

Pensions crisis

The crumbling assumptions of US public pension plans

How public pensions calculate their liabilities comes under sharp scrutiny amid fears of a black hole



A group of protesters call for pensions protection in Detroit, the US city where the financial crunch has been most acute © FT montage; Reuters

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by: **Nicole Bullock** in New York

The governor's office for Illinois, a state with notoriously weak finances, this week issued a stark warning about what might happen if it reduced the assumed rate of return for its Teachers' Retirement System.

"If the board were to approve a lower assumed rate of return taxpayers will be automatically and immediately on the hook for potentially hundreds of millions of dollars in higher taxes or reduced services," the state's senior adviser for revenue and pensions wrote in a memo.

Unlike corporate pensions, US public [pensions \(http://next.ft.com/content/8a54a0c6-648b-11e6-a08a-c7aco4ef00aa\)](http://next.ft.com/content/8a54a0c6-648b-11e6-a08a-c7aco4ef00aa) discount their liabilities using the rate of return they expect to generate on their investments. Some experts complain that these rates have been set

unrealistically high. Lower return expectations would push up the cost of liabilities on their balance sheet, and force Illinois to make higher contributions. If costs to the pension were to increase by \$250m it would nearly equal an entire year's appropriation for six universities.

In spite of the warning, the board on Friday reduced the retirement system's assumed rate of return to 7 per cent from 7.5 per cent.

Illinois highlights one of the most hotly debated issues facing state and local governments in the US: how to value pension liabilities and, in turn, what is the true nature of the deficits they face. As governments are already cash-strapped, these questions are now highly politicised.

Raising taxes and scaling back pension benefits are painful and difficult measures. It leads to a third issue: to justify these high expected rates of return plans are taking on more risk with money they are obliged to pay out.

"The attractiveness of assuming a high discount rate is that you tell the taxpayers, unions and the public that the liabilities are lower, but the only way to maintain that kind of discount rate is to have risky assets" says Don Boyd, a fellow at the Nelson A Rockefeller Institute of Government.

He estimates that extent to which high rates of return keep contributions lower is well over \$100bn a year in the US.

Pension plans discount rates ignore drop in interest rates

Per cent



Source: Nelson A. Rockefeller Institute of Government

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On average US pension plans are assuming 7.6 per cent rates of return, according to the National Association of State Retirement Administrators. That is down from 8 per cent before the financial crisis, but many observers argue that it is still way too high given the persistently low level of interest rates and the outlook for investment returns.

In effect, the fear is that the maths mean plans are saying something costs \$1 when it really costs \$2 or \$3. Corporate pensions value liabilities using a rate drawn from bond yields, which are far lower.

Joshua Rauh, a finance professor at Stanford University, has led the call for public pensions to use different discount rates. He argues for US Treasuries (currently yielding less than 2 per cent) since there is no guarantee that a plan will achieve the expected rate of return while the pension is a guaranteed promise. What is more, in the few [municipal bankruptcies](http://next.ft.com/content/9f5e7590-fec6-11e4-94c8-00144feabdco) (<http://next.ft.com/content/9f5e7590-fec6-11e4-94c8-00144feabdco>) that have occurred to date pensioners have headed the queue even before bondholders.

Interactive

[Pensions' painful arithmetic \(https://ig.ft.com/sites/pensions-interest-rates-explainer#interactive\)](https://ig.ft.com/sites/pensions-interest-rates-explainer#interactive)

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Bond mathematics and the scale of pension deficits explained

Based on that he estimates that unfunded liabilities are \$5tn-\$6tn, including the latest downdraft in market rates post-Brexit vote, compared with the \$1tn-\$2tn figure based on the plans' targeted rates of return.

Critics of the current accounting worry about “a day of reckoning” when US public pensions run out of money or their cost becomes so great that it cannibalises the money for public services and prompts tax increases to the extent that people leave the most troubled spots.

