

Analysis of Congressional Pension Funding Reform Proposals (Updated March 2006)

The American Academy of Actuaries¹ Pension Committee provides this analysis of the *Pension Protection Act of 2005* (H.R. 2830) and the *Pension Security and Transparency Act of 2005* (S. 1783) currently in a House-Senate conference.

EXECUTIVE SUMMARY

The Academy's Pension Committee commends members of Congress who have worked to pass pension funding reform, and in particular, members of the conference committee for their continued work. The two bills reflect many of the funding reform principles discussed in our published report, [Pension Funding Reform for Single Employer Plans](#), namely: solvency, predictability, transparency, incentives for funding, flexibility, avoidance of moral hazards, and simplicity.

In particular, these bills improve solvency by setting a funding target of 100 percent and using an amortization period of seven years. The use of one funding rule, one funding target, and one amortization period improves transparency and simplicity. Elimination of the dual funding rules and the cliffs in current law helps to reduce volatility and improve predictability. Flexibility is enhanced by the provision in both the House and Senate bill increasing the maximum deductible contribution. Moral hazards are reduced by: (1) the Senate's provision in Sec. 402 providing the Department of Treasury and Pension Benefit Guaranty Corporation (PBGC) additional tools to hold sponsors responsible for funding their plans in order to avoid involuntary or distress termination and (2) basing the funding target on a bond rate, which reduces the incentives to overly invest in equities. The following are additional suggestions for consideration as conferees finalize the legislation (with further discussion below):

- **A side fund could allow economic value from super surpluses:** Plans investing in equities will not stay well funded unless Congress removes the current disincentives for contributing a funding margin. Solutions would be to expand Sec. 420 transfers and/or allow a side fund for contributions above the minimum, where super surpluses (i.e., surpluses in excess of a threshold set in consultation with the PBGC) could be used for other purposes.
- **Smoothing:** Our further discussion addresses concerns about contribution volatility and ways to manage such volatility, including the concept of *gradual amortization*, a technique that could be utilized if policymakers want to drop smoothing of assets and liabilities. We also discuss two important technical corrections with respect to legislative language addressing smoothing in both the Senate and House bills.
- **Yield curve and phase-ins:** Plan sponsors should have the option to use the market value of liabilities (without smoothing, segmentation, or phase-in) just as they can now opt to use the market value of assets.
- **Mortality:** Plan-specific experience should be allowed, and projection of additional mortality improvement should be required (to the extent it is appropriate under actuarial standards).
- **At-risk liability:** Our further discussion provides some technical corrections on how to calculate this liability.
- **Subtracting credit balances (technical fix):** In order for the credit balance mechanism to work properly, they should be subtracted from plan assets for funding purposes, even when assets (including the credit balance) exceed liabilities.
- **Government contractors (technical fix):** The discrepancy between minimum contributions for government contractors and the reimbursement received from government agencies should be

¹ The American Academy of Actuaries is a national organization formed in 1965 to bring together, in a single entity, actuaries of all specializations within the United States. A major purpose of the Academy is to act as a public information organization for the profession. Academy committees, task forces and work groups regularly prepare testimony and provide information to Congress and senior federal policy-makers, comment on proposed federal and state regulations, and work closely with the National Association of Insurance Commissioners and state officials on issues related to insurance, pensions and other forms of risk financing. The Academy establishes qualification standards for the actuarial profession in the United States and supports two independent boards. The Actuarial Standards Board promulgates standards of practice for the profession, and the Actuarial Board for Counseling and Discipline helps to ensure high standards of professional conduct are met. The Academy also supports the Joint Committee for the Code of Professional Conduct, which develops standards of conduct for the U.S. actuarial profession.

mitigated in order to avoid the freeze and termination of these plans on account of inconsistent Federal rules.

- **Simplify lump sum calculations:** The use of a single rate to calculate lump sums under Sec. 415(b)(2)(E) would provide greater simplification.

FURTHER DISCUSSION: SUGGESTIONS FOR CONSIDERATION

The following section provides a fuller discussion of the ideas summarized above.

