

## NYC story

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*The man responsible for determining the liabilities of New York City's public sector pension system wants to move to market-based valuation, but the move may be controversial.*

*Nicholas Dunbar reports*

Robert North, the Chief Actuary of New York City, likes to joke about the response to the idea of market-based pensions valuation. "We better hang that actuary guy," he quips. "He's completely out of his mind." With a strike by City transit workers - partly due to pensions issues - still fresh in the mind, such sang froid is understandable.

But North is deadly serious about his quiet campaign to modernise US public sector pensions valuation, which he acknowledges is several years behind the corporate sector. "There are big problems to overcome to convince people that with the actuarial approaches we're using now, we're potentially pushing current obligations onto future generations."

At first sight, the pension finances of New York City look healthy, as do the finances of the City itself. With a total of about 617,000 members, of which 258,000 are retired, the City's pension obligations are dominated by five large schemes. Four of these cater for firefighters, police officers, teachers and school support staff. The biggest, the New York City Employees Retirement System (NYCERS), covers all other City employees including transit workers.

According to the notes to the 2005 comprehensive annual financial report (CAFR) published by the New York City Office of the Comptroller, the total pension scheme assets in mid-2004 were \$99.3 billion, while the total liabilities were \$99.7 billion. While not in surplus, the pension figures should not be cause for concern in the light of the City's total annual expenditure of \$50 billion.

But as North argues, something is seriously wrong with this comfortable picture. If he is right, New York City's balance sheet is not as robust as it appears. Writ large, North's analysis could be a harbinger of a potential funding squeeze across the US public sector.

To understand North's arguments, one must first understand the origin of the comforting figures used in public accounts. While the Financial Accounting Standards Board (FASB) is moving to place US corporate pension liabilities on the balance sheet from 2006 onwards, the picture in the public sector is very different. A sister organisation to FASB, the Governmental Accounting Standards Board (GASB), requires entities such as New York City to file accounts using a standard called GASB27; whereas individual schemes such as NYCERS file under GASB25.

GASB's approach to pensions is based around the archaism known as the actuarial interest rate (AIR). The AIR is supposed to reflect the expected long-term growth rate of assets, and it is also used as the discount rate of pension liabilities, which are split into two parts: 'accrued' liabilities and 'future' liabilities. To the extent that the assets are not sufficient to cover those accrued liabilities, then 'unfunded' liabilities exist. Under a funding method called 'frozen initial liability', adopted by New York close to the peak of the equity bubble in 1999, the unfunded part became negligible. The accrued liability thereafter is defined, under this funding method, as the unfunded liability plus the assets.

As North explains: "Under this method, when your unfunded liability equals zero, your accrued liability has to equal your assets, so that when you take your assets divided by your accrued liability, you're just dividing assets by assets, and you get a funded ratio of 100%. That is exactly what is required by the GASB accounting standard" - here he lowers his voice - "and it is absolutely useless".

The uselessness of this GASB information is impossible to gauge from the City's annual report, wherein the funding ratio of the five large schemes is reported as being at or close to 100% for each year since 1999. But buried within other reports of the five individual pension schemes, a very different story emerges.

In a section called 'other measures of funded status', North single-handedly takes US public sector accounting into the 21st century. "We have a funding measure I put down that's the ratio of market value assets over market value accumulated benefit obligation (ABO), which I define as the accrued benefits to date with no salary increases in the future and no future service, discounting at treasury yields to each point of expected payment."

This market-consistent funding ratio starts out healthy for NYCERS, standing at 138% in 1999. However, the ratio then declines precipitously, falling to 70% by the end of June 2004. According to this measure, the \$34.4 billion scheme has a deficit of \$14 billion.

For the New York City police pension fund, the funded status is even less. As North explains: "We went from 108% down to 49% over the course of 1999 to 2003, because we both improved benefits in 2000, and the market tanked and interest rates went down. Everything went wrong." According to North's figures, the police pension had an \$11 billion deficit and was only 59% funded at the end of June 2004.

North is quick to emphasise that his market value deficits, which add up to a total of \$49 billion for the City as of June 30, 2004, are not accounting deficits of the type that appear on balance sheets as a result of the UK's FRS17 or the impending FASB market value requirements for US corporate pension schemes. The reason is that unlike their corporate brethren, US public sector accountants remain mired in the archaic world of actuarial valuation.

