their benefits cut down to the guaranteed benefit by PBGC.

²⁰ Unless all interest rates go up dramatically in the next three years.

²¹ Each year, participants get one year closer to their normal retirement date (NRD), which means their lump sum increases by one year's interest rate (unless they are already beyond their NRD, in which case the lump sum can decrease).

In addition, we suggest Congress simplify the very complex calculations caused by §415(b)(2)(E) for maximum lump sums. One simple alternative suggested by ASPA (the American Society of Pension Actuaries) would be to use just one interest rate. Our paper, “Alternatives to the 30-Year Treasury Rate,” suggested that it could be somewhere in the 5 percent to 8 percent range. The Academy has also suggested to the Treasury Department in the past that the rules could be greatly simplified by deleting the words “or the rate specified in the plan” in Section 415(b)(2)(E), so that the maximum lump sum would be the same in all plans (and the discount rate used above and below the Normal Retirement Age would be the same).

PBGC’s Financial Status: Another issue that policy-makers need to consider whenever the funding rules are modified is the effect of the changes on the PBGC. Increasing the discount rate in accordance with earlier intentions (which is close to a corporate bond rate or annuity-pricing rate) may help the PBGC indirectly if it means that employers are more likely to be able to afford their pension plans for a few more years (hopefully, until the economy recovers). This could mean that fewer plans will need to be trusted by the PBGC and more defined benefit plans will be around to pay premiums to the PBGC. By fixing the discount rate, Congress signals to employers its intention to keep defined benefit plans as a viable option for employer retirement programs. However, that statement comes with a caveat. Since increasing the interest rate reduces minimum contributions, there may be a need to review the funding and premium rules in the near future, particularly if PBGC has more major losses over the next couple of years in this current economic downturn.

Due to the triple whammy of plummeting stock prices, lower interest rates, and more bankruptcies, the PBGC has gone from a surplus of \$10 billion just two years ago to a \$3.6 billion deficit. However, the dollar amount of the deficit may not be as relevant as the funding ratio, which is 90 percent. Each time the PBGC takes over a pension plan, it also takes over the plan assets. PBGC’s assets are now over \$31.5 billion²³ while its annual outgo is expected be around \$3 billion. Thus, the PBGC will not have problems fulfilling its primary mission for a number of years — to pay guaranteed benefits on time. This is not to say that we do not need a change in the funding rules. On the contrary, the Academy has already met with the PBGC to discuss ways to fix them. We are just saying that PBGC’s large asset base allows time to thoroughly discuss how to fix the funding rules before enacting them.

²² Another idea might be to freeze the lump sum dollar amount on the amendment date (using the accrued benefit on that date), so that the lump sum amount would not decrease unless the old rules would have reduced it (e.g., due to the Treasury rate going up or due to the participant being beyond the NRA, or due to a case where a large early retirement subsidy is in the lump sum). However, this would require two lump sum calculations and thus could be a little more complex to calculate than the 3-year phase-in idea.

²³ This \$31.5 billion amount includes the \$6 billion in assets from probable plans in PBGC’s FY 2002 annual report (such as Bethlehem Steel), because PBGC includes such liabilities in the report.

This discussion so far has only taken into account PBGC's past terminations. However, PBGC's financial status is also intimately linked with how industries (like the airline industry) fare over the next several years. The pension underfunding at several weak airlines exceeds \$10 billion. In fact, PBGC's 2002 Annual Report forecasts that future claims could be twice the average of past claims — a clear signal it may want to double premiums and/or tighten funding rules.

