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A Pension Strategy Open to Any Plan

(Not Just the Big Boys)

BY JOHN CIERZNIAK

Liability Driven Investing gets the plan sponsor focused on what the true objective is for a pension plan — to provide what's being promised in the plan.

Liability Driven Investing has largely come to light for U.S. pension plans over the course of the last 10 years. The main goal of this investment strategy is to limit volatility from a funding standpoint, or to simply limit the differences between assets and liabilities over time. This is much different than the standard goal of earning as much return as you can within reasonable risk parameters. A plan earning healthy asset returns could still fall behind the liability growth due to drops in interest rates. The LDI strategy is designed to better align assets with the movements of the liabilities.

THE PRE-PPA DAYS

So why is there now a big deal about "matching" the assets with liabilities? And why wasn't this the standard approach all along? To answer this question, it's worthwhile to revisit the years leading up to enactment of the Pension Protection Act of 2006.

Before the PPA, funding valuation interest rates were usually kept the same year to year, and were often selected with a very long-term horizon. Having static and high interest rates resulted in liability values that seemed manageable and grew in a predictable fashion. Albeit, "current" liability rates also played a role in larger plans to ensure that funding requirements were not grossly understated. In any event, standard investment portfolios were constructed to at least meet the valuation interest rate, and comprised an asset mix mostly in equities.

Heading into the late 1990s there were signs of a disconnect between standard valuation interest rates and how the same liabilities were being valued in the market. This showed up in instances of paying out lump sums or purchasing annuities. The liability being funded for was considerably lower than what was needed to satisfy an annuity or lump sum payment. So a plan's financial health could steadily decline, since actual dollar outflows were greater than the same liabilities represented in the valuation.

This bleeding of the asset portfolio meant a modest rise in contribution requirements but also a greater reliance on high investment returns that would not falter. The asset part of the equation did falter in a big way with the bear market of 2000-2002. With a large portion of the pension system weakening at this time, the PBGC was sounding alarm bells about the increasing stress on its program; a future government bailout of the PBGC might be the end result.

Lawmakers took notice, and a move to strengthen the pension system began in earnest that eventually took shape in the Pension Protection Act in 2006. One big change in the PPA was that the selection of valuation interest rates would be more market based. The large disconnect between funding rates and current market rates was ending.

LIABILITIES GET NOTICED

By having valuation interest rates aligned more with the interest rates demanded by the market, there were two particular consequences that changed from the pre-PPA days. Liabilities were no longer valued at static, higher interest rates, and the seeming predictability of the movement of the pension liabilities was gone. Furthermore, this meant that a clear return hurdle for the asset manager was also gone.

For plans that kept going with the standard way of relying largely on the returns of equities, it became apparent that a good portfolio return for the year could still be beaten by the returns of the liabilities in a decreasing interest rate environment. PPA has essentially changed the investment return target from the old static valuation rate to the dynamic liability returns of the plan.

PLAN ASSETS VS. LIABILITIES

With the Pension Protection Act rules in effect, the liabilities have a volatility that rivals the assets themselves. Many plan sponsors — and even investment managers, for that matter — may not fully appreciate that the growth of pension liabilities has been quite difficult to match with asset returns. Moreover, there is a built-in bias that favors liability returns over asset returns.

Asset portfolios have ever-present fees. Maybe it's "just" 1% or perhaps larger, but it means that what a plan earns from the risk it takes is always a bit smaller. And that doesn't even count other expenses the plan may pay out of the fund for actuarial services and administration — and now rising PBGC premiums as well.

The liabilities' growth, on the other hand, is rather relentless. The liabilities are valued as discounted future cash flows. With the mere passage of time, that discounting gets shorter and the present value marches upward. Now, if interest rates rise in between valuations, that doesn't automatically mean that the liabilities will go down. That is because time keeps marching on, and the discounting period as a whole will be a bit shorter.

Assets also have time on their side through compounding, but that usually means to maintain a risk level that can jump up and put a bite into the portfolio. And in those times, an uphill and expensive battle for the plan sponsor would only just begin.

THE LDI MINDSET

The name "Liability Driven Investing" aptly describes the focus of this strategy. Rather than targeting some asset-based benchmark with only the occasional glance at how the liabilities move, the plan sponsor needs to have a good understanding of the growth of the liabilities as well as their volatility. It does not mean, however, that the plan's portfolio becomes pigeon-holed into one track. There are still challenges to face and risk to monitor. But utilizing LDI will bring a vital connectedness to the plan.

For LDI purposes, it's key to know what the duration of the liabilities is. This is the cornerstone upon which the asset portfolio is built. What exactly is duration? It is the average time-weighted years of the future cash flows. In more useful terms, the duration gauges how much the liabilities will move given a change in interest rates. For example, if the liabilities duration measures 14 years, then the present value will change by 14% for a 1% change in interest rates in the opposite direction. (Remember, present values move in the opposite direction of the interest rates themselves.)

It should be noted that measuring the effects of interest rate changes is not quite as simple as that. The duration may change a bit given where the interest rates are at in

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the first place. This rate of change to the duration itself is referred to as "convexity" and just means that monitoring the liabilities is critical in the LDI framework.

SETTING A PLAN FOR THE PLAN

In order to take advantage of knowing the duration of the liabilities, you can build an asset portfolio with a similar duration. With matching durations, ideally the assets will move in lock-step with the liabilities, thereby limiting much of the interest rate risk that has become such a problem in the defined benefit world.

