

Good morning and thank you for the kind introduction. I am pleased to have this opportunity to address the 2005 Enrolled Actuaries meeting to discuss the Administration's pension reform proposal for single employer defined benefit plans. Although the Administration is also considering the problems in the multiemployer system, all my remarks today pertain only to single employer plans.

What, you might ask, would an economist contribute in an address to a meeting of actuaries? In part I appear as the spokesman for an important Administrative initiative. But I also have a long-standing interest and background in pensions and pension policy. Prior to joining the current Administration, I oversaw pension research for TIAA-CREF and was a Senior Economist on the staff of the Assistant Commissioner for Employee Plans and Exempt Organizations at the Internal Revenue Service responsible for a study of underfunded pension plans. I have also written a number of academic articles and books on pensions and annuities. Although my duties at the Treasury Department cover a wide range of topics, my interest in pensions has made my work on the Administration's defined benefit pension and Social Security reform proposals particularly satisfying.

Before I outline the basic structure of the Administration's pension proposal and discuss some modeling results of the impact that the proposal will have on the pension system, I'd like to say a few words about Social Security. As you are all aware, the Social Security system clearly is not financially viable and must be fixed. How to close the permanent financing gap raises difficult questions over how the net benefits of Social Security should be shared across generations. In this context, it is important to recognize that the large unfunded obligations in the system are primarily the consequence of the past system generosity to generations that are now either dead or retired. Of course, those early generations are beyond reform's reach, so the entitlement reforms needed to close the financing gap must fall entirely on later generations.

Viewing Social Security from the perspective of how it affects generations and individuals explains why it is imperative that Social Security be reformed now. Delaying reform only reduces the options for fairly distributing the benefits of Social Security across generations. Most people agree that it would not be fair to alter Social Security's promises to retirees and near retirees. The longer reform is delayed, the fewer generations that are left to participate in a reformed entitlement system so as to close Social Security's funding gap, and the more severe those reforms will be. Fairness to future generations requires that we act now.

Estimates made by the Social Security actuary nicely illustrate this point. According to those estimates, one policy that would close Social Security's permanent financing gap is to immediately raise the payroll tax rate by 3.5 percentage points. But if the tax increase were instead delayed until 2041 when the trust fund is depleted, numbers reported in the Trustee Report imply that the requisite tax increase would be 6.3 percentage points. Clearly, I do not advocate either of these policies. My point, once again, is that fairness to future generations requires that action be taken now.

In order to make Social Security fair to future generations, not only must reform occur now, it is essential that reform make Social Security permanently solvent. Permanent solvency means that

our best estimates show the system needing no further reforms in the future. Anything short of permanent solvency amounts to a delay of reform that would be unfair to future generations.

Testing for permanent solvency requires that we look beyond 75 years. For example, the estimated 75-year Social Security financial imbalance suggests that raising the payroll tax rate by 1.92 percentage points, to 14.32 percent, would fix the system. But as many of you are aware, that is not true. If the payroll tax rate was raised in that manner, a large Trust Fund balance would be accumulated in the short-term that would peak in about 2060, and would then commence a steady decline to complete exhaustion at the end of the 75-year projection period. This type of reform would therefore not make the system permanently solvent. With each passing year, the Trustees would report an ever larger financial imbalance as the 75-year scoring window is moved forward to include years with ever larger gaps between expected system costs and income.

A reformed Social Security system that is truly permanently solvent must include personal retirement accounts (PRAs). PRAs allow individuals to save now to help fund their retirement incomes. In principle, that could be done with reforms that save tax revenues in the Social Security Trust Fund. But such “saving” would almost certainly be undone by political pressures to increase government spending and hence produce larger deficits outside of Social Security that would ultimately lead to crisis in the non-Social Security budget. There is no guarantee that the solution to any such fiscal crisis would not include a lowering of Social Security benefits. Hence, the only way to truly save for our retirement and give our children and grandchildren a fair deal is with personal accounts. Personal accounts serve as private and therefore effective “lock boxes”. When pre-funding is done using a personal account, there is no pressure to increase government spending, because this pre-funding belongs to individuals and does not appear on the government balance sheet as budget surpluses.

Now on to my main topic, Defined Benefit Pension reform.

