istock

Public Pensions: Don't Look Now, But ...

BY ED BARTHOLOMEW

ED BARTHOLOMEW, an independent pension consultant, is the former chief financial officer of the Inter-American Development Bank (http://www.iadb.org/en/about-us/about-the-inter-american-development-bank,5995.html).

Published November 1, 2016.

You've probably heard that the retirement plans for school teachers, police, firefighters and other state and local government employees are neck deep in red ink. And you've heard right: they have promised to pay trillions of dollars over the next several decades for work already done and have not put aside nearly enough to ensure they will be able to honor those promises.

What you may not have heard is that the public pension sector's gloomy prospects have turned much gloomier in the past few years. Using figures reported by the plans themselves, which discount liabilities at 7-8 percent based on portfolio asset returns they hope to see, pension systems were underfunded by $1.2 trillion in 2014. So by their own accounting, plan assets would only cover 75 percent of the money already owed, even if they earn a remarkable 7-8 percent annual return over many decades.

Oh wait; it's much worse. **According to a study published earlier this year by Joshua Rauh (https://www.scribd.com/document/307464825/Hidden-Debt-Hidden-Deficits-How-Pension-Promises-Are-Consuming-State-and-Local-Budgets-by-Joshua-D-Rauh)**, a finance professor at Stanford, unfunded liabilities for state and local pension plans totaled $3.4 trillion in 2014, having only $3.6 trillion in assets set aside to cover liabilities of $7.0 trillion. But that's not the half of it: if updated for two years of poor returns and lower interest rates, **Rauh thinks unfunded liabilities would now be $5-6 trillion (https://www.ft.com/content/456172b4-6b11-11e6-ae5b-a7cc5dd5a28c)**. By this reckoning, the average plan is about 40 percent funded — not 75 percent.

One big difference between Rauh's estimates and those of the pension plans' own actuaries is that Rauh values unfunded liabilities by discounting at U.S. Treasury rates, on the theory that pensions are — or are at least intended to be — default-proof. Now the actuaries are inclined to put garlic around their necks when they see Rauh coming. But you won't find any serious economist who pays attention to the pension fund issue who doesn't agree with Rauh's basic analysis.

At the risk of digression, back to some basics. With "defined benefit" pensions — the sort that a few big companies and most public employers still offer — employees earn monthly payments in retirement that are tied to both their years of service and their salaries. For example, an employee who worked for 40 years under a plan with a 2 percent accrual rate might be entitled to an annuity equal to 80 percent of his or her final salary.

This is a wonderful benefit, but an increasingly expensive one that forces employers to bear risk on more than one dimension. A pension annuity is like a bond that makes regular payments starting at retirement. And like a bond, the amount that must be set aside on Day One to cover the payments will rise when interest rates fall. By the same token, if life expectancy continues to increase, the number of years the annuity is expected to make payments goes up, further increasing the cost to employers.

This, anyway, is how financial economists think about the cost of pensions. But actuaries and accountants live in their own world and value a pension liability by discounting at the rate the plan "expects" to earn on assets set aside to fund the plan.

The higher this discount rate, the lower the liability (as they measure it). And since a riskier portfolio of investments may be expected to earn a higher return than a less risky one, this approach creates a perverse incentive. Plans can reduce current funding requirements — making it seem cheaper — by taking on more risk. Not surprisingly, given a choice between taking more risk in investments and pouring more cash into pension funds today, most politicians choose risk.

Not surprisingly, given a choice between taking more risk in investments and pouring more cash into pension funds today, most politicians choose risk.

Of course, the returns expected today may not be realized tomorrow. Indeed, the reason returns on risky assets are expected to be higher is to compensate investors for the real possibility that they may prove to be lower — perhaps even negative. That's what risk means, and that's why counting uncertain income associated with bearing more risk as earned before any risk has been weathered is a fundamentally flawed strategy. But that is exactly what public pension actuaries and accountants are doing when they discount promised annuity payments at a rate (like 7 or 8 percent) that includes a risk premium.

Public pension actuaries have a lot at stake in this high-stakes disagreement, and they mean to prevail. In August, **the American Academy of Actuaries and the Society of Actuaries issued a letter (http://actuary.org/files/imce/PFTF-Academy-SOA-Joint-Communication-Aug2016.pdf)** disbanding its Pension Finance Task Force (PFTF), a group created in 2002 with a mandate to study the application of financial economics to pension analysis. At the center of the decision to disband the PFTF was a disputed paper, "**Financial Economics Principles Applied to Public Pension Plans (http://www.pensionfinance.org/papers/PubPrin.pdf)**," written by four PFTF members, including me.

The decision to disband the PFTF and the controversy over the disputed paper was covered in the press, including in **the *Economist* (http://www.economist.com/news/finance-and-economics/21704796-report-american-pension-funds-controversially-shelved-no-love-actuary)** and ***The New York Times* (http://www.nytimes.com/2016/09/18/business/dealbook/a-sour-surprise-for-public-pensions-two-sets-of-books.html?_r=0)**, and it was the subject of a strongly worded **editorial in the publication *Pensions & Investments* (http://www.pionline.com/article/20160905/PRINT/309059999/actuarial-overbearing)**. The white paper took the view that all pension liabilities, including those sponsored by state and local governments, should be valued based on risk to the pension promises themselves. For plans that have made firm promises to beneficiaries, liabilities should be at default-immune U.S. Treasury rates. For pensions offered by plans that are not secure (seriously underfunded with a financially weak funder unlikely to write a check to cover the difference), liabilities should be valued like lower rated bonds, with an explicit reduction reported for the risk of less than full payment. The paper also noted that such insecure pensions are a flawed product, since pensioners are dependent on this income being secure.

All this seems pretty straightforward, at least to academic economists, who have been saying essentially the same thing for over 20 years. And one would think that actuaries, whose profession is about quantifying risk, would welcome a rigorous approach to pension valuation based on the same principles used (without controversy) to value virtually all other financial instruments.

But the paper's conclusion is anathema among actuaries because the consulting firms hired by public pension plans have embraced a very different methodology — one that says pension costs are much lower, and funded status much stronger, than what financial economists would conclude. Plan administrators and trustees, unions representing employees and local governments funding the plans have all been happy with that answer because it lets them offer more pension for less contribution, or so they want to believe. Indeed, **public plan administrators have also sought to suppress discussion of financial economics (http://www.ncpers.org/files/Schedule%20A_2015-07.pdf)** and have made a virtue of boycotting pension consultants who would flirt with the Dark Side.

But how do public pension actuaries climb down from a position they have defended from the very start of pension regulation and disclosure requirements? How, indeed. Actuaries might open themselves to lawsuits for giving bad advice, particularly those who advised plans that are now failing. Government officials, for their part, would have to acknowledge that the financial hole that must be filled is much deeper than they have been claiming. And they would have only politically unpalatable solutions to offer: tax increases, government program cuts and perhaps even default on their bonds or pension promises.

One thing is clear, at least to me. Using actuarial sleight of hand to deny hard realities is a recipe for disaster. In the end, it's no better than trying to recoup gambling losses by doubling down on the next bet.

MAIN TOPIC: Finance (articles/topic/finance)

RELATED TOPICS: Labor (articles/topic/labor), Regulation (articles/topic/regulation)