## Mitchell's Musings 3-26-12: Is Pay-as-You-Go a No-No?

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California has various pension funds operated at the state level. It has local pension funds as well in particular jurisdictions. The largest of the California pension funds by far is CalPERS – which is also the largest state and local defined benefit plan in the country with assets of \$225 billion as of last December. It currently covers 1.1 million active public workers and has over 500,000 retirees. Workers covered include state employees with some exceptions – mainly at the University of California which has its own plan – and employees of local jurisdictions that don't have their own separate plans.<sup>2</sup>

Various sub-plans are part of CalPERS; there is not a single benefits formula for all covered workers. At the bottom of the global financial crisis, the official all-plans blended funding ratio of CalPERS dropped below 60%. With the recovery in financial markets, the funding ratio has been officially in the mid-70% range. In theory, the funding ratio is the percentage by which plan assets cover the present value of current liabilities for future pension payouts.

CalPERS has been subject to the same criticism as other public pension funds in recent years. It is noted that its assumed long-term earnings rate, until recently 7.75%, may be too high. That rate was cut to 7.5% based on such concerns about two weeks ago, but the lower rate has also been criticized as still overoptimistic. The more you cut the assumed earnings rate, the greater the estimated present value of liabilities and, hence, the lower the estimated funding ratio. However, I will point out below that the funding ratio is not the be-all and end-all of metrics for pension strategy, particularly for significantly underfunded plans. Underfunding may well have occurred because of bad judgments by pension fund policy makers but once bad judgment has occurred, it may be difficult to reverse.

It should be noted that making forecasts about future earnings does not in itself change future rates of return available in the marketplace. That obvious point is important since assumptions and forecasts are sometimes concerned with actual events that will occur. Put another way, the future will be what it will be. Nevertheless, the standard approach to defined benefit pension management is to require contributions (employer and employee) that cover the normal cost of the plan – essentially an estimate of what this year's pensions promises will cost – *plus* an amortization of estimated unfunded liabilities. And the estimate is partly dependent on the earnings forecast. In effect, standard practice says pension administrators should cover currently accruing costs and also add enough revenue over time so that, at some target date, it is estimated that the plan will be 100% funded. The target, in short, is always supposed to be 100%.

The media and academic controversies about funding ratios and earnings assumptions often neglect the underlying basis of what we consider to be good pension management. A fundamental question is why

<sup>&</sup>lt;sup>1</sup> See http://www.calpers.ca.gov/ for information.

<sup>&</sup>lt;sup>2</sup> School teachers in California are covered by a state-run plan known as CalSTRS.

we have trust funds for pensions and funding rules at all. The basic reason is for the protection of employees. In a defined benefit pension, we make promises of future benefits according to a formula typically based on age, length of service, and earnings history. Having a trust fund to back up those promises is meant as a contractual assurance for employees. You will get your pension because we have put the money aside to make that happen.

The degree to which a trust fund, especially a 100% funded trust fund, is important depends on the degree to which employees believe that the promise will be honored regardless of funding. In the public sector, however, such promises have been generally regarded as ironclad legally although this situation may vary from state to state. That is, the public employer is responsible for meeting the pension promise, even if there is insufficient money in the trust to cover the liability.

A secondary reason for maintaining a trust fund is protection of the employer. Having a trust fund with a funding ratio of 100% says that in the future when promises come due, there will be money set aside to meet those promises regardless of the then-existing fiscal condition of the employer. For the public sector, where – as noted - pension promises are typically regarded as ironclad legal contracts, having that financial backup is important. Absent money in a trust fund, the pensions would have to be paid out of current operating income.<sup>3</sup>

Apart from the rationale for having a fully funded trust fund, let's consider the idea of always paying the normal cost into the trust fund. There is a general rule for state and local finance – not just with regard to pensions - that current services should be paid for currently. For example, the cost of municipal police protection this year should not be charged to the future by borrowing. Residents of the city who received the police service this year should be expected to pay for it this year.

If part of police officers' compensation is composed of pension promises and if the incremental promises made this year are not funded this year, then future residents - who did not receive those services - will be paying for them, something considered unfair. In addition, there is an economic rationale for paying the full current cost of current services. If part of the cost of police service is effectively charged off to the future, those police administrators and political leaders making decisions on how many police officers to employ may underestimate the true cost of such employment. They

<sup>&</sup>lt;sup>3</sup> The issue is more complicated for the (rapidly disappearing) private sector defined benefit pensions. Before 1974, a private employer might go bankrupt and pensioners might well be out of luck. In 1974, however, Congress created the Pension Benefit Guaranty Corporation – a public entity which assumes (most of) the liability of private pension plans when such bankruptcy occurs. So rules for establishing and properly maintaining private pension trust funds effectively protect the PBGC and the federal government. Public sector defined benefit plans are not covered by the PBGC. See <a href="http://www.pbgc.gov/">http://www.pbgc.gov/</a> for information.

