

Fixing the Pension Plan Funding Rules

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Abstract

Funding rules, established in 1974, apply to most voluntary U.S. employer-sponsored retirement plans. This paper traces the factors that influenced these rules, follows their evolution and identifies their shortcomings. It proposes principles to serve as the basis for revising these rules as well as a set of revised rules. This set includes rules for determining benefits to be valued. It also includes rules for setting statutory interest rates and other elements of a statutory rate basis. The paper discusses ways to overcome the tension between two conflicting needs. Plan sponsors need to avoid wildly fluctuating contribution requirements. Society needs to provide continuous security for workers' benefit expectations. Finally, the paper discusses an alternative approach that reduces reliance on funding standards and increases reliance on the PBGC.

1. Introduction

Recent events suggest that it's time to reexamine existing pension plan funding rules and consider changes. This is a discussion of how the current rules came into being, their shortcomings and possible replacing rules.

Responsible pension funding began long before ERISA. For many years, most plan sponsors had worked closely with their actuaries in developing rational funding programs. Generally, there were three objectives: smoothing year-by-year contributions, avoiding surprise contribution requirements and making steady progress towards targeted funding levels. Often these targets involved fully funded accrued liabilities.

One objective rarely discussed was to protect workers in event of business failure. Sponsors had in mind the success and growth of their businesses, not planning for failure. In contrast, the *principal* objective of ERISA funding rules was the protection of workers in event of business failure. Many observers felt this was the only legitimate objective.

Despite this difference in objectives, the original ERISA funding rules mimicked, very closely, the funding techniques that responsible employers had followed voluntarily in the years before ERISA. So, the "brave new world" of ERISA was born, and we all sat back to see how the new funding rules would work.

It turns out that sometimes they worked—and sometimes they didn't. When they didn't work, the reasons for failure quickly became so obvious that many planners were chagrined they hadn't anticipated the failures.

The original rules were designed to reach target funding levels gradually and relatively painlessly over a long period. So far, so good. So long as the sponsor remained healthy over this period of gradual buildup, employees would be fully protected—without any help from the PBGC.

However, the gradual buildup applied to the plan as it existed at the time ERISA was enacted. Consider an enhanced benefit added later by amendment. The enhancement was treated as a brand new plan—with a new gradual buildup period. Now, consider the collectively bargained plan whose benefits were not pay-related. To keep these plans up-to-date, it was necessary to bargain for additional benefits with every contract. Often, this meant adding a new piece of benefit every three years. Sometimes, it was less than three years. Under the original funding rules, every new piece started its buildup from ground zero as if it were a brand new plan. So, the typical bargained plan would make funding progress for three years, receive a setback, move ahead for three more years, receive another setback and so on. It was tantamount to running in place.

In any dynamic economy, there will be a certain percentage of business failures. When sponsors of these perpetually amended plans went under, they inevitably left behind unfunded promises. The PBGC found that its job of picking up the pieces was becoming progressively more burdensome.

So, in 1987, we the people, acting through Congress, rewrote the rules. This occurred barely more than a decade after the brave new world had begun. We moved our focus away from orderly funding designed to reach long-term targets. Instead, we focused on what might happen to a plan if its sponsor failed tomorrow. But, instead of replacing the old rules with the new, we kept the old and layered on the new.

The new rules proved their worth very quickly. However, they did need refinement. So, we tinkered. And, we tinkered. And, we tinkered. We kept tinkering until today we have a mountain of complexity. Section 412 of the Internal Revenue Code, the section setting down minimum funding rules, is now *over 12 thousand words long!* It has become a monster practically unfathomable to anyone other than a pension actuary working full-time in this very narrow field of specialization. Enormous amounts of effort are spent in the private sector just to keep up with, and comply with, the rules. Equally enormous amounts of effort

are (or should be) spent by the regulators in checking to see whether compliance is taking place.

The problem has been exacerbated by the absence of adequate regulatory guidance on application of these complex rules. It's increasingly obvious that the time has come to step back, rethink our objectives, turn over a clean sheet and rewrite the rules. But first, we should analyze the mistakes that got us where we are today. There were lots of them.

1.1. Mistake 1: New Rules Layered on Old

When we discovered that the old rules weren't working, we added new ones. We probably should have completely replaced the old with the new. That simple step would have streamlined the process enormously.

