

Comments on Exposure Draft of Accounting and Financial Reporting for Pensions
(Proposed Amendments to GASB Statements 25 and 27)

by Jeffrey R. Brown, Ph.D.

Thank you for the opportunity to provide comments on the proposed GASB guidance on accounting for public pension plans. Public defined benefit (DB) pensions are extremely important as a vehicle for the retirement security of participants, as a large part of many state budgets, and, collectively, as major players in global financial markets. As such, clear and transparent accounting rules are important for ensuring good governance and good financial decision-making.

Qualifications of the author:

I serve as the William G. Karnes Professor of Finance and the Director of the Center for Business and Public Policy at the University of Illinois' College of Business, and as Associate Director of the National Bureau of Economic Research (NBER) Retirement Research Center. I have previously served as a member of the Social Security Advisory Board and as a Senior Economist with the President's Council of Economic Advisers, and thus I have both academic and policy experience with issues related to retirement policy. The views expressed herein, however, are mine alone and do not reflect those of the institutions with which I am, or have been in the past, affiliated.

The choice of discount rate:

As members of the GASB Board may already know, I have been critical of existing GASB guidelines for the computation of public pension liabilities. I have a paper in the May 2009 *American Economic Review* (co-authored with David Wilcox of the Federal Reserve Board) in which we explain the basic economic rationale for the appropriate choice of a discount rate. Economic and financial theory is very clear that the choice of a discount rate depends on the risk of the cash flows being discounted.

This is true regardless of whether those cash flows are positive or negative, and whether they are being generated by public institutions, private institutions, or individuals. There is absolutely no economic or financial basis for discounting one set of cash flows based on the risk of a completely different set of cash flows. In other words, there is no logic whatsoever for discounting pension *liabilities* based on the risk of the pension plan *assets*.

A simple analogy illustrates this point. Suppose that at 9 a.m. on January 1, I borrow \$100,000 for one year from a bank at an interest rate of 5 percent. I immediately invest the full amount in a diversified portfolio of risky assets (such as stocks and bonds) that has an "expected return" of 8 percent. By the time I have completed this transaction at 9:05 a.m. on January 1, how much do I owe the bank? Naturally, I still owe them \$100,000 (ignoring the 5 minutes' worth of interest). At this point, I have not changed by net worth at all. All I have changed is my risk exposure.

Suppose, however, that I follow GASB-like accounting rules to calculate my net worth. Because the expected return on my portfolio is 8 percent, I can use this to discount the \$105,000 (principal plus 5 percent interest) that I will owe in one year (December 31). By this calculation, I would now only value the future liability as \$97,222.22 ($=\$105,000 / 1.08$), making it appear as if I have created \$2,777.78 of wealth out of thin air.

Of course, if I tried to tell my lender at 9:05 a.m. on January 1 – just 5 minutes after closing the loan - that they should allow me to give them \$97,222.22 and cancel my \$100,000 debt, they would look at me with great puzzlement! And for good reason – I owe them \$100,000 now, or \$105,000 in one year, regardless of what I do with the funds in the interim! The transaction just described is absurd from the financial perspective. But as illogical as it seems, this approach closely mirrors the approach that has been taken by GASB in the past and that is still embedded in the proposed new public pension accounting guidelines.

The fundamental problem is that *the use of “expected returns” as a discount rate is a largely a meaningless concept unless it is also accompanied by a discussion of, and accounting for, the accompanying risk.*

The most straightforward way to do this is to discount pension liabilities *based on the risk characteristics of the pension cash flows.* For example, for the accumulated pension obligation (ABO) for a public pension in a state with strong constitutional guarantees against the impairment of retirement benefits, it would be appropriate to use a rate close to the risk-free rate. In other cases – such as states where pension benefits can be easily changed by the legislature and where the likelihood of change is correlated with broader economic activity – a higher discount rate should be used. In either case, what must determine the discount rate is the risk profile of the liabilities and NOT the expected return on plan assets.¹

In the exposure draft for the new rules, GASB seeks to replace the “expected return on plan assets” discount rate with a “blended rate.” This blended rate is a combination of the expected return on plan assets for the funded portion of the liability and a muni-bond index for the unfunded portion. Unfortunately, there is no theoretically coherent rationale for the proposed approach. Indeed, though this approach could be viewed by some as a “compromise,” the result produces an even less coherent outcome than existing policy.

