What can plan sponsors do with plummeting interest rates?

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The rapid decline in interest rates through August 2019 leaves defined benefit plan sponsors in a bind. They know that a decline of this magnitude will increase the measurement of their plan's liabilities.

But generally, they don't know by how much. Will gains from their asset portfolio be enough to compensate? Will a decline in the plan's funded status require increased contributions?

And what if the trend continues? The last time rates were this low was during 2016, according to the FTSE Pension Liability Index (FPLI). In the wake of the 2007-08 global financial crisis, many plan sponsors' instinctive response was to mitigate their interest rate risk by freezing or terminating the pension plan. CFOs and members of pension committees may now be wondering if now is the time to take further action and, if so, whether minor tweaks to the plan design will be enough—or should they consider major changes to get rid of unwanted volatility once and for all?

In this article, we present our perspectives on the challenges of the current interest rate environment. Because every pension plan's situation is unique, sponsors need plan-specific data in order to make informed decisions. We also explain how, thanks to advances in technology, consulting actuaries can now generate realistic estimates of actuarial valuation results, funded status, expected investment returns, and other key factors, and deliver them in real time to support critical business decisions.

The current market dilemma

The current scenario, while not as dire as during the global financial crisis, still presents a considerable challenge. The yield on the 10-year Treasury was 2.66% at the beginning of calendar year 2019. After that, rates declined steadily through July 31 when the U.S. Federal Open Market Committee (FOMC) cut its benchmark interest rate by 0.25%. This triggered a more precipitous decline, as the yield on the 10-year stood at 1.46% on September 3.

A decline of 120 basis points is a large move by historical standards. As a result, the typical defined benefit (DB) plan with a 10-year duration would find its liabilities have increased by approximately 12.0%. A CFO looking at that number would certainly have cause for concern. Fortunately, both stocks and bonds are up for the year. Many pension funds have asset returns in excess of 10% through the end of August.

Is that enough to compensate for the liability increase? We do know that pension liabilities have increased this year based on the Milliman 100 Pension Funding Index (PFI), resulting in a funded status decline of 1.5% through the end of July. However, each individual plan's experience varies based on numerous factors, including a plan's specific duration, expected cash flows and asset allocation. But the key takeaway is that the discount rate used to measure liabilities is the lowest in the history of the FPLI through August 2019—dating back to 2010.

Questions—and answers

While the Milliman 100 PFI provides a general sense of how accounting liabilities have been increasing, plan sponsors still need data that reflect the specifics of their pension fund. Here are six questions that come up frequently:

1. **What will be the impact on our plan when it's time to refresh our balance sheet?** Historically, this was difficult to answer quickly because actuaries typically provide a formal report on a plan's liability and cost estimates in January—after the books have closed at the end of the prior year. However, a company's budget process needs to start much earlier than that. CFOs and controllers need to know how much capital is available for all of the items in their budget in order to communicate proactively with key stakeholders.

   Plan sponsors probably have a good sense of the value of their assets at any point in time because most securities are priced daily and asset managers provide reports on a monthly basis. So far in 2019, low interest rates have been a tailwind for stocks while also increasing bond valuations. In isolation, this paints a positive picture for plan sponsors. However, this picture is incomplete. A reliable estimate of liabilities and prospective asset return expectations are required to produce accurate forward-looking estimates. As noted above, actuaries can now quickly provide the required data through innovative technology. For example, online projection tools (like Milliman's FutureCost Online) allow sponsors to model the impact of changes to interest rates and other variables (in real time) on contribution requirements, funded status, Pension Benefit Guaranty Corporation (PBGC) premiums, and accounting expense to name a few. Armed with this holistic view, plan sponsors can more confidently budget for both the coming year and the long term.

2. **Will there be an impact on earnings?** It doesn't matter whether a pension plan is active with $1 billion in assets or has been frozen with a fund of $9 million, plan sponsors do not like when pension surprises negatively affect the company's balance sheet. By understanding a client's sensitivity to surprises, an actuary can provide early warning. For example, suppose a client communicates a concern about negative surprises of 2 cents per share or more. The plan actuary can estimate upcoming changes in outstanding liabilities and pension expense to determine the impact in terms of earnings per share. This enables the plan sponsor to set the right expectation as far in advance as possible.