Others say concerns are vastly overblown except perhaps in the most extreme of cases. Troubled pensions played a role in [Detroit's bankruptcy](http://next.ft.com/content/afd4a050-0b15-11e6-bof1-61f222853ff3) (<http://next.ft.com/content/afd4a050-0b15-11e6-bof1-61f222853ff3>) and the debt crisis in [Puerto Rico](http://next.ft.com/content/f9251a80-652b-11e6-a08a-c7ac04ef00aa) (<http://next.ft.com/content/f9251a80-652b-11e6-a08a-c7ac04ef00aa>), two of the biggest blow-ups

in US public finance in recent years. [Chicago](http://www.ft.com/fastft/2016/03/28/fitch-s-lives-chicagos-rating-amid-pension-burden/) (<http://www.ft.com/fastft/2016/03/28/fitch-s-lives-chicagos-rating-amid-pension-burden/>) is another area that is grappling with particularly severe pension woes.

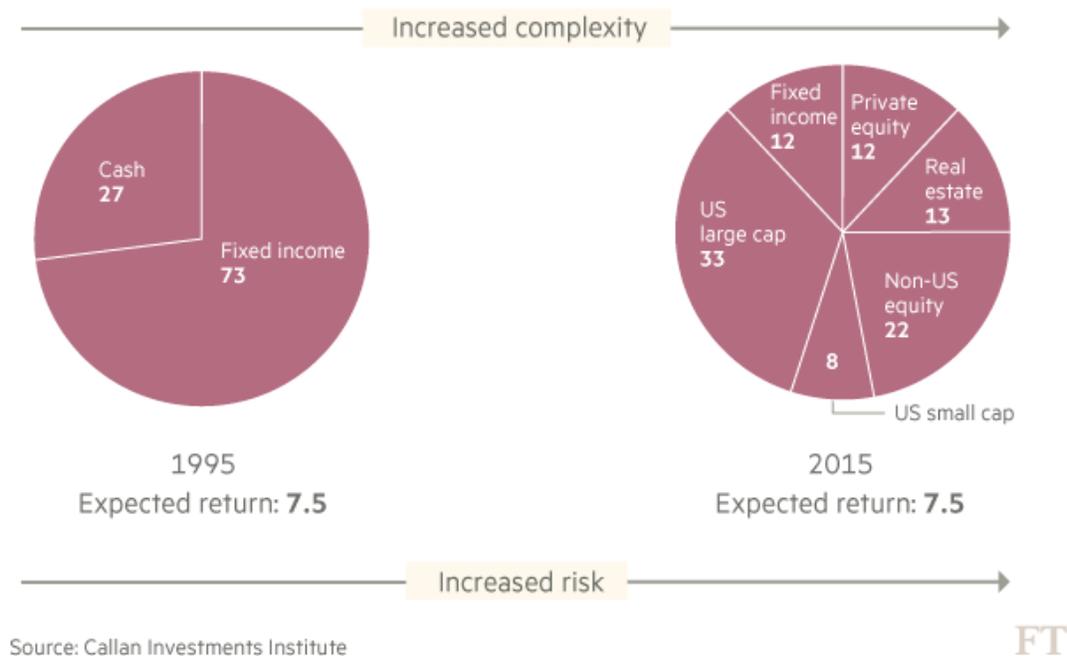
Keith Brainard, Nasra's research director, says the rationale for using expected long-term rates of return to value pensions comes from the concept of “intergenerational equity” —

each generation pays for the cost of services it receives — and that linking to current interest rates increases the chance of separating the cost of the service from the generation receiving that service.

And while the recent performance of public pension funds in the aggregate has been bleak — just 0.5 per cent for the year ended June 30, according to Callan Investments Institute, a research group — the idea is to reflect a long-term outcome.

Increasing volatility and complexity

Expected portfolio returns and allocations over the past 20 years (%)



“All those day of reckoning stories report unfunded liabilities assuming the plans will receive no benefit or reward from taking investment risk. That type of reporting can be misleading and make pension costs look a lot bigger than expected. That reporting, by itself, is not informative,” says Matt Smith, Washington state’s actuary. “On the flip side, if you only report the expected cost of a pension system assuming a long-term rate of return, that does not tell the entire story of the cost and risk of running a pension system. The truth is probably between those two points of view.”