Risk-Related PBGC Premiums and Funding Rules: Recently, the PBGC floated the idea of charging higher premiums (or strengthening the funding rules) for plans that present more risk to them (e.g., plans with high levels of equities and plans sponsored by weak companies). These rules might be helpful to strong employers so that they would not have to subsidize weak employers. However, employer groups²⁴ say their members have not asked for these fixes, possibly because almost all plans have over 50 percent of their assets in equities. And many employers are wary of basing these calculations on credit ratings because they could someday have lower credit ratings themselves²⁵ – and because this approach may result in significant cost increases for companies that can least afford them. In addition, implementing these risk-related premiums and funding rules would raise many complex issues (in an area that is already overly complex). For example, credit ratings might be needed for non-rated private employers, subsidiaries of foreign owners, and individual controlled group members. Risk levels would be needed for stocks and bonds (and some bonds present more volatility and/or mismatch risk than certain stocks). Plan sponsors might seek ways to temporarily avoid the riskier investments on the measurement date, and if those rules were tightened it could hurt the markets when pension plans started selling equities. However, if PBGC needs to substantially increase its premiums because of large increases in claims, some strong employers might be willing to discuss risk related premium and funding ideas. Maybe there are ways to help make them more palatable such as:

- transition rules;
- delayed implementation;
- exemptions for current benefit levels, while assessing for benefit increases; or
- caps on the increase in the premium or the 0.9% multiplier (similar to the \$34 per participant cap that was placed on the initial variable premium legislation).

Other Reforms: There are many other ideas that could be considered, such as:

- To make it more difficult for weak companies and underfunded plans to increase benefits.²⁶

²⁴ For example, the Committee on Investment of Employee Benefit Assets (CIEBA), the ERISA Industry Committee (ERIC), and the American Benefits Council (ABC).

²⁵ In addition, reflecting credit rating changes would make contributions and premiums more volatile.

²⁶ For example, charge a larger premium rate (on just the benefit increase) that is risk related, require faster funding (fund benefit increases faster than 30 years; FAS already requires employers to expense benefit increases over a much shorter period, and the deficit reduction contribution rules already do that when the funding ratio is under 80 percent or 90 percent continually), or prohibit the benefit increases unless liens are provided as in Section 401(a)(29) – and just increase the 60 percent threshold to 70 percent or 80 percent.

- To address the cost of shutdown benefits (or not to guarantee them).
- To get contributions into the plans earlier. The PBGC tells us that pension plans frequently do not contribute in their last year when the PBGC takes over the plan. Thus, requiring sponsors of underfunded plans to make contributions by year end (or very soon thereafter) could help the PBGC. Employers might be amenable to this rule if quarterlies were eliminated. This could also enable quicker reporting of pension plan financial information, which would also be valuable to the PBGC and the markets, and be a positive step in the direction of greater clarity and transparency.
- To suspend the use of the credit balance when plans are very underfunded. (PBGC notes that some companies don't have to pay their deficit reduction contributions because they have a large credit balance.) Another way to reduce that concern in the future would be to reduce the 30-year amortization period for plan amendments.
- To improve PBGC's standing in bankruptcy courts, and give presumption to PBGC assumptions for determining their claim in bankruptcy.
- To increase disclosure.

In addition, we have been asked what reforms would be helpful for hourly and bargained plans²⁷ because they are more likely to be underfunded than salaried plans. Reasons for this are:

- They are amended frequently to update benefit levels for inflation. These amendments can be funded over 30 years (even though the increased retiree benefits can be paid out much faster). If plans are very underfunded, they have to amortize benefit increases over 3 to 7 years by means of the deficit reduction contribution. One compromise might be to smooth out these rules so that there is not such a large cliff between them. Congress might consider reducing the 30-year period (FAS already requires companies to expense benefit increases over a much shorter period).
- When assets exceed current liability, the plan sponsor can't make a deductible contribution. If funding rules allowed hourly plans to deduct contributions even if assets exceeded current liability, then hourly plans could advance-fund their future benefit increases.
- They are more likely to be in industries that have large legacy costs payable to large retiree populations (in comparison to smaller workforces). Shorter amortization periods and allowing margins would help this too.
- They can experience large asset losses, and may find it difficult to amortize them over a small workforce, even if assets cover their retiree liability. Immunization

²⁷ Some of these ideas might apply to both single and multi-employer plans, so the suggestions may also be applicable to both. In fact, having different rules for these hourly plans can set up arbitrage opportunities that some plan sponsors have tried to exploit. (Multi-employer plans need not pay variable premiums or deficit reduction contributions.) Some of the reasons for the difference in the rules may be that the multiemployer guarantees are smaller than those for single employer plans, the PBGC multiemployer fund has a surplus, and it is more difficult for multi-employer plans to change their contributions in the middle of a bargaining period.

of the retiree liability in underfunded plans could be discussed, but Congress would need to be careful about removing the flexibility plan sponsors currently have to invest pension assets in the way that best fits their plan and the ever-changing economic conditions.

