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PENSION PLAN DE-RISKING, NORTH AMERICA 2017

Understanding the risks and strategies for successfully de-risking a pension plan

MAY 2017

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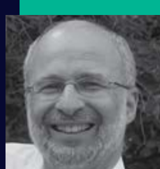

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FOREWORD

De-risking is not a waiting game: After another year of optimistic hopes and sideways progress, proactive de-risking looks even smarter.

FOREWORD

De-risking is not a waiting game: After another year of optimistic hopes and sideways progress, proactive de-risking looks even smarter.

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LDI Strategist, Fidelity Institutional Asset Management

Dan Tremblay,
Director of Institutional Fixed Income Solutions, LDI Strategist
Fidelity Institutional Asset Management

At the risk of preaching to the choir, we think 2016 nicely illustrated why delaying de-risking may be ill-advised for many corporate plan sponsors. In the U.S., the federal funds target rate eventually rose in December, after a previous increase in December 2015. Unfortunately for plan sponsors, the high-quality credit curves used as a basis for liability measurements flattened, and the average discount rate for pension plans was down at year-end. Strong returns for equities were a bright spot, but the overall improvement to corporate pension plans was modest at best. In our analysis of 10-K statements from U.S.-based public companies with $25 million or more in domestic PBO, the average funded status rose only 0.2%, from 78.0% to 78.2%, all due to contributions. Without contributions, average funded status would have dropped to 77.6% at year-end, due to the dip in discount rates, new pension accruals, and the effect of benefit payments on the ratio for underfunded plans. A "rising-rate environment" and strong equity market returns—seemingly a dream combination—required cash layouts just for funded status not to deteriorate.

There are many reasons to avoid playing the de-risking waiting game. Escalating PBGC fees are one highly visible motivator, and may tilt the math in favor of voluntary contributions for many plan sponsors with available cash. For those with access to capital markets, the current low-rate environment can be a golden opportunity to borrow to fund. As we write this in May 2017, Verizon and DuPont have recently announced borrowing $3.4 and $2 billion, respectively, for voluntary pension contributions, and we expect this trend to continue. In fact, because a legislative overhaul of the U.S. corporate tax code could reduce the economic benefits of voluntary contributions and borrow-to-fund strategies, we anticipate a noticeable acceleration of voluntary contributions in 2017.

Whether gains are achieved through voluntary contributions or other means, plan sponsors would be well-advised to try to protect funded status improvements with a liability-driven investing (LDI) strategy. Generally, improvements in funded status are useful milestones for taking some risk off the table. And particularly for those borrowing-to-fund, using some of the proceeds for liability-hedging would help better align the risk profile of the new assets with the debt (as opposed to raising risk company-wide by borrowing to invest solely in return-seeking assets).

In aggregate, plans have gradually lowered exposure to equities, but there is room for a more nuanced approach. Market risk in the return-seeking portfolio still overwhelms the rate risk associated with the liability for many pension sponsors, and the extended length of the current bull market may be a concern. Increasing the hedging portfolio's share of assets is one way of de-risking assets. But another approach could include evaluating the potential risk-mitigation effects of return-seeking exposure to alternatives or low-volatility equity.

Finally, when plans begin to approach full funding, being ready to implement an "end-state" strategy becomes even more important. The optimal de-risking approach will be highly dependent on specifics, and often no single factor uniformly tips the balance between "hibernation" (fully immunizing the liability through LDI) and "termination" (transferring it through pension risk transfer). In our experience, many plan sponsors find that hibernation can be a cost-effective method for securing peace of mind, but the details can make a difference. The pages that follow in this year's report show some of the many considerations relevant to both end-state approaches.

Whether a plan is frozen, closed, or ongoing, well-funded or not, we believe plan sponsors should be having conversations now about implementing sound pension risk-management strategies. Proactive strategies might include increasing or initiating LDI, working with an outsourced CIO to develop multi-asset-class approaches (for hedging and return-seeking), and taking steps to ready the plan for risk transfer or full hibernation whenever the conditions are most advantageous. As 2016 showed, holding onto risk while waiting for the right alchemy of returns and discount rates to close a funding gap could be a long wait, and a bumpy ride.

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SECTION 1

DE-RISKING AND ITS CONSEQUENCES

1.1 INTERVIEW

Ten years on from the Pension Protection Act... where are we today?

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What are the drivers behind the recent increase in pension buyouts and what does it mean for insurance supply and pricing?

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Is liability-driven investing still the most effective mainstream strategy for reducing plan sponsors funding gaps through investment activity?

1.4 INTERVIEW

Could pension buyouts be the solution to the great public pension funding gap in America?

1.1 INTERVIEW

Ten years on from the Pension Protection Act... where are we today?

Interviewer

David Grana, Head of North American Media, Clear Path Analysis

Interviewee

Patrick Baumann, Treasurer, Harris Corporation

SUMMARY

- *Safe harbor protection was one of the most notable elements of the Pension Protection Act*
- *One of the main factors in de-risking comes from the desire to reduce funded status volatility*
- *Guidance around QDIA has been very effective*
- *DC plans are becoming like DB plans in some respects*
- *Target date funds are becoming more sophisticated*

David Grana: What were the most notable provisions of the Pension Protection Act of 2006 (PPA)?

Patrick Baumann: While the PPA had several meaningful provisions, the most notable were the creations of a safe harbor protection for using target dates as the QDIA (Qualified Default Investment Alternative), providing safe harbor protection when mapping funds and implementing automatic enrollment.

David: Do you feel like the higher premiums that the PPA required plan sponsors to pay to the Pension Benefits Guarantee Corporation (PBGC) was a motivator for plans to move towards de-risking and to a defined contributions model?

Patrick: Higher premiums could be a factor in the decision making. But I believe one of the main drivers to de-risk stems from plan sponsors' desire to reduce funded status volatility by aligning the duration of plan assets more closely with the liability duration, diversify equity and increase the fixed income allocation with corporate and inflation-indexed funds. De-risking the plan is a strategy aimed to immunize the plan from the effects of interest rate changes on the funded status.

It seems more plan sponsors are moving toward a DC model versus a DB plan and that DC plans are beginning to incorporate many of the DB features. A DC plan structure is more flexible, portable and becoming a growing trend. This could be attributed to pension reforms, combined with plan sponsors' aim to incorporate DB features as a mean to retain, as well as attract talent. This is especially the case when a plan sponsor offers a generous company contribution match.

David: What do you feel are the biggest accomplishments of the PPA?

Patrick: The PPA brought improvement, clarity and cemented several funds as the Qualified Default Investment Alternative (QDIA) of choice. In particular, the target dated fund. The PPA also made features like auto-enrollment acceptable. This is a very useful tool to stimulate participants with low saving rates or inertia. Another feature that the PPA brought is protection for fund mapping. The fund mapping safe harbor is important, in particular, when plan sponsors want to transition fund assets or merge plans. Under the fund mapping provision, plan sponsors can re-enroll participants or allow new participants to make choices. If they don't make an active decision, then those new assets under the old plan will be automatically mapped towards the QDIA, which in most cases is a life cycle fund.

David: Has qualified default investment alternative (QDIA) been working since its implementation? How would you grade its effectiveness?

Patrick: It has been very effective and I would give it a high mark. The PPA was a breath of fresh air. It gave guidance for plan sponsors to fight plan participants' inertia. The PPA brought clarity to the

plan sponsors to designate a default fund and obtain safe harbor protection. That is a step in the right direction. It also provided clarity for participants as to the type of vehicle a plan sponsor would default participants into, who opted not to make an active investment decision.

David: From a risk management perspective, do you feel that the provisions set forth for QDIA are favorable enough for plan sponsors to stay in the pension game?

Patrick: While the PPA enhanced the DC plans by providing explicit guidelines and safe harbor protection, many argue that the PPA weakened DB plans by making them more expensive and onerous to manage. A positive trend is that DC plans are becoming DB-like in a couple of ways. Target date funds are getting more sophisticated and there is a growing emphasis on income replacement. Plan sponsors should review the plans to form an opinion about industry best practices. The outside investment consultant and subject matter experts can assist with the review of the investment policy statement, fund structure and fee evaluation. I would recommend reviewing the QDIA regularly and undertaking a suitability analysis to test the appropriateness of the target date glide paths and level of diversification.

David: How do DB plans of yesteryear differ from DC plans of today?

Patrick: The main differences between DB plan and DC plans are in the investment decision making process and the retirement security component. In a DB plan, the plan sponsor promises to pay a specific amount of benefits in the future. That benefit represents an obligation of the plan sponsor to the plan participant. The plan sponsor is responsible for making contributions to the plan and ensuring they have enough assets to pay for the benefits. Whereas, in a DC structure, the contributions are made to the plan participants. The contributions/assets are invested per plan participants' instructions. As DC plans are becoming the key vehicle to participants' retirement, plan participants are tasked to make their own investment decision and understand if they can accumulate sufficient funds to last through retirement.

Plan sponsors should provide a robust, but easy to understand, fund line up with exposure to growth assets during the wealth accumulation stage and address the probability of plan participants outliving the assets post retirement. The plan fund line up should be diversified, with a mix of fixed income, equity products and perhaps inflation-hedging funds, along with broad investments across the risk spectrum.

David: Thank you for sharing your views on this topic.

“PLAN SPONSORS SHOULD PROVIDE A ROBUST, BUT EASY TO UNDERSTAND, FUND LINE UP WITH EXPOSURE TO GROWTH ASSETS DURING THE WEALTH ACCUMULATION STAGE AND ADDRESS THE PROBABILITY OF PLAN PARTICIPANTS OUTLIVING THE ASSETS POST RETIREMENT”

1.2 INTERVIEW

What are the drivers behind the recent increasein pension buyouts and what does it mean for insurance supply and pricing?

Interviewer

David Grana,
Head of North American Media, Clear Path Analysis

Interviewee

Lynn Esenwine,
Partner and Senior Pension Risk Transfer Consultant, Mercer

SUMMARY

- *2016 pension buyout activity exceeded $14 billion*
- *Interest in annuitization is growing*
- *More insurers are looking into entering the de-risking business*
- *Understanding each insurer's position is crucial*
- *Risk transfer is not a one-size-fits-all solution*

David Grana: Why do you think we've been seeing a lot of pensions buyouts announced in the news as of late?

Lynn Esenwine: Final numbers are in for 2016. In both 2015 and 2016, total pension risk transfer buyout activity exceeded $14 billion. There is certainly a trend. And we expect, based on our current working knowledge of 2017, that this will continue to stay flat or likely increase.

Plan sponsors are definitely looking to transfer liabilities to insurance companies. I would bifurcate that into two types of activity for the past several years since 2012, when General Motors and Verizon announced their large retiree buyout deals.

1. *We have seen a keen focus on retiree-focused buyouts. By this, you can think about participants who are currently receiving their monthly benefit payments. Those have been rather efficient to transfer to an insurance company, both from a pricing perspective and a data perspective. And the market has gotten very efficient on this front.*

2. *Over the past 2 years, we have seen an increase in plan terminations. That is where an entire plan wants to settle their liability with an insurance company. The efforts on this front can be a bit more tenuous on this front, because it requires working with the Internal Revenue Service (IRS) and Pension Benefits Guarantee Corporation (PBGC) for various approvals. It's a very formal process to terminate a plan where most plan liabilities are transitioned to an insurance company.*

Of course, not everyone is looking at risk transfer. But the biggest catalyst in recent years has been the rise in PBGC premiums. The flat and variable rates have caused some anxiety for corporate sponsors. Writing a check to the PBGC annually and having this increase year over year isn't necessarily something people want to continue as a "tax" to their pension. In particular, as a frozen plan sponsor, every dollar you pay into the pension fund or pay to manage the fund is a sunk cost.