1.2 Mistake 2: Emphasis on Smoothing

Even with the new rules, we placed too much emphasis on smoothing—dampening year-by-year volatility in contribution requirements. Where did we smooth? Just about everywhere.

- Consider the changes in calculated liability that occur when it becomes necessary to true-up assumptions—investment return, future pay changes, mortality and the like. We didn't require immediate recognition of these changes. Instead, after we had concluded that a new liability level was the only correct one, we permitted gradual grading to this new level. We did this by establishing the difference between old and new levels, and amortizing that difference.
- Consider the inevitable gains and losses that occur when year-by-year results fluctuate so they aren't always exactly what had been expected. We permitted amortization of these gains and losses, too. We failed to consider what might happen if business failure should occur before amortization was complete.
- When it came to asset value fluctuation, we permitted even more dampening.
- We permitted amortization (although not nearly so gradually as before) of the deficits that exist when benefit enhancements outpaced asset buildups.

- We permitted still more dampening when benchmark interest rates changed. We went further and told actuaries they didn't have to use even the dampened rates as long as they used rates that were within broad specified tolerances of the dampened targets.

In short, whenever it becomes obvious that some aspect of the world around us has changed, we've been telling sponsors they needn't recognize the change all at once.

1.3 Mistake 3: Poorly Conceived Interest Rate Rules

Finally, we went haywire in specifying the interest rates to be used for different purposes. Today, depending on the rule being satisfied, the statutory rate might be the actuary's best estimate of future investment return. Or, it might be 120 percent of a 30-year Treasury bond rate, or 110 percent of that rate, or 105 percent of that rate or 90 percent of that rate. There were no differences in the nature of liabilities being valued that might justify these different percentages. For other purposes, it might be 175 percent of the federal mid-term rate. For still others, it might be 150 percent of that rate. Finally, wonder of wonders, for some purposes, it's simply 5 percent.

2. Why We Have Statutory Requirements

Obviously, the first step in designing any new set of requirements is to identify the reason or reasons for having requirements at all. Just about everyone agrees that one reason is to protect workers from losing the pensions they've earned if their company should fail.

There's an excellent case for the proposition that protecting these earned benefits is the *only* reason for statutory rules. Many employers will continue to want to see stable contributions and avoid surprises, just as they did before ERISA. Employers belonging to this group won't need mandatory rules focused on this stability. These employers will voluntarily follow procedures that produce it.

What about other employers? What if an employer will not voluntarily adopt procedures that smooth contributions and avoid surprises? Does society have any business forcing this employer to adopt such procedures? We already have a rule that in general an ongoing employer can't abandon a plan unless all accrued rights are fully funded. If we have funding rules that protect employees of companies that fail, should we be seeking anything more?

Arguably, one reason for seeking something more would be to encourage sponsors to maintain their plans even when the going gets tough. If society followed this argument, it would be saying it's not enough to ensure participants that their earned rights are protected. We'd be saying we must protect participants against the likelihood that voluntary plan termination would occur, causing a loss of *future* accruals. This would be a strange approach for a society in which the adoption of a private plan is a voluntary act in the first place.

3. A Basic Funding Rule

Suppose we accept the proposition that the only legitimate purpose for statutory funding rules is to protect employees of businesses that fail, and that maintaining stable contribution levels is something employers may want to do voluntarily but should not be required to do. Given these two premises, the indicated basic funding rule becomes the ultimate in simplicity:

Adjusted assets must always be at least as
great as accrued benefits.

All that's necessary is to specify the rules for determining adjusted assets and the rules for determining accrued benefits.

3.1 Adjusted Assets

First, consider adjusted assets. The challenge is to obtain protection from the possibility that even if assets are sufficient to cover liabilities today, they might become insufficient tomorrow.

With bonds and similar debt securities, there are two principal risks.

- First, the issuer may go broke, leaving bondholders with an empty bag.
- Second, prevailing interest rates may change.

If interest rates go up, market values of existing bonds will go down. If rates go down, market values of existing bonds will increase, but issuers may call their bonds, forcing bondholders to reinvest at a lower rate. Even if the investor has good call protection, interest received on the bond will have to be reinvested at lower rates.

