

Derisking Can Follow Several Paths

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Derisking Can Follow Several Paths



From the left, Derek W. Dobson – CEO and Plan Manager at the CAAT Pension Plan; Catherine Thrasher, Vice President, Strategic Client Solutions for CIBC Mellon and Managing Director for BNY Mellon Global Risk Solutions; Neil Duffy, Vice President, Group Retirement Products and Pension Risk Transfer – The Great-West Life Assurance Company; and Michael Augustine, Managing Director at TD Asset Management Inc.; outlined approaches Canadian defined benefit pension plan sponsors can take to derisk at the Benefits and Pensions Monitor Meetings & Events 'Pension Risk Strategies' session.

The goal for many defined benefit pension plan sponsors today is to have a well-funded, derisked plan. At the *Benefits and Pensions Monitor Meetings & Events 'Pension Risk Strategies' session*, Michael Augustine, Managing Director at TD Asset Management Inc.; Neil Duffy, Vice President, Group Retirement Products and Pension Risk Transfer – The Great-West Life Assurance Company; Catherine Thrasher Vice President, Strategic Client Solutions for CIBC Mellon and Managing Director for BNY Mellon Global Risk Solutions; and Derek W. Dobson – CEO and Plan Manager at the CAAT Pension Plan; presented some of the paths that can be taken to achieve a well-funded, derisked plan.



With many plans now in their best funded position in many years – the median plan, on a solvency basis, is about 100 per cent funded – “it’s a good opportunity to think about making changes” like derisking, said Michael Augustine, managing director at TD Asset Management Inc.

There are really two essential paths to get there. “One is the path well-travelled and often talked about and the other we really believe is a game-changer,” he said. These are paying to derisk or investing to better manage the risk.

When looking at paying to derisk – purchasing annuities – areas like market risk, longevity risk, and investments need to be evaluated.

Rule Of Thumb

With market risks, for example, if rates were to decline one per cent, a typical plan would go from fully funded to 90 per cent. With longevity risk, a rule of thumb is that every 10 years a 65-year-old could be expected to have one additional year of life expectancy. If one extra year of life expectancy has a pension cost of about three per cent, over one year a plan’s funded status could go from fully funded to 99.7 per cent, a relatively small risk exposure compared to the market risks a typical plan faces.

For assets managed on an LDI basis, when purchasing an annuity, the first step is to set a liability benchmark. This steadies the plan relative to that benchmark so the

underlying purchase price of annuities can be tracked as the market is approached. This is usually done by “dialing down” the equity exposure, increasing the fixed income exposure, and putting the portfolio in a position to do the transfer. Closer to the purchase date, liquidity is encouraged in the portfolio by making sure securities can either be transferred in kind to an annuity provider or, if “you’re not seeing the prices you like from the annuity providers, disposed of in the market in short order,” said Augustine.

Other Path

The other path is investing to better manage the underlying risk.

To understand this approach, a sponsor needs to appreciate that annuity providers are regulated. They not only have to be fully funded, but are also required to hold additional regulatory capital. That capital comes from financings in the capital markets and “it’s expensive. You have to earn a certain return on it to pay the top of the house,” he said.

Focusing on the underlying pension obligation, annuity providers recognize the product is inherently illiquid and it’s a very natural match to pair that with an illiquid asset, like investment-grade private debt.

All of this means that for every \$100 million of annuities purchased, the cost is probably in the range of \$10 to \$15 million.

However, there is an underlying yield opportunity set in private markets, especially investment-grade private debt, said Augustine. Investment grade private debt, from a risk profile perspective, is somewhere between that of a provincial bond and a municipal bond, “so it’s actually a lot safer than what you may find in the unsecured public markets.”

As of December 31, 2017, this underlying yield was between 410 and 460 points, an incremental pickup over the 220 and 350 points observed in the public markets.

Given the yield and the underlying asset mix, “when you put all of that together – and this is probably conservative” – the rate earned on a basket of assets at the end of last year was about four per cent.