An additional trend that has emerged in 2015 and will continue to be a trend over 2017 is doing a retiree buyout for those individuals with very small monthly benefits. You can imagine that the flat piece of the PBGC premium is a fixed per-head fee and then there is a variable premium based on funding levels. Several sponsors over the past year have faced the PBGC variable rate cap, which comes in at $500 per participant in the plan. The economics tend to be compelling for very small benefit. Sponsors are comparing the ongoing run rate to manage those participants versus transferring it to an insurance company. And there tends to be a high return on your investment to actually move them from your balance sheet to an insurer.

As we look at 2017, with PBGC premiums continuing to rise, this again will be a fundamental driver in risk-transfer activity.

> AN ADDITIONAL TREND THAT HAS EMERGED IN 2015 AND WILL CONTINUE TO BE A TREND OVER 2017 IS DOING A RETIREE BUYOUT FOR THOSE INDIVIDUALS WITH VERY SMALL MONTHLY BENEFITS

In addition, the market is more broadly educated than it was in the past several years. The large, named companies who have transacted have forged a path for other sponsors who want to know and understand about this area of pension risk management.

Additionally, many pension plans have become frozen. And once they do, it doesn't fall into the hands of human resources or benefits. The pension is no longer available to attract or retain talent in the future. Since pension deficits show up on a corporate balance sheet, it becomes a discussion with the finance teams of each organization. There is a new scrutiny around how much risk a company is holding and what are the fees that are being paid that are associated with this risk. Since many decisions are being driven from the finance suite, this is a continued reason we see an uptick in pension risk transfer activity.

David: What is happening with the cost of transferring pension risk? In order for them to be able to remove the risk off of the plan sponsors balance sheet?

Lynn: There is a lot of attention on what someone is being charged to settle these liabilities. One unique feature of annuitization for a plan sponsor is that there is a one-time payment to transfer all of the risk.

As such, insurance companies get a single opportunity to price a set of liabilities correctly. There has been a perception that the cost has decreased over recent years. I would put some caution around this notion. Insurance companies are in the business of prudent risk management and clearly understand the type of business they are underwriting.

The absolute cost of an annuity is in the eye of the beholder. At the end of 2014, when plan sponsors updated their mortality tables for their balance sheet disclosures, their liabilities inherently went up. As a result, the percentage it cost them to transfer the risk - the dollar amount - would have stayed the same, but the percentage lowered.

For example, in 2013, you may have perceived a deal to be done at 10% of your disclosed liabilities. But after liabilities were marked up in 2014 for longevity improvements, that price may have been lowered to 2-3%. In addition, it is important to note that every plan sponsor values their Pension Benefit Obligation (PBO) differently – using varying assumptions – for their annual accounting disclosures. It is nearly impossible to compare fees as a percentage of PBO from one deal to the next.

Generally speaking, that cost has not changed from an insurer's perspective, but it doesn't account for competitive forces.

We do see many insurance companies competing on retiree liabilities. Not all insurers compete in the plan termination market where deferred optionality exists. And last year, we certainly had a very active market with 14 competitors in the insurance market.

Not every insurance company will bid on all transactions since they all have various constraints on types of liability underwritten, financial and administrative capacity. But on a given day, I would say

that for a $100 million retiree buyout, we could see 6-8 bidders. And the competitive tension there could potentially lower prices versus 5 years ago, when there were far less than 14 insurers participating.

David: Seemingly then, the competitive tension has had a very favorable effect for plan sponsors who are looking to remove those liabilities from the balance sheet?

Lynn: It has, and we may see more insurance companies looking to enter into the business. This is great for plan sponsors, since it gives them more options.

Insurers do not have an infinite amount of capacity in any given year. By opening up more insurance companies, which provide additional financial capacity, it will help meet the supply and demand that is happening in the market.

David: Is the increase in demand leaving insurers in a tough spot, particularly with continued low interest rates?

Lynn: Insurers price according to market conditions. For the near term, the stagnant interest rate environment doesn't appear problematic for insurers to effectively hedge the liabilities they take on. Current demand is certainly being met by the participating insurers today.

I have received the "what if" question around what would happen if all pensions end up at insurance companies. I don't think that will be a probable event. And this certainly would only happen over time.

Part of that analysis and fiduciary process on a pension risk-transfer trade is looking at how big the transaction is relative to the company. Or, how in pension risk-transfer business the insurer currently has, among other factors. So the system that is in place today is working well.

Each insurance company has their own governance process to ensure that the risks that they are taking on are appropriate for the long haul.

David: Their risk teams are making sure that they are not getting themselves into a sticky situation. As they are such a highly regulated area it is probably very difficult for them to find themselves in a position where they may become insolvent?

Lynn: Yes. Insurance regulations, as well as internal chief risk officer processes are very stringent. Consulting firms, like Mercer, are also doing constant due diligence with the companies to make sure that they understand each insurers position in the market.

When we talk to our clients, we want to make sure that we are very well educated on these insurer positions, their stance, the type of liabilities they are seeking, or if there are any constraints in place.

The insurers also want to be as transparent as possible. I don't feel that in any given year that there is an infinite amount of capacity an insurer would underwrite. By the very systems in place today, this isn't something that clients should be concerned about.

> The composition of what plans look like in the future may be different, but I don't feel that in the long term, we are going to see everyone trying to transfer their assets and liabilities to an insurance company

Insurance companies have regulators and rating agencies to contend with. Insurers must understand the risks that they have taken on and to what extent it impacts the future state of their business. If they were to take on an abundant amount of pension risk-transfer activity, it would need to be for a justifiable reason.

There is a very prudent process in place for looking at insurance companies as dictated by the Department of Labor's Interpretive Bulletin 95-1 which talks about choosing the safest available annuity on behalf of participants. It is not likely that a company will pick an insurance company that hasn't been fully vetted by their fiduciary committee and the process dictated by 95-1.

Ten years from now, who knows what type of pension risk transfer activity will have occurred, who the insurance players in the space are, and how it will unfold. But it is certainly something that we keep an eye on here at Mercer and the market will also keep an eye on it as well – rating agencies, equity analysts and shareholders.

David: While there is already significant new competition, do you see that with even more demand other insurers are looking to enter the market?

Lynn: It is a new area of cash-flow. Insurers are trying to figure out if it is a good mix for them. But they do have to take this decision

very seriously and put their guiding principles around what types of business they want. They need to figure out what will be the product offering and what their limitations are around it. They also need to see where it might add a nice compliment to other business lines. We will see new entrants, but they don't make that decision very lightly.

We are currently talking with 2-3 insurance companies who are contemplating entering the market. They want to understand the dynamics around the market and potential opportunity in the coming years. So we will see more competition. The question is depending on how much risk-transfer will there be and when will there be a significant uptick in interest. I am not sure how the insurance market will look 10 years from now.

David: Do you see the eventual fate of corporate pension plans going the way of buy outs and transfers?

Lynn: There is roughly $3 trillion in corporate pension assets. When you look at the largest market plan sponsors, they tend to do well managing their own risks and investments and prefer to keep this in the business mix. Risk, to each plan sponsor, is something different. To say that it is one-size-fits-all to transfer risk to an insurance company isn't the best answer.

Pensions will not be disappearing overnight or even in the next several years. And not every pension is frozen or headed towards a plan termination. There will be an evolution, but there are many factors that go into when, how and why sponsors transfer risk. And, whether it be to an insurance company or other vehicles, such as a lump sum. Additionally, there are still many companies who really like their pension plans, who maintain it for their participants, and who are very paternalistic.

In the long run, the pension ecosystem may change its composition. By this, I mean that some plan sponsors may decide to right-size their plan, reduce their liabilities by 50%, and be happy to manage the risk of the rest. You may also have closed/frozen plans, where they seek a full termination or risk-transfer. Pension plans have never been a one size fits all business. The composition of what plans look like in the future may be different, but I don't feel that in the long term, we are going to see everyone trying to transfer their assets and liabilities to an insurance company.

David: Thank you for sharing your views on this subject.

1.3 INTERVIEW

Is liability-driven investing still the most effective mainstream strategy for reducing plan sponsors funding gaps through investment activity?

Interviewer

David Grana,
Head of North American Media, Clear Path Analysis

Interviewee

Brad Smith,
Partner, New England Pension Consultants

SUMMARY

- *LDI has not been a preferred strategy of choice over the last couple of years*
- *The amount of LDI utilized by a client is plan-specific*
- *LDI is seen as a risk management decision, not an investment decision*
- *Risky parity and global asset allocation are useful diversifying strategies*
- *Pension buyouts are the more expensive route to take when de-risking*

David Grana: Is adopting liability-driven investing (LDI) on the rise or are there other strategies that are increasing in popularity as of late?

Brad Smith: There are still two very different LDI camps for corporate plan sponsors today. The first are clients who are very sensitive to changes in funded status. These clients have typically adopted some form of LDI investing and many have been increasing their allocation to LDI assets over the past couple of years.

The second group makes up about 32% of plans we advise who are not using any form of LDI. These clients have evaluated and considered the merits of LDI, but rejected it. Some of them are waiting for rates to go up, while others are just big believers in a long-term total return investment portfolio. Total return focused clients typically maintain plans that are smaller in size to the company's overall balance sheet. As a result they can better withstand a higher funded status volatility associated with maintaining a total return investment strategy.

We haven't seen a lot of clients go into LDI over the past couple of years. Most LDI investors have been in LDI strategies for quite a while. NEPC was an early advocate of LDI, so we and our clients were an early adopters.

Over the past several years, we have seen a significant increase in the allocation to LDI assets, as plan sponsors have continued to de-risk their portfolios with the improvement of funded status.

David: Are the interest rate levels the predominant factor in their decision?

Brad: Not as much as you would expect. We view LDI as a risk management tool. As a result, the amount of LDI utilized by a plan is very client specific and depends primarily upon the individual plan sponsor's risk tolerance. We perform an annual DB trends industrywide survey that asks plan sponsors who aren't using LDI what their reason for not doing so is. This year, about 27% said that they were waiting for rates to rise, while 35% said that the plan remains open and they are committed to a total return strategy.

Not all plan sponsors are focused on discount rates. We work with many clients who are either privately held or still offer active DB plans. Many of these clients are committed to a total return strategy and don't have any LDI in their portfolio today.

David: What level of funding do you feel these plans might be at?

Brad: The funded status of open plans are all across the board. Although, the clients we work with in this segment tend to be better

funded plans. The majority of open plans we work with are either private companies or clients associated with the government sector.

The majority of publicly traded sponsors tend to have some form of LDI, but a lot of the privately held firms that we work with are still total return focused. The private firms are not as focused on funded status volatility since they don't have to report quarterly earnings to the public.

When we look at LDI, we see it as a risk management decision, not necessarily an investment decision. In other words, we ask clients "how much of the funded status volatility do you want to take off the table and how quickly do you want to de-risk the portfolio?" The answer to both questions helps guide the glide path development and implementation.

Each client has a different amount of threshold for pain. That is why every client has a different hedging strategy, glide path and different allocation to LDI, assuming a comparable funded status.

It is interesting that clients do have and implement unique solutions across the board to meet their individual needs.

David: Is LDI different to risk parity as a strategy?

Brad: It is very different. LDI to us is a risk management strategy. The level of LDI assets and the structure of the hedging portfolio is determined by how much funded status volatility you can withstand. Whereas, we view risk parity as diversifying return seeking that we use to diversify the return-seeking portfolio. Risk parity is typically funded pro rata from a 60/40 global equity portfolio. The goal of risk parity is to reduce equity volatility without materially reducing expected return on assets (EROA).