A Side Fund Could Allow Economic Value From Super Surpluses

Both the House and Senate bills allow deductions for pension contributions when assets are above 100 percent of accrued liabilities, which permits the creation of a margin to hedge against future downturns in the market.

Unfortunately, it is widely expected that employers are unlikely to commit to extra funding, unless they can get economic value from super surpluses in their plans. Two ways to do this would be to: (1) expand Sec. 420 transfers to allow a super-surplus in a pension plan to be used for other employee benefits, such as employee health benefits; or (2) allow the creation of a side fund that can be used for similar purposes.

The **side fund** could be a parallel trust fund subject to claims for accrued benefit liabilities by participants, and to claims by the PBGC if the plan were to ever terminate. It could receive contributions in excess of the minimum contribution. If needed, the employer could pay its required contribution from the side fund. Thus, the side fund could act like a credit balance, which could greatly simplify and rationalize the credit balance rules. Since the contributions to the side fund are in excess of the minimum contribution, a lower excise tax, such as 10 percent to 15 percent, might be appropriate as long as a funding margin remained in the plan and side fund. Both employee and employer groups have expressed an interest in these ideas. Some of the concerns expressed about at-risk contributions could be ameliorated if they could be placed in the side fund. If a surplus is built up but is not needed because the company becomes healthy again, then the unnecessary funds could be accessed.

Allowing employers to use super-surplus assets for other purposes will encourage them to better fund their pension plans, because they know they will retain economic value for additional contributions even if the plan becomes overfunded.

It has been suggested that legislative proposals in the mid-1990s to allow the use of super surpluses encountered opposition because they did not set a sufficiently high threshold before assets could be transferred.² Should such legislation be raised within the current legislative cycle, perhaps if the threshold is set with input from the PBGC, such concerns could be allayed.

Smoothing

Should a conference report contain only one-year or two-year smoothing of assets or liabilities and the tighter 90 percent to 110 percent corridor around market assets (without any smoothing of the contribution), the resulting volatility in the minimum contribution level would be more disruptive to employers. It would increase the cyclical nature of contribution requirements on plans sponsors and the economy (i.e., greater contributions in more difficult times).

Both bills currently stipulate that experience losses are amortized while experience gains are not. This uneven treatment of experience gains and losses (i.e., one-sided amortization) makes the smoothing issue even more important.

Sponsors can control unpredictability and volatility of minimum contributions to the satisfaction of stockholders by: (1) matching assets to liabilities and (2) contributing surplus assets. However, many plan sponsors and employee groups are on record with their belief that the expected increase in contributions is too high to justify this approach.

Gradual amortization: Another way to fix the volatility problem would be to use gradual amortization. It can achieve more stable and predictable minimum contribution requirements. Under gradual amortization, employers would be allowed to phase-in the first amortization payment if the plan experienced an unusually large loss. The amortization payments could be set as follows:

- In the first year, require a payment of half of the normal payment.

² The proposals in the mid-1990s also provided a very short time period where there was no excise tax, which could have encouraged employers to terminate their pension plans before the door closed.

- In the second through seventh years, require the normal payment, calculated so that the loss is fully paid off in seven years.

This alternative amortization approach still pays off the loss in seven years, as required by the Administration proposal.

The gradual amortization approach can produce results similar to the House bill without having to smooth assets and liabilities at all by phasing it in over two years.³ Members of the Pension Committee are available to discuss this further should more detail be desired.

A *technical fix* is also needed with the one-year smoothing rule in the Senate-passed bill. To achieve one-year smoothing, Sec. 303(g)(3)(B)(ii) should allow the use of the asset values on the last day of the second prior plan year (e.g., the 12/31/2005 asset statement for a 1/1/2007 valuation). As currently written, it will not allow the use of any asset information from the prior valuation date, which appears to have been unintentional. For the House bill, assuming the drafters intended the parallel treatment of assets and liabilities (i.e., to use three years of interest rates and three years of asset information), in order to do that, Sec. 303(g)(3)(A) needs to reference the asset statement for the current valuation date, **plus** the asset statements for the three prior valuations (for a total of four asset statements).