At the outset I want to address an issue that I know is of great importance to this group. I want to ensure to you that the Administration is committed to the future of the defined benefit system. I believe DB plans are valuable to many employees and employers. One of the motivations behind our proposal is to create a set of rules that will allow for a sustainable defined benefit system. I believe the Administration’s proposal would revitalize the system by placing both the PBGC and individual pension plans on a sound financial footing.

I think that nearly all us who are interested in defined benefit plans recognize that the system is undergoing severe financial stress. Evidence of that stress is abundant. Underfunded plans have a collective \$450 billion in unfunded liabilities with \$100 billion of that total concentrated in plans with financially weak sponsors. Many of these sponsors, after enjoying a period of low or no contributions during the boom years of the 1990s, now face very substantial near term contribution burdens.

Claims on the pension insurance system have accelerated dramatically in recent years. After averaging \$451 *million* annually between 1990 and 2001, average claims for the years 2002, 2003 and 2004 were \$9.8 *billion*. Such unprecedented losses to the insurance fund resulted in a

change in the single employer system's net position from a \$7.7 billion surplus at the end of 2001 to a \$23.3 billion deficit at the end of 2004. Such a deficit, if allowed to persist, threatens the pension benefit payments of more than 1 million participants of failed defined benefit plans taken over by PBGC.

Recent financial market performance exposed the fact that existing pension funding and insurance rules fail to provide adequate incentives for plans to maintain responsible funding levels. Pension rules need to be fundamentally reformed to provide such incentives. Rules should be sufficiently robust to encourage adequate plan funding of accrued liabilities under the widest possible range of financial market conditions, while also providing the tools plan sponsors need to assure themselves a smooth and predictable contribution pattern.

When pension plans default on their obligations participants typically suffer by losing benefits. For many retirees and near retirees these losses often come at a time when they are unable to make up the shortfall through other means. In all cases, this Administration is committed to ensuring that pension promises made are pension promises kept. That is why our reform proposal stress adequate and timely funding of accurately measured pension liabilities, real consequences of severe underfunding, improved disclosure, and ensuring the financial solvency of the PBGC.

Today I'll discuss some of the important features of the Administration proposal to reform the existing funding rules and insurance system in order to create proper funding incentives. I'll also provide a "sneak preview", if you will, of some PBGC simulation results that will provide a first look at how the proposed rule work in some stylized economic environments. As I'll note again later, these results are not predictions of what funding levels and claims are likely; they are simply simulations of how the proposal operates in some hypothetical economies.

### *Measurement*

But before we discuss results, I'll describe the proposal in a bit of detail. Our plan ensures that both assets and liabilities are measured on a timely basis and that measurements reflect market values. That means marking assets to market and reducing smoothing in liability measurement to a minimum. Liabilities will be computed by discounting future benefit payments using an AA corporate bond yield curve. The yield curve matches future benefit payments to interest rates of bonds that mature when those payments become due. This is the most accurate method of measuring liabilities because it explicitly recognizes the time structure of benefit payments.

We also eliminate the confusing array of largely unrelated, special purpose, liability measures that have been added in ERISA over the years. Under the reform proposal there are two logically related liability measures that will be used for all funding and premium purposes. The first, called ongoing liability would measure benefits accrued under the plan and is appropriate for an ongoing plan with a financially health plan sponsor. Ongoing liability is computed using the yield curve, a specified mortality table, and reasonable assumptions about retirement rates and the take up rates on retirement subsidies. Ongoing liability – unlike current liability - will reflect expected lump sum take up rates.

The second measure, at-risk liability is designed to measure accrued benefits in a manner appropriate for a plan that is “at-risk” of termination because the plan sponsor is less financially healthy. At-risk is basically the same as ongoing with four critical assumption changes, reflecting behavioral changes that are observed when a plan approaches termination. At risk liability would assume that participants retire as early as possible and take advantage of any early retirement subsidy that might be available to them. At risk liability will also reflect costs associated with closing out a plan. These costs include a load of 4 percent of liabilities plus a \$700 per participant charge.

### *Funding Targets*

These liability measures are used as funding targets. These funding targets are meaningful and reflect the risk of plan termination. Financially healthy sponsors will fund to ongoing liability and less-healthy sponsors will be required to fund to at-risk liability.