There are several fatal flaws to the proposed approach, including:

1. There is no clear question to which the proposed measure is the right answer. Indeed, it is difficult to think of any outcome of interest that is meaningfully described by the output of a cash flow discounting exercise that uses the blended rate as described in the proposed rules.

¹ There are two alternative approaches to using the risk-adjusted rate. The first is to discount using the expected return on assets but then to add the value of the “put option” implicitly being provided by the state and/or the taxpayer in the event that the pension funds generate returns below the expected return. If implemented properly, this will add up to the the same present value of liabilities as one would obtain using the risk-adjusted rate. Another approach, which is used by the Congressional Budget Office and the Social Security Administration in evaluating Social Security (in addition to, rather than as a replacement for, expected present value calculations using the risk-free rate to discount liabilities, uses stochastic (i.e., Monte Carlo) simulations to map out the full probability distribution of future funding outcomes. There is tremendous value to such an approach for use in conducting policy analysis. It is, however, less useful for accounting purposes, and I will therefore spend no more time on it here.

2. Funded status is not a sufficient measure of the risk of pension liabilities. To be sure, it may be one such factor – at least insofar as one believes that participants in underfunded pensions are more likely to experience future benefit reductions – but it is far from a sufficient statistic. Therefore, it is an insufficient basis on which to evaluate the risk of the liabilities.
3. Even if funded status were a sufficient measure of risk (which it is not), the proposed GASB rules have blended the discount rates in the wrong proportions. If funded benefits are less risky than unfunded benefits, then the funded benefits should be discounted at a lower rate, and the unfunded ones that should be discounted at a higher rate. The proposed GASB rules turn this logic on its head, and the result is inconsistent with accepted procedures for risk adjustment.
4. Even if one wished to calculate a blended rate to account for differential risk based on funding status, the “expected return on plan assets” is not the right rate to use for the “risky” portion of benefits -- unless the risk of the liabilities just so happens to correspond exactly to the risk of the asset portfolio, which is highly unlikely. For example, if liabilities are discounted using the expected return on a 60/40 equity/bond portfolio, this is equivalent to saying that the distribution of benefit payments to DB pension participants is just as risky as investing in a 60/40 portfolio. I suspect that few DB plan sponsors intend for their plans to be so risky, and fewer participants believe that their public pension is intended to be so uncertain.
5. The proposed rules provide an unattractive and dangerous incentive for plan sponsors to take on more investment risk than is optimal. If plan sponsors invest in a riskier portfolio, they will then be able to “justify” a higher expected return under GASB rules. Indeed when they are permitted to use a higher expected return, they can show a larger share of their liabilities as being “funded.” This, in turn, also reduces the fraction of their liabilities that will then be discounted using the muni-bond index. In short, public pensions may be tempted to invest in a riskier asset portfolio in an attempt to shrink the reported size of their unfunded liabilities.
6. There is a good conceptual argument for using state or municipality’s bond returns as a discount rate for a public entity’s pension liabilities, at least to the extent that pension obligations and bond obligations bear comparable credit risk. However, this rate should reflect the risk of that particular state or municipality, rather than some aggregate index. More generally, different states and municipalities should use different discount rates when the risks of their pension obligations differ.

Because of these and other flaws, I believe it would be a mistake to adopt GASB’s the new proposed discounting rules. Instead, GASB should adopt standards that based discount rates on the risk of the liabilities.

Liability definition

GASB’s definition of “inter-period equity” appears to be most closely aligned with the notion of fully funding a plan’s ABO. Roughly speaking, the annual change in the ABO reflects the pension’s portion of the economic cost of providing public services in that year. The ABO is a reasonably well-defined concept and is somewhat less subject to “gaming” than projected measures. In states like Illinois where the non-impairment clause of the state constitution makes changes to accrued pension benefits less

subject to the risk of benefit reductions, the ABO calculated using a riskless interest rate is an accurate measure of the state's liabilities.