That being said, the majority of risk parity strategies have a lot of duration in them. In fact, many of the bond portfolios have a 11-13 year duration. So if you have a very high hedge ratio and you are a big user of risk parity, you absolutely need to take into consideration the duration exposure and the risk parity strategy.

Risk parity is an important tool and we have used it a lot along with global asset allocation strategies because we view both strategies as diversifying strategies. But you really do need to be aware of how they are investing their portfolios.

David: What are some of the pressures that plan sponsors are feeling at the moment and over the last few years?

Brad: The ongoing funded status volatility associated with managing a DB plan, as well as the continual regulatory changes, have both recently added pressures to plan sponsors.

They have had several rounds of funding relief provided by Congress going back to 2008. The Pension Protection Act was the primary legislation that ushered in the use of LDI in the States.

> "CONGRESS HAS PUT SO MUCH PRESSURE ON PLAN SPONSORS THAT THE NEXT EFFECT HAS BEEN TO ESSENTIALLY LEGISLATE CORPORATE PENSIONS OUT OF EXISTENCE"

The most recent funded relief passed by Congress considerably increased Pension Benefits Guarantee Corporation variable and fixed rate premiums. So many plan sponsors are acutely focused on the impact on the variable rate premium.

We have clients who would that are not required to make contributions under funding relief and are planning to make voluntary contributions to minimize the impact of the variable rate premium. Several clients are topping up their plans in an effort to avoid the variable rate premium.

Congress has put so much pressure on plan sponsors that the next effect has been to essentially legislate corporate pensions out of existence. I haven't seen this much focus on PBGC premiums over the 30 plus years I have been in this industry. I don't blame plan sponsors. The variable rate premium is real money and no one likes to pay taxes. So plan sponsors are trying to find ways to mitigate them.

We have also seen more clients look toward lump sum settlements and partial buyouts to try and manage the overall size of the pension liability. Clients are exploring multiple ways to get the liabilities off their balance sheet. Even plans that are really well funded are topping off the plans to try to minimize the impact of the variable rate premium.

David: At what stage should a plan sponsor forget about LDI and just pull the trigger on a buyout?

Brad: It isn't easy as it sounds to get rid of the pension liability. A pension buyout is still the most expensive way to settle pension liabilities. Essentially, the plan sponsor is transferring the liability from its balance sheet to an insurance company, and the cost of that insurance is not free.

You need to be between 105%-108% funded status to do a pension risk transfer. The addition premium over 100% is due to differences in discount methodology and the additional "insurance premium" charged by the annuity provider. Buyouts are also complicated. Sponsors need to know if a partial settlement could possibly trigger settlement accounting. It is really not as easy as you think to make it go away.

Depending upon how clean the client data is at the moment, it is not uncommon for a sponsor to plan for a 1-2 year process from the time a plan sponsor decides to terminate, initiates the plan termination process with the Internal Revenue Service (IRS) and Department of Labor (DOL), to when they can write the check to the annuity provider.

What we have seen across the board is that the majority of plan sponsors are exploring multiple strategies to minimize the total operating costs of these programs and streamline them. We have also seen many clients do lump-sums to try and reduce the overall head count that is applicable to the fixed and variable rate premiums.

While buyouts are still very expensive as a settlement tool, if we see a 200-300 basis point increase in the discount rates, you could see a lot of plan sponsors head for the door. Especially, on the smaller plan size, where they can make it go away much easier.

The larger plans will have a longer tail on them than the smaller ones.

David: What about plans that have sub-80% funded rates?

Brad: It is a bigger market than you would expect. We track year-over-year change in funded status in our annual survey. What was interesting to see was that plans that were really well funded tended to have higher hedge ratios and held up remarkably well during 2016. Whereas, plans that were poorly funded (and had lower hedge ratios) experienced a fairly significant drop in funded status during the first half of 2016. That difference in funded status volatility was tied directly to the amount of hedging assets each group of plans maintained.

For the plans who are 80% funded, they really need to let their assets work for them. They need to be aware of how much funded status volatility they have in their portfolio. They also need to have a glide path in place, so that as the funded status does improve, they have a governance process in place that enables them to capture the funded status gains and protect the portfolio from another drawdown in rates.

At the end of the day, if a plan is sub-80% funded, they are not going to earn their way out of their deficit. The gap in funded status will need to be solved by additional contributions or rising discount rates. That being said, a well-diversified, return-seeking portfolio can help minimize the total cost of funding the shortfall.

The Pension Protection Act (PPA) is also going to ensure that you fund that more quickly anyway. So contributions have to be part of the solution.

David: Does the PPA say that as a corporate you are going to have to fund from other sources?

Brad: PPA required plans to become fully funded within a set period of time. The recent increase in PBGC premiums includes a material penalty tax on plans that are underfunded. As a result, plan sponsors are looking for ways to reduce the burden on the corporation. We have seen clients who have actually gone out and issued debt, funded up the pension plan and de-risked it in an effort to minimize these burdens. The decision of whether to issue debt becomes a balance sheet issue for the plan sponsors. In many cases, it comes down to a capital allocation exercise of how much room there is their capital structure to issue debt versus what are the other uses for the capital. .

I was surprised to see how much interest there was in ths type of transaction in our 2016 DB Trends Survey. 34% of respondents had evaluated the merits of issuing debt to assist in proving their funded status. 43% had already implemented lump-sums. 47% had a funded status of less than 80%. And 70% of corporate respondents, who had planned to issue debt, had a funded status of at least 80%.

What surprised me most was that 7% of plan sponsors indicated that they planned to issue debt to improve the funded status. I thought that this figure would be closer to 2%, so I was very surprised to see that many sponsors exploring this strategy.

This was the first year that we asked this question, but we will ask it again in 2017 to see what the results will be and track the trends.

David: Thank you for sharing your thoughts on this subject.

1.4 INTERVIEW

Could pension buyouts be the solution to the great public pension funding gap in America?

Interviewer

David Grana,
Head of North American Media,
Clear Path Analysis

Interviewee

Dr. Mark J. Warshawsky,
Senior Research Fellow,
Mercatus Center of George Mason University

SUMMARY

- *True funding levels at public sector pension funds may be worse off than current calculations show*
- *It is dangerous to believe that the federal government will bail out plans on the brink of collapse*
- *A voluntary buyout for public sector plans may be a viable option*
- *At the moment, no legal restrictions for voluntary public sector buyouts exist*
- *Plans and members should consider this solution before funding evaporates*

David Grana: What is your background within the pension sector?

Dr. Mark J. Warshawsky: It is quite extensive, particularly on the corporate side. I have been following this sector and doing research on pensions for almost 30 years.

After I finished my PhD in economics at Harvard, I went to work for the Federal Reserve Board, where one of my first topics was corporate pensions. Specifically, I was working with the new accounting standards, which was then called FASB 87-88. This was quite important, since it put the liability on the books.

After my work at the Fed, I worked at the IRS in the Employee Plans Division and did a study of underfunded defined benefit (DB) plans within the corporate sector. The study was combined with an examination program to look at compliance with the minimum funding requirements. That had some influence in the law changes in 1994 for the funding requirements, as well as other legal requirements that were affecting DB plans.

I then worked in the defined contribution (DC) area at TIAA-CREF, but came back to the corporate DB plan space, when I returned to government to work at the Treasury Department, where I was very involved in the lead up to the Pension Protection Act of 2006.

I have very extensive knowledge of the corporate sector in the areas of plan investments, funding, legal requirements, etc. As for local and state government plans, that is a little newer for me, but many of the same principles apply.

With the way the accounting works, there are a lot of differences, but there are also similarities in funding, investments, and benefits.

David: Funding levels particularly in public sector pension plans seem to be in dire straits. Can you paint a picture of what that looks like?

Dr. Warshawsky: One of the important things to know is that the funding should be measured by the market value of assets that the plan holds, less some measure of the liability of the accrued benefits that workers have earned.

There are different ways of measuring assets and liabilities. Government plans have a particular type of accounting for measuring them, which has a number of peculiarities in the area of methods and assumptions.

The main assumption that readers need to be aware of is the return that is assumed in measuring the liability. Liability is a discounted, present actuarial value of future benefits, according to accounting standards. It is dependent on the assumed investment returns of what the plan is investing in. It has been as high as 8.5% and is now down to 7.5%, with some even as low as 7%.

> THE DIFFERENCE BETWEEN A 3% RATE AND A 7.5% RATE IS ENORMOUS IN THE MEASURE OF THE LIABILITY, AND THEREFORE, IT IS THE EXTENT OF UNDERFUNDING IN THE SECTOR

The important point is that for the vast majority of people who work in finance, and certainly in financial economists' view, is that it is basically a mistake in the way of measuring liability.

The way to measure a liability is to look at what is being promised, not as a basket of assets, but rather as a benefit. In other words, the liability is a promised benefit. If it is a non-contingent guaranteed promise, it should be discounted at a risk-free discount rate.

Many people use the Treasury rate in their analysis, and this makes an enormous difference. That is because the current 10-year Treasury is at 2.5%. A slightly longer duration than this it could be 12 to 15 years, which could put you at 3%, give or take 10-20 basis points.

The difference between a 3% rate and a 7.5% rate is enormous in the measure of the liability, and therefore, it is the extent of underfunding in the sector.

There are many people who have done these calculations and adjustments, such as Professor Rauh at Stanford. He has done this adjusted measure of liabilities and he came up with an unfunded liability across the public sector in the U.S of about $3.5 trillion.

When you look at it plan by plan, there is a lot of variation. Some plans which have more modest benefits, or where the state and local governments have been making the contributions at the level that the actuary indicated, may be in the 60-70% funding range.

By contrast, there are other plans in states, which haven't made their funding contributions, or their investments haven't performed well. Or take a situation like what happened around the late 90s, where plans increased their benefits, or the population shrunk, such as in Detroit. Basically, the whole funding structure crumbles. The plan may not have been well funded to begin with, so you can end up with a plan in the 10-20% funding range.

It is very important to know that there is this wide spectrum. Often, people talk about something being a bad situation, but that the Federal government will come in and bail them out. What they fail to realize is that a senator representing another state with a relatively well funded pension plan would not be motivated to for a bailout of a different state.

The range is significant. For some plans, it is not a crisis. But for others, it's a very dire situation.

David: You have proposed a buyout solution. What does this entail?

Dr. Warshawsky: In a way, I feel that I was forced into this proposal. You have very poorly funded plans that are not sustainable. There is no way that they are going get out of the hole they're in and their assets will dwindle with 5-10 years. We have already seen plans that have collapsed with insufficient assets and bankruptcy like Detroit and Puerto Rico.

The problem is that in a normal legislative context, you would hope that you could solve the problem by either increasing contributions or cutting back on benefits. Maybe even for current beneficiaries, if there were legislative means. However, in many of these states, it is impossible because the law or state constitutions will not allow for alterations.

These laws are so prohibitive, that for a 25 year old who just started their job, you can't change any of their retirement benefits for the rest of their career - and that could be the next 40 years, and then another 25 years paying benefits!

In other words, the solution has to be voluntary. No one can force anything because of the legalities.

These plans can do an actuarial calculation of the value of assets and give a realistic projection of what the plan will look like over the next 5-20 years, including at what point the funding would be exhausted.