A sponsor is considered financially weak if the plan sponsor OR any significant member of the sponsor’s controlled group has NO senior unsecured debt that is classified as investment grade by at least one of the nationally recognized rating agencies.

Because at-risk funding targets are likely to be higher than ongoing targets, we provide a five year phase-in period to the higher target for any plan that has a financially weak sponsor subsequent to enactment. The funding target during the phase in period will be a weighted average of the ongoing and at risk targets. The phase in period includes a look back provision for plans with sponsors that are classified as financially weak on the date of enactment. The phase in period will be reduced for each year a sponsor was classified as weak prior to the effective date of the new funding rules.

### *Funding*

Under the proposal, sponsors that fall below minimum funding levels would be required to fund up towards their appropriate target in a timely manner. In general, if the market value of plan assets is less than the funding target for the year, the minimum required contribution for the year would be equal to the sum of the applicable normal cost for the year and the amortization payments for the shortfall plus any ongoing amortizations of prior year shortfalls. Amortization payments would be required in amounts that amortize the funding shortfall over a 7-year period. The initial amortization base is established as of the valuation date for the first plan year and is equal to the excess, if any, of the funding target over the market value of assets as of the valuation date. The shortfall is amortized in 7 annual level payments.

Here it is important to note that this is the same amortization regardless of the source of the funding deficiency. It is also worthwhile noting that this element of the plan is likely to provide immediate funding relief for many plan sponsors currently facing the prospect of Deficit Reduction Contributions with amortization periods as short as four years.

For each subsequent plan year, if the sum of the market value of assets and the present value of future amortization payments is less than the funding target, that shortfall is amortized over the following 7 years. If the sum of the market value of assets and the present value of future amortization payments exceeds the funding target, no new amortization base would be established for that year and the total amortization payments for the next year would be the same as in the prior year. When, on a valuation date, the market value of the plan's assets equals or exceeds the funding target, then the amortization charges would cease and all existing amortization bases would be eliminated.

### *Credit Balances*

I'd like to say a few words about credit balances. Many of the critiques of the Administration proposal note that we will eliminate the use of credit balances as currently allowed. I am proud to tell you that is correct. Credit balances that allow underfunded plan are undesirable and dangerous because they create funding holidays as plans become increasing by underfunded and prolong the amount of time that such plans can remain below their funding targets, leaving participants at greater risk. One need only consider the case of Bethlehem Steel to see how significant an issue this is.

That said, it is important to understand that contributions above the minimum are accounted for in the Administration proposal. Plans that have made higher than minimum contributions in past years do not lose the value of such contributions. These contributions increase the value of plans assets relative to liabilities and, other things equal, reduce plan underfunding and decrease future amortization payments. In combination with the rest of the proposal, there is more than adequate incentive for plan sponsors to fund above the minimum.

### *Benefit Limitations*

The reform proposal will include benefit limitations for seriously and severely underfunded plans. Benefit restrictions serve three critical purposes. First, they will limit liability growth as a plan becomes progressively underfunded relative to its funding target. It is important to arrest the growth of liabilities when plans are becoming dangerously underfunded in order to ensure that plan participants will collect benefit that they accrue. Under current law, sponsors of underfunded plans can continue to provide for additional accruals and, in many situations, even make benefit improvements. Plan sponsors in financial trouble have an incentive to provide generous pension benefits, rather than increase current wages, and employees may go along because of the PBGC guaranty. This increases the likely losses faced by participants and large claims to the PBGC. Hence, the second purpose of benefit restrictions is to guard against this type of moral hazard. Third, but certainly not least importantly, I believe benefit restrictions will serve as a very powerful incentive for plan sponsors to maintain well funded plans. As I describe the limitations, I am sure you will recognize that most of the plan sponsors you work for would be loathe to explain to their employees that, due to the severe underfunding of their pension plan, these limitations had been put in place.

Plans with financially weak sponsors that are funded at a level of between 60 and 80 percent of their targets will be prohibited from paying lump sums or increasing benefits. If funding falls

below 60 percent of target liabilities accruals will also stop and there will be no preferential funding of executive compensations. Plans with healthy sponsors will be prohibited from increasing benefits or making lump sum payments if they are funded at less than 60 percent of their target. Underfunded plans with sponsors in bankruptcy will also be subject to benefit limits.

