Magical Thinking about Pension Plans

a slightly edited version of a talk given after receiving the Lillywhite Award for extraordinary lifetime contributions to Americans' economic security by William F. Sharpe on Nov. 6, 2012 at the Pensions and Investments Defined Contribution Conference in San Francisco, California.

I started studying pension funds when most people had defined benefit plans. No decisions. You worked, you got paychecks. You retired, you got smaller paychecks, You died, your partner got even smaller paychecks. He or she died, the paychecks stopped.

Now defined benefit plans survive mainly in the government sector. Social Security of course. And pension plans for government employees. But they can teach us something about defined contribution plans.

Take CalPERS. It covers non-teaching state and many local government employees in California. And, officially, it is substantially underfunded. This is based on the assumption made for funding by the CalPERS actuaries that their portfolio of bonds, stocks and exotica will return exactly 7.5% every single year. Moreover, they value assets at an average of past values.

Magical thinking. Bad economics.

Almost every economist who has looked at similar pension funds concludes that assets should be valued at market and that liabilities should be valued by determining the cost of a low-risk government bond portfolio that could provide the funds to pay the benefits already earned. For CalPERS this portfolio would be primarily in TIPS since their benefits are mostly indexed for inflation.

When the liabilities are valued with good economics, the extent to which CalPERS is underfunded is not just substantial – it is woeful.

But this is a Defined Contribution conference. Employers in the DC world have no liabilities and mark assets to market — in some cases every day. No magical thinking. Good economics.

Yes, but...

Sometimes in projecting the amount that should be contributed to a defined contribution plan there is magical thinking. We or our employees may assume the portfolio will earn 7.5% or so per year for sure. The market may go down, but if so it will feel sorry for us and go back up in short order.

But the good news is that we are getting better in helping employees get a sense of both expected return and risk in the accumulation phase.

But not always in the decumulation phase.

As the baby boomers enter retirement, every part of the financial industry is lusting after their money. Financial advisors have strategies for managing investments and spending. Insurance companies have traditional annuities and guaranteed withdrawal plans. Mutual funds have retirement income products. Employers have extensions of 401(k) plans. Everyone wants a piece of the action.

For good or bad reasons, left to their own devices, retirees invest relatively little in traditional annuities, foregoing the significant advantages of pooling mortality risk.

Moreover, thanks to Chairman Bernanke and his counterparts around the world, low-risk investments currently offer paltry nominal returns and negative real returns for all but the very longest horizons.

What's an investor to do? A frequent answer is this. Invest in risky securities, which should provide higher returns. Spend on the assumption that returns will be 7.5% (or so) per year. Not to worry, returns may vary, but they will average out in the long run. Once again, magical thinking and bad economics.

So what should financial professionals, do? One answer is to use Monte Carlo analysis with a sensible market model to generate possible scenarios for future investment returns, then use the results to help investors understand the true implications of alternative decumulation investment and spending strategies.

Admittedly, neither the creation or the communication of such ranges of outcomes is easy. But investors need to understand that if they take market risk, someone will be exposed to that risk. If something bad happens, it is going to happen to someone. It might be them or it might be their beneficiaries. Their financial advisor, investment company or employer may get smaller fees, but won't bear the majority of the impact. And if insurance companies take market risk, they do so at their peril or, worse yet that of the taxpayers who might have to bail them out.

Pooling can't help – when the market crashes it takes almost all the players with it.

If your investments are subject to market risk, so are the prospects for your spending and/or that of your beneficiaries. Even the cleverest financial strategy can't magically make market risk disappear.

So, I implore all those who help people save and invest for retirement and then use their savings sensibly in retirement. Please avoid magical thinking and bad economics. Employees and r etirees deserve better.