By restricting purchases to high quality investment-grade bonds, the pension fund manager can minimize the risk of default. The manager can also obtain protection from the interest rate risk. Suppose a fund's only obligation is a lump-sum benefit to be paid in 12 years. The manager who covers this liability with a noncallable zero-coupon bond due to mature in 12 years can be indifferent to interest rate changes. Achievement of this "duration matching" doesn't require that every benefit disbursement be matched with every income receipt. The key is to construct a portfolio of bonds whose market value can be expected to change to the same extent as the present value of pension obligations, given any particular change in interest rates.

All of this means that a duration-matched portfolio of investment-grade bonds will minimize both the default risk and the interest rate risk. A portfolio of this type will come close to providing complete assurance that accrued benefits will be covered if the market value of assets equals the present value of accrued benefits. The residual risks posed by defaults and interest rate changes seem inconsequential.

A portfolio of investment-grade bonds that's not duration-matched will minimize the default risk but not the interest rate risk. The investment manager may have good reason to eschew duration matching. If interest rates seem very low, the manager may want to avoid locking in these low rates. The manager may prefer to invest in bonds of very short duration. If interest rates seem very high, the manager may want to take the opposite approach. The manager may want to lock in these apparently high rates by investing in long-term bonds. Finally, the manager may simply feel that the then current yield curve favors a particular bond duration.

It would be possible to determine different adjustments for differing degrees to which assets and liabilities are mismatched. However, a refinement of this nature would be difficult to apply and difficult to police. It might be better simply to establish a single rule for investment-grade assets that are not matched to liabilities. It might make sense, for example, to have a rule that the adjusted value of nonmatched investment-grade assets will equal 90 percent of market value.

With rules for investment-grade bonds and similar debt obligations clearly established, there remains a wide variety of other investments still to be treated. This third group includes all forms of equity ownership. It also includes noninvestment-grade debt obligations. In this third category, equity ownership probably offers the greatest challenge. Here, the risk goes far beyond the risk that

the issuer will become bankrupt. It includes the risk of a temporary or permanent downturn in the issuer's business operations. That downturn might be unique to the issuer or it might be epidemic in the issuer's industry. Or, it might reflect general economic conditions. Worse yet, there's the risk of unpredictable and sometimes apparently irrational changes in investor attitudes. About the only thing that can be said definitively about this third category is that short-term fluctuations can (and probably will) be profound. In this third category, it might be reasonable to establish that adjusted assets will equal, say, 60 percent of their market value.

To summarize, adjusted assets might fall into one of three categories. Defining investment grade debt as Moody's AA, the categories might be described as in Table 1.

Table 1

Category	Ratio of Adjusted Value to Market Value
Duration-Matched Investment-Grade Debt	100%
Other Investment-Grade Debt	90
All Other Assets	60

These percentages do not, in any way, reflect an attempt to smooth changes in asset values. They simply reflect an acknowledgement that asset values do fluctuate. If an employer should fail shortly after its pension plan has been subjected to an annual test of funding adequacy, the relationship between assets (at market) and liabilities may have deteriorated.

This approach of discounting the value of certain types of plan asset has been the subject of some considerable criticism. The critics point out that market values are determined in the marketplace, and it's inappropriate to second-guess this determination. But, the exercise is not to find appropriate "true" values. Instead, the exercise is to establish a method for ascertaining, with a reasonable degree of assurance, that fluctuations in market value will not cause values to fall below a level sufficient to provide expected benefits.

It seems worth pointing out that the same result could be obtained without mandating the discounting of assets. Instead, a margin or buffer zone could be required. This margin would be the amount by which the market value of assets must exceed the value of accrued benefits. The degree of excess could be related to the nature of the plan's investments. To the extent investments are in duration-matched investment grade debt securities, a buffer zone might be deemed unnecessary. To the extent assets are in other investment-grade debt, assets could be required to exceed accrued benefit values by 11 percent. For all other assets, the required margin could be 66⅔ percent. The result of these surplus requirements would be identical to the result of discounting assets.

This whole notion is not exactly a novelty. During the 1980's, there was a certain amount of activity in participating group annuity contracts with customer-selected investments. Investment results, determined explicitly by performance of the customer's selected portfolio, were credited to the customer's account. Pensioner reserves were calculated using standard insurance company procedures. However, it was a requirement that assets must exceed reserves by specified percentages. These specified percentages were determined in a manner analogous to the asset discount procedures being suggested here.

