Viewpoints

3Q 2020

Welcome to the launch of **Viewpoints**, a quarterly LGIMA publication presenting candid discussions with industry experts on vital topics. In this issue, we discuss 2020 market turbulence with Ben Bartelt, Vice President, Marketable Investments at Advocate Aurora Health and Ciaran Carr, Head of Solutions Strategy at LGIM America.

We are happy to answer any questions if you seek additional information and welcome feedback as we shape content for future issues.

Presented by

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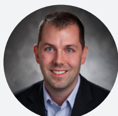
Featuring



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A discussion on how the evolution of LDI pertains to managing a cash balance plan

Liability driven investing (LDI) has been established as an effective strategy to increase predictability and reduce volatility for defined benefit plan sponsors. The use of LDI has grown over time as plan sponsors have experienced the pain of large fluctuations in funded status. We have seen plan sponsors implement LDI programs as a journey, starting with simpler programs that better align assets with the plan's liability profile, then moving to a more customized approach over time. Some plan situations, like cash balance plans, may require an element of customization to achieve their hedging objectives. In our conversation with Ben and Ciaran, we discuss the evolution of LDI and custom strategies and specifically, how they pertain to managing a cash balance plan.

CW: Before we start, I just want to thank you both for your time and willingness to participate in our first "Viewpoints" publication. Ben, I'll start with you. Do you mind sharing a bit about yourself, including how long you've been with Advocate Aurora Health?

Ben: I've been with the organization for three and a half years and in nonprofit health for eight years, previously with Catholic Health Initiatives. Like many, I was not aware of the asset allocator or plan sponsor career path in college. I started my career with a retail advisor in my hometown before moving to Chicago. It was during my next role in the back office of an asset manager that opened my eyes to the fact that institutional investors have a dedicated staff. I enrolled in the CFA Program and worked at an investment consulting firm before moving to the allocator side of the table. Nonprofit health particularly appealed to me because you get to work across multiple portfolio types in a mission driven environment.

CW: We've certainly had a year for the record books in terms of the market environment and the challenges facing many pension plans – volatility, liquidity, drawdowns, to name a few. What would you say are the key concerns for you and your team today?

Ben: Funded status volatility is our primary concern across all market environments. We are fortunate to have embraced LDI over the past several years to mitigate the

risk of funded status erosion. 2020 has been the first true stress test and we are happy to report that all plans have maintained funded status despite the market volatility.

CW: I'm glad you mentioned LDI, as this has been an investment strategy more plans have been adopting over the past few years. Ciaran, transitioning to you to speak more about what you have seen regarding LDI.

Ciaran: To begin, I do not believe there is a one size fits all solution in terms of LDI strategies. We are committed to letting the client's investment objectives drive their LDI design process -- meaning we need to first understand our client's goals before we can recommend the appropriate investment strategy. Though many LDI strategies share common themes in terms of hedging interest rate risk and credit spread risk or facilitating a client's path down its glidepath, every LDI strategy should be unique to a plan's specific situation.

CW: Has 2020 led to a greater adoption of this thinking?

Ciaran: I feel like we're still working toward widespread adoption. Over my career here, it's been a gradual climb in terms of gaining traction within the corporate DB space. A pension plan's first step into LDI is often as simple as extending the duration of their fixed income allocation. This could be a re-allocation of their Barclays Aggregate component to Long Duration Credit or Long Government Credit. As some plans continue their journey down their glidepath and allocate more to fixed income, we have definitely seen an increased demand for further customization to achieve a better match to their liabilities. This can take many forms such as using custom market-based benchmarks, using derivatives as a risk management tool to hedge more of the liability duration or even cashflow matching to plan liabilities. Customization is really about aligning a plan's fixed income investment to their liabilities and incorporating client hedging objectives more directly.

CW: Typical components of an LDI strategy include a Treasury and credit component. However, should liability challenges beyond interest rate and credit spread risk fall under the definition of LDI?

Ciaran: Yes, they absolutely should. Again, it is vitally important to understand the plan's unique liability and tailor an investment strategy. A perfect example of another challenge is cash balance plans. These have a very nuanced liability structure that requires a custom LDI strategy to hedge the risks effectively. Understanding the risks beyond interest rates and credit spreads, like the return seeking component, will allow a manager to design a solution that can appropriately address their unique challenges.

CW: Speaking of cash balance plans, Ben, I understand there are some nuanced features to plans that your team looks after. Do you mind explaining the unique natures of the Advocate and Aurora plans?

Ben: No problem! All three of our plans are now frozen. We have two traditional final average pay plans and one cash balance plan. The cash balance plan has a unique liability profile because the interest crediting rate (ICR) on the plan is the 1-year Treasury, measured annually on October 31st. Economically speaking, this creates a duration liability that is more akin to a floating rate bond than your traditional hedging instruments of long Treasuries or long STRIPS.

CW: Interesting. What are some of the bigger challenges you've faced in managing these plans?

Ben: The biggest project since I joined the organization was the freezing of the cash balance plan. Prior to the freeze, the plan was managed more like an endowment with a healthy allocation to alternatives and limited liability hedging assets. Once the freeze was approved by governance, our team moved quickly to transition the portfolio to over 50% liability hedging assets in less than two quarters. Behind the scenes, this involved completing a secondary sale for the vast majority of private assets exposure and coordinating the liquidity waterfall resulting from the termination of hedge funds and other semi-liquid strategies. Today, the portfolio is close to 70% liability hedging assets and 30% highly liquid return seeking assets.

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CW: Ciaran, from an asset manager's perspective, how do you typically address the cash balance component within the overall LDI strategy?