These are all very complex ideas and have far-reaching implications for the pension world, so they should not be implemented until after major discussion and analysis.

Allowing Contributions in Good Years: We recommend that employers be allowed to make a deductible contribution to their pension plans in years when they are healthy and can afford it, even if assets are above 100 percent of current liability. Currently, contributions in this situation may not be deductible and may also be subject to an excise tax. When interest rates were higher, the full funding limit allowed a pension plan to have a margin above current liability (see second chart). That margin is also needed when interest rates are low, particularly for plans that are retiree-heavy and for hourly plans, which cannot easily advance fund their benefit increases. Congress could allow a contribution up to (for example) 130 percent of current liability minus assets. Alternatively, the definition of the full funding limit could have (for example) 130 percent of current liability as a minimum. At the very least, the excise tax on nondeductible contributions could be eliminated in this situation.

We also note that there are strong incentives for companies to contribute more, and companies have learned a lot lately about the risks inherent in pension plan funding. Recent drops in the market have provided a good reason for employers to increase their funding margins and build a cushion to protect against adverse experience. Thus, companies may be more willing to contribute more than necessary in the future to avoid falling below certain key thresholds, if the law allows them a deduction (or at least doesn't penalize them with an excise tax for making nondeductible contributions). For example, if assets fall below the accumulated benefit obligation, accounting rules may force a major hit to the company's net worth. If assets fall below the liability for vested benefits, companies must pay an additional premium to the PBGC. If assets fall below 90 percent of current liability, contributions can increase dramatically.

A list of the penalties follows. If policy-makers want to increase the incentives for funding, then the threshold for one or more of the penalties could be increased (e.g., the threshold for security).

If the funding ratio falls below	Then
125%	No §420 transfer to the company post-retirement health plan Company cannot use the prior year valuation
110%	Restrictions on the size of lump sums to the top 25
100%	Accounting rules may force a hit to net worth if unfunded ABO > \$0 PBGC variable premiums are payable Companies must pay quarterly contributions PBGC files lien on company if missed contributions > \$1 M PBGC financial filings required if underfunded over \$ 50 M