3.2 Accrued Benefits Defined

Establishing an accrued benefit definition to be used in the funding rule seems reasonably straightforward. Congress and the regulators have established a definition of accrued benefits to be used in determining whether a plan has sufficient assets to qualify for plan termination on a nondistress basis.

From time to time, changes in this definition are proposed. For example, ongoing attention is being given to the question of protecting death and disability benefits not considered part of the accrued benefit.

However, it appears reasonable at this time to define accrued benefits as those benefits that must be covered by a sponsor wishing to terminate its plan on a nondistress basis.

3.3 Valuing Accrued Benefits

Valuing accrued benefits requires assumptions as to interest, mortality and expenses. Where options such as early retirement or alternative benefit forms are subsidized, it also requires assumptions as to the likelihood that these options will be exercised.

If accrued benefits are to be protected, the assumptions used to value them need to satisfy this rule:

Use of the assumptions must produce liability values at least equal to the premiums that would be required under a contract available from the commercial insurance industry to provide paid-up annuities covering all accrued benefits.

An annuity contract providing such benefits is often described as a “group closeout annuity contract.” There are a number of alternatives available to satisfy this assumptions rule.

3.4 PBGC Rates

The PBGC has developed procedures for determining and updating assumptions that satisfy the rule. These assumptions are used for a number of purposes. A primary purpose is to value liabilities of plans undergoing “distress termination.” A distress termination occurs when a plan has assets insufficient to cover accrued benefits and is being terminated because the sponsor is bankrupt or suffering extreme financial hardship.

The PBGC collects information each quarter from the insurance industry on the rates then in current use for group closeout annuities. Individual insurance companies have proprietary interests in maintaining the confidentiality of their current rate offerings. To protect these proprietary interests, information is furnished in a way that masks the identity of each individual company and its rate bases.

From time to time, observers have compared liabilities based on these PBGC assumptions with premiums actually charged to plans terminating on a sufficient basis. These comparisons lead to the conclusion that the PBGC’s procedures for keeping its rate basis current are extremely effective. On balance, the comparisons have shown remarkably little variance between liabilities based on PBGC rates and premiums under actual contracts.

So, one approach to statutory funding is to mandate that accrued benefit values be based on PBGC rates for distress terminations.

4. A Procedure Parallel to the PBGC Procedure

Many observers have expressed concern over a statutory requirement that minimum funding must always be based on PBGC rates. They point out that times change, and PBGC rates may not always be as closely related to commercial annuity rates as they are today.

An alternative procedure would be to establish machinery that parallels the PBGC machinery and independently maintains an up-to-date statutory rate basis. The organization or agency responsible for administering this machinery would need to be one that has the trust of the insurance industry. Members of the industry would be understandably concerned if there were any suspicion that confidentiality might be breached. The organization would also need the confidence of the regulators. Either the American Academy of Actuaries or the American Society of Pension Actuaries might be suitable.

5. A Statutory Interest Rule

Still another option would involve one treatment for the interest assumption and a different treatment for all other assumptions. The interest assumption generally attracts more concern than the others do. Plan sponsors are concerned that the rate (or rates) might be too low. Entities representing pensioner interests are concerned that the rate (or rates) might be too high. Both factions might be more comfortable with a rule that's automatic and eliminates discretion.

A rule that produces automatic results might involve reference to a well-publicized index. The index might reflect swap rates. It might reflect bond rates used by an established mortgage agency such as Fannie Mae. Or, it might reflect rates maintained by a nationally recognized commercial rating agency such as Moody or Standard & Poor.

The relevant rate would not necessarily be 100 percent of the index. It could be a fixed percentage of an index if the consensus is that the index will vary in sync with the interest rates underlying insurance company premium rates. The index itself might consistently be higher or lower than the insurance company rate basis. The relevant rate could be defined as a yield curve, matching shorter bond durations to liabilities with shorter duration, and longer with longer.

It doesn't appear feasible to establish a comparable automatic procedure for the other assumptions. Attempts to establish automatic procedures respecting mortality assumptions have not produced satisfactory results. For example, one statutory mortality base is keyed to the rates mandated for the valuation of annuity reserves whenever a new table is mandated by a majority of the 50 states. The problem is the time lag. The new table must be mandated by 26 states and the federal regulators must acknowledge the mandate. While the world waits, the old table remains in continued use long after it has become dangerously obsolete.