### *Increased Deductibility*

As I noted above, our proposal asks more of plan sponsors than current law – we insist that plans reach and maintain a responsible level of plan funding. Along with these new responsibilities we provide enhanced tools to maintain adequately funded plans while maintaining a smooth pattern of contributions if they desire. One important tool is that the level of permissible deductible contributions will be raised. Under the Administration’s proposal, plans will be able to build two separate funding cushions. The first is equal to 30 percent of ongoing liability and the second allows for prefunding of expected salary increases for final pay plans, and expected future plan amendments, based on the amendment experience of the last six years, for flat dollar plans. In addition, plans will always be able to deduct contributions that bring a plan’s funding level up to at risk liability.

Higher limits for deductible contributions, along with existing authority to allocate plan assets and hedge investment and interest rate risk, will provide sponsors with the tools they need to smooth contributions over time. We believe that providing sponsors these tools will not only allow for more effective contribution smoothing than is accomplished using the mechanisms embodied in current law, but it will also allow sponsors to optimally balance contribution smoothing with other investment objectives.

We also think that under the new more flexible funding structure the actuary’s role as plan advisor will be enhanced. Funding decisions under this system will require the use of sound judgment rather than being an exercise in following rules.

### *Premiums*

The PBGC insurance premium structure also is in need of reform. Our proposal increases incentives for plan funding and provides the pension insurance system with adequate revenues to eventually restore it to solvency. The flat rate premium will be immediately increased from \$19 to \$30 per participant to reflect wage growth since 1991 when the \$19 rate was set. In the future, the flat premium rate will be updated annually using the same index that is used to update PBGC’s maximum guarantee limits. This provision will allow the price and level of insurance coverage to grow at the same rate in the future.

The proposal will also introduce risk based premiums. Risk-based premiums will be charges levied on unfunded target liabilities for all plans. Two key differences distinguish risk based premiums under the proposal from the variable rate premiums of current law. First, the liability on which underfunding is measured for premium purposes is the same liability measure used as a plan’s funding target. Second, all plans with unfunded liabilities will pay risk-based premiums at

the same rate. This feature of risk-based premiums should provide a much stronger incentive to maintain adequately funded plans.

### *Disclosure*

The final element of the proposal is increasing pension funding disclosures to plan participants, investors and regulators. I don't have time here to discuss all of the changes in detail, but the intent is to provide participants in all plans with more current and accurate information on funding levels.

### *Results*

Our colleagues at the PBGC have taken the basic structure of the proposed funding rules and simulated their effects on the single employer system under a range of assumptions about future economic and financial market activity. I'd like to share some of these results with you.

It is important to note that the results we will talk about today reflect only the funding rules. These results do not reflect the effects of some critical components of the proposal including the direct and incentive effects of benefit restrictions and the incentive effects of the proposed system of PBGC premiums. More broadly, the focus on minimum required contributions, while useful, fails to capture an essential feature of the proposal; we provide plan sponsors with both the tools and incentives to smooth contributions by funding above the minimum during good times. Projected minimum contributions do not reflect this behavior. I will discuss a stylized example of how a plan sponsor *might* use the additional flexibility provided in our proposal to maintain smooth contributions.

The simulations assume that the reform proposal is implemented fully in 2006. All slides that depict estimated future claims and contributions express those amounts not in dollar terms but as index numbers. We have taken this approach because we want to highlight the fact that these are not predictions but rather simulations designed to show the different outcomes generated by the proposal and current law. The base of the index is the estimated level of contributions or claims in 2005, as appropriate, under current law, assuming that liabilities are discounted using 105 percent of the 30 year Treasury bond rate.

While I'll just be running through a few key slides here, a more complete analysis is available at [http://www.pbgc.gov/publications/white\\_papers/wp\\_040605.pdf](http://www.pbgc.gov/publications/white_papers/wp_040605.pdf)

I'll begin by showing how the mechanics of the proposal work compared to current law. This is best demonstrated by holding all financial and economic variables fixed and simulating funding ratios, contributions, and claims under each set of funding rules. In this set of simulations, equities are assumed to have a nominal 9 percent annual return, the 30-year Treasury bond rate is 5 percent, inflation is 2.5 percent and wage and benefit growth rates are 4.2 percent.