It may be desirable to calculate additional liability measures – in addition to the ABO - that account for factors such as projected future salary growth, new employees, and future contributions. Such projections can be very useful when analyzing the pension obligations as part of a long-term fiscal analysis. However, such projections should *not* be the only such measure of pension obligations. My biggest concern with the proposed rules is that states will be able to “game” the system by stating that they “intend” to make future contributions, but then fail to follow through. Indeed, the state of Illinois has seen many decades of skipping or skimping on its intended pension contributions. Allowing states to take credit for intended contributions, even when there is no legal mechanism in place for ensuring that they follow through on those intentions, will provide a very misleading picture of the real funding situation.

Data

There are many users of the data on the financial status of public pension plans, ranging from participants in the market for municipal bonds to academic researchers to taxpayers and policymakers. In all cases, it is important to note that *any* measure of the present value of liabilities is simply a summary statistic that is meant to characterize a series of future cash outflows from the plan. Regardless of what liability definition or discount rate GASB ultimately recommends, **the single most important and helpful change that could be made is to have public pension plan sponsors report the annual expected cash flows from their pension plan along with the assumptions used to estimate these cash flows.**

With such data, all interested parties would be able to conduct virtually any financial analysis they deemed appropriate, e.g., they could compute whichever liability measure they wished using whichever discount rate they deemed most appropriate. It is worth noting that the Trustees of the U.S. Social Security system make all such data available each year in an annual Trustees' Report. Indeed, not only does Social Security report the projected annual cash flows for each of the next 75 years, they also report most of the underlying assumptions that go in to such projections. If public pension plans would simply do the same, the debate over the particular accounting standard used for baseline reporting would be far less important. I can think of no compelling reason that this data should not be made publicly available to all interested stakeholders: taxpayers, employees, retirees, investors, and others.

Final thoughts

In contrast to the famous observation that “if you put seven economists in a room, you will get eight opinions,” there is a truly remarkable *degree of agreement* in the profession, that the use of “expected returns” on assets to discount pension liabilities is incorrect and lacks any coherent basis in finance.

It is important to note that the high degree of consensus exists in spite of tremendous disagreement among those same economists about other issues related to public pension plans, such as the optimal mix of DB or DC, the right level of public pension benefits, or the best mix of tax increases and benefit changes to address the fiscal shortfalls faced by many state and local governments. The reason our profession is united on the discount rate issue, even while disagreeing on policy issues, is that the choice

of discount rate is a *methodological issue*. It is fundamentally an issue of measurement, and we have a remarkably clear theory on how to do this.

Many of the points made by defenders of the “expected return” approach are inconsistent with basic finance. For example, it is often asserted that because governments have infinite lives, they can be counted on to make good on all DB pension promises. To the extent that one believes that governments will always make good on their promises in the long-run – and therefore that pension benefits are relatively free from risk – then this is an argument *in favor of using a risk-free rate*, not expected returns on an asset portfolio. Others sometimes argue that appropriate discounting will make DB plans “look” more expensive, but this also mischaracterizes the issue. Appropriate discounting based on the risk of the liabilities is intended to provide a more accurate description of the true cost of providing public pensions. So the issue is not that the use of a riskless rate inflates the cost of DB plans; rather, it is that the use of expected returns artificially understates the true economic costs of these plans. Regardless of one’s views about the optimal structure of public retirement plans, one basic principle ought to be that plan sponsors at least account for their costs accurately.

At the end of the day, there really is no good rationale for either the existing or the proposed GASB policies that make use of expected returns on pension assets to discount pension liabilities. I would strongly urge GASB to completely reconsider its approach and work towards guidelines that promote more economically meaningful measures of public pension obligations. In the interim, I would strongly urge GASB to urge public plan sponsors to provide more comprehensive and transparent estimates of the entire time series of future cash flows into and out of the pension plans.

Thank you for your consideration of these comments.