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How Should Financial Economics Principles Be Applied (Or Not Applied) to Public Pension Plans?

By Thomas Lowman

There have been papers written about the application of financial economics to public pension plans. One such paper, titled "Financial Economics Principles Applied to Public Pension Plans," was a working draft that came from the joint American Academy of Actuaries/Society of Actuaries (SOA) Pension Finance Task Force.[1] Part of me wants to say that there is nothing new in these papers that has not been said before. However, if there are some new things, I would say they are the following:

1. These papers have clearly moved into the areas of funding and investing more than simply disclosure (these generally had been fringe thoughts before).

2. They tend to present one set of views for the actuarial profession to adopt as its sole policy (which, given the views proposed, is likely why no actuarial organization will adopt it as a sole policy even if the organization had that power).

Let me dispel two myths:

- The first myth is that the Actuarial Standards of Practice (ASOPs) do not allow actuaries to calculate public plan contribution needs based on bond rates. Section 3.6 of ASOP 27 says:

  > Each economic assumption selected by the actuary should be reasonable. For this purpose, an assumption is reasonable if it has the following characteristics: . . . d. It reflects the actuary's estimate of future experience, *the actuary's observation of the estimates inherent in market data*, or a combination thereof; . . .

  I italicized the authorizing words and note that section 3.6.1 goes on to talk about bond rate considerations. Few public plan clients ask the plan actuary to make use of this alternative because it is not common practice. I believe the authors wish to change the actuarial standards to only allow the use of market bond rates (such is not even the case now in the private sector). If employers wish to convert to bond rates, they can read my May 2009 paper published by the SOA, "The Debate Over Applying FE Principles to the Funding of Public Pension Plans: A Transition Proposal and Other Ideas." I found no takers to even transition to a bond-based calculation.

- The second myth is that actuaries are miscalculating liabilities. Actuaries know how to estimate solvency liabilities. It is somewhat unfortunate that the term actuarial liability for funding purposes is confused by some to imply that actuaries think this is an understated solvency calculation. However, actuaries are not confused and others choosing to misrepresent it as something else are using it as a debating ploy.

Now onto the substance of the two key recommendations in these papers. I'll start with the proposition that:

> [M]anaging a plan in an economically efficient manner without violating intergeneration equity requires keeping the plan fully funded on a solvency basis and as much as possible not taking investment risks.

To me, fully hedging the solvency liability and not taking investment risk in search of higher returns means (in overly simple terms) plans should sell all of their stocks and buy bonds. I am as unhappy with this statement as I am with the actuary who, when asked about investment mixes, supported 80 percent to 100 percent in equities. Nowhere in the ASOPs does it talk about how funds must be invested. Actuaries should not (cannot) be giving investment advice, and there is no way requiring a conservative investment mix should be in the ASOPs. Actuaries try to give risk advice, and it is a fine line when it comes to investing. Giving advice on asset allocations to a pension fund for a fee is generally the job of an SEC-registered investment adviser. The audience for selling the proposed insurance-company-like investing approach should generally be the board of trustees. I see no hope of the authors of these articles succeeding in this arena.

The other key recommendation was to measure liabilities for funding purposes based on bond rates. It certainly is a plausible position but not the choice of the actuary. This debate goes back to at least 2003 when Jeremy Gold and Larry Bader said that this is a policy choice. The Gold /Bader statement on discount rates for funding purposes may have been more intended for private sector plans where Congress made policy choices. I believe that both risk decisions (either in the form of the discount rate basis for funding or the investment mix) are policy choices. In the public sector it is really up to the plan sponsors or their boards of trustees to make these choices. Note that the actuaries are not the Congress nor state and local governments nor boards of trustees, i.e., actuaries do not make policy choices

and are not fiduciaries. Of course the concern with state and local governments and boards making policy choices is that there are inherent governance risks.

I understand the frustration with governance risks and the view by some that the actuaries are the only adults in the room, so somehow the actuaries should fix the problems that do exist. The actuaries might be the most knowledgeable about many pension topics but we are not the only adults in the room and actuaries are not the elected officials or labor/management board members given the power to make these calls.

So what do these alternative papers mean to me? At best they present an economic argument to not take risk but one which almost all trustees will soundly reject. At worst, it will be used politically by some to try to terminate public sector plans with greater damage being done. Even finding that some public plans that find themselves in trouble need to cut benefits or raise contributions does not provide a true comparison to the more common benefit leakage issues with the alternatives that are commonly proposed. But my real concern is that it takes energy away from dealing with some of the governance and risk problems we should all want to fix with the existing system.

So what are these problems? Certainly one is the natural desire to contribute to the plan as little as possible to maximize current spending on other taxpayer needs. While not always a bad thing, some forms this may take include (1) not contributing the full actuarially determined contribution, (2) using methods that hide the true cost of the plan often independent of the discount rate, and (3) lack of a complete risk management plan.

A complete risk management plan would, among other things, anticipate the problem that as the plan grows faster than payroll growth, the risk of larger contribution increases grows. Most board members look at investment risk focused on the investments' volatility. Many also look at long time horizon risks and may factor the plan liabilities and plan sponsor size into their long time horizon models. I believe that if more thought was put into this area, then trustees would decide that asset allocation policies need to become more conservative than most are today, since not having a plan to adopt more conservative allocations means taking on increasing risks over time. However, different policymakers will make different choices. Some labor trustees might opt for higher equity investments than management trustees, but almost none would likely opt for the insurance company approach.

The real questions are: (1) Who gets to decide how much risk can be taken? and (2) How do you measure and communicate that risk? The actuary does not get to decide how much risk can be taken. I also have my own article in the January 2017 *Pension Forum* on "Model Legislation for Better Public Plan Governance (vs. Risk Disclosure)." I wrote this in 2015 trying to deal with larger governance problems focused on not paying the actuarially determined contribution (regardless of the discount rate used). Yet even this idea has been soundly rejected by various groups. My *Pension Forum* article even suggests two sound uses on solvency-style liabilities. Being pragmatic, we need to try to focus on problems we agree on and that we think we can solve together. Where we have difficulty getting agreement with policymakers (e.g., changes in asset allocation to reflect plan maturity or simply paying the actuarially determined contribution), we as a profession should say more. However, a take-no-risk mandate is not what I would recommend since the down side of what we have now is not as bad as the alternatives others have proposed. ■

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ENDNOTES

1 The task force was disbanded in mid-2016 before a final paper was produced, but the working draft was briefly posted on the SOA website. It was a resource for several SOA-sponsored professional development events in 2016 and prior.