<sup>&</sup>lt;sup>4</sup> Note that at the federal level, macroeconomic policy (fiscal policy) may involve deficit finance. State and local jurisdictions do not have macroeconomic responsibility and are more like households which also are well advised not to pay current expenses by borrowing.

may treat police labor as cheaper than it really is and – as a result - hire too many police officers. The normal cost rule thus provides the correct signal to decision makers about the true cost of policing.

I began this musing with a reference to CalPERS because of an article that appeared in an online service that covers California pensions: *Calpensions.com*. According to the article, CalPERS has apparently been doing the kind of stress testing that has been applied to other financial institutions after the financial debacle of 2008. Discussion has turned at CalPERS to what could happen if there were a repeat of 2008. What if the funding ratio fell below 40%? Is there some level from which no recovery is possible? The article notes that CalPERS has a health care plan which for retirees is essentially unfunded. So it is essentially a pay-as-you-go system. If 40% funding is viewed as a no-recovery mark, zero funding is clearly well below that level. And that fact – along with the discussion of a stress test – raises an interesting issue.

We know that the retiree health component of CalPERS has been running for years on a pay-as-you-go basis. That may not have been a good policy decision but it is history. The history tells us that in principle, a defined benefit pension plan can also be run on a pay-as-you-go basis, i.e., with no trust fund at all. Or, even if it has a trust fund, it could be run with a target funding ratio of less than 100%. Such less-than-full-funding approaches risk making future benefit promises seem more uncertain to employees. If employees feel that promises might not be honored, even if there are seemingly ironclad legal guarantees, offering a defined benefit pension is a less attractive option for the employer. The pension promise becomes a less attractive recruitment and retention tool if the promise is not fully credible. All of these considerations are important – but they are not absolute guides to policy.

What may be needed for public defined benefit pension plans is a regular discussion of the full set of options, some of which deviate from optimal pension administration, assuming "optimal" means a target of 100% funding. CalPERS currently takes in about \$11 billion per annum in employer and employee contributions. Under the most conservative critics' views, its unfunded liability should be evaluated at the rate it could earn on riskless U.S. Treasuries. If CalPERS put all of its assets into long-term Treasuries, it would earn something like 4% per annum which would be about another \$10 billion on its current assets. So the combination of contributions and portfolio earnings would be about \$21 billion per annum at present. Its current annual payout for benefits is about \$15 billion. That amount has been rising, however, due to an increase in the ratio of retirees to active workers and to some ill-conceived pension formula adjustments during the dot-com boom. Still, even with rising benefit costs, there will be some future limit to the level of benefits relative to the underlying government budgets that ultimately support the system.

See Ed Mendel "CalPERS Funding Level

<sup>&</sup>lt;sup>5</sup> See Ed Mendel, "CalPERS Funding Level: How Low Can It Go?," March 22, 2012 http://calpensions.com/2012/03/22/calpers-funding-level-how-low-can-it-go/

<sup>&</sup>lt;sup>6</sup> The main rationale for this view seems to be that since the pension promises are ironclad, they should be evaluated at the risk-free Treasury rate. Put another way, if the promises are risk free, then the discount rate should be risk free.

My suspicion is that a CalPERS strategy of investing in Treasuries and continuing on with current pension contribution rates would produce a result something like that characterizing Social Security today. It would take decades for CalPERS to draw down its trust fund to zero and after that it would still have current contributions coming in to pay benefits, although – like Social Security – not enough for full benefits which would then have to be paid out of general revenue. It would be nice if the annual reports of CalPERS produced such examples.

Of course, there are many in-between strategies of somewhat higher contributions and long term target funding ratios of less than 100%. The choice does not have to be either zero funding or 100% funding. Examples in the annual report ranging between zero and 100% would make clear, however, that freezing the pension funds (no new hires paying into the plan or even no continued service as a credit to the plan) would hasten the depletion of the fund. Contributions would decline as new employees were outside the system. Given the legal impediment to cutting public pensions, such freezes might create a public budget crisis sooner rather than later.

As was noted earlier, the future of market returns will be what it turns out to be. So, too, the past is the past as it actually was. The difference is that we have some control over future returns to a pension plan by changing the portfolio mix. But we have none over the past. And if decisions in the past did not produce full funding today for a pension plan, fiddling today with the plan as it goes forward cannot change those prior decisions.

The bottom line here is that for at least some subset of public sector pension plans, not necessarily CalPERS, a goal of reaching 100% funding may not be realistic. Yes, we are in that unfortunate situation because of past mistakes. But sometimes you have to live with your past sins as best you can. Insisting that the only policy option is a choice between 100% funding or freezing existing public pensions can produce perverse results, both for the employees involved and for the employers.