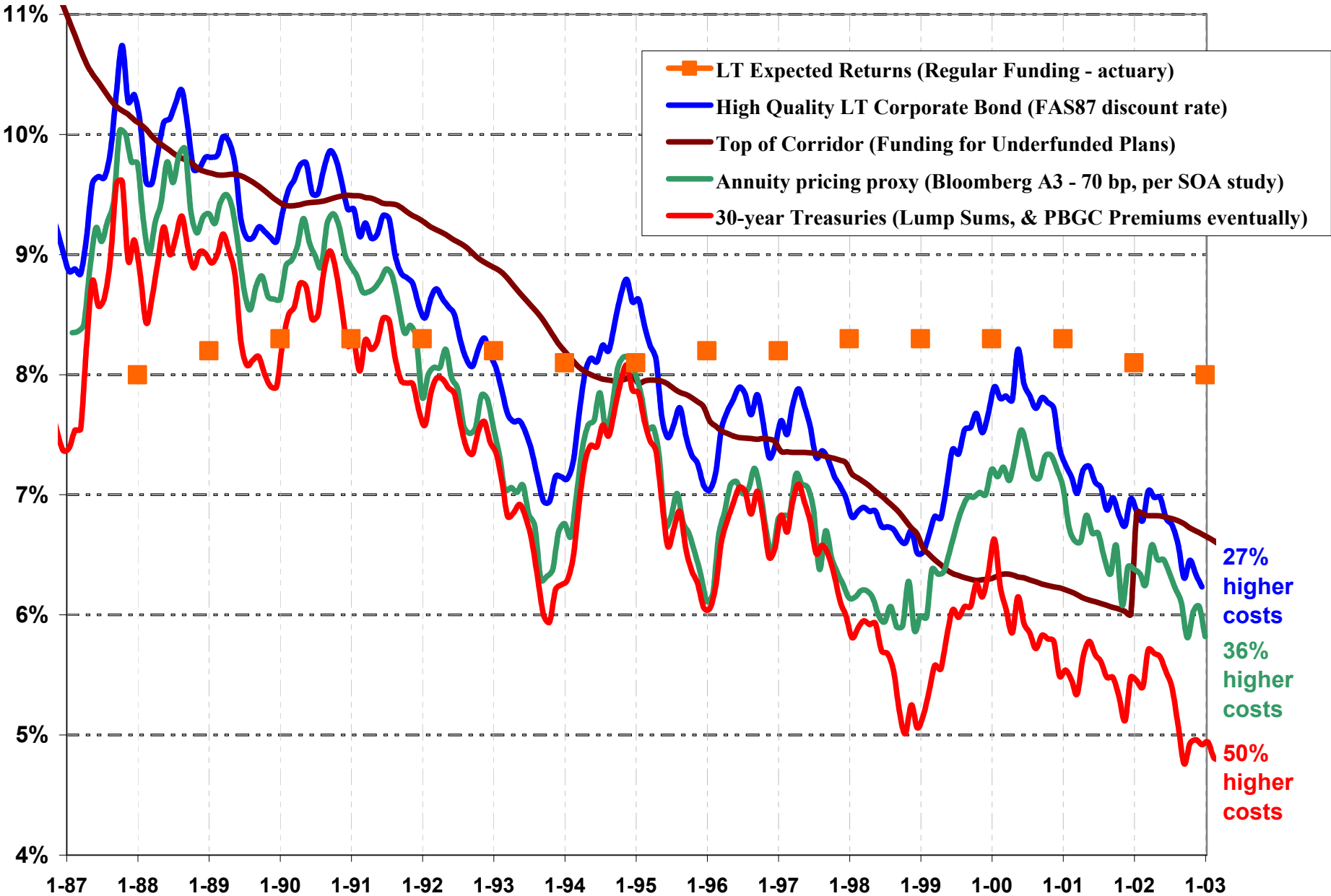
	Must report certain corporate transactions to PBGC if underfunded Bankrupt firms can not increase benefits
90%	Additional deficit reduction contributions required Notice to employees with funding ratio and PBGC guarantees required
60%	Security required for plan amendments

We believe many employers will contribute enough to reach a key threshold margin in order to avoid these problems.

Being forced to fund when the plan sponsor cannot afford it and being precluded from funding when the plan sponsor can afford it is unreasonable, self-defeating, and difficult for the PBGC. We hope Congress will consider making this fix, which does not cause problems (because it is voluntary), except for reducing tax revenues. However, we don't believe that the revenue loss will be as large as might be expected because it may not be used heavily in the near future and, to the extent that it is used, it will reduce contributions in the future. In addition, it could reduce PBGC claim amounts and the number of underfunded terminations.