Producing this every year would provide a sobering understanding to workers and beneficiaries of what they are likely to get. After 2-3 years of sharing this information with them, you can put to them a choice: they can continue with what is indicated and they take their chances or they would receive a buyout offer - a lump sum of the discounted value of the benefits. This would not be the full value of the benefits, because there wouldn't be enough money to pay for that. This makes it a fair offer for the people who take the buyout, for those who continue in the plan, as well as for the taxpayers.

The discount is something that has to be designed. I had a very specific idea that it should relate to the funded ratio of the plan, plus 5 percentage points. This is a level of detail that can be worked out. The important aspect is that this is something that has to be fair to everyone concerned, as well as sustainable.

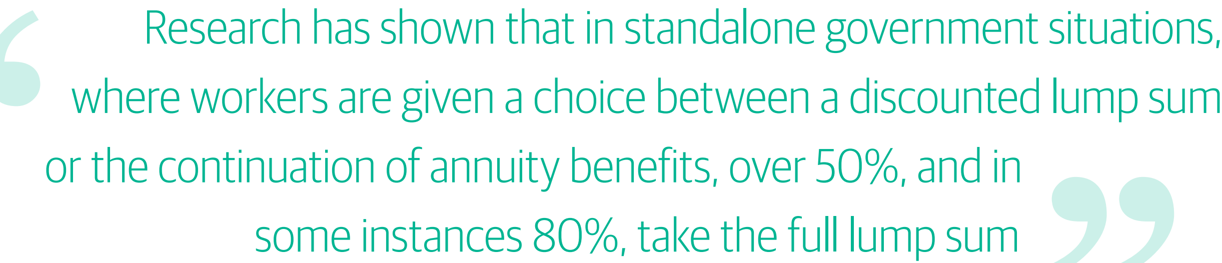
I acknowledge that it is a proposal that recognises the reality of the situation, which is uncomfortable to people. But if you are already in the position of what Puerto Rico is facing, then this proposal doesn't really do anything because there aren't any assets left. So it needs to be acted upon soon in many situations of states with unsustainable plans.

It isn't a proposal that can be on the table forever because as the assets disappear then it is too late. This is why it is so important to get the accurate measurements and accurate depictions and projections out to the public, workers and beneficiaries as soon as possible.

David: What are some of the risks for employees or the public plan sponsor?

Dr Warshawsky: Hope springs eternal, so even though I believe that there isn't going to be a bailout, some may still feel that there will be. I feel that the prospects of a bailout are very poor. I don't say this as a policy statement, but rather, I back that up with actual observations of real experience.

For example, Detroit went bankrupt and the pension plan benefits were cut. There was discussion of a bailout, but it never came.



I feel that there would be a lot of takers of the offer. Research has shown that in standalone government situations, where workers are given a choice between a discounted lump sum or the continuation of annuity benefits, over 50%, and in some instances 80%, take the full lump sum. This is despite that it is valued less than the flow of benefits.

This is a very viable solution to a very serious problem. And it removes the uncertainty from the beneficiaries and the workers, since they would invest the money. In essence, they would be out from under this enormous uncertainty that they are currently facing.

David: It is a viable solution but is it a realistic one? Could we start seeing buy outs in the public sector?

Dr. Warshawsky: Right now, there are no legal restrictions on such an offer, and it is being discussed. I have had heard discussions amongst state legislators, as well as city governments. They didn't propose it with quite as steep discount as I believe they would need to in order to make it work. I heard 75% of the actuarial value for the lump sum.

Similarly, in Puerto Rico, there was a discussion of a bailout but there isn't going to be one. As a result, there will be benefit cuts.

David: If public sector plans do not attempt to go down this, or a similar route, what are the possible risks of inaction?

Dr. Warshawsky: It won't be pretty, but there are a lot of uncertainties. One big uncertainty is that because there are other debtors, such as retiree health benefits, working capital and access to funds can disappear quite quickly.

There is a great deal of uncertainty in the bankruptcy process with the state. It is totally unknown because states don't go bankrupt. How the losses will be allocated has yet to be seen.

David: Thank you for your insight into this topic.

SECTION 2

ASSET MANAGEMENT STRATEGIES

2.1 WHITEPAPER

Weatherproofing a plan's return-seeking assets

2.2 INTERVIEW

An actuarial perspective of the current and future state of pensions

2.3 INTERVIEW

How has the corporate pension industry evolved over a 38-year career, and where is it heading – what does the future hold?

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Stemming the bleeding – what pension funds are doing to solve the issue of negative cash-flow

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The alternative method: Using a multi-asset approach to increasing funding levels

2.1 WHITEPAPER

Weatherproofing a plan's return-seeking assets

Amy Trainor, FSA, Multi-Asset Strategist, Portfolio Manager, and LDI Team Co-Chair, Wellington Management

SUMMARY

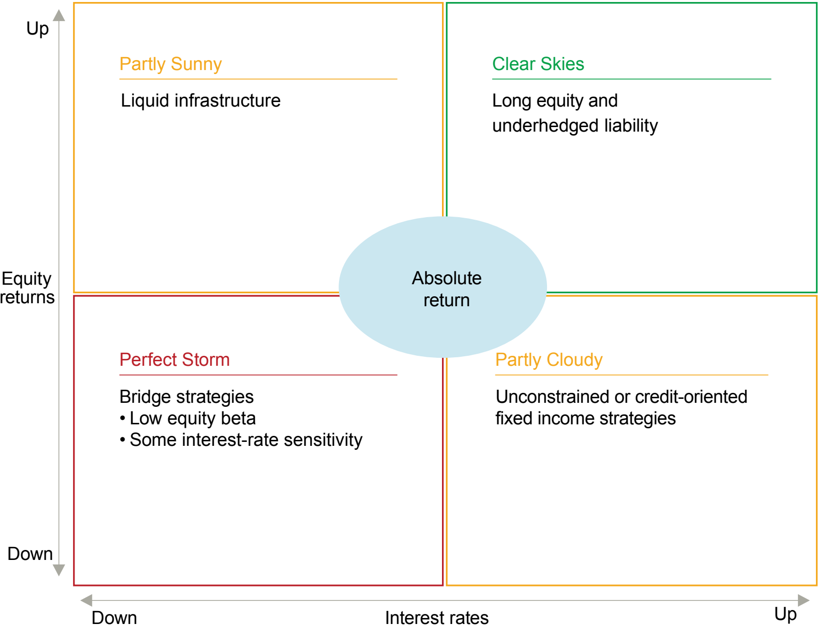
- *Equity-reliant return-seeking allocations are well positioned for one environment — rising equity returns and rising rates — and vulnerable in others*
- *A more diversified allocation may be prudent, as no single environment dominates*
- *Plans may be able to mitigate risk with "bridge strategies" that combine return-seeking and liability-matching characteristics*
- *Absolute return strategies may also help plans navigate different environments*

For corporate defined benefit (DB) plans, return-seeking assets are often synonymous with traditional equities. That's fine if market conditions are just right, but it leaves plans vulnerable in many environments, including one marked by weak equity returns and falling interest rates — what came to be known as a "perfect storm" scenario amid the funded-ratio devastation of 2000 – 2002. We think the solution is for plans to consider diversifying their return-seeking allocations with assets that may perform well in a variety of conditions.

Fair weather or foul? Rate and return scenarios

Many DB plans concentrate their risk in two positions: They are long equities and significantly underhedged versus their liabilities — effectively, long equity beta and short fixed income. As a result, the key market forces that affect their funded status are equity returns and interest rates. We used those two variables to define the four economic scenarios shown in Figure 1. The top-right quadrant ("Clear Skies") is the optimal scenario: With equity returns and rates rising, both risk positions would be expected to pay off, and funded ratios would improve.

Figure 1 - Better balance for changing market conditions



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The polar opposite of that scenario is captured in the bottom-left quadrant, where falling equity returns and falling rates come together in a "Perfect Storm" that can threaten major funded status drawdowns. Ideally, plans would have minimal equity risk and fully hedge their liabilities to produce steady liability-relative returns across all environments (especially a Perfect Storm). But that might be unrealistic for those that desire some return to help offset costs and improve funded status.

We think plans that still desire some return above their liability can mitigate the risk of a Perfect Storm scenario by diversifying their return-seeking portfolio with "bridge strategies" — investments that combine return-seeking and liability-matching characteristics, and that may offer low equity beta and moderate interest-rate sensitivity (duration). Examples include strategies focused on liquid infrastructure investments (e.g., companies with long-lived physical assets and earnings set by regulation or long-term contract, creating potential for "bond-like" earnings streams) and unconstrained or credit-oriented fixed income strategies.

No single solution

We advocate holding a mix of bridge strategies that encompass varying levels of equity beta and rate sensitivity. Not only can this provide diversification within the bridge lineup, but it may also better balance the portfolio across the other two scenarios in Figure 1, in which equity returns and interest rates move in opposite directions (in other words, equities and liabilities move in the same direction). In these environments, the effect on funded status depends on which of the two variables dominates (i.e., whether equities or liabilities experience the greater magnitude of change) — hence the somewhat ambiguous labels we've given to the top-left quadrant ("Partly Sunny") and the bottom-right quadrant ("Partly Cloudy").

Our research confirms this ambiguity: During periods in which equity returns and interest rates moved in opposite directions, traditional equity exposure was equally likely to harm plan funded ratios as to improve them. We demonstrate this in the third and fourth bars from the left in Figure 2, which shows the degree to which US equities outperformed or underperformed long bonds in the four different environments. Not surprisingly, the Clear Skies environment (second bar) is the only one in which equity returns consistently improved funding. But this environment has prevailed only about one-quarter of the time since 1973.

Figure 2 - Equities consistently improved funding in only one environment

Monthly return of US equities over long bonds, February 1973 – December 2016 (%)

Funded ratio improves

Funded ratio declines

Equities have consistently outperformed only in Clear Skies

95th percentile / Median / 5th percentile

	Perfect Storm	Clear Skies	Partly Sunny	Partly Cloudy	Rate neutral
95th percentile	-1.5	9.7	5.6	3.1	4.8
Median	-4.9	3.6	0.8	-1.2	0.4
5th percentile	-12.8	0.2	-3.8	-6.4	-5.3
Equities	Down	Up	Up	Down	Up or down
Rates	Down	Up	Down	Up	Neutral
% obs	29	24	18	15	14

Equities: S&P 500. Long bonds: 75% Bloomberg Barclays US Long Corporate Bond/25% Bloomberg Barclays US Long Government Bond. Equities up/down identified by direction of monthly return on S&P 500; up/(down) rates defined as months where yield on US 10-year Treasury rose/fell by over five basis points (bps); monthly observations where yield on US 10-year Treasury changed by five bps or less are classified as "neutral rates" regardless of direction of equities. PAST RESULTS ARE NOT NECESSARILY INDICATIVE OF FUTURE RESULTS AND AN INVESTMENT CAN LOSE VALUE. Sources: S&P, Bloomberg Barclays, US Treasury, Wellington Management

It is this uncertainty about what will work best in a Partly Sunny or Partly Cloudy scenario that we think argues for a mix of bridge strategies. For example, in Partly Sunny scenarios, liquid infrastructure investments may have enough market beta to participate in rising equity markets, and may benefit from falling rates given their interest-rate sensitivity. In Partly Cloudy scenarios, unconstrained or credit-oriented fixed income strategies may be attractive for their low equity beta, even if they have some modest interest-rate sensitivity. Equity strategies with low beta and neutral rate sensitivity (e.g., long/short equity hedge funds or liquid alternatives) may also be beneficial in this environment.

