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Douglas J. Elliott

202-347-5770

[douglas.elliott@coffi.org](mailto:douglas.elliott@coffi.org)

[www.coffi.org](http://www.coffi.org)

## PBGC: Premium Hike Possibilities

The Administration's pension reform proposal and both the House and Senate versions of the Congressional Budget Resolution would implicitly or explicitly require significant increases in premiums charged by the Pension Benefit Guaranty Corporation (PBGC). This paper summarizes current premium rules and the issues surrounding possible changes.

COFFI does not advocate any position on pension reform and our intent here is to provide a neutral summary. Readers unfamiliar with PBGC may wish to access [www.coffi.org](http://www.coffi.org) for a number of papers explaining PBGC and its finances, particularly "PBGC: Policy Options," a comprehensive listing of 15 options to deal with PBGC's deficit, and "PBGC: A Primer."

This paper is organized around a few key questions:

- Why consider a premium hike?
- What are the disadvantages?
- How are premiums calculated today?
- How might they be increased?
- How high should they go?
- How should premiums be divided between fixed and variable?

## Why consider a premium hike?

There are three main motivations expressed by advocates of premium increases:

- PBGC has a \$23.3 billion deficit.
- There is a structural imbalance between premiums and risks.
- Some types of premiums could motivate desirable behavior.

PBGC has accumulated a \$23.3 billion deficit over its 30 year history, which will have to be paid by someone even if pension reforms prevent further accumulations. ERISA, the law establishing PBGC, envisioned premium income as the source of funds to fill the gap between liabilities and assets taken over from underfunded pension plans. Current law does not give PBGC access to general tax revenue, except for a small loan facility, although there are proponents of a partial taxpayer rescue to minimize the necessary premium increases.

There is also a need to stem future losses. The cumulative deficit confirms the conclusion of every academic study on the topic, which have all concluded that there is an imbalance between the risk imposed on PBGC and the level of premiums it is allowed to charge. The most optimistic study calculated that premiums over the long term were roughly 50% sufficient to cover risks under current law. This is broadly consistent with the fact that historical premiums, adjusted for inflation, add up to roughly the same size as the deficit. COFFI's cash flow model of PBGC also concludes that there is a major imbalance between premiums and risks, This is the only detailed, publicly-available analysis outside of PBGC's own models, for which PBGC releases only certain summary statistics. (See [www.coffi.org](http://www.coffi.org) for several papers explaining our model.)

This structural imbalance can be fixed going forward either by increasing premiums, decreasing PBGC risk, or through a combination of actions. Most proposals assume both types of action will be taken.

Finally, some forms of premium increase could discourage certain behaviors and encourage others. For example, the Administration proposes to substantially increase premiums for companies with underfunded pension plans. In addition to raising revenues, the hope is that firms will choose to contribute more to their pension funds, reducing their premiums while also reducing PBGC's exposure to future claims.

## What are the disadvantages?

Charging companies more for offering pension plans will increase their incentives to stop offering such plans. Incentives to exit the system are of concern to many policymakers, since there is already a substantial exodus from defined benefit pension plans to defined contribution plans such as 401k's. A large majority of policymakers believe that defined benefit plans are worth encouraging, since they transfer investment and mortality risk from employees to companies that are presumably better able to bear the risks. (See "PBGC: Fundamental Questions" at [www.coffi.org](http://www.coffi.org) for a more detailed discussion of the pros and cons and trends.)

Companies can exit the defined benefit system either by "freezing" plans so that no benefits are earned for future service or through outright "termination" of the pension plan. A voluntary termination is identical to a freeze from an employee's point of view, since he or she remains

entitled to any pension benefits that are already earned, but will earn no more. However, in a termination, the company transfers its financial obligations to an insurer in exchange for a one-time premium.

Plan freezes at large corporations are far more common than terminations and are likely to remain so, no matter how unattractive companies find new pension laws. Insurers price termination insurance by assuming a bond-like investment return of 4-5%, while companies generally account for their pension plans using 8-10% assumed returns. The cost of giving up 3-6 percentage points of return on their large pension funds is a major disincentive to terminate. (See "PBGC: Policy Options" for a more detailed explanation.)