Either way, the high return assumptions have prompted plans to move into riskier assets over the years with allocations to hedge funds, [private equity \(http://next.ft.com/content/415a7ad6-6a8e-11e6-ae5b-a7cc5dd5a28c\)](http://next.ft.com/content/415a7ad6-6a8e-11e6-ae5b-a7cc5dd5a28c) and real estate.

“As they get into these potentially very volatile risk investments, they may get lucky, but it may just get a lot worse,” says Mr Boyd. “If we get a 20 per cent down year, with \$3.6tn under investment, if they lose 20 per cent that is almost three quarters of a trillion dollars.”

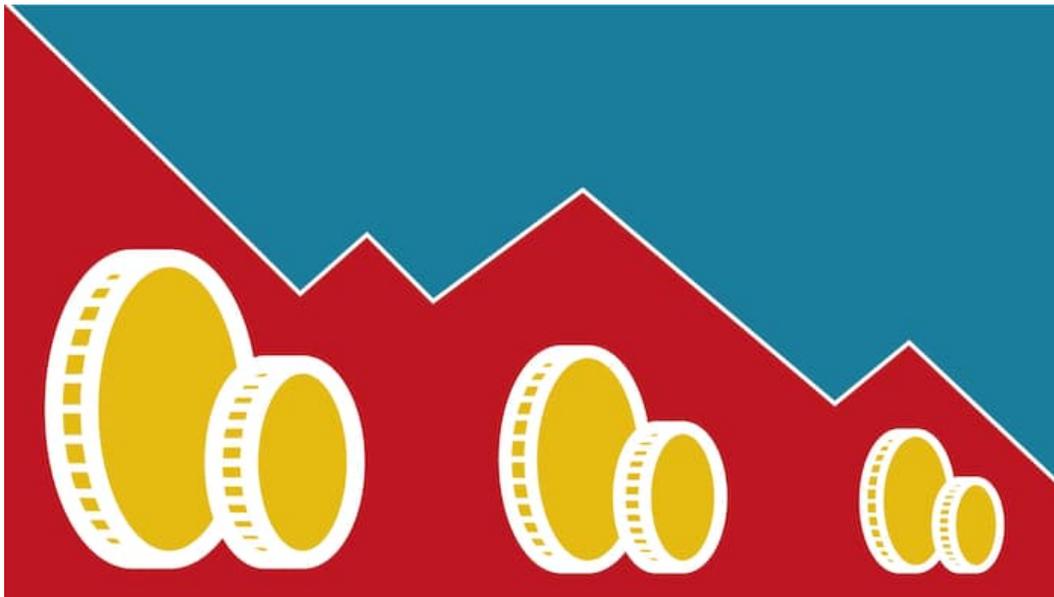
Some plans are beginning to consider lower return expectations and the risk associated with alternative types of investing.

Calpers (<http://next.ft.com/content/fcbdf88c-4f1f-11e6-88c5-db83e98a590a>), the largest US pension fund, a few years ago decided to stop investing in hedge funds as part of a long-term plan to lower the risk, cost and complexity of the investment portfolio. More recently, it also embarked on a 30-year plan to reduce the discount rate from 7.5 per cent to 6.5 per cent.

The idea has traction elsewhere. Just this week, Connecticut's treasurer, Denise Nappier, argued for lower investment return assumptions.

“Markets have largely recovered from the troughs seen in the Great Recession, but are susceptible to downside surprises stemming from changes to the global economic outlook,” she said. “If return assumptions are set at levels unlikely to be attained, it will be difficult to achieve them without pursuing high risk investment strategies. It is far more prudent to structure the portfolio based on what is achievable, rather than what is desirable.”

But any such changes will come with a cost, too.



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