We think plans can help mitigate the risk of a Perfect Storm scenario with "bridge strategies" — investments that combine return-seeking and liability-matching characteristics

We caution against allocating to strategies that have negative interest-rate duration (perform well when interest rates rise). Although such a strategy would likely help bolster returns in a Partly Cloudy scenario, it could suffer catastrophic effects in a Perfect Storm scenario and would likely worsen the funded ratio due to its negative rate sensitivity. Growth-sensitive commodities are an example, to the extent that interest-rate increases are driven by rising inflation. For this reason, we generally advise against a strategic allocation to negative duration or inflation-sensitive approaches unless the plan's liability has inflation linkage.

Absolute return strategies (center of Figure 1) may also help plans navigate different environments. The key is ensuring that the returns are truly market neutral, whether using standalone or portable alpha strategies. In some cases, these strategies have exhibited more beta exposure than expected in periods of market duress. A well-designed strategy that monitors residual exposures and combines diversified sources of alpha may help avoid this counterproductive outcome.

While these approaches might give up some upside relative to traditional equities in a Clear Skies scenario, we expect they would still outperform the liability and contribute to funded ratio improvement. Regardless of the specific strategies selected, the key is to begin taking a more holistic approach to return-seeking assets, creating a profile that is not dependent on clear skies for its success.

For more on our research, visit our **LDI library** at www.wellington.com/LDI.

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2.2 INTERVIEW

An actuarial perspective of the current and future state of pensions

Interviewer

David Grana,
Head of North American Media, Clear Path Analysis

Interviewee

Ted Goldman,
MAAA, FSA, Senior Pension Fellow, American Academy of Actuaries

SUMMARY

- *The financial strength of the plan sponsor relative to its financial liability can be a bellwether of benefit security*
- *Over 100 out of 1400 multi-employer plans may not be able to fulfill their member obligations*
- *Low interest rates have resulted in pressure on plan funded status*
- *The new administration's tax reform may impact contributions that employers and employees make to 401(k) plans*
- *With respect to the future of retirement security, we may see an emergence of new hybrid retirement designs that include DB risk-sharing and DC plans that take behavioral features to the next level, such as personalized auto-enrollment and auto-escalation features*

David Grana: I hear a lot about funding status being at rather alarming levels here in the US. From an actuarial point of view, how are pension plan sponsors' ability to keep up with paying members' benefits?

Ted Goldman: Funded status is important, but it's only part of the story. The financial strength of the whole organization, relative to the size of the financial liability, can be a significant bellwether of benefit security. Whether there's a funding strategy that aims to deliver the targeted member benefits can be, too.

When looking at the trends in funded status, it's important to understand the history behind them. Many traditional pension plans have been around for a long time and have had to withstand demographic and economic challenges. In some cases, the ratio of active employees to retirees has changed dramatically as retiree populations have grown. And in some instances, active participants groups have declined.

That history has affected the various types of sponsors differently, so there are really three different stories to tell with respect to benefit security.

First, you have the corporate pension plans, which are largely frozen at this point. For these traditional pension plans, generally, member benefits are secure and the focus is largely on an end-game strategy with an objective of fully funding the plan over time and minimizing risk and volatility. We may see an increase in plan termination activity and paying out benefits, as they become fully funded, especially if the economy strengthens further. Indeed, plan sponsors are being careful not to overfund these plans, since any surplus cannot be used for other business purposes and are subject to additional taxes if they ultimately revert back to the employer.

Next is the multi-employer pension plan system. These plans are facing a host of issues, with about 100 or so plans, out of 1400 in total, that are in a category labeled as critical and declining by PBGC. These 100-plus plans face a high probability of being unable to deliver on the full commitments made to plan members. Something needs to happen to help these plans ultimately pay out benefits – either by injecting more money into them or reducing the benefits. To exacerbate the situation, PBGC's multi-employer plan program, itself, is also at risk of being unable to pay the guaranteed benefits levels, which are often much lower than plan sponsors' benefit levels.

Third is the public-sector pension plans. Within this group, some plans are very poorly funded, while others are just fine. These public entities often make choices in a political or legislative environment that can make governance and funding even more challenging. For example, appropriators may choose between increasing pension contributions

or paying teachers or filling potholes. There has been growing concern about the size of the pension obligations of many of these plans as they mature.

David: Have interest rates had an impact on benefit calculations for plan members, and how quickly do rates need to move in order to provide some relief?

Ted: One of the benefits to plan members of a defined benefit plan is that members do not bear the investment risk – at least not directly. The risk is borne by the plan sponsor.

Ever since the 2008 recession, plans have been working to recover from the market losses. And although markets have recovered, interest rates have remained extremely low. With low interest rates, the liabilities are higher, resulting in continued pressure on the funded status of plans. Rising interest rates can quickly improve funded status and the security of benefits.

Another concern that emerged for poorly funded plans is a focus on plan solvency. This is especially true in the multi-employer and public sectors. Pension plans are very long-term obligations, but plan sponsors need to be doing calculations to make sure that cash flows can be covered.

David: Many in the industry are still waiting on guidance from the new administration on the issue of tax reform and regulations. What was discussed about those issues at the recent Enrolled Actuaries meeting that you attended?

Ted: There was a general session at the April Enrolled Actuaries meeting that talked about tax reform.

Tax deductions for contributions employers make to retirement plans, as well as deductions that employees take for retirement savings in DC plans and IRAs, are considered significant revenue losses to the government. Thus, retirement is likely to be looked at carefully in any reform efforts.

One idea being considered on Capitol Hill is treating 401(k)-type tax deductions with a Roth-type approach. Under a Roth account, an individual doesn't receive a tax deduction for the initial contribution, but taxes are not levied later on the investment earnings.

If lawmakers start looking at ways to promote savings, they will be interested in the effectiveness of tax incentives in encouraging employers to offer retirement plans. Employer-provided retirement benefits are one of the legs in the traditional three-legged stool of retirement, along with Social Security and personal savings — so any proposed changes in this area would receive a lot of attention.

David: Lifetime income is becoming an increasingly important topic, especially as our life expectancy increases. Is there any guidance on better preparing plan members for retirement in defined contributions (DC) structures?

“IF LAWMAKERS START LOOKING AT WAYS TO PROMOTE SAVINGS, THEY WILL BE INTERESTED IN THE EFFECTIVENESS OF TAX INCENTIVES IN ENCOURAGING EMPLOYERS TO OFFER RETIREMENT PLANS”

Ted: At the Academy, we have done many things to help inform policy makers and the general public about the importance of and options for lifetime income. We have a task force that is dedicated to addressing lifetime income issues, and it has produced issue briefs tailored to different audiences, including educating future retirees and advisers directly. They're available in the Lifetime Income Initiative section on our website, actuary.org.

The Academy also created the Actuaries Longevity Illustrator (www.longevityillustrator.org), in partnership with the Society of Actuaries. With this online tool, you enter your age and answer a handful of

questions about how healthy you are. It shows you not just your life expectancy, but also your probability of living to different ages. This idea is to illuminate the real possibilities of living a long lifetime and provide a more objective foundation for people to plan for retirement income and needs. We have had really good feedback to-date about the illustrator, plus it's fun to show family and friends.

Making lifetime income options within DC structures more widely available and better understood is important. One of the challenges to this is employer reluctance to offer employees these options due to fear of litigation if things don't work as planned for an individual. Clear safe harbors appropriately protecting employers from fiduciary risk could help pave the way for more options within DC plans. We need to make it easy for organizations to offer some of these solutions inside qualified plans and encourage them. The providers also need to create solutions in a way that people can understand them and see the value in them. Success will take efforts from all stakeholders – employers, employees, the financial services industry, and the government.

David: Do you feel that this has to do with regulations, particularly around Qualified Default Investment Alternatives (QDIAs) and the liability that would fall onto the plan sponsor?

Ted: The short answer is "yes." Features like QDIAs and Qualified Longevity Annuity Contracts (QLACs) are good examples of where public policy is attempting to make it easier for employers to offer lifetime income options. Offering appropriate default investment choices through QDIAs has improved asset allocations for many and constructs continue to evolve. QLACs are available, but take-rates have been low. More needs to be done in the way of employee education and removal of barriers to employers offering them.

David: What are some alternative solutions to the pensions dilemma?

Ted: There is continued interest in hybrid approaches to retirement benefits that attempt to capitalize on the best of both the DB and DC approaches. As an aside, it's pretty interesting that after all of these years, these are still the only two fundamental ways of delivering retirement income. Hybrids have been in the market for a while, with the likes of cash balance plans or pension equity plans or even variable benefit plans.

Other countries, such as the Netherlands and Canada, are taking the lead on what is being labeled as collective DC plans or DB shared-risk plans. Benefits are paid as lifetime income and assets are pooled and invested by professionals. Funding targets are set, but if funds are inadequate, adjustments are made by either increasing contributions or reducing benefits. These approaches attempt to capture the best of the DC and DB worlds. A similar design has been discussed for multi-employer plans in the U.S., but to-date, no action has been taken. This could be an approach that we see more of down the road.

Another area to watch is the emergence of more behavior-related solutions in DC plans. Automatic enrollment and escalation features have shown some success, but there are still limitations on their effectiveness. Rather than start with a blank piece of paper, it makes more sense to start employees on a path to a secure retirement and then keep them on that path. I could easily see plan designs that automatically enroll employees at a personal savings rate and that adjusts that rate throughout their working lifetime. Similarly, behavioral solutions could be implemented to help retirees with the drawdown stage of assets during retirement. We may see some exciting developments along these lines.

It's time to think creatively — and realistically — about meeting retirement income needs. If you think about the amount of savings needed for retirement as a dartboard, with the bullseye being how much wealth at retirement you need to live happily ever after, right now many people who are picking up the darts and throwing them aren't even hitting the wall.

Given Big Data and the technology that we have today, with a splash of actuarial science, we as a society could do a lot better for people than we're doing now.

David: Thank you for sharing your thoughts on this subject.

2.3 INTERVIEW

How has the corporate pension industry evolved over a 38-year career, and where is it heading – what does the future hold?

Interviewer

David Grana,
Head of North American Media, Clear Path Analysis

Interviewee

Ray Kanner,
Chief Investment Officer (retired), IBM, Executive Director, Committee on Investment of Employee Benefit Assets (CIEBA)

SUMMARY

- *A hybrid pension plan may be a good solution to replace DB plans*
- *The only way plans can dig themselves out of deficits is to contribute funds to the plan*
- *It is never too late to implement an LDI solution*
- *Pension risk transfers are very plan-specific*
- *Advances in technology may be able to provide a viable DC solution*

David Grana: Could you give an overview of your history within the pension industry?

Ray Kanner: I spent all of my career at IBM, though not all of it in the pension area. After graduating with an MBA in computer applications and finance, my first position at IBM was on the systems side. I did that for 7 years and then moved over to the finance side of the organization. I worked in the Treasury group of what was then called the IBM Credit Corporation - its leasing arm. I ran a mortgage portfolio and was then in charge of credit for IBM's customers. Ultimately, I got an opportunity to join the pension fund. That was 24 years ago, and gradually moved up, eventually assuming overall responsibility as the Chief Investment Officer, nearly 10 years ago.

David: With this experience and looking at how things have evolved between markets and the interest rates, do you think that plan sponsors can or should stay in the defined benefit ("DB") game for much longer? Or should they consider looking at offsetting the risk and moving out of it altogether?

Ray: Unfortunately, for a variety of reasons, this train has left the station. Corporate DB plans are either closing, have closed to new entrants, or are freezing their plans and will continue to do so. In spite of their resistance, many of the public plans, with their large funding gaps, will have no choice but to also head in this direction.