Ciaran: We recognize that interest rates and credit spreads will impact the liability value. Additionally, with cash balance liabilities there is also the dynamic of the interest crediting rate that can lead to unique behaviors within the liability as Ben first pointed out. This can present new challenges for the investment strategy. Using a different example, if the interest crediting rate is tied to the 30-year Treasury yield, the overall interest rate duration for a plan that is 100% cash balance could be close to zero. However, if you examine the key rate duration profile, you'll notice a unique risk profile that will often subject the plan to curve risk. As Ben and his team have already demonstrated with the management of their plans, understanding these features will be vitally important to designing an appropriate investment strategy.

CW: Ben, what would you say are the top priorities to consider when managing a cash balance plan?

Ben: The top priority, in my opinion, is truly understanding the economic liability profile of a cash balance plan. In our case, the actuarial cash flows resulted in a liability duration of approximately 10 years compared to the economic duration of less than one year. We didn't come to that conclusion until a detailed asset liability study. If you find a discrepancy between the actuarial liability, which feeds accounting and financial statements, and the economic liability, then you have a couple more decisions to make. Those are (1) which liability are you going to hedge against and (2) are you going to change underlying actuarial assumptions. We decided that hedging the economic liability was the top priority and then adjusted our actuarial assumptions to align with that decision.

CW: Given the unique nature of a cash balance liability that you've both pointed out, the use of derivatives seems to be an effective tool when trying to properly hedge the liability. Ciaran, do you mind speaking a little bit about the benefits of incorporating leverage within the LDI strategy? Are there any risks?

Ciaran: At a high level, including derivatives within the investment toolkit can allow a plan sponsor to hedge uncompensated risks more effectively within the LDI strategy. The use of leverage effectively allows the plan to hedge more interest rate risk per dollar of capital invested in the portfolio. As it relates to hedging a cash balance liability profile, interest rate derivatives can provide the plan sponsor more precision in addressing the unique curve exposures that I spoke of earlier. We've found that it can be difficult to effectively hedge these unique risks by solely relying on standard, market-based benchmarks. There are risks associated with incorporating leverage within the strategy through the use of derivatives. Risks, such as counterparty risk and mark-to-market risk, need to be considered as well as the processes to mitigate these risks. Central clearing, as well as the availability of exchange traded derivatives, has helped mitigate counterparty risk while daily collateralization has helped to greatly reduce mark-to-market risk.

CW: It sounds like there is an element of customization that is necessary when designing the LDI framework in a cash balance context. Ben, when plans move away from a pure product-type approach toward a more custom strategy, I can imagine the measurement of success is not as straightforward. What are the elements that your team look at when comparing managers who run custom solutions?

Ben: When setting up the manager structure for our custom liability hedge, it was very important to be able to efficiently measure success on a regular basis. Given the scale of our plan, we were able to map the custom credit hedge into three separate accounts that each have a market-based credit index. This allows us to conduct the traditional index and peer performance reviews for each account while still having a custom hedge at the portfolio level. We then have one completion mandate separate account to structure the custom interest rate hedge. For that mandate, we measure success by looking at the account's returns relative to a custom Treasury benchmark. The completion manager is also measured by looking at the effectiveness of the liability hedge at the plan level. We tend to focus on surplus return and surplus volatility metrics. At the end of the day, our governance measures success by looking at the stability of funded status.

CW: Can the principles of designing a custom strategy in a hedging context be applied outside the LDI realm to meet client objectives?

Ciaran: Yes, absolutely. One main component of a custom LDI strategy is the design of a custom fixed income portfolio tailored toward meeting the client's investment objectives. These same principles can be applied to other institutional investors. The first one that comes to mind is public plans. As public plans value their liabilities differently to corporate defined benefit plans, the investment strategy needs to be further tailored to fit their goals. Liquidity is often a challenge that public plans face, especially as they've been increasing their allocations to illiquid asset classes in search of maintaining long term return assumptions. We've been partnering with the public plan community to rethink the core fixed income allocation and understand if there are better solutions to ensure benefit payments will be met over time. The other area is defined contribution. In particular, how can asset-allocation be structured to meet post-retirement income objectives for participants. Regulation, such as the SECURE act, has moved the focus much more towards sustainable income solutions to promote savings and better spending outcomes for retirees. Similar principles used in designing a custom LDI strategy can serve as a roadmap for other institutional investors.

Ben: Absolutely, the natural next role for the liability completion manager to assume is completion responsibilities for the entire plan. For example, having our completion manager also serve as the derivatives overlay manager on our plans to ensure overall asset allocation is maintained as well as the sub-targets within our equity book.

CW: Thank you so much for your time today and sharing your thoughts and experiences with custom LDI strategies ■

About LGIM America

LGIM America (LGIMA) was founded in 2006 with the purpose of helping people achieve their long-term financial goals. We offer a range of strategies to help our institutional clients (corporations, healthcare agencies, non-profit, education, public plans and Taft-Hartley) manage their investment objectives, which can range from market-based alpha-oriented strategies to those that are designed to be more liability-centric, derivative overlays, or indexed solutions. Encouraging a diverse and inclusive environment coupled with a solutions-focused culture allows us to increase our breadth of knowledge and the likelihood of improved client outcomes and stronger financial performance. We have teams of experienced, innovative professionals committed to helping plan sponsors meet their pension promises, managing investment exposures efficiently to seek enhanced returns while mitigating risks, and working to generate returns while making a positive societal difference. As of September 30, 2020, LGIMA had $224 billion assets under management.

For further information about LGIMA, find us at www.lgima.com

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