One solution would involve an automatic procedure for the interest assumption, and a joint public/private committee empowered to update the other assumptions. The joint committee might consist of representatives from the private sector pension actuarial community together with representatives from Treasury, the Department of Labor, the IRS and the PBGC.

6. A Mistake to Avoid

At present, serious discussions are underway regarding an automatic procedure for the interest assumption. At the same time, some participants in the discussions are apparently assuming that updating the mortality assumption is not a priority item. We could, indeed, get along for some time with an obsolete mortality table.

However, to do so safely we'd need an offsetting adjustment to the interest rate. The interest rate would need to be reduced to offset the inadequacy of the mortality table. This need appears to have gone unrecognized. Indeed, the PBGC has been chastised for its use of unrealistically low interest rates. The low interest rates are entirely appropriate when viewed as devices to offset the obsolete mortality table currently mandated.

7. Meeting Sponsor Needs for Smoothness

The statutory funding rules outlined here require just enough funding to ensure that benefits already earned will not be lost. They leave no room for smoothing. Amortization periods and the use of averages are not part of the proposals. If these proposals were adopted, the sponsor who consistently contributes just enough to satisfy statutory requirements would be in for a rough ride. The typical sponsor would find this unacceptable.

Suppose an employer's objective is a pension cost factor that's a stable percentage of payroll or a stable amount per employee. In almost every situation, assurance that this stability will occur would require funding levels exceeding the statutory minimum level. Therein lies the secret. The sponsor seeking smoothing will elect to fund at a level greater than the statutory minimum. This sponsor can then be relatively indifferent to any lack of smoothing in the statutory minimum levels.

8. Statutory Rules to Accommodate Heavier Funding

The tax code and ERISA currently offer two roadblocks to this higher level of funding. First is the limit on deductible contributions—and its complement, the excise tax on nondeductible contributions. Great strides have been taken, in recent years, to make this a less serious roadblock, but more needs to be done. We need to redouble our efforts to persuade legislative planners that substantially liberalized deduction limits for contributions to defined benefit plans do not constitute tax giveaways. We need to focus these legislative planners on the concept that with defined benefit plans the long term deductible cost is dictated by the plan's provisions. Amounts contributed and deducted today will not be contributed and deducted again tomorrow.

The second roadblock is more difficult, and its elimination will face greater opposition. Consider the funding standards proposed here. There will be a willingness to voluntarily go beyond the levels dictated by these standards if sponsors can be given two new privileges:

- First is the right to make trust fund withdrawals at will. This withdrawal right should apply to any amount by which assets exceed the new minimum funding levels. As will be discussed shortly, a withdrawal tax is appropriate, but it should not be punitive.
- Second is the right, upon plan termination and after all obligations have been satisfied, to withdraw any remaining assets. This, too, should involve a withdrawal tax, but not a punitive one.

Consider withdrawals before plan termination. Current law forbids this—and with good reason. Under current funding standards, following the rules does not provide an absolute guarantee of termination solvency. If experience losses occur, current rules allow time to restore the balance. The proposed standards don't provide absolute guarantees—but they come much closer. And, when experience losses do occur, the balance must be restored at once. Fairness

dictates that if shortfalls must be corrected at once, sponsors should be allowed to correct overages to the extent they see fit.

Consider reversions upon plan termination. In a cynically conceived series of political decisions, we have allowed ourselves to become confused over the status of excess plan assets. The sponsor's job is to provide benefits as promised. There's no room for the notion that assets beyond those amounts needed to perform this job belong anywhere but back in the hands of the sponsor. Our decision to impose punitive excise taxes on reversions has played an important role in weakening the funded status of many plans. Under current rules, no rational sponsor will intentionally permit assets to exceed termination solvency levels for any extended period. The excise tax that would occur in event of an unexpected need for plan termination would be too painful. The existence of this tax has led to corporate combinations that would have been deemed ill advised if not for the fact that they involved locked-up pension assets.

This is not to say that asset withdrawal taxes have no role. Reference was made earlier to their legitimacy. But, their sole purpose should be to reverse the tax advantages that accrued while the withdrawn assets resided in the tax-exempt trust. Such taxes should apply whether the withdrawal is from an ongoing plan or a terminating one.

