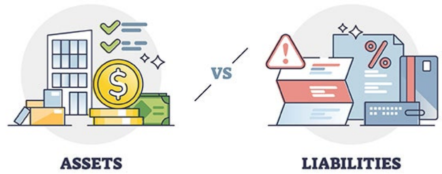

Mitigating Pension Plan Risks with LDI

The last few years have been defined by unpredictability, and pension plan sponsors have faced their fair share. Federal Reserve interest rate hikes, market volatility, and an aging population have combined to create a perfect storm of uncertainty and change for pension plan sponsors. This confluence of factors has elevated the importance of liability-driven investing (LDI) and proven its usefulness.

Consider the interest rate environment of the last decade. For years, central banks around the world kept interest rates at historic lows, which reduced returns on fixed income investments—often a staple in pension plan portfolios because of their stable cash flows and relatively low risks. As a result, many pension plan sponsors faced a growing gap between their plan liabilities and the returns generated by plan assets. But things reversed quickly when rate hikes began in 2022. As interest rates rose, pension plan sponsors saw liability values shift downward, providing a tailwind for funded status improvements.

Enter LDI: an investment strategy that seeks to align the duration and risk profile of pension assets with expected future liabilities to smooth the rough edges of financial volatility. LDI is now becoming more of a focus for plan sponsors as they look for ways to lock in *funded status*. Funded status is the **financial status of a pension plan,** measured by subtracting liabilities from assets. If a plan's funded status falls below a certain level, the sponsor may be required to make additional plan contributions to bring the funding level back above the threshold. LDI helps protect funded status by creating more alignment between liabilities and assets.

But making good use of LDI requires a shift in thinking, says Curtis Cunningham, an institutional portfolio manager at CAPTRUST. "It means transitioning away from an asset-only view of pension performance to a more holistic view that considers performance relative to liabilities," says Cunningham. "LDI isn't about maximizing returns. It's about mitigating risk. And managing risk is the best way to make sure you don't underperform your liabilities."

LDI Benefits and Challenges

Nroop Bhavsar, a senior specialist in institutional portfolio management at CAPTRUST, says LDI offers three primary benefits: risk management, enhanced predictability, and improved funding discipline.

"When actively managed, LDI can significantly reduce interest rate risk and help moderate market volatility," says Bhavsar. By aligning assets with liabilities, it ensures a more predictable funding outcome, helping plan sponsors avoid the wild swings that can lead to underfunding crises.

LDI can also help provide stable cash flows, making it easier for plan sponsors to meet pension obligations. This predictability can be hugely beneficial, especially when facing unpredictable market conditions.

Lastly, the structured approach of LDI promotes responsible funding practices. Combining responsible funding patterns with LDI helps solidify funding gains associated with those contributions. Encouraging plan sponsors to increase their allocations to fixed income instruments can effectively secure their funded status, ensuring the financial well-being of retirees and bolstering long-term financial stability.

But LDI also poses potential challenges, the most significant of which may be the ability to actively manage the LDI portfolio vs. the plan's liabilities to avoid underperformance, downgrades, and defaults. This is one reason an active LDI manager may outperform a passive manager, as this article will discuss later.

Considerations for Implementation

Plan sponsors considering LDI should approach implementation holistically, carefully assessing their specific needs and objectives. Every pension plan is unique, with distinct cash-flow characteristics and liabilities based on its participant makeup. LDI can create a portfolio that structurally matches the key rate durations of the plan's liabilities. This is called *duration matching*. A core principle of LDI, duration matching means aligning the interest rate risks of pension assets with those of the pension liabilities.

Most commonly, sponsors will assign a percentage of plan assets to LDI. Funded status shapes the intent and composition of the LDI portfolio. As funded status improves, so does risk mitigation. "The higher your funded status, the higher percentage of assets you can allocate to LDI because you want to protect that status by being more conservative," says Cunningham. "But a lower funded status often means you may need to take more risk. In that case, you'll typically have a lower allocation to LDI and a higher allocation to return-seeking assets."

Hard frozen pension plans are usually the best candidates for LDI, since these plans are no longer accruing liabilities. Hard frozen means the plan is closed to new participants and existing participants are no longer accruing benefits. *Soft frozen* plans may also be eligible, depending on funding status. In soft frozen plans, existing participants are still accruing benefits, so the plan is still accruing liabilities.

But LDI isn't only fit for frozen pension plans. "It can be appropriate for lots of different plan types—even open plans that are still accruing benefits if the sponsor is looking to mitigate risk and create more predictable outcomes," says Cunningham.