Therefore, large firms that are pushed to exit the defined benefit system will almost universally choose to freeze their plans rather than terminate them. Frozen plans continue to pay PBGC premiums, which has important implications for premium structure and level. PBGC has a captive audience for premium purposes to a much greater extent than is often presented, since it would take a staggering increase in premiums to offset the economic disadvantages of terminating a plan instead of freezing it.

### **How are premiums calculated today?**

PBGC collects two types of premiums today. There is a "fixed" premium of \$19 per year for each present and former employee covered by the plan. This level is set by Congress and has not been raised since 1991. There is also a "variable" premium of 0.9% of the amount of a plan's underfunding, subject to various exceptions. These exceptions exempted 80% of underfunding from paying the premium in 2004, 90% in 2003, and 95% in 2002.

PBGC earned \$1.5 billion in premiums last year -- \$0.9 billion from variable premiums and \$0.6 billion from the fixed premium. This was unusually high; recent years have averaged closer to \$1.0 billion with about 70% coming from fixed premiums.

### **How might they be increased?**

There appears to be a strong consensus to retain a mix of fixed and variable premiums. Fixed premiums are straightforward and the only proposals have been to change the per participant level. The Administration has proposed to increase the rate to \$30 per participant, to reflect wage inflation since 1991, and to index it to wage inflation going forward.

Variable premiums could be changed by altering the base on which they are calculated, changing the rate, or some combination. The Administration proposes to eliminate all exceptions and to charge the variable premium on every dollar of underfunding, which would be a dramatic widening of the base, given how much of the underfunding currently qualifies for exemption. They have also asked for Congress to cede the authority to set the variable premium rate to PBGC's Board of Directors, composed of the Secretaries of Labor, Treasury, and Commerce.

Some policy analysts recommend charging additional variable premiums to companies with weaker credit ratings, since claims against PBGC can only be filed when companies are at or near bankruptcy. The idea is to charge firms more if they represent more risk to PBGC, both as a fairness measure and to encourage weaker companies to avoid accumulating large pension underfunding. The Administration moves in this direction through another part of its proposal,

which changes the funding targets so that they are higher for companies with non-investment grade credit ratings. This automatically increases variable premiums, since they will be based on a rate multiplied by the difference between a plan's assets and its funding target.

Finally, some policy analysts suggest that variable premiums be modified to reflect the investment risk within each pension plan. Pension plans with higher levels of investment in the stock market tend to be more volatile and therefore more likely to produce a future large claim on PBGC. (The bursting of the recent bubble provided a number of examples of this potential.) So far, neither the Administration nor anyone in Congress has proposed such a change.

## **How high should they go?**

The "correct" level of PBGC premiums is a highly subjective matter, determined by four key variables on which there is considerable disagreement:

**How quickly, if at all, should PBGC's deficit be paid off?** Opinion ranges from as little as one year out to "never." Some economists argue that the deficit should ideally be paid off immediately, because otherwise future premiums will have to be at higher than fair levels for the future protection being provided. Any service that is overpriced will tend to be shunned, in this case implying more departures from the defined benefit system. This argument loses considerable force in the pension case, since, as explained above, it is difficult for large firms to avoid future premiums by outright termination of their pension plans.

The Administration appears to be targeting a 7-10 year period to pay off the deficit, judging by the revenue increases shown in the President's Budget Proposal. This intent appears to conflict with the actual mechanics of the President's Pension Reform Proposal, as explained in "PBGC: Budget Process May Shape Pension Bill," available on [www.coffi.org](http://www.coffi.org). In brief, it relies so heavily on variable premiums collected on underfunding that it is likely drive underfunding down to a level where no reasonable premium rate could bring in the projected dollar amount. Dramatically reducing underfunding in a short time might arguably be good public policy, but it would not raise the premium levels projected.