With these changes—higher deductible limits and access to excess trust assets—sponsors are likely to look favorably on the additional funding necessary to permit a smoothing of contributions. They'll also find the asset adjustment aspect of the proposed minimum funding rules more palatable, knowing that upon plan termination assets will be applied to provide benefits, 100 cents on the dollar, and the sponsor will recover any surplus.

The sponsor who seeks contribution smoothing without exceeding minimum funding standards does have another option. Much of the volatility that would be brought about by eliminating smoothed standards could be regained through investment policy. By emphasizing investment-grade debt obligations, duration-matched to plan liabilities, contribution volatility related to asset fluctuation could be virtually eliminated.

The important thing is that the sponsor, working with the plan actuary, will be able to focus on long term cost trends and accomplish contribution smoothing to whatever extent the sponsor deems desirable.

9. Accounting Concepts to Accommodate Heavier Funding

Changes in the statute would be significant in encouraging heavier pension funding. Another significant factor would be changes in how financial analysts view a sponsor's pension funding. Consider the possibility that financial analysts might fully accept two concepts:

- For accounting purposes, pension assets should be viewed as assets of the employer.
- For these same purposes, investment results on these assets should, indeed, be reflected at once, without smoothing. But, they should not be viewed as affecting results from operations. Rather, they should be viewed as items appearing "below the line."

Acceptance of these concepts, coupled with the statutory changes already discussed, would go far in eliminating disincentives for heavier funding. The advantage of heavier funding in terms of smoothing cash flow demands would then emerge as a powerful incentive without significant offsetting disincentives.

10. New Plans—and Liberalizing Amendments

Sponsors of existing plans can achieve smoothed contributions by maintaining funding levels that exceed the statutory minimum. However, there remains the problem of a feasible approach to new plans.

Consider the sponsor who establishes a new plan providing significant benefits for past service. Immediate compliance with the statutory funding rules outlined here would require an initial contribution that most sponsors would find totally unacceptable. Sponsors seeking to increase benefits under existing plans would face the same problem.

10.1 Providing a Temporary Unfunded Benefit

A solution to this problem would involve initial establishment of a temporary unfunded plan. These rules might apply:

- The plan would not be permitted to remain in effect for more than, say, five years.
- Throughout the lifetime of this unfunded plan, employee notices would be required each year. These notices would state that:

1. The plan is unfunded.
 2. There are no PBGC guarantees
 3. The sponsor may terminate the plan and revoke all unpaid benefits at any time.
- Throughout the lifetime of the unfunded plan, the sponsor would be permitted to contribute to a tax-exempt trust designed to fund benefits upon termination of the unfunded plan. Deduction limitations respecting such contributions would be based on the benefit structure of the unfunded plan.
 - At the end of the five-year period, or anytime sooner at the sponsor's option, the sponsor would need to discontinue the unfunded plan and either abandon it completely or provide its benefits through the funded trust.

This temporary unfunded approach would be available to new plans. It would also be available for any benefit provided as an addition to an existing plan.

10.2 Advantages of the Temporary Unfunded Approach

Of all the proposals set forth here, the temporary unfunded plan will almost certainly be the most controversial. The notion of a plan covering a broad spectrum of employees with no requirement that there be assets backing up benefits will, indeed, require some thought.

However, consider the advantages:

- Broken promises will be almost completely removed from the picture. During the temporary existence of the unfunded plan, there will be no promises to break. Once the funded plan replaces the temporary one, funding standards will virtually guarantee payment of all accrued benefits.
- Employees will fully understand their status. During the lifetime of the temporary plan, annual notices will communicate a very simple message: there are no promises. Unpaid benefits are subject to complete and retroactive revocation. Once the temporary plan is replaced by the permanent one, employees will have, with almost no

possibility of exception, the same assurance that participants in funded plans always think they have: full guarantees that benefits will not be lost due to employer failure.

- It will become possible to set PBGC premiums at extremely low levels. There will be very few circumstances where plan assets will be insufficient to pay promised benefits.