North says he argued that his market valuations provided important additional financial information. "The whole point is it provides a measure that's independent of the asset allocation, exclusive of any advance recognition of any expected risk premia, and gets rid of smoothing. I happen to think it's beneficial."

But the outside auditors rejected including these figures in the financial statements for the City and the schemes. North complains: "They told me I couldn't do it in the financial statements due to the constraints of the Sarbanes-Oxley law. However, there's an actuarial section in the CAFR for each of the schemes and that's where I snuck it in, because the auditors don't control the actuarial section."

Even within the US actuarial profession, North has a fight on his hands. "My own actuarial standards of practice are at odds with my 'just stepping up and doing the financial economics' view of the world. Today there is generally accepted actuarial practice versus best actuarial practice, and how do you go from 'generally accepted' to 'best'?"

North is at pains to point out that his market valuation deficits should not be used to paint New York City in an unfavourable light relative to the US public sector as a whole. The reason is that no other US local authority other than New York reports such figures. According to the traditional measure, US States currently have a combined pension deficit of \$284 billion, according to rating agency Standard & Poor's. On this basis, New York has one of the healthiest balance sheets in the country. Yet, having produced his samizdat market valuations for three years, North faces an actuary's dilemma: what are the implications of his figures for the City and how should the unwelcome news be communicated?

For a start, the pension benefits enjoyed by New York City employees are unlikely to be eroded, and enjoy significant legal protection. According to North, such protection springs initially from Article 1, Section 10 of the US Constitution, which forbids individual State or local entities from defaulting on financial contracts. As North explains, the US legal system has applied this concept to public sector pension benefits.

"People raised the question: 'When state and local governments hire somebody, is that a contract and is it governed by the no-default provisions?' In New York State in 1939, we went a lot further. Article V, Section 7 of the New York State Constitution says that the benefits of membership in a retirement system may not be diminished nor impaired. Because of this constitutional protection you can never reduce anybody's benefit, including future accruals."

During the City's long financial crisis in the 1970s, some of these benefits were curtailed for new members of City pension schemes, but even today, the system remains generous to employees by corporate standards. For example, Metropolitan Transit Authority employees currently pay 2% of their salaries into a scheme that allows them to retire on a final salary pension at the age of 55.

North notes that before the mid-1970s: "Some of these plans were originally designed where the members would pay a quarter of the cost and the City would pay three quarters, or at least for part of it. However, based on experience, it turns out that 90% is really the true cost for the employer. Well, the member cost never changes."

As the recent transit strike showed, public sector employees fight fiercely to defend such benefits, despite the fact that their cost to the City is skyrocketing. "Police, firefighters and teachers are the most expensive," he comments. But North believes that attempts to curtail defined benefit pension plans in the public sector are misguided. "The City tends to work best, as do most municipalities and governments, by having employees of long tenure; whose institutional memory and skills are useful. Why did everyone want to go to defined contribution (DC) plans in the private sector? Because today's younger employees tend to change jobs more frequently and they don't appreciate the value of benefits designed for long service people."

"Do all the analysis and guess what works the best for long service employees - where you want to maximise the value to those employees without having the employer spend too much. Lo and behold, the contributory defined benefit plan gives you the maximum bang for the dollar. If you make the contribution reasonably high, the member pays for his own benefit during the first few years of employment, because all he gets is a refund of his own money."

With changes in pension benefits off the agenda, two other levers for protecting the City's finances remain: contribution levels and asset allocation. But here the debate over valuation becomes far more controversial, and so far remains theoretical. "That's an important part of this," says North. "The solvency analysis has nothing to do with the budgeting and funding analysis."

The actual decisions about contributions are made by a complex interaction of the trustee boards of the respective schemes, the New York State legislature and governor, and the actuary. Decisions about asset allocation are made by the trustee boards with input from the New York City Comptroller's Office, which monitors the City budget, acts as investment adviser and then oversees the mandates to asset managers, outside investment consultants and the actuary. The trustee boards include a mixture of union representatives and City officials.

At present, scheme contribution levels are determined purely on the basis of North's traditional actuarial estimates without market valuation. The current asset allocation across the City's schemes is 70% equities and 30% bonds, which as North freely admits, was chosen in order to increase expected returns, which resulted in lower contributions. "The reason it's 70% equities, to a large extent, is that back in the mid-1990s there was a serious desire to get contributions down."