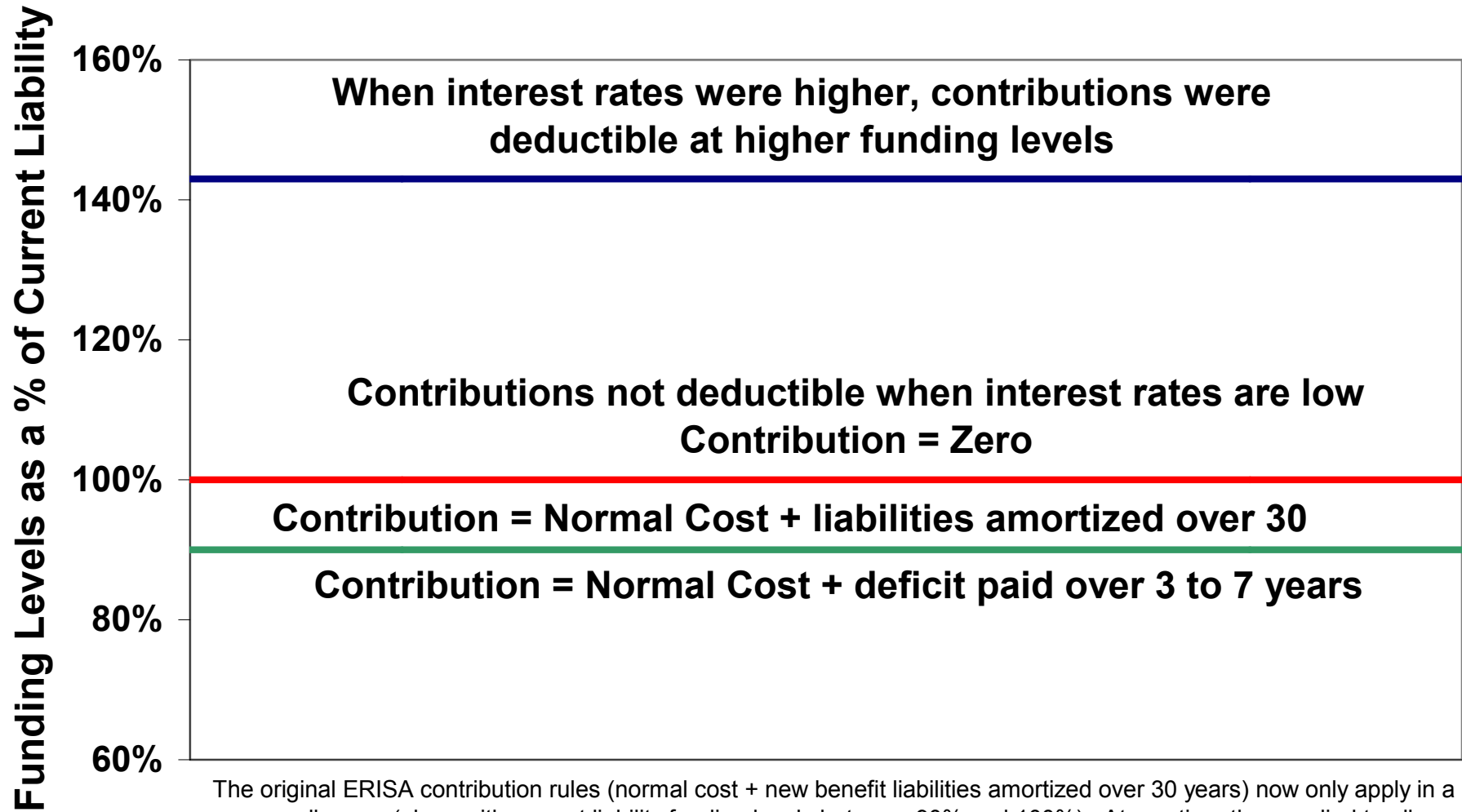
We at the American Academy of Actuaries hope that a permanent alternative to the 30-year Treasury rate can be enacted quickly. In addition, we are also very interested in working with Congress and the PBGC to consider funding ideas further. Thank you for holding this hearing and inviting us to speak before you today.

Choices for Discount Rates



Choices for discount rates in paper by American Academy of Actuaries: Long Term Expected returns, HQ Corporate Bond returns, Annuity Prices, and Treasury rates. They produce the costs indicated (relative to LT Expected Returns used for funding), assuming an average pension plan (with duration around 12). The expected returns are from Watson Wyatt surveys.

Allow Contributions in Good Years



The original ERISA contribution rules (normal cost + new benefit liabilities amortized over 30 years) now only apply in a very small range (plans with current liability funding levels between 90% and 100%). At one time they applied to all plans. The new deficit reduction contribution rule applies when the funding ratio is under 90% (unless the 2 consecutive prior years or 2nd and 3rd prior years were above 90%) and always applies when the funding ratio is under 80%. It is like converting a 30-year mortgage to a 5-year mortgage (although the bank does not have to do that because it has security for the loan).