

Aegon Asset Management US, specializes in multi-sector fixed-income investing, an expertise built over decades of working closely with insurance company assets. Liability-driven investment (LDI) is in our DNA.

Having evolved from the customized benchmarking and asset-liability management (ALM) ecosystem that prevails in life insurance companies, we have adapted skills and developed infrastructure to match asset cash flows with anticipated liabilities. Our highly customized approach to finding relative value at each part of the yield curve is born from the strategy life insurance companies utilize to match their highly complex, unique liability streams. With the full complement of our deep, fundamental, bottom-up research culture, our global top-down house view process—and our sophisticated risk management systems—we offer customized LDI solutions for corporate or public pension plans.

In this paper, we illustrate the value proposition of a particular solution: our multi-sector, ALM-based approach in managing a broadly diversified portfolio matched to retiree liabilities. We believe this alternative approach can be a worthwhile option for plan sponsors interested in pension risk transfer (PRT) solutions, now or in the future.

INTRODUCTION

For corporate plan sponsors that are exploring a de-risking solution for their defined benefit pension plan, our multi-sector, liability-driven approach can offer the opportunity to enhance the portfolio's diversification and yield profile and reduce funding status volatility.

We believe our method is distinct in two key ways. First, we focus exclusively on designing a portfolio for the block of existing retiree liabilities. Second, we expand the universe of investible assets to include less-liquid products, like private placements and commercial mortgage loans.

Our goal is to increase the interest hedge ratio and reduce the funding status volatility of a defined benefit pension plan. By focusing on the closed retiree block of plan participants, which has relatively predictable future cash flows, we can more effectively target the cash flow profile of those participant liabilities. And by expanding the investible universe across multiple fixed income sectors, this can provide an additional level of diversification and help locate relative value opportunities across the yield curve.

A multi-sector investment strategy can be a beneficial addition to an LDI program, due to its potential diversification and performance-enhancing characteristics. However, for the particular needs of a closed-block of retiree liabilities, we believe additional benefits can be gained through the use of more illiquid assets. We believe, including these additional sectors in the asset mix makes sense for life insurance companies, and it may make sense for pension plans, too.

AN ALTERNATIVE TO, OR PREPARATION FOR, PRT

Defined benefit pension plans present specific risks and costs to corporate balance sheets, and we understand why some plans decide to move some, or all, liabilities to a third party. However, for some underfunded plans, the additional contributions required to undertake that form of de-risking may be out of reach.

LDI has been adopted, in some form, by a significant percentage of the large corporate plan universe, but with interest rates near historical lows, glide paths may be far out-of-the-money, which means de-risking has stalled. Our approach is a step towards further de-risking and may be enhanced with a new type of glide path that is not based on funding status or interest rates, the two primary drivers of most LDI glide paths. Before addressing this approach, a brief history of the PRT market can help provide important context.

PENSION REVOLUTIONS, PRT EVOLUTION

Most commonly, PRT is a buy-out of a plan's current retiree liabilities and comes in the form of a single premium group annuity (SPGA) contract, wherein the pension plan sponsor purchases a stream of future fixed cash flows (an annuity) to match the plan's retiree liabilities. The SPGA business started booming in the late 1980s when plans were overfunded and "terminal funding" contracts were a popular way for corporations to tap the excess money. It's not a new idea for corporate defined-benefit plan sponsors to buy annuities, but the rules surrounding what companies can do with overfunded plans have evolved significantly over the decades.

The new wave of PRT transactions is a quickly-growing business and the providers seem to now be offering fairly competitive pricing. Some corporate plans may choose a slightly different path and purchase a financial guarantee from a large insurer. They would be adding a balance sheet asset, rather than unloading the liabilities. This "buy-in" technique is less common. Regardless of which approach sponsors take, PRT options can be expensive for an underfunded plan and incredibly time consuming for the company. Not only will a plan have to be fully funded as a pre-condition of a buy-out, but also the insurance company on the other side of the deal charges a premium, typically 5%, to take over the plan liabilities. There are other potential costs and downsides to consider, as well.

- PRT options apply only to the (closed-block) retiree liabilities. Therefore the plan will still have funding status volatility on the remaining participants, including actives, terminated vested, and new retirees.
- Companies that do a PRT transaction could be subjected to reputational risks and litigation.

Liability-driven investing can provide effective solutions for corporate plan sponsors seeking less costly ways to manage current retiree liabilities. And plan sponsors need not have to choose between one or the other; LDI can be a precursor to, or even operate simultaneously with PRT. In particular, Aegon Asset Management US's multi-sector approach is designed to generate liability-matched cash flows, without having to spend additional plan assets or get large contributions from the parent company.

FOCUSING ON THE RETIREE BLOCK

Our approach creates an alternative glide path based not on funding status or interest rates, the two primary drivers of most LDI glide paths, but on a simple and intuitive concept: Time.