Private debt is not a new asset class. What’s really new is that the barriers have

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come down, said Augustine. In this low interest rate environment, people are looking for incremental yield, but don't want to take extra risk. Offering this asset class directly to pension plan sponsors means instead of a \$100 million annuity purchase, plans can invest directly in the underlying assets and earn a higher yield. If the resulting investment required is only \$90 million, this makes the implied cost \$10 million.

"We're not advocating that all plans liquidate their return-seeking assets and alternatives and redeploy into fixed income only. Rather this approach to demographic asset allocation is a concept that can be applied within a portfolio context.

"One interesting application is as a cost savings alternative to a traditional buy-in annuity," he said. With this do-it-yourself (DIY) annuity approach, pension obligations would be split between retirees and actives, then as the actives age into the retiree population, the DIY buy-in annuity portfolio is topped up to hedge the new retirees. The DIY annuity portfolio then becomes a more cost effective asset within the plan, allowing dollars to be redeployed to other parts of the underlying plan or within the plan sponsor's organization.



When it comes to reducing the risk levels within a pension, there are many options, but "annuities offer the ultimate form of derisking by completely eliminating the plan sponsor's risks by transferring them to an insurer," said Neil Duffy, Vice-President, Group Retirement Products and Pension Risk Transfer – The Great-West Life Assurance Company.

Explosive Growth

In the last few years, Canada's pension risk transfer market has seen explosive growth. The total market was \$3.7 billion in 2017 – up from \$1.1 billion on average from 2008 to 2012. And some industry experts estimate the pension risk transfer market could reach \$15 billion over the next three years.

What ignited this growth continues to be true, especially recently. Plan funding levels are at the highest levels they've been in years. Strong funding lets plan sponsors eliminate their pension risks at little to no additional cost.

"If you look at 10 years ago, pension plan funding levels weren't there to let plan sponsors consider a full risk transfer. It wasn't affordable," he said. Now, with funding levels much higher due to strong markets, it's a good time to look at derisking.

Attitudes Changed

Plan sponsor attitudes towards pension risk have changed, Duffy explains, "Companies want to focus on their core operations. Growth in the pension funds have led to companies having significant financial risk embedded in their pension plan," which is why there's such a need for pension risk transfer.

Another is longevity. Statistics Canada says the average 65-year-old Canadian can expect to live more than 3.5 years longer than they did 30 years ago. This 22 per cent increase in post-retirement lifetimes has some pension plans looking for protection from longevity risk.

Risk from longevity creeps up on plan sponsors who often don't necessarily understand its causes and effects. It's not a far stretch that in a given year, a pension plan could lose one per cent from increased longevity. And while that may not be that drastic a figure, Duffy said, "When the pension plan experiences higher longevity year after year after year, the cost becomes significant. Longevity is a risk many plan sponsors take on unknowingly and it hasn't been paying off."

Longevity insurance allows a pension plan to transfer that risk to an insurer, while the pension plan maintains the management of the assets. With longevity insurance, premiums are guaranteed over the lifetime of the plan. The pension plan agrees to pay the insurer a fixed stream of payments and then the insurer pays the actual pension payments to the pension plan, regardless of how long the pensioners live.

As plan sponsor attitudes towards risk continue to change, the strong pension risk transfer market offers annuity purchases or longevity insurance to help sponsors transfer risk. With strong funding levels, it's time to consider a risk transfer solution.



Not that many years ago, enterprise risk analysis or ex-ante risk analysis was

really only done by the most sophisticated hedge funds or bank risk organizations, said Catherine Thrasher, Vice President, Strategic Client Solutions for CIBC Mellon and Managing Director for BNY Mellon Global Risk Solutions. Many asset owners weren't even interested in thinking about the ex-ante risk of their investment program.

Over the last five to 10 years, that's really changed and a lot of types of investment and ex-ante risk are much more mainstream, she said.

Over that same time period, allocations to alternative investments increased, presenting challenges in incorporating especially illiquid or non-transparent assets into an enterprise risk analysis framework. With an increased focus on risk measurement from regulators and "from your constituents, there's increased pressures of dealing with the complexity of alternative investments as they grow in popularity," she said.