Finally, there are some who argue that federal policy has created the budget deficit by sinking the steel and airline industries and therefore it is only fair for the government to pick up the tab for the existing deficit.

**How big is the real deficit?** PBGC reports a cumulative deficit of \$23.3 billion, having lost \$10 billion a year for the last three years. However, there are many who argue that this unprecedented deficit figure is a blip that will vanish as market conditions return to normal. Some further argue that various mechanics of the calculation, such as the choice of discount rate, skew the number high. On the other hand, COFFI's detailed financial modeling of PBGC suggests that the economic deficit is somewhat higher than reported and could rapidly become substantially worse.

**What premiums are needed to cover new claims?** This breaks down into a question of what the funding and other pension rules will be and then a series of complex calculations as to the likely losses under different economic scenarios. We are aware of only two publicly available sources for estimates derived from detailed analyses. PBGC just came out with a White Paper on the likely quantitative effects of the Administration's pension reform proposal (see PBGC:

White Paper Implications,” released simultaneously with this paper on [www.coffi.org](http://www.coffi.org) and see [www.pbgc.gov](http://www.pbgc.gov)). In addition, COFFI’s model provides estimates of the premium levels needed to break even under various circumstances, assuming current law.

By combining several PBGC analyses, we estimate that ongoing premium levels could come down by 2014 to approximately \$1.3 billion in current dollars, if the President’s Pension Reform Proposal is implemented and performs as shown in PBGC’s White Paper. This assumes that the existing deficit, and any new deficit from the next several years, is paid for separately, leaving premiums in later years to cover only new claims. Premiums would need to be higher in the first few years, as claims are projected to be unusually high coming off recent major losses.

Using the same assumptions, ongoing premiums needed under current law would come in by 2014 at \$2.2 billion a year in current dollars, again assuming no burden from prior year deficits. It is worth repeating the caveat from our other paper that PBGC’s PIMS model, on which all this is based, generally appears to somewhat underestimate future losses.

COFFI’s PBGC cash flow model allows us to estimate the necessary premium levels under current law using a different target, but again assuming the current deficit is paid for separately. According to our model, 2014 premiums would need to be set at \$1.9 billion a year, in today’s dollars, in order for PBGC to avoid running out of cash to pay pensions over the next 75 years. This assumes total premiums rise 3% a year.

**How much can plan sponsors bear?** Regardless of the amount needed for PBGC’s solvency, there may be an upper limit to what plan sponsors can pay without seriously damaging the defined benefit system. This could take two forms. The less extreme is that premium increases could push a number of companies over the edge where they would choose to freeze their plans, in order to slowly exit the defined benefit business. Outright termination would be out of the question for the vast majority of these firms, due to expense considerations explained above, which is why they would opt for plan freezes.

PBGC-insured plans pay out close to \$100 billion a year in benefits to participants, meaning that current premiums represent about a 1.5% charge on top of those benefits. This would rise to about 6% according to the President’s Budget Proposal. Another measure of cost is to look at corporate contributions to their pension plans. Unfortunately, these are both volatile and hard to find for the complete universe of pension providers on a timely basis. But, as a point of comparison, companies in the S&P 500 contributed \$73 billion in 2003. These firms hold about 2/3 of the systemwide pension assets. If the same ratio held for contributions, then 2003 would have seen \$112 billion in systemwide contributions, producing similar ratios of premium cost to total pension cost.

No one knows how many companies might choose to exit the defined benefit system due to the roughly 4% rise in total pension cost implied by the President’s Budget Reform Proposal. On the one hand, a number of plan sponsors are reportedly on the edge of deciding to make the switch and this might be the catalyst for that action. On the other hand, a 4% increase does not seem likely to push many companies into doing something they were not already planning to do.

It is easier to evaluate the more extreme argument that PBGC’s own financial interest would be served by avoiding excessively high premiums which might drive the healthy sponsors out of the

system, leaving too little premium revenue to pay for the unhealthy ones that would remain. The only way that this exodus could be quick enough to offset the benefit to PBGC of substantially higher rates would be if plans were pushed into outright terminations. (Premiums from plans that are merely frozen drop off quite slowly.)

