



## THE STATE OF PENSION FUNDS IN PENNSYLVANIA

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Chairman Metcalfe, Representative Cohen, and distinguished members of the committee, thank you for inviting me to testify on the subject of pension reform in the Commonwealth of Pennsylvania. My name is Gary Wagner and I am a professor of economics at Old Dominion University.

Pension reform is an extremely important topic for the fiscal health of the commonwealth and for the more than 700,000 active and retired members of the Public School Employees’ Retirement System (PSERS) and the State Employees’ Retirement System (SERS). I commend you for your willingness to address these challenging issues.

My objective this morning is to assist you in understanding the tradeoffs that are involved in any pension reform decision so that you can make the best choice for the commonwealth, in view of the fact that the current unfunded liability of PSERS and SERS is a staggering \$135,000 per active member.

The gap needs to be closed, but the benefits for future employees and the treatment of future taxpayers need to be addressed as well.

### THE FUNDING RATIO

The most common metric for gauging the health of a pension plan is the actuarial funding ratio (or funded ratio). An easy way to think about this is that a funding ratio of 100 percent means that if the actuarial assumptions turn out to be true, then the plan could pay all its promised benefits and would have zero dollars remaining at the end of its time horizon.

The current funding situation for PSERS and SERS is near-critical. Based on each plan’s current funding ratio and the assumed distribution of investment returns, the plans are only guaranteed to be able to pay the benefits

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that have already been earned for the next five years. By 2030, just 15 years from now, the probability that each plan will be able to meet its promised obligations without additional contributions drops to 31 percent for PSERS and just 16 percent for SERS.

The most important point I can make today is that, while a pension plan's funding ratio gives you some information about the solvency of a plan, it does not measure what is really the most important piece of information: What is the probability the plan will be able to make its promised benefit payments without additional contributions?

## LOOKING BEYOND THE FUNDING RATIO TO SOLVENCY

Even if we assume that PSERS and SERS are "fully funded" in an actuarial sense today with a 100 percent funded ratio, there is only a 42 percent chance the funds will be able to make all their promised benefit payments over the next 65 years without needing additional contributions. This is because of the volatility in investment returns and the effect it has on the asset side of the ledger. For example, based on SERS's *2013 Comprehensive Annual Financial Report*, the plan had investment returns of 24.3 percent in 2003 and losses of -28.7 percent in 2008.<sup>1</sup> More recently, the investments earned just 2.7 percent in 2011 and 13.6 percent in 2013. This is a simple demonstration of how the volatility in investment returns has varied by more than 50 percent in just the last 11 years. This is critical because 70 percent of the plans' funding is derived from investment returns.

Given that pension plans are forward-looking and that investment returns are uncertain, the correct way to think about the funding issue is in a probabilistic sense, meaning that we do not know the exact outcome in advance. Standard pension accounting models are deterministic because they assume investment returns will be exactly equal to their assumed rate of return. Once you allow for investment returns to be uncertain, the funding calculus changes dramatically and the changes do not favor the commonwealth.

## THE EXTENT OF THE SHORTFALL

For example, if the commonwealth wanted to be 90 percent certain to make the benefit payments that have already been earned without additional contributions, the funding ratios in PSERS and SERS would need to be equal to 180 percent using standard actuarial methods (roughly three times where they are now). This means the commonwealth would need to find \$150 billion additional dollars today in order to be 90 percent certain it could make the benefit payments that have already been earned without additional contributions down the road. On the other hand, if the commonwealth wanted a coin-flip, a fifty-fifty chance of being certain to make the benefit payments that have already been earned without additional contributions, the commonwealth would need a total of \$65 billion in additional assets today to achieve this objective. It is also worth pointing out that all the figures I am reporting are in present-value terms.

Of course, if the investments were to earn returns that are higher than assumed for a significant period of time, then this would reduce the size of the funding shortfall. However, based on historical investment returns, PSERS and SERS are imposing considerable risk on future generations to close the funding gap. The current pension structure makes this a question of "when" rather than a question of "if." So, in addition to closing the approximately \$50 billion pension shortfall that currently exists between PSERS and SERS, the commonwealth will almost certainly be required to make additional adjustments at some point in the future.

It may be a natural course of action to simply consider shifting the plans' investment portfolios to less risky investments. Since less risky investments will also have a lower average rate of return, shifting to a less risky investment

1. *2013 Comprehensive Annual Financial Report: For the Year Ended December 31, 2013*, Commonwealth of Pennsylvania State Employees' Retirement System, Harrisburg, PA, May 30, 2014.

strategy will increase the probability of making promised payments in the near term, but it will drastically lower the probability of making those payments over the longer term because assets will not be growing nearly as rapidly as benefits. Without a considerable increase in contributions, shifting to a safer investment strategy simply will not work.

## CLOSING THE GAP

There is no way for the commonwealth to avoid closing the funding gap on the benefits that have already been earned. The only true issues are when do you close the gap and how do you close the gap. Do you address the underfunding by increasing employee contributions, increasing the commonwealth's contributions, or some mix of approaches?

While the current funding shortfall cannot be avoided even if the defined benefit plans are closed, the commonwealth can eliminate the possibility of these costs occurring again in the future by moving new employees to a defined contribution plan. Another considerable advantage to a defined contribution plan is that short-term and long-term employees in those plans will be treated much more equitably than in the current defined benefit plans.

I would encourage you to also keep in mind the broader the picture when considering reforms. The commonwealth's bond ratings have been lowered twice by Moody's and Fitch since 2012, with pension funding cited as a contributing factor. Given the volume of debt that the commonwealth issues and has outstanding, these downgrades are not a trivial matter. The commonwealth currently has roughly \$47 billion in outstanding debt. Assuming that borrowing costs for the commonwealth rise by 25 basis points owing to the credit rating downgrades, which is one-third of the estimated increase in Illinois and on the conservative side, then the downgrades will cost the commonwealth \$120 million per year in additional interest costs when all the outstanding debt is rolled over.

I thank you for your time and hope you find my testimony helpful in your deliberations. I would be happy to answer any questions that you may have.