Forces In Conflict

These two forces are in conflict. On the one hand, "you have to do more of this analysis. On the other, it's harder to incorporate that data in ways that make sense, especially when it comes to enterprise risk analysis," said Thrasher.

There are different definitions of and approaches to enterprise risk analysis. However, the quantitative investment risk bears specific scrutiny. Enterprise risk analysis looks at risk exposures across asset classes and understanding how each portfolio contributes to the overall or enterprise risk. Different metrics are used within that enterprise risk analysis framework. For example, stress-testing is, essentially, a historical replay of some dramatic historical event on the portfolio. Sensitivity analysis looks at the specific sensitivity of different factors within the portfolios. Value-at-risk helps illustrate the overall portfolio relative to the risk of a policy benchmark or pension obligations as a liability benchmark.

"Value-at-risk has been made into a popular villain over the years," she said, but it is "just math; it's not inherently good or inherently bad, but like any number, it can definitely be misused, but it can also be used effectively." It should more accurately be thought of in the context of the mini-

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num value that could be lost for a given set of assumptions. The key point is “really that you want to understand what the assumptions are that are used” and then look at that number relative to other parts of the portfolio over time. It is really about how you use the number, rather than how you calculate it, she said.

Enterprise risk analysis can be used for risk budgeting or determining asset exposure to certain sectors or countries. It can answer how a portfolio would perform if some significant market factor were to change by some amount. For example, if interest rates increased by one per cent, it can show the impact on the value of the fund and the funded status of the plan.

“That’s how you use a number, but how do you get that number? This is where a lot of the devil is in the details,” she said. This is the part that’s most complicated for investors who are thinking about imple-

The challenges, for example, when incorporating alternative investments into enterprise risk analysis relate to transparency, the frequency of evaluation, and liquidity and private equity is really where things start to get interesting. “You can get the information about the underlying companies of the private equity fund, but it’s certainly not going to be valued on a regular basis,” she said.

And with enterprise risk analysis really dependent on price movements, dealing with illiquid or non-transparent investments depends on different approaches and different assumptions to address the specific questions relevant to a fund, she said.



While Airbnb, Uber, Lyft, and Turo are all described as disrupting their markets,

pension plan nature which I think makes our plan more sustainable,” said Dobson.

CAAT didn’t set out to do this, it was actually asked by various industry players if it could do something different.

The changing nature of work and artificial intelligence suggest that Canada’s economy will be quite different 20 years from now. “These are risks as long-term vehicles that we have to address. The best thing we’ve done as an industry is to pool risks that individuals or individual employers are ill-equipped to manage on their own. This is, essentially, what we’re trying to do,” he said.

Derisking, from CAAT’s perspective, not only derisks past service, but also derisks the future health of the employer in terms of attraction, retention, workforce management, and actually delivering meaningful pensions at a reasonable cost. Most CFOs want out of the pension



menting an enterprise risk program. It’s important to think about the sources of data and the assumptions made to incorporate all of the different asset classes into the total analysis.

Different Sources

The data comes from a variety of different sources – custodial systems and commingled funds for example. However, as the assets become more complicated, they can become less liquid and less transparent. This puts more burden on the institutional investor to be able to combine data from all sources.

the CAAT plan does not mean to be disruptive, it is just “trying to fill a gap in the marketplace, both from a derisking solution perspective, but also in terms of expanding pension coverage in Canada,” said Derek Dobson, CEO and Plan Manager of the CAAT Pension Plan.

With the tipping point of traditional defined benefit plans as a sustainable product in the marketplace passing, he said CAAT, like OPTrust Select and Common Good, promise a new type of DB plan. These “modern DB plans” are quite different. The risks are different and the benefits are different. “It’s that jointly-sponsored

risk management business and the number one reason is accounting risk. “It’s not solvency, it’s not longevity, it’s not funding – although these are real issues as well – it’s DB accounting volatility,” he said, and “this is the issue that CAAT solves. All of our employers benefit from simply expensing their contributions” meaning it acts like a DC plan. The only job employers have is “every time a member makes \$1 of contribution, they put in a dollar.

“At the end of the day, our goal is to eliminate all the risks that members and employers are facing, or at least move the risks over to us,” he said. **BPM**

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