The Impact of Interest Rates

Although hard frozen plans may be easiest to track and predict, all pension plans face uncertainty because interest rates impact liabilities. Duration of assets and liabilities, allocation to LDI, and funded levels can all serve to make liabilities more rate sensitive than assets.

"Changes in the rate environment can have a meaningful impact on liability valuations and cause discount rate and duration to change over a plan's life," says Bhavsar. Simple hedging solutions, like blending mutual funds to match duration, may be appropriate under certain circumstances, but for many sponsors, they can be difficult to manage.

LDI strategies help to soften the volatility created by interest rate movement. "They do this by matching cash flows along the yield curve to mitigate interest rate risk each year," says Bhavsar. "Liabilities are interest-rate sensitive, but investments are only interest-rate sensitive up to the amount of LDI that you have in your portfolio."

The intention is to create an investment strategy that is more aligned with the interest rate sensitivity of liabilities. This way, even in times when fixed income performance is challenged, funded status will remain stable relative to liabilities.

Stability protects participants' benefits and helps make Pension Benefit Guaranty Corporation (PBGC) premiums more predictable. In 2023 and for 2024, PBGC variable-rate premiums are set at $52 per $1,000 of unfunded vested benefits—a 478 percent increase since 2013. "There is a significant cost to being underfunded," says Cunningham. "And that cost will likely continue to increase in the next few years."

Active vs. Passive LDI

Navigating changing rate environments and their impacts on liabilities may present challenges when not using an active LDI manager. Given the constant change in plan duration and plan discount rates, utilizing an off-the-shelf fixed income solution limits the precision with which a fixed income portfolio can hedge liabilities across a range of interest rate environments.

Active LDI investment managers focus on plan-specific risk factors like *key rate duration* to maintain a high degree of correlation between plan assets and liability valuations, which helps preserve funding levels. Key rate duration measures how the value of an asset changes at a specific maturity point along the entirety of the yield curve.

“Unlike a fixed income portfolio of similar quality, plan liabilities are immune to the effects of credit downgrades,” says Cunningham. “In an LDI context, this necessitates active investment in the portfolio to avoid downgrades and keep pace with plan liabilities.”

Utilizing active LDI management can protect the portfolio against unnecessary risk. Since trading activity can be based on research, not only index changes, there is an opportunity for performance to outpace the index and for managers to take advantage of market inefficiencies. “Active managers are often able to select bonds from a much wider opportunity set than a passive index,” says Cunningham. “By doing so, they can potentially avoid the impact of downgrades and defaults.”

A downgrade is when a ratings agency lowers the credit rating of a borrower. Actuaries for corporate pension plans calculate discount rates for pension liabilities using high-quality corporate bond yields to determine how much is needed today to fund future benefit payments. These rates are created by screening the universe of corporate bonds based on criteria such as credit quality. Investment managers use the same universe of bonds as part of the opportunity set when investing in LDI portfolios. When one of the bonds included in an LDI portfolio is downgraded below an acceptable credit quality or defaults, it no longer passes the screen and is removed from the discount-rate calculation in the next period.

With an active manager, removal can happen immediately, or even preemptively. “Active managers have the expertise to identify struggling companies and their probabilities of default,” says Bhavsar. “With a passive manager, removal happens only when the index is reconstituted.”

Yet passive strategies can be lower cost and more tax efficient, making them an attractive option for some defined benefit plan sponsors. “The important piece is to do your research so you’re really comparing apples to apples,” says Cunningham. “Passive strategies can sometimes help sponsors save money on fees but at the expense of outperforming the plan liabilities. You can get some custom LDI managers at a relatively attractive cost that will likely save you money in the long run. But if you’re looking at only fees—not the overall opportunity cost—passive strategies will almost always be less expensive.”

Risk Budgeting

In an era defined by unpredictability, LDI is one answer to the question of how to manage pension plan risks. As the complexities of the financial world continue to evolve, so must the strategies employed by defined benefit retirement plan sponsors. It’s not just a matter of financial prudence; it’s a way for pension plan sponsors to navigate the rough seas of uncertainty, reduce risks, and secure the financial future of retirees.

Before constructing an LDI portfolio, plan sponsors should do three things. First, identify the desired liability that they would like to hedge (e.g., the ASC 715 projected benefit obligation). Then, quantify the acceptable funded status risk given the plan status, current funded status, market conditions, and risk tolerance. And lastly, recognize the limitations inherent in hedging pension liabilities. With these pieces of data in hand, sponsors can make more robust decisions about LDI implementation and future measures of success.

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