Each year, employees retire and their status in the plan moves from active to retiree. In a traditional PRT solution, the corporate plan sponsor is responsible for these new retiree liabilities. In our LDI approach, however, the LDI solution provider can use annually updated actuarial projections to create a new liability benchmark each year. The result: The investment manager can build an alternative glide path based on the most recent actuarial data. Should the present value of the liabilities increase, the plan contributes new money, but only in the precise amounts to fund the new retirees.

LDI comes in many forms, but we break down the retiree liability approach into three broad categories of varying sophistication:

- Duration Matching - matching the overall duration of the assets with the duration of the liabilities. This is the very early stage after funding.
- Key Rate Duration (KRD) Bucket Matching - matching the duration of the assets and liabilities for different maturity buckets. This reduces the impact of non-parallel shifts of the interest rate curve. We suggest a quick move to matching KRDs.

- Cash Flow Matching - matching individual cash flows of the liabilities with corresponding assets.

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From a theoretical perspective, a cash-flow matched approach using only AA-rated corporate bonds is the most efficient, idealized solution for minimizing funding status volatility. In practice, however, it is not practical to construct a precisely cash-flow matched portfolio.

In an effort to take advantage of return-enhancing relative value opportunities and help provide a high level of cash flow matching, our LDI solution expands the investible universe.

THE MULTI-SECTOR LDI APPROACH

Opening up the plan's portfolio to include a more diverse array of investable assets is the core of our value proposition. It offers pension plans the opportunity to enhance the yield profile of the portfolio while working to maintain the desired asset-liability match.

Our approach aspires to let the sponsor fund liabilities at the current funding status level.

The Aegon Asset Management US approach may look different from competitors, in part because we propose diversifying the fixed income exposures across multiple sectors, including high-grade corporates, high yield credit, emerging market debt, structured products and US Treasury STRIPS. In addition to providing more diversification, an approach that expands the investable universe across multiple fixed income sectors can potentially deliver relative value across the yield curve.

Furthermore, we could include products like private placements and commercial mortgage loans in the portfolio. These assets can be sourced and structured with the plan's key rate duration buckets and projected liability cash flows in mind. A buy-and-hold approach with these illiquid securities is designed to help the plan to source extra income with the goal of outperforming other sectors. In other words, the multi-sector approach appears to be well suited to match shortening liabilities that will ultimately mature.

For very long-dated plan liabilities, there are few sources of duration available. Asset-liability matchers or managers who offer various LDI approaches tend to focus on new and recently issued 30-year US Treasury bonds and STRIPS. Those with derivative capabilities can utilize interest rate swaps or use US Treasury futures to attain a higher interest rate hedge ratio. However, a closed block of retiree liabilities has a much shorter duration profile than a full plan, and therefore cash instruments can be used to match very precisely with short liabilities. As a result, low-yielding US Treasuries are not required. In fact, with this approach, we are also able to incorporate less-liquid assets that tend to offer a premium to publicly traded securities.

Investment universe

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| i. | Publicly traded, investment grade corporate bonds |
| ii. | Privately placed, investment grade corporate bonds |
| iii. | Taxable municipal bonds |
| iv. | ABS, RMBS, and CMBS |
| v. | Commercial mortgage loans |
| vi. | Emerging Market debt |
| vii. | High yield bonds |
| viii. | U.S. Treasuries (nominals, TIPS, and STRIPS) and other sovereigns |
| ix. | Derivatives (e.g., interest rate swaps, futures) |

CONCLUSION

It is important to realize that a perfect LDI solution does not exist. Not only are matching assets not always available at the right price, but also pension liabilities are very likely to change over time, even for closed pension funds (e.g., due to changes in mortality rates and actuarial assumptions for survivor benefits). An LDI solution should therefore be reviewed periodically (we recommend annual reviews), using updated cash flow projections, in order to accurately track the changing liability structure. New retirees will increase the size of the pool, so additional funding could be expected, creating a glide-path that is not driven by rate or funding status.

Over time, a multi-sector portfolio may benefit from diversification and has the potential to outperform portfolios with more restrictive investment universes. The prospect of upside gains means it would not be necessary to fully fund a mandate that employs this LDI approach. Obviously, performance is not a straight line and there will be periods of underperformance as well as outperformance, but over a long period of time, we believe this strategy has the potential ability to outperform the liabilities, net of fees.

By focusing on retiree liabilities, and opening the investment possibilities across asset classes and sectors, the challenge of sourcing asset cash flows to match the liability stream is much more manageable.

Our experience in multi-sector fixed-income investing and asset-liability matching mean that designing your bespoke LDI solution is at our core. We invite corporate plan sponsors interested in pension risk transfer solutions to consider this approach.

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