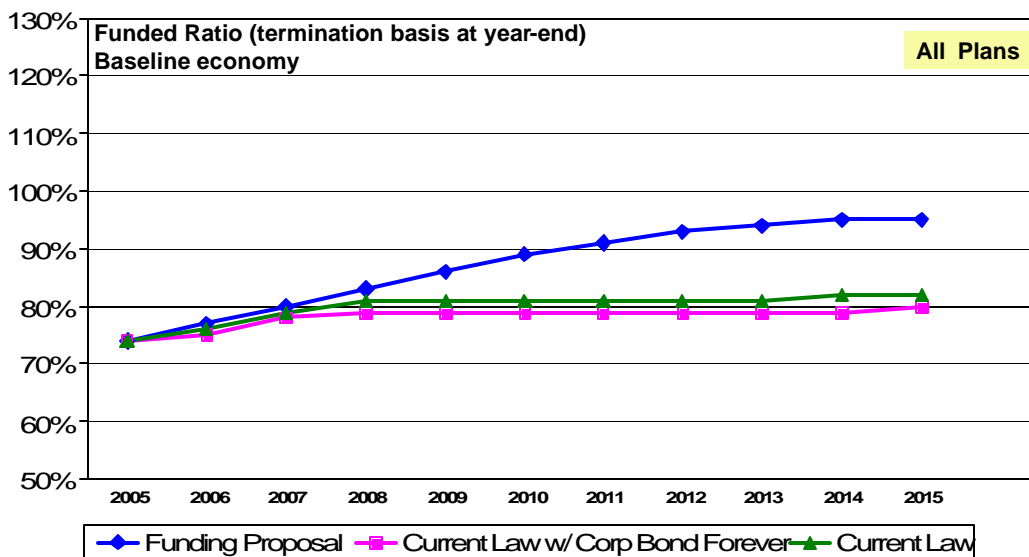
First we'll look at funding ratios relative to termination liability. One of the problems with current law is that sponsors are permitted to stop funding plans while there are significant unfunded accrued liabilities.

This is demonstrated in the graph [Figure 1] on the screen. Under current law, aggregate plan funding ratios reach a maximum of 82 percent of termination liability and remain there. This is only a modest improvement over the 77 percent funding ratio of 2003 even though in this scenario interest rates are constant and equity returns are constant at their long-run average value. Note that in this scenario the assumptions that interest rates are constant and equity prices are increasing steadily over time mean that plan funding levels reflect the operation of the funding rules rather than changes in asset or liability values. Such an outcome suggests that current law is ineffective in moving plan sponsors to adequate levels of funding. (Under current law using the corporate bond rate, funding reaches a peak of only 80 percent.)

By contrast under the Administration’s funding proposal, aggregate funding improves steadily during the 2006 to 2012 period as plans fund to their new targets. Funding is significantly higher under the proposal than under current law by 2015 reaching a peak of 95 percent. All other things equal the proposal would appear to succeed in improving plan funding. Higher plan funding levels significantly increase the security of benefits for plan participants.