Yield curve and phase-ins

The regulation and implementation of yield curves and segments will take time, so we strongly encourage Congress to have regulators promulgate a single equivalent rate to the yield curve (*for all plans*) for at least the first three years after enactment, particularly for small plans. Since the yield curve is currently flat, using a single rate will have only a slight, if any, effect on current results. Even if the yield curve becomes steep again, the effect would be minimal.⁴

In fact, legislation could allow plan sponsors to just use the single equivalent rate *determined separately for each plan* that would approximate the accrued liability determined using the full yield curve. This is how many actuarial firms develop their liability numbers for financial reporting. It would greatly simplify the complexity of the yield curve requirement and the results would be more consistent with the objectives in introducing the yield curve.

Proposals to require a simplified yield curve will cause problems for plans that are primarily invested in bonds. For example, using three segments to measure liabilities interferes with the ability to hedge pension investment risk by asset/liability matching. Thus, we suggest allowing sponsors an option to calculate plan liabilities using the full yield curve, at market interest rates at or near the valuation date, without smoothing, segmentation, and/or phase-in.⁵

To avoid “cherry-picking,” the rules could limit a plan sponsor’s ability to switch between these options unless they obtain IRS approval (similar to current rules requiring IRS approval for funding method changes). It could be done simply by inserting the words “up to” right before “12-month period” in Sec. 303(h)(2)(D) in the Senate version, and making the segmentation and phase-in sections optional.

Technical correction: The language in both the House and Senate versions regarding the construction of the segments is not actuarially sound. Determining the second segment from bonds with maturities from six to 20 years inappropriately includes market rates during the first five years. We believe that a present value based approach would be appropriate. If interested in discussing possible solutions to this issue, please contact Ron Gebhardtshauer, the Academy’s senior pension fellow (Gebhardtshauer@actuary.org).

³ The gradual amortization payments to mimic the House bill (without having to smooth assets and liabilities) would be as follows:

- In the first year, require a payment of 1/3 of the normal payment.
- In the second year, require a payment of 2/3 of the normal payment.
- In the third through sixth years, require the normal payment.
- In the seventh year, require a payment of 2/3 of the normal payment.
- In the eighth year, require a payment of 1/3 of the normal payment, calculated so that the loss is fully paid off by the end of the eighth year.

⁴ Our analysis shows that using a current yield curve generally changes plan liabilities by less than 1 percent. If the plan is very mature AND the yield curve is very steep (which typically only happen in recessions, when short-term interest rates are artificially pulled down by the Federal Reserve) then the effect might be as much as 3 or 4 percent. Thus, it has less effect than the effect of different mortality tables or typical small data errors.

⁵ In 2005, corporate bond rates are quite close to the weighted average. In addition, segmentation and the use of the yield curve do not change the results much, so the phase-in will not change results much unless interest rates change over the next few years.

Mortality

We were very pleased to see that the Senate and House bills acknowledge the differences in mortality experience for different groups of participants and allow for the possibility of using expected experience, subject to IRS approval. We believe this is a very important provision and sincerely hope it is included in any final legislation. However, we note that the mortality tables used should be the appropriate *plan*-specific mortality tables. The same table should not be used for all of the sponsor's plans, especially when some of the sponsor's plans may be blue collar and some white collar. We also note that if plan-specific mortality is used for a blue-collar plan, then plan-specific mortality would need to be used for the non-blue-collar plans.

We also commend the update of the mortality table from the very old 1983 GAM table (developed from mortality data from the 1960s) to the more recent RP-2000 table (the most up-to-date table, developed from mortality statistics from the 1990s projected to 2000).

In the proposed IRC Sec. 303(h)(3) of both versions of the bill, the mortality table for plans that are not allowed to use actual experience would be up-to-date only as of the bill's date of enactment, and would have no projection or margin to account for future mortality improvement. That could be inadequate for sponsors of workforces that are in generally good health.⁶ On the other hand, it may be too much projection for sponsors of other industries. We would suggest mandating projection to the valuation date, and require further projection using actuarial standards by using language such as:

- (A) IN GENERAL.--Except as provided in subparagraph (C), the mortality table used in determining any present value or making any computation under this section shall be the RP-2000 Combined Healthy Mortality Table as published by the Society of Actuaries, ***projected with Scale AA to the valuation date, and further projected in accordance with the actuary's best estimate of future experience and as appropriate under applicable actuarial standards***, and as revised from time to time under subparagraph (B). (*changes emphasized*)