The world has changed a lot from when I first entered the workforce 39 years ago. Back then, most or many employees were expected to and wanted to work at the same firm for their entire career. That environment lends itself to a DB structure. But the dynamics are much different now, and millennials will only be working in one place for a few years before moving onto another employer. Given the way that benefits are earned, portability is not a feature of the DB plan.

In addition, corporate plan sponsors are eliminating the DB benefit because the liability is much greater than previously assumed, given the increase in longevity.

One of the things that I have always wondered is why no one came up with a hybrid DB/defined contribution (DC) solution. This would address some of the issues that plan sponsors face. Why not have a finite DB term that provides a DB benefit for, say 5 years, after a 30-35 year service career? It would obviate the claim that DB has become unaffordable because people are living longer. It would also allow for a smoother transition into retirement and better workplace management, as well as eliminate or reduce the issue of path dependency, which an employee retiring around the 2008 Financial Crisis would have faced.

> THE ONLY SOLID ADVICE IS TO CONTRIBUTE TO DEAL WITH THE FUNDING GAPS. THAT'S PROBABLY WHAT THEY SHOULD HAVE BEEN DOING ALL ALONG. 80% FUNDING IS A FAIRLY DEEP DEFICIT. 50% IS AN INCREDIBLE DEFICIT

David: What advice can you give plan sponsors that have a sub-80% funding ratio?

Ray: The only solid advice is to contribute to deal with the funding gaps. That's probably what they should have been doing all along. 80% funding is a fairly deep deficit. 50% is an incredible deficit. To extricate yourself from these holes in an environment of low expected returns is very difficult. It will be tough to earn much above your required return to make up for the shortfall, especially when you are paying out 6-8% of your liabilities every year to retired members. The math does look very daunting. Working yourself out of it without contributing is a very difficult challenge.

David: What are your thoughts on LDI, especially with the recent increase in interest rates?

Ray: We did not let the rate environment unduly influence us. What we have experienced over the last 10-15 years is that rates would go up a bit, followed by a false hope that rates are rising, and all of a sudden rates are back down 50 basis points. In 2013, rates ended the year at 3% and everyone thought rates were finally going higher, only to come right back down again. Rates are incredibly difficult to predict.

We aren't talking about rates that are at 0, but at 2-2.5%. They were 2.6% two months ago and are now back to 2.2%, so I would say go ahead and do it (LDI).

It is never too early or too late. In hindsight, you will obviously know whether you were right or not. You may have some regrets, but not increasing your liability match is an uncompensated risk that should be decreased or even eliminated.

The last 15 years have provided quite a few opportunities to de-risk, which most companies didn't take advantage of.

It isn't that rates just have to go up; they have to go up more than is already discounted and baked into the curve. Not everyone factors this in.

In addition, there is a wall of demand for long duration assets if rates do go up. If this happens, it may provide a natural ceiling for how much rates rise, given their limited supply.

Furthermore, if you think rates are low in the U.S., take a look around the world.

Again, my advice would be to do it. If you are a bit wary of the timing then perhaps dollar cost-average in little by little, but do it.

David: Was the LDI at IBM executed pre- or post- Financial Crisis?

Ray: It was executed pre-Financial Crisis. There were degrees of our exposure to LDI as a strategy. But during the financial crisis, we went full throttle, which saved us. We were something like 50% hedged pre-Crisis and 80%+ hedged in the middle of it.

David: Did you run a model of what it would have looked like if you had gone LDI after Oct 2008?

Ray: We would probably have been 10 points worse, because we would not have had the benefit of our fixed income portfolio going up in value.

David: We're starting to see partial and full pension risk transfers become more interesting to plan sponsors. What are your thoughts on that subject?

Ray: There isn't a right answer, and these solutions are very company specific. One main factor is the size of the company's pension obligation relative to its market capitalization.

Another is the desire on the part of the plan sponsor and its skill set to immunize the portfolio and manage it in house, saving on the cost of the transfer.

Regardless of the plan's funding level, though, the ever increasing PBGC premiums (both fixed and variable), make the case for risk transfers more compelling, especially when dealing with low balance accounts.

As a result, a partial risk transfer of terminated vested employees could be cost reducing for many plans, regardless of their funding levels or size.

David: On the DC side of things, I've spoked to plan administrators about the growth of target date funds and even funds that include alternative assets in an effort to try and get close to the options and performance of DB. Do you have any thoughts on what's working and what's not in DC and how to improve that area for employees?

Ray: Target date funds have definitely improved the outcomes for participants. They glide down in risk over time, making them a better default option than default funds we've seen in the past. It is certainly a major improvement, but it is still an imperfect option.

Why should we decide on an optimal asset allocation solely based on one factor, which is age? Why not consider total wealth and one's personalized expected retirement date instead of assuming that everyone retires at the same age? Why not consider their liabilities and tax situation, etc.? In other words, why not create a personal target date fund?

The technology exists now to implement it. And this is a better mousetrap than a one-size-fits-all target date fund. How soon this can happen is uncertain, but I feel that this will be the evolution of target date funds.

With respect to alternative assets, there is a role for them, but only within target date funds. However, we do need to get over the very destructive impact of lawsuits plaguing the industry.

Plan sponsors have no interest in attempting innovation, because of the fear that they are going to be sued if the option(s) they chose did not perform over some period that the lawyers decide. If this were to dissipate, then we could see plan sponsors take advantage of the illiquidity premium and offer some of the strategies that have worked within the DB world.

> "Plan sponsors have no interest in attempting innovation, because of the fear that they are going to be sued if the option(s) they chose did not perform over some period that the lawyers decide"

There is also lots of nervousness regarding fees. As overall DC fees have come down, with the shift from active to passive, introducing a target date fund with private equity or private real estate can make the fees go up considerably.

One idea is to have some creative performance fee structures that align the interests of the managers with that of participants and plan sponsors, so that managers only get paid when the performance is there.

David: Thank you for sharing your thoughts on this subject.

2.4 INTERVIEW

Stemming the bleeding – what pension funds are doing to solve the issue of negative cash-flow

Interviewer

David Grana,
Head of North American Media, Clear Path Analysis

Interviewee

Aoifinn Devitt,
Chief Investment Officer, Policemen's Annuity and Benefit Fund of Chicago

SUMMARY

- *Funding levels are an abstract actuarial concept, but cash flow is critical*
- *Private credit is a good method of hedging against interest rate exposure*
- *Unconstrained fixed income can provide a more practical approach to duration*
- *Cash flow has not been a common problem for most DB plans, but that may be changing*
- *Some CIOs may opt for a multi-asset strategy as a way to establish a strategic relationship*

David Grana: Why is cash flow an issue growing in importance these days with defined benefits (DB) plans?

Aoifinn Devitt: I consider cash flow a key issue for us. We're a public defined benefits (DB) plan and I consider our cash flow situation to be much more critical than the funding level. This is because the funding level is somewhat of an abstract actuarial concept that will move according to how you change your target rate of return and the discount rate that is used.

We just changed our target rate of return to 7.25% from 7.5%. That had the effect of moving our funding level from 26% to 23%. I don't manage the funds to a funding level. However, I do manage the funds according to our cash flow reality. The cash flow reality here is a sunnier picture than it has been in the past. Right now, we are at negative cashflow, but only to the tune of 5% a year. This is an improvement on recent years. Still, that 5% of our fund is quite a significant cash shortfall.

I don't believe you will find many other public plans globally, for example in the UK, nor many corporate plans, negative to that degree. But I feel that it is a manageable number. With a target rate of return of 7.25% and the historical rate that we have delivered since inception of around 8%, it is reasonable to expect to generate 5% per year in returns. That is what we need to bridge the gap, and it does need to be in cash. On this basis, since the fund will not be run down as much as in the past, it should hopefully remain whole at a fund level, because we can generate what we need in order to pay benefits. We then can have a proper approach to asset allocation, since we know that the core of our fund will be growing and not declining.

David: With interest rates rising, is this to your benefit? Are you starting to see a rosier picture and maybe being able to make up that 5% loss that you currently have?

Aoifinn: It is still a little early to see the flow through of interest rate rises. Ultimately, that will hurt our fixed income portfolio in the short-term. But with our core fixed income portfolio, we don't expect to see very compelling returns from it. In fact, we are currently looking at low single digits.

We have taken a decision to diversify significantly into private credit by allocating up to 8% into private credit. That is a way we believe we can hedge against interest rate exposure, because most of the private credit we are investing in is floating rate. It's not as sensitive to interest rate rises.

We are also exposed to a whole lot more than core fixed income, such as a lot of shorter duration exposure. This includes high yield, bank loans, mortgage derivatives, private lending, as well as some esoteric, flexible capital. All of this isn't as sensitive to interest rates. We almost have more exposure to growth and the strength of economy in many ways.

Of our core fixed income exposure, 13% of our portfolio is in unconstrained fixed income. That is, by definition, aiming for a more practical approach to duration. Some of our unconstrained managers have negative to zero duration and all are shorter duration then the Barclays Aggregate Index. As a result, we are getting some protection against interest rate rises. In the longer term, rising rates are a good thing for pension plans, since a high risk-free rate gives a better yield environment all round.

David: Do you feel that cashflow is a common problem amongst DB plans in general, including corporate plans?

Aoifinn: It hasn't become a severe problem for many DB plans yet. But this is changing, and there is a shift towards cashflow becoming less positive and more negative. I don't feel that many are in as dire straits as we are, with our 5% negative cashflow. This is quite unique.

As far as corporate cash plans, they are certainly better funded, given that they are generally entering into de-risking glide path arrangements. They are also moving towards fixed income as part of this shift, and cashflow generation does not seem to be of particularly high priority.

I believe that cashflow generation as a focus is an excellent way to ensure a diversified portfolio. When you have contractually guaranteed cashflows, whether it be in small to mid cap private entities, through construction loans or litigation finance payments, that is quite robust and independent from market forces and market direction.

Another example is the triple net lease arrangement, where you are getting the rental payments on a property net of insurance, maintenance, etc. These are nicely uncorrelated to market direction and momentum. For that reason, they can be an excellent addition to every portfolio, regardless of whether you need the cash or not.

We have found that we are in the minority because we take the cash coupons. In some cases, most investors are happy to just roll them over and re-invest. Their main goal is to achieve a total return instead of focusing on the cash.

David: What are your thoughts on multi-asset strategies?

Aoifinn: I am a little bit wary of these strategies. My role as a CIO is to create a multi-strategy portfolio that achieves our target rate of returns. I don't see much value in having a sub-part of my portfolio with that objective.

The reason some CIOs in my position might do so is if there is a huge opportunity to partner with a leader in the multi-asset space to create a strategic relationship. In that scenario, they run a portion of the money, but they also share ideas, research and macro calls with the investor. The investor can then take that insight and apply it to the rest of the portfolio.

David: Thank you for sharing your views on this subject.

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WHEN YOU HAVE CONTRACTUALLY GUARANTEED CASHFLOWS, WHETHER IT BE IN SMALL TO MID CAP PRIVATE ENTITIES, THROUGH CONSTRUCTION LOANS OR LITIGATION FINANCE PAYMENTS, THAT IS QUITE ROBUST AND INDEPENDENT FROM MARKET FORCES AND MARKET DIRECTION

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2.5 INTERVIEW

The alternative method: Using a multi-asset approach to increasing funding levels

Interviewer

David Grana,
Head of North
American Media,
Clear Path Analysis

Interviewee

Brian Reed,
CAIA, AIF, Director,
Retirement Plan Assets,
CSRA Inc

SUMMARY

- *LDI removed too much return potential from the plan*
- *Multi-asset was a good way to diversify from excessive equity risk*
- *Exposure to alternatives, and an active credit strategy should perform well in a rising rate environment*
- *Measuring multi-asset performance is done on an absolute return basis*
- *How a multi-asset strategy holds up against a market correction is the true test*

David Grana: Tell me a little bit about your plan. Is it frozen? What is its size?