**FIGURE 1**

**Current rules do not lead to better-funded plans.  
The funding proposal improves funded ratios over time.**

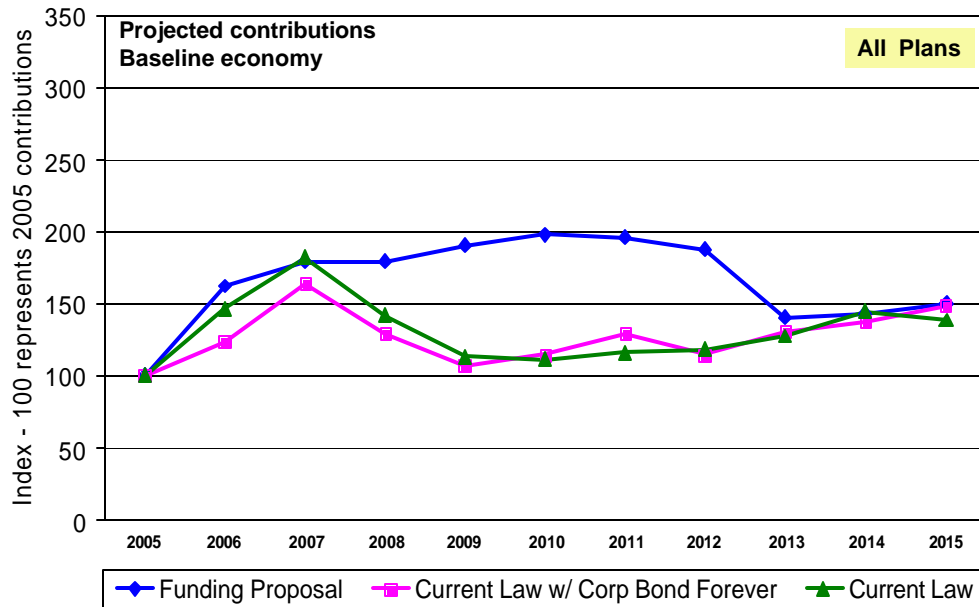




As you might expect, a set of funding rules that produces higher funding ratios in a steady state economy will require higher contributions. As my next slide [FIGURE 2] shows, during the first seven years of the proposal, 2006 to 2011, minimum contributions are higher under the proposal than under current law as plans fund to their new higher targets over a seven year amortization period. Thereafter contributions under current law and the funding proposal converge and by the end of the forecast period in 2015 are the same.

FIGURE 2

Under the proposal, required contributions continue until accrued benefits are funded.

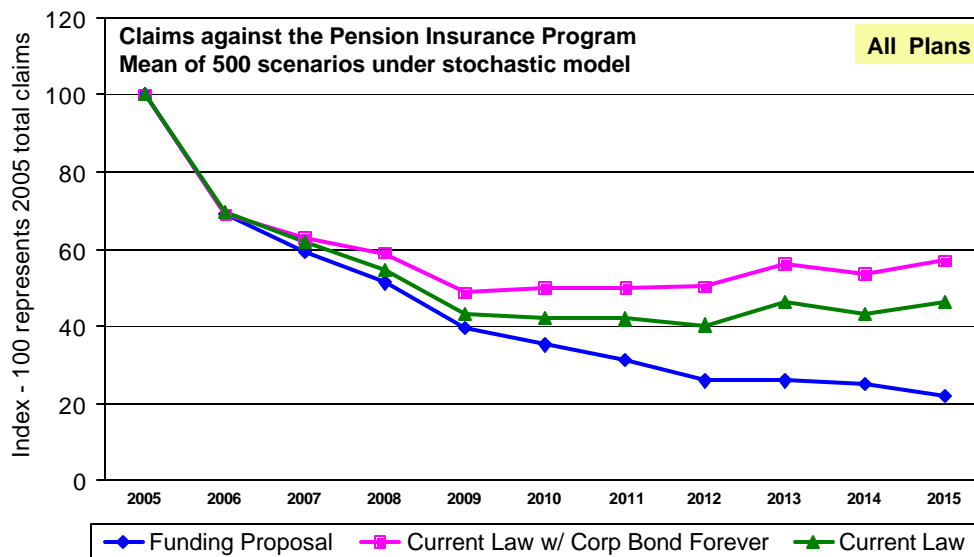


The critical measure of the effectiveness of a plan funding proposal is its effect on claims. Claims projections under the funding proposal are significantly lower than under current law, because the proposal's new funding rules require plans to be significantly better funded. The next slide [FIGURE 3] shows - under the proposal and under current law - the mean claims against the pension insurance program from the 500 randomly chosen economic scenarios. Claims represent the amount of underfunding in terminated plans that would be guaranteed by the PBGC. (Of course, as explained above, participants also often suffer major losses in their pension benefits upon termination due to statutory limits on PBGC's guaranty.)

It is important to focus on the relative differences between the scenarios and not the values shown under each scenario. As noted above, the amounts shown represent the mean result of 500 economic scenarios. It is not intended to forecast what claims will actually be. One large distress termination could change the numbers significantly. However, the relationship among the lines would not change.