At-risk liability

For at-risk plans, the bills specify that participants will retire at their earliest retirement date or on the most subsidized date. However, those assumptions determine a liability that would be worse than anything possible from a worst-case scenario. We suggest that the worst-case result for a liquidating company with early retirement subsidies in their pension plan would be to assume that everyone who is eligible will retire immediately. Actuaries could be required to assume the company liquidates this year, or on any of the next four valuation dates, and may use the highest of those five liability amounts. However, that would entail many calculations, and may not be much different than just assuming everyone who is eligible will retire immediately; this latter approach may be adequate.

Furthermore, the at-risk liability needs to reflect the chance that the sponsor may, or may not, fall into bankruptcy. Some companies have been rated "BB" for 20 years, but have never defaulted, and their employees do not retire at their earliest or most subsidized retirement age. Thus, we suggest that the at-risk liability be phased in, as well. For example, the liability for sponsors rated "BB+" could be increased 1/15th of the way towards the full at-risk liability. Sponsors rated "BB" could use 2/15th, sponsors rated "BB-" could use 3/15th, etc., all the way to 15/15ths for companies rated "C."

Subtracting credit balances (technical fix):

The House bill permits double counting of credit balances for determining the minimum contribution when a plan is funded over 100 percent. Under the bill, as long as a plan is over 100 percent funded (using the credit balance), it can preserve and build up large credit balances. Then, plan sponsors will be able to use them at some future point to reduce the minimum contribution and de-fund the plan for a number of years. In order for the credit balance mechanism to work properly, *assets should be reduced by the credit balance for funding purposes, even when over 100 percent funded (using the credit balance)*. The Senate version appears to handle this issue as we suggest.

Government contractors (technical fix): While sponsors will now have to pay minimum contributions using bond rates regardless of their funding level, we understand that government agencies procuring services from the private

⁶ A Society of Actuaries study found that "[p]eriodically updating the mortality table assumption to reflect current mortality levels with or without mortality scale projections or using mortality projected beyond the valuation date may accumulate assets closer to the ideal assets. Consistently using mortality tables that are not current will eventually accumulate assets less than ideal." Kays, David F., [*Impact of Mortality Table Projection Scales on Defined Benefit Pension Plan Valuations*](#), Society of Actuaries, 2005.

sector will still be using the old federal Cost Accounting Standards (CAS), which use expected rates of return. Thus, government contractors will see a large increase in their minimum contributions (particularly with the increase in the normal cost, which is not phased-in under either bill) but will not receive a similar increase in their reimbursement. We believe cost accounting standards should be adjusted to reflect changes in minimum contribution rules.

Simplify lump sum calculations: The calculation of lump sums is one of the most complex calculations a plan administrator has to calculate. Since the Senate bill in Sec. 302 already changes the Sec. 415(b)(2)(E) lump sum calculation to use the greater of a fixed 5.5 percent and the plan rate, a very minor change to just use a fixed percent would greatly simplify the calculation. With that one fix, lump sums would be calculated the same way for all plans. In the House bill, Sec. 303 uses the greater of the applicable rate and two other rates. If the conferees favor the House provision, it could be greatly simplified if just one rate (i.e., the applicable rate) were used for all plans.

In fact, the Sec. 415 lump sum rules could be further simplified if the same interest rate, whether fixed (as in the Senate bill) or variable (as in the House bill), was used for all Sec. 415 calculations (for all early retirement, delayed retirement, and optional form factors) and the IRS published the appropriate tables.

Members of the Academy's Pension Committee appreciate the efforts of Congress, and in particular, the House Education and the Workforce, House Ways and Means, Senate Finance and Senate HELP committees in advancing pension funding reform legislation, and look forward to any discussion on the issues outlined in this analysis. Please contact Ron Gebhardtsbauer, the Academy's senior pension fellow (Gebhardtsbauer@actuary.org), or Heather Jerbi, the Academy's senior pension policy analyst (202.223.8196; Jerbi@actuary.org) if you have any questions or would like to additional information.