10.3 Shutdown Benefits

The unfunded arrangement could also serve as a roadmap for solving a problem that has plagued planners for many years: shutdown benefits. These are benefits that will never become payable—*provided* the sponsor never closes its doors. The proviso establishes the problem. With most plans, the likelihood that the sponsor will close its doors in the near future is remote. It's less remote if, for example, the sponsor has multiple locations or plants. In these cases, a sponsor may decide to close some of its doors but not all of them. It's the multiple-plant scenario that's troublesome.

Given the remote likelihood that even some of the doors will really close, the plan actuary will, quite properly, assign a realistically low probability to the likelihood that shutdown benefits will ever be paid. Multiply the value of the benefits payable if shutdown should occur by the probability that it will occur, and the result is a very low estimated liability. This means that funding against this liability is likely to be totally inadequate if even some of the doors should really close.

Suppose the shutdown benefit is part of a plan providing routine retirement benefits—benefits not contingent on shutdown. Actual shutdown can precipitate payment of shutdown benefits that far exceed the reserve the actuary had established. The result can severely compromise the security of benefit expectations of employees not affected by the shutdown.

Assuming no insurance company will underwrite the risk of voluntary shutdown at anything close to a reasonable premium, there's only one way to solve the problem. That's to establish the shutdown benefit as a completely separate plan and specify that assets of the plan providing routine retirement benefits cannot be used to meet shutdown obligations. Sponsors will be unwilling make advanced funding contributions to a plan providing only benefits that are considered unlikely to be paid. Hence, the unfunded plan

established on a *temporary* basis for nonshutdown benefits will be a natural *permanent* vehicle for shutdown benefits.

11. Alternatives to Stronger Funding Proposals

Clearly, the rules suggested so far are not the only answer. They don't eliminate dependence on the PBGC, but they greatly reduce it. An alternative would be to move in the opposite direction. We could increase our dependence on the PBGC by eliminating all statutory funding rules. We'd define, in much more detail, the risk related premium structure necessary to permit the PBGC to make up the shortfall whenever an insufficient plan should terminate.

The *amount* of exposure would be evaluated using tools similar to the tools we currently use to calculate variable premiums. Premium *rates* applied to this exposure would be determined much more precisely than variable premium rates are now determined. These new rates would be set at levels adequate to cover the risk. In general, these rates would be somewhat higher than the one currently in use. Even more importantly, sponsoring employers would be underwritten individually. Each sponsor would be assigned to a rating class on a basis that reflects the likelihood that the particular sponsor will become incapable of fulfilling its pension promises.

Some observers will argue that a workable approach of this type is not possible. But, it seems worth pointing out that this type of rating is already taking place in the private sector where, for example, insurers routinely write performance bonds. Other observers will react unfavorably to the notion that a governmental agency should enter the business of evaluating the creditworthiness of a private business. The answer, here, may lie in transferring the role of the PBGC to the private sector.

12. Conclusion

The changes suggested here represent major departures from current rules. Existing players—sponsors, rule-makers and expert advisors—are likely to have difficulty, initially, with the notion that changes this extreme are sensible.

In evaluating these proposals, two questions seem essential:

- First, we must ask ourselves again why it makes sense to have any externally imposed funding rules. It is suggested here that the reason,

the only reason, is to protect workers at all times from losing the pensions they've earned.

- The second question is just as important, but less obvious. Suppose we didn't currently have statutory minimum funding requirements. Suppose we were writing rules where none existed. Knowing what we now know, what set of rules would we write?

There's clearly a case for avoiding radical shifts. Gradual change often works better than precipitous shifts. But even with gradual change, it's important to establish a focus on where we'd eventually like to be. With this focus, it becomes possible to make incremental changes without losing direction.

This long-term target might run along the lines proposed here, in a way that minimizes the need for a PBGC. It might run along alternative lines, also discussed here, in a way that would increase the role of the PBGC. This alternative approach would eliminate funding requirements and substitute a more highly developed plan termination insurance structure. Or, the target might be something that falls between these two approaches.

The casual observer might say the in-between approach is what we have now. This conclusion would be wrong. Even with the in-between approach, we need to reevaluate our methods of determining adjusted assets, our methods of determining liabilities, our approach to smoothing and our methods of determining PBGC premium rates.

In any event, the important thing is to define the long-term goal. With the goal defined, the steps to achieve it can be developed in a rational manner. We can thus develop the most efficient approach to securing the pension expectations of our nation's workers—with the smallest possible intrusion into the funding practices of our nation's pension plan sponsors.