**FIGURE 3**

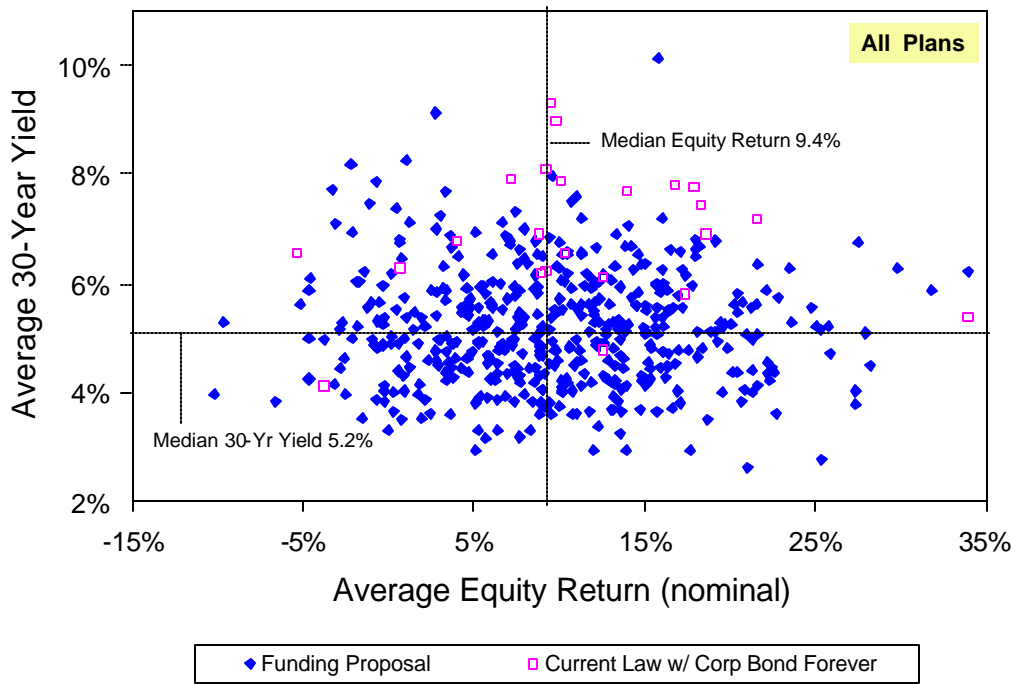
## Better funded plans reduce losses to participants and burden on premium payers.



The next slide [FIGURE 4] provides a different and fuller picture of how the funding proposal performs against current law in reducing claims. The graph shows instances of lower claims under current law (the pink squares) and under the funding proposal (blue diamonds) plotted on average 30-year bond yields and the average equity return in the stochastic simulations. The funding proposal resulted in lower claims in 95 percent of the simulations. The few scenarios in which the proposal results in higher claims were almost all scenarios characterized by rising interest rates, as the current low interest rate 4-year smoothing artificially increases contributions.

FIGURE 4

The proposal results in lower losses in 95% of the scenarios modeled.