Brian Reed: The plan was frozen in 2009. As of March 31, 2016, it held $2.6 billion in assets, covering $3.1 billion in liabilities. Plan investments are managed externally in 25 funds and overseen by a small treasury group, an analyst, and myself. We act as internal advisors and work closely with legal, human resources, and an external consultant, NEPC, to monitor investments and ensure proper governance of the pension, along with the 401(k), SERP and OPEB plans. I started with CSRA's predecessor company, Computer Sciences Corporation (CSC), as Director of Retirement Plan Assets in January 2012.

CSC in 2014, and CSRA in 2016, executed two optional participant lump sum settlement programs that reduced the liability by over $900 million. It also reduced the participant count by 10,000. There are currently about 20,000 participants in the plan.

David: Many companies go the route of a buyout or LDI, but you chose a different path. What was that and what were the factors for choosing the solution that you did?

Brian: We've actively reviewed strategies with our investment consultant and plan actuary to manage the liability and to address what we saw as an increasingly uncertain asset return environment susceptible to shocks or other events. At different points in time the company and our fiduciaries considered LDI, annuitization, and lump sums for terminated / vested and active participants. We will continue to review strategies as conditions change. From the reviews, we executed the two term vested lump sum programs in 2014 and 2016.

The fiduciary committee and advisors felt that reliance upon an LDI strategy removed too much return potential from the plan and slowed projected closure of the funding gap. However, the plan's asset allocation was not diversified. In fact, it left the company exposed to significant equity risk. The plan was a traditional 60% equity /40% fixed income plan, with 50% exposure to US equity and full 40% exposure to US fixed income. Although 60% of the plan was allocated to equity, it posed 90% of the plan asset risk. This exposure was evident during the 2008 financial crisis, when the plan experienced a drawdown of almost 35% and a subsequent rebound of over 30%. The committee wanted to reduce that drawdown risk while preserving return potential at a reduced level of volatility.

To increase diversification and reduce drawdown risk, the committee approved inclusion of alternate investment strategies and hedge funds. In late 2013, we included two risk parity strategies and three global tactical asset allocation strategies. In early 2014, we invested in two hedge fund of funds and began to search for direct hedge fund allocations to round out the program. Ultimately, we added seven strategies in the 2014/2015 time period. Additionally, within the remaining traditional fixed income allocation, we invested in two new unconstrained strategies in late 2014 to diversify the investment from the Barclay's Aggregate Bond benchmark. The current allocation of

> THE NUMBER OF STRATEGIES AND ALLOCATIONS ARE WEIGHTED TOWARD CREDIT STRATEGIES OVER EQUITY

the plan is now 31% to equity, 23% to fixed income, and 46% to the alternative strategies and hedge funds. This new allocation reduces equity asset risk to 70% of the plan and also reduced measures of projected return volatility. It is also more actively managed, with active credit strategies that are expected to perform well in a rising rate environment.

Although we have moved the allocations dramatically, the plan is still largely liquid, with 86% of the plan, providing daily, weekly and monthly liquidity.

David: What types of assets is the part of the portfolio that is not allocated to equities or fixed income invested in?

Brian: Approximately 50% is invested in risk parity and global tactical asset allocation. And approximately 50% are in hedge fund-of-funds (HFoF) and direct hedge funds (HF). The HFoFs are diverse strategies with a cap on the illiquidity, recognizing the frozen status of the plan. Within the direct HF, we employ a mix of equity long-short, credit long-short, distressed credit, opportunistic credit, direct lending, and mortgage derivative strategies. The number of strategies and allocations are weighted toward credit strategies over equity. The risk parity strategies allocate across equity, fixed income and commodity exposures, with one manager operating tight to risk measures and another able to tilt exposure strategically toward preferred segments.

David: Do you look at the performance from an absolute return perspective, or do you use a benchmark?

Brian: Although we track performance against different benchmarks, for reference, we look at it from an absolute return perspective. We track performance of a generic 60/40 domestic plan, a 60/40 global plan, as well as the policy portfolio.

David: Has this allocation strategy moved the needle on the funding level of the plan?

Brian: Over the last few years, discount rates, as opposed to assets, have made the largest impact to funding levels. The assets are performing as expected, and funded status has improved since the changes were implemented.

The allocation is still new to the plan, with the most recent investments not yet two years old. It's early to judge impact of the allocation with confidence. US equity has provided strong returns the last few years, and the diversification of the plan reduced our exposure to the asset class. Looking forward, in the longer term, the allocation is expected to reduce volatility and drawdown risk.

David: What's the execution timeline for measuring whether the strategy yields its intended results?

Brian: There is not a stated timeline, we will proactively review allocations. The better determinant will likely be event-based rather than time-based. A market correction or an event that materially impacts global markets for a sustained period will test the diversification and provide insight.

As market conditions and plan funded status change, we will review options to strategically reduce the liability and reposition allocations.

David: Thank you for sharing your views on this subject.

SECTION 3

EXECUTION STRATEGIES AND RISK MANAGEMENT

3.1 INTERVIEW

Case Study: Steps taken to execute the recent C$350 million Loblaw annuity buyout.

3.2 INTERVIEW

What are some of the litigation risks associated with pension de-risking that plan sponsors should prepare for?

3.1 INTERVIEW

Case Study: Steps taken to execute the recent C$350 million Loblaw annuity buyout.

Interviewer

David Grana, Head of North American Media, Clear Path Analysis

Interviewees

John Poos, Group Head, Pensions and Benefits, George Weston Limited

Marco Dickner, Retirement Practice Leader, Willis Towers Watson

SUMMARY

- *Pricing in the annuity market was favorable at the time of execution*
- *Ontario law prohibits using excess funds outside of the pension plan, so de-risking makes sense*
- *The economic conditions over the last decade have not been favorable for plan sponsors*
- *Annuities are likely to become more expensive as demand increases in the short term*

David Grana: What were the factors that led Loblaw to make the decision to de-risk the pension plan?

John Poos: We have been de-risking for upwards of 10 years in various ways. Over the course of the last 3 years, the de-risking activity has focused primarily on annuities. Before this, we had implemented an LDI strategy and have been continuing to do so ever since. The transaction that was concluded late last year/early this year was an opportunity that existed in the market that we took advantage of. Previously, we had executed four other annuity deals. They weren't of similar size, but they gave us some comfort that we were headed in the right direction. When this opportunity presented itself, we were prepared. Our funded position was such that the pricing was in line with our triggers, and we saw it as an ideal opportunity.

David: Marco, where you instrumental in providing this opportunity to John and Loblaw?

Marco Dickner: We have been working with Loblaw for years in establishing and executing their de-risking strategy. With respect to the $350M annuity purchase, we were by Loblaw's side through the entire process. It was close to a 12- month process, starting with governance readiness, followed by coordination and negotiation with the insurers, and finally a review of the contracts and implementation. For a transaction this size and especially given annuities were indexed, a significant contribution from us consisted in arranging a highly competitive bidding process for Loblaw.

David: Why did you decide to go the route of derisking as opposed to deciding to operate the pension fund?

John: We had been de-risking for some time. The issue for us was why continue investing in a geographic location where excess funds can't be utilized for anything other than pension purposes. In the province of Ontario, the law doesn't allow for the growth of surpluses to the benefit of plan sponsors. Once we found ourselves fully funded, relieving ourselves of the obligation made more sense, because it removes longevity and other risks that we can't control.

Marco: Let me share the perspective of plan sponsors in general on this question. The economic environment has not been favorable for many plan sponsors over the last decade with continued decreases in interest rates and a highly volatile equity market. In fact, looking at our most recent pension risk survey, the volatility of expected future contributions and high level of expected of future contributions are the main concerns for plan sponsors. De-risking through annuities is a powerful way to address these concerns. Why are we currently seeing an increase in the annuity market? Many plan sponsors now have the ability to transact without having to make additional cash contribution given the recent improvements in funded status.

> THE ECONOMIC ENVIRONMENT HAS NOT BEEN FAVORABLE FOR MANY PLAN SPONSORS OVER THE LAST DECADE WITH CONTINUED DECREASES IN INTEREST RATES AND A HIGHLY VOLATILE EQUITY MARKET

David: Was it difficult to find an insurer willing to take on the inflation-risk in the portfolio?

John: There aren't a lot of insurers who play in this area, so it was difficult. We had previously gone to market with these liabilities and the insurance carriers in Canada were aware that we were actively marketing. We received calls from carriers who were interested at that time and thought that they could come up with a price that might be inviting to us. As it turns out, it led to a discussion, which ultimately led to the transaction. It is not an easy area, but carriers are becoming creative around how to deal with inflation risk. We focused on three carriers who had expressed an interest and we pursued that with two of them exclusively.

David: Marco, are you finding that the market is quite limited and is not really set up for these types of transactions?

Marco: There are currently eight players who carry out annuity purchase transactions in Canada, but only three at the time could seriously have entertained transacting such a large block of indexed annuities, and they were invited to the discussion. Looking forward, the recently added new players, RBC and Brookfield Annuity, will help increasing the supply. Also, as we see the demand from plan sponsors increasing for large transactions, we expect more accommodation from re-insurers on the supply side. The Canadian market is evolving and transactions that were not possible in recent past due to size, complexity or affordability are now becoming possible. The Loblaw transaction is a good example.

David: Why were two insurers involved in the transaction? Was that by default or by design?

John: The price was not affected whether we used one or two carriers. This had been determined in our discussions with the carriers. Given our desire to expand our relationships, we had previously entered into some annuity deals with other companies. For us, it was about trying to create additional relationships for potential future transactions, given that it was not going to impact our price in any way. We were happy to share this transaction across two carriers.

Marco: It is common in Canada to have more than one insurer involved in a specific transaction. For large transactions, we always advise our clients to look at what the price would be for smaller blocks as well as the entire purchase with one or multiple carriers. This taps into the preference of all the various carriers, as some carriers prefer smaller blocks. It also key to maximize competitiveness.

David: What has been the strategy behind communicating the de-risking to plan members?

John: The members in this annuity transaction were all retirees already. They were receiving a pension check from us, so for them, they were now going to receive a pension check from an insurance carrier. To a certain extent, the carriers' credit rating is better than ours, so from the perspective of the members, this was probably perceived as further enhancement and protection for their pensions.

The communications originate with the carriers. They sent out welcome packages and communicate with our retirees. We sent a cover letter to advise them of the transaction, but the most critical communication is around the entire de-risking strategy with the board and senior management. The members' ability to affect the

transaction is limited. They are receiving a cheque and will continue to receive one. There is really no change from their perspective. The reaction has been limited and we have had very minor comments back from those that have been affected.

David: Marco, were you a part of that strategy or was this just considered standard operating procedure?

Marco: To echo John, the governance readiness and educating key stakeholders within the organization are very important pieces of the puzzle which all occurred prior to the transaction. As for the affected members, the fact they receive the exact same pension combined with the insurers' protection and Assures coverage makes these transactions typically well-received.

David: How important was timing in executing the de-risking when you did?

John: We have been fortunate at Loblaw in that we found ourselves in a position to transact largely before the bulk of our competitor plan sponsors. We have been in an enviable position, since the funded status of our plans has been relatively good. For 2017 and in the future, annuities may become more expensive to transact because of supply and demand. You may not see us transact anything similar to this in the near future unless the pricing makes sense for us. This was an opportunity that presented itself and we took advantage of it.