3. **How can we reduce costs?** When initial analysis shows increases in pension expense or contributions, plan sponsors often look for concrete steps they can take to save money. There are three primary ways to achieve savings in retirement plans. The first is reducing benefits through plan design changes. The second and third are increasing future asset returns through changing asset allocations or reducing expenses through cost reductions from plan providers or using passive investments with lower management fees. Modeling allows actuaries to examine the impact of a variety of "cost cutting" options.

4. **Should we think about plan design changes?** Shifting risk from plan sponsors to employees usually entails freezing and eventually terminating the existing pension plan combined with implementing or enhancing a 401(k)-type plan to replace it. It's debatable whether one year's increase in liabilities, fueled by declining interest rates, would be sufficient to justify such a dramatic move. In addition to volatility worries, we generally see other catalysts—new management or concerns about the size of the pension plan relative to business operations—leading to major changes in plan design.

   If ongoing pension expense or cash contributions are the primary concern of the plan sponsor, there are several options for changing the plan design that can still keep the pension promise to employees. Actuaries can model the effect of changing the benefit formula from Final Average Earnings to Career Average Earnings or the impact of reducing the multiplier to name a couple variations of design changes.

   These cost-reduction options are important to consider because they can be less expensive than switching to a defined contribution (DC) plan.

   Balance sheet volatility is often addressed through Liability Driven Investment (LDI), but less common and arguably more effective is modifying the plan design by adopting a plan where the liabilities move in sync with the assets, such as with a Sustainable Income Plan (SIP). SIPs are designed to avoid balance sheet volatility by adjusting participant benefits based on actual investment returns, resulting in a plan that will stay fully funded in all market environments.

   Regardless of the motive, modeling remains an effective tool for analyzing the potential results of a plan design change. For example, a plan sponsor may start by evaluating the continued costs and funding required between plan freeze and termination. At the same time, employer contributions and administrative costs needed for the new DC plan would be included in the modeling in order to provide a more complete picture of the cost impact.

5. **What about investment strategies that mitigate risk, like LDI?** LDI is a strategy that seeks fixed income investments that match a plan's liability reaction to changes in interest rates as precisely as possible. Thus, a plan sponsor would purchase bonds with the same duration as that of the liability. Then, as interest rates move, the value of the LDI portfolio will move roughly in sync with the liabilities. When liabilities go up, assets go up. When liabilities go down, assets go down.

   Actuarial modeling can support the development of LDI strategy through duration measurement. However, the most successful LDI strategies are those that not only match duration between assets and liabilities but also address changes in the shape of the yield curve. At Milliman, we use innovative "completion management" strategies that use overlays of interest rate derivatives in conjunction with bonds to help pension plans weather all market conditions. Given that yield curves rarely ever stay the same shape for extended periods of time, we think it is best to use these kinds of dynamic LDI strategies to provide optimal de-risking for pension plans.

6. **What is the impact of declining rates on plan terminations?** Terminations become more expensive when rates decline. In a terminated plan, the sponsor purchases annuities to fund the payouts owed to beneficiaries. And annuity prices are affected by falling rates in generally the same proportion as the plan's liabilities. Plan sponsors considering termination or currently in the termination process would benefit from regularly updated estimates.

Know your options

Extreme interest rate volatility creates a wide variety of issues depending on the circumstances of each pension plan. One of the only things that's true across the board is that better decisions can be made when you have reliable and updated financial data.

During the last recession, we were impressed by the performance of the CFO of a large corporation who was questioned during an earnings call. The company had both a DB plan and a DC plan with a generous match. Like many others during the global financial crisis, his company was struggling financially. When an investor asked the CFO why the company didn't freeze the pension plan, he fired back quickly that his company would get a more immediate cash savings by getting rid of the 401(k) match than by freezing the pension plan.

He had the right answer because he was prepared with solid data and a deep understanding of the drivers of pension funding. Actuarial modeling can help provide both.

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