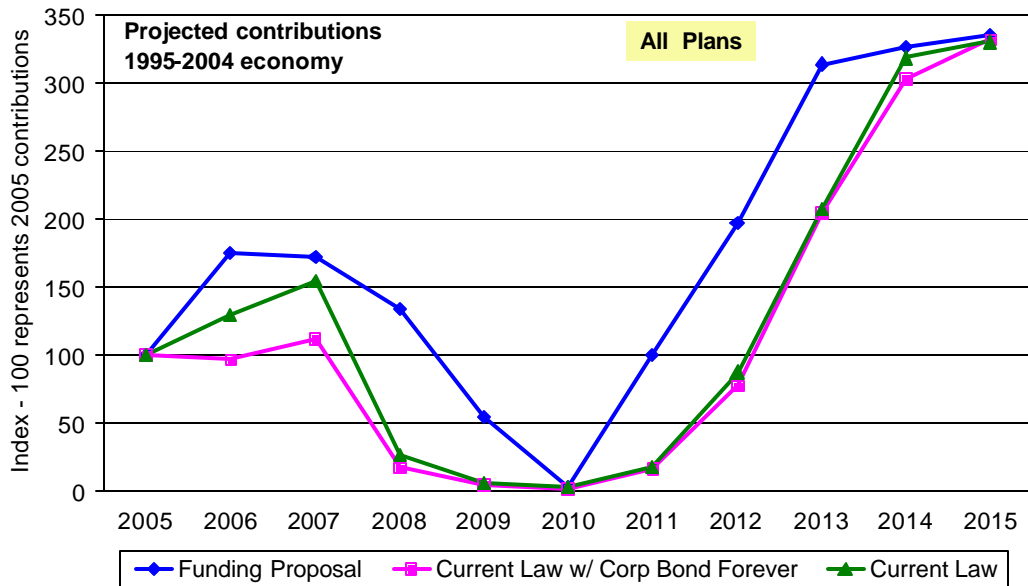


Finally, I want to address the issue of contribution volatility. To see how the proposal would have operated in the recent past, we will also look at the proposal's performance during in the economic environment of the most recent 10 year period 1995 to 2004 – a good choice for discussing volatility! Current funding numbers were used as a starting point to estimate funding ratios, contributions and claims.

This slide [FIGURE 5] shows that Contributions are volatile under both current law and the funding proposal reflecting significant changes in interest rates and equity market values over the period; volatility, however, is actually lower under the funding proposal than under current law. That said, no one would want to experience this type of contribution volatility on a regular basis.

FIGURE 5

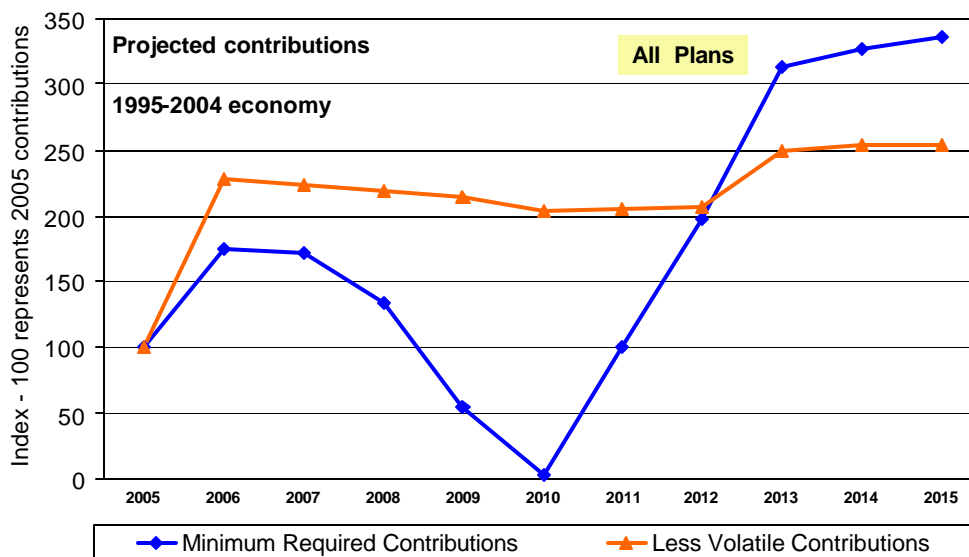
In a “perfect storm” economy, current law smoothing leads to weaker funding.



One feature of the proposal that will enable sponsors to control the type of funding volatility that occurs in the environments like that of the 1995 to 2004 period is the ability to make higher tax deductible contributions. In the next slide, [FIGURE 6] is a stylized example of how this new ability might be used by a sponsor to smooth contributions over this period. A smoothing contributor is assumed to contribute 25% above the required amount in 2006. In each subsequent year, contributions are assumed to be the greater of 98% of the prior year's contribution or the minimum required amount. The graph depicts the smoothed contribution path and compares it to the path under the proposal in which the sponsor makes only the minimum required contribution each year. This is a clear demonstration that using the features of the proposal, plan sponsors, guided by the wise counsel of the consulting actuary, can manage the volatility of their required contributions.

**FIGURE 6**

## The proposal permits a less volatile pattern of contributions.



### Conclusion

The results of these simulations suggest that the Administration's single employer defined benefit funding proposal will accomplish its primary goals of increasing the retirement security of defined benefit participants and decreasing losses to the pension insurance fund. Stochastic modeling indicates that benefit losses and claims are likely to be lower under the proposal than current law under a wide range of economic environments. We are proud of this proposal and feel that its enactment will improve and help maintain the defined benefit system.