Marco: Historically, annuities were purchased only in cases of plan terminations and the transactions were completed only following the regulators' approval. The emerging trend, with Loblaw being a good example, is to purchase ahead of the end game. The approach allows sponsors to complete opportunistic transactions and reduce their market risk, the risk that the annuity market becomes more expensive. Our advice to plan sponsors interested in annuities as a de-risking strategy is to get started sooner rather than later and to be ready to be able to take advantage of potential opportunities.

David: Thank you both for sharing thoughts on this subject.

> To a certain extent, the carriers' credit rating is better than ours, so from the perspective of the members, this was probably perceived as further enhancement and protection for their pensions

3.2 INTERVIEW

What are some of the litigation risks associated with pension de-risking that plan sponsors should prepare for?

Interviewer

David Grana,
Head of North American Media,
Clear Path Analysis

Interviewee

Markus Kremer,
Commercial Litigation Group,
Borden Ladner Gervais

SUMMARY

- *Pension de-risking may not decrease a plan's exposure to litigation risk*
- *Communication issues around de-risking are fraught with risk*
- *There is a possibility of plan members taking action against plan sponsors as a result of de-risking*
- *Plan sponsors cannot prevent legal risks, but they can minimize them*
- *Insurer solvency is a main risk factor that plan sponsors should consider*

David Grana: It is becoming common for a pension plan sponsor to de-risks their plans. Speaking from a Canadian perspective, what are the legal risks involved with taking such an action?

Markus Kremer: It depends on what kind of de-risking activity you are talking about. The simplest de-risking strategy is to change your investment portfolio to a more conservative approach. If this is what we are talking about, you aren't really increasing your litigation risk.

One of the factors you do have to be aware of is that you can decrease the investment risk, but by doing so, you don't decrease the risk that your liabilities could increase. If there is a drop in long term interest rates, that fuels the cost of annuities.

All this aside, there is another type of de-risking that we are seeing happening a lot in Canada, whereby pension plan sponsors purchase insurance to cover longevity and inflation risks. In this situation, you have an insurer paying money to the employer to help meet its costs. With this you aren't creating a significant litigation risk.

Where you are creating risk is with the other types of de-risking. These are the categories of de-risking where what you are doing is shifting risk from the employer to the employees and pensioners. When you do this, you create the risk that if things go badly for them, they suffer perceived or real losses. This might come back to the employer to cover these losses.

One of these is the annuitization risk. This is the circumstance where the employer purchases annuities in order to cover pensions and payments. In this situation, you have the risk that if something goes wrong with the insurers, such as the insurer becoming insolvent, the employees might try to come after the plan sponsor for that obligation.

There are also the plan amendment risks. These are situations where, in order to manage costs and, in particular, to manage the risk of increased costs, the employer amends its pension plan in order to freeze benefits or reduce them. They can also remove indexation. When you do this, you then have the risk that you have breached either legislation, your contractural obligations, or a collective agreement, if it is a unionized environment.

You also have the plan conversion risks. This occurs when an employer decides that they want to get out of the defined benefit (DB) plan business altogether and instead move to a defined contribution (DC) plan, or some sort of group investment vehicle. Here, you have the risk that you might be sued for how that new vehicle has been selected and designed or what information has been given to people who invest in it. This includes information about the management fees and other areas associated with participation in the plan.

The final category, which is the largest and most ripe for litigation, is the category where your de-risking measures result in employees

> AS A PENSION LAWYER, ONE OF THE TERRIFYING ASPECTS IS THAT YOU GIVE ADVICE TO YOUR CLIENTS AND THE CONSEQUENCES OF THAT ADVICE MAY SLUMBER FOR YEARS OR EVEN DECADES

being given options and being asked to make choices. Any time you do this, you run the risk of being sued for not having provided them with adequate and accurate information for them to make their choices.

An example of this would be where you make a DC option available to employees. With this, they can decide whether to go into some group investment vehicle or another, or where they are choosing between options within that type of investment model. It may also be in order to manage your ongoing liabilities that you offer an early retirement package to people, or you offer to buy people out or annuitize them. This is the area that will most likely generate the most litigation.

David: Is it more often than not that it is more about the communication of what has been transacted in the derisking that is the issue as opposed to the actual de risking plan and this is where a lot of the confusion and where the employees may want to take action against the employers?

Markus: The communication issues are more fraught with risk. If you are simply doing something, the issue comes down to whether you are legally entitled to do it. On this front, if you are getting appropriate, professional advice, you can manage that risk.

You manage the risk, firstly, because if you are getting proper advice, then what you are doing is most likely legal. But also, if it turns out that it isn't legal, then you have another party to look to make up your losses (i.e. you can sue your lawyers if they gave you bad advice). In this sense, this risk is a bit more manageable.

The risk where you are actually communicating information to employees and giving them options is harder to predict in terms of how it will play out.

This depends so much on the communications that occurred. Also, this is the area where it is the least predictable to see how employees will respond and whether or not they will feel that they were given adequate information. This is different to whether they were, in fact, given adequate information.

When it comes to actually minimizing risks, the communication piece is essentially and particularly the idea of managing expectations.

David: Is it often that we see employees taking action against employers after de-risking?

Markus: In Canada, it hasn't been happening frequently yet. But the key word here is "yet". I see this happening in the future, for a few reasons. One is that there is a bit of a tendency for our jurisdiction to lag behind the U.S., in terms of litigation trends. Often, what we will see is that something will start to take route in the U.S., which is followed by more of those actions being brought up here.

It is not so much a question of our law following the U.S. law. It's mostly that people read about lawsuits in the U.S. and either employees, pensioners, or in some cases just the lawyers, realize that we have a similar issue up here which could be pursued.

I have been practicing pension law for 18 years and one of the things you learn is that pension risks tend to have very long tails. Very often,

a risk that was incurred doesn't actually come to light until people are ready to retire. Many people won't pay attention to their pension entitlements until they actually get close to receiving the money. Then, they will start to take issue with decisions that were sometimes made decades ago.

As a pension lawyer, one of the terrifying aspects is that you give advice to your clients and the consequences of that advice may slumber for years or even decades. They may only come to fruition much later.

What we have seen is some litigation about employees who have switched between pension options based on information they were provided by the employer. Litigation has challenged the adequacy of information.

We have seen litigation where employees' pension plan was annuitized through an insurer and that insurer has gone bankrupt. The employees in this situation have successfully sued the employer for having selected that particular insurance provider. This is not really a product of the recent de-risking activities. It does go some way back.

We have also seen some litigation recently about plan amendments that would reduce benefits or remove indexing and the validity around these, and the cases have gone in both directions.

There has also been litigation where an employer has offered benefit enhancements to a particular group of employees as part of an early retirement package, where they want people to retire partly to manage their risk. They can then crystalize the liabilities for that group. Sometimes groups within the pension plan will challenge whether or not it was appropriate to grant enhancements to that group. Although, the wave of litigation is probably yet to come for this area.

David: Do you recall any instances where the plan sponsor had to reverse a de-risking, or alter a de-risking because of litigation?

Markus: Not so much actually taking action, but rather threatening legal action. There have been circumstances where employers have pulled back on plan freezes, plan conversions, or pension plan mergers because of the threats that they received from some employees. In some cases, this has included the prospect of litigation.

I am not sure that there are many cases where an actual lawsuit has resulted in the employer changing their mind. There have been cases where particular amendments to a plan have been held to be invalid or illegal, which didn't come into effect. This wasn't so much a case of the employer changing their mind, so much as them being told by a court that they couldn't do what they were trying to do.

David: What measures can employers take to prevent the risk of legal action when executing a de-risking?

Markus: The use of the word "minimize" is right. What I tell my clients is that you can't prevent risks, but you can reduce them. By the same token, there is nothing that you can do that will prevent you from being sued.

My clients often ask what they can do to make sure they aren't sued. The answer is that you can't prevent yourself from being sued. You can only greatly reduce the chances that you will be sued successfully.

Putting that aside, although it sounds trite, the first thing that pension plan administrators and sponsors need to remember is that happy employees don't sue their employers.

First and foremost, the best way to make sure that you don't get sued by your employees is to make sure that they are generally happy. This is aside from their pension arrangements. But you also do the best to help them achieve their retirement goals, so they have no reason to sue you.

The same is true for pensioners. Although pensioners tend to be a bit trickier, since they tend to be a bit more litigious than employees. This is largely because they tend to have more time on their hands and sometimes don't have the same loyalty to the company. A big part is to keep them happy.

The education and information component is also very key. This goes to the specific situation where your employees are being asked to make choices. In this circumstance, you want to make sure that you are giving them accurate and complete information and not giving them advice.

First and foremost, the best way to make sure that you don't get sued by your employees is to make sure that they are generally happy

The reason is that advice is harder to justify. Information is easier to prove down the road as being correct or as correct as could be at the time that you provided it.

Aside from the specific points, there is also a general value to educating your employees about their pension arrangements and to manage their expectations. It is important to make sure that they understand how their pension plan works and what they can expect from it so that you don't have people who retire and are suddenly surprised by anything. The more you manage expectations, the safer you will be.

Companies should use outside professionals whenever possible and whenever appropriate. It depends on the company, since sometimes they will have in-house expertise. But certainly you want good legal and investment advice for them. A lot of this can reduce risk, as well as shift risk, because there may be another party that you can look to compensate you if things go wrong.

Legal advice is one area, as well. If you are setting up a DC plan, a lot of times there will be service providers who will do the education sessions for you by explaining how the plan works and what the options are to your workforce.

As long as you have the right arrangements in place in your contract with that service provider, you can allocate some of that risk.

The other factor is that, as a litigator, I am always focused on evidence. This is the one element that makes a litigator different from other lawyers. I am thinking not only about what is the right legal advice, but down the road, how could you prove that you did the the right thing legally.

A lot of this is all about record keeping, which is extremely important. It could be something as small as keeping accurate attendance lists of who attended an information session. But there is a whole series of things you can do to make sure that if, at some point in the future, there is an issue about whether or not somebody understood what they were doing when they made a choice, you will be ready.

These are all ways in which you can limit risk, although again you need to recognize that you can't eliminate the risk.

David: So is an employer ever really free from potential repercussions after a de-risking or does the risk still loom even after the financial obligation has been transferred?

Markus: They may be, since risk never disappears. You can only transfer some of it. Either you transfer it to an insurance company or you transfer it to your employees.

If you are transferring it to an insurance company, then to a large extent the risk depends on what happens with that insurance company (e.g. if it ever becomes insolvent). It is going to depend on the jurisdiction as to what happens next.

There was a case in Canada where an employer annuitized its pensioners and the insurance company became insolvent and the pensioners successfully sued the company. This was because there was a finding that there was a contractual obligation to provide those pensions. The fact that the company had arranged for someone else to do it didn't negate that contractual obligation to their employees.

This type of risk can never be entirely eliminated. When we talk about the other kinds of de-risking, such as where you are imposing some of that risk on your employees, you are shifting the risk. Essentially, you are creating a risk that you may be sued by a pensioner who claims that you didn't give them appropriate information, and as a result they have made the wrong choice and have suffered a loss.

David: There will then always be some form of risk even after you transfer the plan over?

Markus: Yes, that is right. In your question, you are focusing on where you are literally annuitizing it out to an insurer. This is one of the lower risk options of de-risking, because what it comes down to is whether or not the insurer is going to pay out the way it is supposed to. As long as they do that, you are going to be okay. But, of course, this is also a higher cost option, because you are paying for the insurer to take some of that risk off your hands. The risk is then about selecting the right insurer.

David: Thank you for sharing your thoughts on this subject.

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