"In some ways it was actually a pretty brilliant move because they did it just as the markets were starting the boom of the late 1990s. So I think we're still ahead, versus had we not done it, but it introduced an additional level of risk." By 2002, the equity bear market had revealed the extent of this risk, but so far the broad asset allocation has only been tinkered with, according to North.

"The Comptroller's Office has been trying to diversify more and more: get some real estate, high yield bonds instead of just investment grade bonds, more international assets including emerging markets, and some private equity where we can afford to wait it out for 10 years because we get so much money, and try to maximise the return and maybe mitigate the risk a little bit within that larger 70/30 construct."

But North agrees that such tinkering is not consistent with modern pension financial theory. "The economic theory is that the point is to add value - if it's a private company, add value to shareholders; if it's a public entity, add value to taxpayers. Dabbling in stock markets via your pension scheme is not supposed to be your best widget-making ability in either case. Stick to the knitting and whatever your liabilities are, match or defease them, take care of solvency and pay your promises."

The logical conclusion of such thinking would be to move to a new asset allocation determined by a risk budget with reference to a liability-driven benchmark. So far, North has been hesitant about making such a recommendation, because of the likely increase in contribution levels that would accompany such a move. Even without market valuation, since 2000, City contributions for the five major pension schemes have risen from about \$700 million per year to an expected \$5 billion plus by 2009. "I have no one in my constituencies with an interest in increasing pension contributions for any reasons, let alone for something that's being debated amongst the actuaries," he says.

North imagines himself being addressed by an irate trustee: "Mr Actuary, you tell us that the greatest value can be created by marking all our liabilities and assets to market and by investing to defease those liabilities with bonds. You also tell us that contributions plus investment income pays for benefits plus expenses, which means when you do that we have less expected income and you're going to turn around and tell us we owe a lot more in contributions. What's in it for me?"

Such considerations raise an obstacle to the liability-matching measures being used by corporate pension plans, including the use of derivatives. "Primarily, anything you do in that area - where you're buying a form of insurance - means you're spending something for it," North argues.

"People say: 'New York City is not going anywhere. We're here forever. Why are you making us spend something?'"

"People have lifetimes; New York City doesn't. Therefore we can clip off that extra equity risk and benefit from it, so we should do it in the long-term interest of everybody. The financial economists get all excited now and yell and scream that it's idiocy. But those arguments are from people who are asking 'what's in it for me? Are you telling me to really pump the money in now when I've got 100 other things I want to pay money for?'"

Yet North knows that if the trustees decide to keep their schemes unmatched, at the very least he will still be forced to raise contributions as a form of economic risk capital for this strategy. "If they decide to stay in equities because it's the long run, they'll have to give up the risk credit they receive today. That means that contributions in the short term are expected to be higher than in the future. The other choice is put it all in bonds. Then they'll definitely pay more forever."

Presenting such hard choices to the trustees will take time, North acknowledges. "Little by little, more and more, I intend to introduce more information to the boards on projections, more open group valuation analysis, more information on modern theory of marking-to-market, and what the risk issues are of being invested in equities." But he believes the job can be done. "I take a great deal of pride in, over the years, getting the City unions and the City administration to support ever-strengthening assumptions and getting them to build up to where the equations can go into balance."

And when the equations eventually balance, the costs to New York taxpayers are likely to be considerable. "The City budget is something just north of \$50 billion; I'm talking about asking for five-plus billion of that - that's 10% of the City budget. The last time that happened in the City was back during the financial crisis of the 1970s, when they had allowed the systems to get very poorly funded and they realised what it was. We have other post-employment benefits liabilities like post-retirement medical costs, and those numbers are going to be huge. We pay out almost \$1 billion a year in benefits now, but a proper valuation would suggest five to \$10 billion a year of annual expense to properly acknowledge the costs of these benefits. We just don't have \$5 billion a year to pick up and throw into that."

At least New York City will have a first-mover advantage by addressing these problems earlier than other US local government bodies. According to observers, if North's market valuation analysis was scaled up to the US as a whole, the total state and local government pension deficit could exceed \$1 trillion, not including health liabilities. If US cities or States become insolvent, the Federal government is unlikely to pick up the tab for unfunded pensions. But North insists that New York City will look after its pensioners. "Our members may rest assured that their benefits are well secured and we are working to make sure that will always be the case."

*Please email Nick Dunbar, Editor, to comment on this article.*