A look at systemwide data makes clear that potential losses from outright termination dwarf potential costs from higher PBGC premiums. There are \$1.8 trillion of investments at PBGC-insured plans. Losing even three points a year of investment income through a termination, would cost companies \$54 billion a year if all plans terminated. This is roughly 10 times the most aggressive suggestion for the level of PBGC premium increases. Thus it is unlikely that PBGC would lose premium income overall by aggressively raising premiums.

### **How should premiums be divided between fixed and variable?**

There are practical limits to how much can be collected by variable premiums charged against underfunding, but, within these limits, it is a subjective choice as to how to divide the charges. Variable premiums have the advantages of charging most to those firms presenting the most risk and of incentivizing companies to avoid underfunding. On the other hand, troubled companies, which can least afford higher premiums, tend to have the worst underfunding.

Historically, fixed premiums have generally brought in some two-thirds of all premium income, although there have been spikes such as last year when variable premiums have brought in more than the fixed premiums did.

The President's Budget Proposal serves to illustrate the limitations on the total premiums that can be raised from variable premiums. Variable premiums are assumed to raise about \$5 billion a year for at least a few years. However, this does not seem feasible in reality. (See "PBGC: Budget Process May Shape Pension Reform" for a more detailed explanation than what follows.)

The highest PBGC estimate of underfunding is a \$450 billion number based on "termination liability" which would generally be higher than the figure used for variable premium calculations. Taking this \$450 billion figure, PBGC would need to plan on charging 1.11% on all underfunding. However, the large majority of underfunded plans would be facing an increase from 0% (due to exemptions) to 1.11%. Given the size of pension funds, this is a significant enough increase that management teams would work to avoid the expense. \$354 billion of the underfunding is with investment grade companies that could borrow at a tax-deductible rate of perhaps 6% and put the money into their pension fund to generate an accounting return of 8-10%, tax-free.

It is quite possible that \$150 billion of new funding would be put in, which would mean PBGC would need to charge 1.67% on \$300 billion to bring in \$5 billion. This higher rate would cause even more anticipatory funding, forcing an even higher rate still get to \$5 billion. Follow this process on out and you could find that all underfunding at investment grade companies has been funded, leaving a need to charge over 5% on each dollar of underfunding at the \$96 billion at junk rated companies. The better-rated of these could also borrow and fund, leaving perhaps \$50 billion of underfunding at companies too weak to get cash at any reasonable rate. These companies could not bear the 10% charge that would be needed and would likely enter bankruptcy to purge their pension obligations and premium charges.

This conundrum is likely to be even tougher in later years, since there is strong reason to believe that underfunding will come down substantially from 2004's \$450 billion figure, which far exceeded any previous levels. This natural decrease in underfunding would bring down variable premium collections as well.

\$5 billion a year is clearly too high, but it is difficult to know what rate would work, since different companies would have different trade-offs and thresholds of pain. It is possible, for example, that \$3 billion is achievable initially, with perhaps a 1% rate and \$300 billion remaining unfunded after \$150 billion is funded to avoid the variable premium. However, no one knows the sensitivity of companies to such a universally applied variable premium – there is simply no historical data to go on.

Within the range of premium increases being considered, there is no practical limit on how much can come from fixed premiums. As noted earlier, there is some level of total premiums at which companies would start to terminate in substantial numbers in order to avoid paying the premium, but this level seems to be well above anything under consideration. Absent that effect, there is no feedback loop whereby changes in fixed premium rates would cause incentive changes that would significantly offset the higher rate, at least in the short to medium term.

This means, for example, that the figures in the President's Budget Proposal should be achievable, if the mix is shifted away from such a heavy reliance on variable premiums. At an extreme, a fixed charge of \$175 per year per participant would bring in almost \$6 billion a year, given the current 34 million participants. This would achieve the budgeted premiums without charging any variable premiums at all.