

# Why Bother With Going-Concern Pension Plan Valuations?

**T**HE JULY/AUGUST 2006 *Contingencies* contained an entertaining and provocative article by Charlene Moriarty, “The Actuary’s New Clothes.” Focusing on corporate defined benefit plans, this article addresses her comment that financial economists “offer little guidance on going-concern valuations.”

By *going-concern valuations*, we mean determinations of contributions based on the assumed long-term existence of plans. Such valuations use assumptions about the future service and salaries of plan members and the long-term return of the assets held by the plan. They differ from *solvency valuations*, which show how pension plans would stand if they were terminated immediately.



This article presents the second half of the case: *Pension surplus is also undesirable as a misallocation of corporate resources and societal tax subsidies.*

## Why Prefund Unearned Benefits?

Suppose a corporation decides to set aside funds in an irrevocable trust to pay the future salaries of its employees. What would shareholders think of this decision?

Not very much. While recognizing the general need for a prudent cash reserve, shareholders would see this prefunding as hoarding rather than prudence, destroying rather than supporting shareholder value. They would feel that future salaries should be paid from the revenues generated by the recipients of those salaries. Any surplus not needed for corporate projects should be returned to shareholders, not reserved to pay future salaries.

The company violates the same principles of financial efficiency when it funds pension benefits that will be earned only by the employees’ future service. Even the benefits that represent a “roll-up” of accrued benefits due to salary increases in a final-pay plan are attributable to future compensation decisions by the company. Those future decisions must reflect the accompanying cost of increased pensions and other employee benefits. The increased total compensation should be justified by, and paid from, increased revenue. The company should not prefund these future pension increments, any more than it should prefund the pay increases that produce them.

Why, then, do companies routinely aim to fund beyond accrued pension benefits (apart from legal requirements that may order it)?

## Gimme Shelter

One possible reason is the favorable tax treatment granted to such prefunding: a current tax deduction, and a tax shelter for the investment earnings. But if the tax treatment is the sole reason for prefunding pension plans, the question shifts back to society’s interest. Why should a tax code sub-

## Neither a Borrower Nor a Lender Be

Pension funding is tightly regulated in North America and elsewhere. Still, we may usefully ask, apart from the rules, how should pension plans be funded? The principles of financial economics suggest that going-concern valuations are unnecessary. In an earlier article in *Contingencies*, Jeremy Gold proposed that funding rules should ignore going-concern valuations and focus solely on solvency valuations; the rules should simply specify minimum and maximum funding percentages relative to accrued benefits. He left the percentages blank, to be filled in by the political process. I concur with his general approach. Political realities aside, however, I suggest that economic logic would set both minimum and maximum funding percentages at 100 percent. That is, *plans should always be funded to the level of accrued benefits, and no further.*

I presented the first half of this case in an article titled “Pension Deficits: An Unnecessary Evil.” That article argues that pension plans should be fully funded at all times and immunized with regard to accrued benefits. This condition would align pension plans with other financial intermediaries, such as banks, insurance companies, and securities dealers. It’s the only practical way to protect the Pension Benefit Guaranty Corp., healthy plan sponsors, and perhaps taxpayers from the poorly funded plans of weak or irresponsible plan sponsors.

LAWRENCE N. BADER is an actuary living in Cary, N.C.

sidize such prefunding, if there is no reason for it other than the subsidy?

Perhaps society should encourage prefunding to provide a cushion against adverse fluctuations in assets or liabilities. Corporate plan sponsors who meet the standard I suggest—immunization of all accrued benefits—have a minimal need for a protective surplus, a few percent at most. Companies investing in risky assets need a greater surplus to be fully protected.

It's not clear, though, how companies can benefit their shareholders by setting aside additional capital to support their ability to take risks in the capital markets (which shareholders can do on their own). Nor is it clear why tax law should subsidize such activity. Further, if a safety margin is desirable, the actuary can calculate it directly based on the risk. Only by the oddest of coincidences would a going-con-

cern valuation of future pension accruals provide an appropriate safety margin.

**A Better Way to Stabilize Contributions**

Another possible reason for prefunding is the company's desire for stable and predictable contributions. Prefunding allows the company to adjust the contribution level slowly when conditions call for a change. But if the company demands a predictable contribution stream, stabilizing the underlying economics is more sensible than misallocating its capital.

Instead of prefunding, the company can simply immunize its accrued pensions. The ongoing cost of the plan will then be the year-by-year value of future pension accruals (known as *service cost*), which can be readily forecast. Significant departures from this forecast would result only from

plan changes, unanticipated changes in total payroll or individual pay increases, and changes in market interest rates. The company can hedge market interest rate changes, and the other factors are under its direct control. Even left unhedged, the annual fluctuations in the service cost would seldom reach 20 percent. Though it sounds large, a 20 percent swing in service cost would most likely be only 1 percent to 2 percent of payroll.

The remaining problem with a contribution stream that tracks accrued pensions without prefunding is that it may rise steeply for individual employees. But this cost pattern simply reflects the true value of pension accruals to employees as they age. The escalating cost curve enables a company to pay younger employees a bit more generously, but suggests more stringency in granting raises for older employees.

**Conclusion**

I've argued previously against pension deficits; it's prudent for corporate pension plan sponsors to provide, and for society to demand, full security for accrued benefits at all times. But pension surpluses are also a mistake; it's profligate for sponsors to prefund benefits not yet earned, and for society to subsidize such prefunding. Of course, current North American regulatory structures don't require, or in some cases even permit, plan sponsors simply to keep their funding at the level of accrued benefits. But an enlightened future regulatory system would aid plan sponsors and society by making both plan deficits and surpluses relics of the past. ●

**References**

Bader, Lawrence N., "Pension Deficits: An Unnecessary Evil," *Financial Analysts Journal*, May/June 2004. Reprinted in *The Pension Forum*, Vol. 16, No. 2, April 2005 <http://library.soa.org/library-pdf/PFN0504.pdf>.  
 Gold, Jeremy, "Stopping the Insanity in Pension Funding," *Contingencies*. Sept.–Oct. 2003, 15(5):34-37.

**Do you see a forest? Or trees?**

We're expanding our team of actuaries who see both.

CCA Strategies is a fast-growing, mid-sized firm that's genuinely different from any other organization you may consider.

The people we seek understand the importance of both big-picture vision and crucial details.

We have a number of openings for actuaries, both entry level and experienced, in all of our offices.

If you're looking for the place to do your best work, we invite you to contact us.

**cca-strategies**  
Where numbers become ideas

Atlanta • Boston • Chicago • Dallas • Denver • Jacksonville • Los Angeles • New York • San Francisco • St. Louis  
 CCAstrategies.com