So what does a portfolio look like when you are focused on duration rather than the traditional diversification model? The main attribute is that the portfolio will be much heavier on the bond side and less so in equities. The reason for this is that bonds have measurable duration, while stocks at most have very low duration in empirical terms. Although changes in interest rates can affect a stock price (and more so for dividend-paying ones), there are still plenty of other factors that affect stock prices. So in the LDI portfolio framework, equities are considered to have minimal or no duration.

With the focus on fixed-income instruments, what are the best types of bonds to fill the portfolio? Due to PPA interest rates being tied to corporate bond interest rates, high-quality corporate bonds with sufficient duration are ideal to include in the portfolio. In the real world, however, it tends to be difficult to buy corporate issues with enough duration for a typical plan. While the interest rate spread can fluctuate somewhat between U.S. Treasuries and corporate bonds, it is acceptable to also include various Treasury instruments in an LDI portfolio. This component does a better job at increasing the duration of the portfolio.

As a start, a portfolio that has a focus more on the bond side and includes both corporate and Treasury bonds will start to move in the same direction and general magnitude as the movement of the liabilities.

Is that all there is to it — move out of stocks and replace them with some bonds? Unfortunately, LDI is not a "set it and forget it" strategy. Just like an individual planning his or her retirement, monitoring is needed to track the efficiency of the strategy and make any necessary adjustments along the way.

MONITORING THE STRATEGY

By implementing an LDI strategy, with its weighting on bonds rather than stocks, a plan sponsor will be limiting upside returns that one hopes to earn with a healthy exposure to the stock market. By giving up some upside, you definitely want to have in place a monitoring system to know that what you potentially sacrifice in absolute returns is gained in stable relative returns. LDI is not about absolute returns, but how the returns are performing versus the liability returns.

The very large plans using LDI frequently track the liabilities with the assets — sometimes just about every day. For the medium and small plan market, it is probably not practical to get a measurement of the liabilities that often. But by all means, it should be more often than once a year. While the actuarial valuation report is issued once a year, the actuary is able to apply basic projection techniques to update those liabilities during the year, whether on a semiannual, quarterly or monthly basis.

Key interest rates are published monthly for various purposes, such as for funding, FAS/ASC accounting, lump sum payouts or annuity purchases. LDI is mostly keyed toward the stability of funding, but the monitoring process can include the other measurements as well.

There will likely be some tracking error between the movement of an LDI portfolio and the liabilities it is to shadow. From a funding perspective, the recent MAP-21 legislation has complicated matters in that funding rates are now a 25-year average of rates. As such, tracking of assets should really be compared with liabilities utilizing interest rates without the MAP-21 smoothing — or better yet, measured from the full yield curve. Tracking versus a liability benchmark tied to the movement of current rates is essential to make adjustments to the portfolio along the way.

PRACTICAL IMPLEMENTATION

For the small and mid-size plan market, which commonly has plan assets in mutual funds or commingled funds, it's still possible to take the "fund" approach rather than buying bonds separately to customize the portfolio to the plan's own targeted duration. A vital element in this type of portfolio building is knowing the duration that each fund carries. By weighting the holdings in the bond funds to be used, you can dial in to an overall targeted duration. There are also good bond ETFs in the marketplace that carry sufficient duration so that a mix of ETFs can be used — with the added benefit that fees will be at a minimum.

For added sophistication, interest rate futures contracts are available to anyone with a basic brokerage account. Since futures are bought on margin, you will have more liability hedging power for the amount of contracts that are actually bought. In this setup, the futures contracts act as an overlay to the portfolio providing the duration matching. Since only a small portion of the portfolio needs to be tied up in the contracts, the rest can be used for a portfolio that can capture some upside in the markets.

Just like a basic, bond-heavy LDI approach, monitoring is especially important, with an overlay strategy due to the margin employed in the portfolio. While large plans have dedicated internal staff to monitor the plan's portfolio and the progress of any overlay strategy on a daily basis, small and mid-size plan sponsors do not have the same resources. With proper education and careful planning, a dedicated overlay can definitely work that is within the comfort zone of the plan sponsor.

THE STATE OF INTEREST RATES

It has been no secret that the low interest rate environment has been artificially orchestrated by various tactics employed by the Federal Reserve since the financial crisis in 2008. The investment community has been wondering how long rates can remain historically low — although there have been signs of interest rates creeping upward in recent months.

With rates seemingly on the rise, the timing of LDI implementation is not ideal in the minds of many plan sponsors. Why buy bonds when they are losing money right now? On the flip side, as rates rise, there is more of an opportunity for them to go back down or at least level out. Interest rates are still difficult to predict.

TRANSITION MANEUVERS

Rather than going into an LDI strategy all at once, there are some good ideas for transitioning into it. One is to phase in according to funded status level. If a plan is, say, less than 80% funded, LDI is kept on hold in order to maintain a risk level to capture good upside moves in equities. As the funded status level improves and hits certain trigger points, LDI is partially implemented each time. By the time the plan becomes fully funded, LDI is fully in place.

Another transition strategy is similar to one based on funded status levels, but a plan can transition into LDI as interest rates rise to certain predetermined levels. In this manner, bonds are bought as their values are going down. This may mean having LDI partially implemented and staying that way for quite some time if all of a sudden rates stall or go back down. In this case, at least the plan is better hedged than before. A combination of these two transition ideas can be put into place as well.

A different type of a phase-in approach is to focus on the liabilities attributed to current retirees or participants nearing retirement. This is similar to a 401(k) plan offering target date funds, where a more conservative portfolio is geared toward older participants and a more aggressive one is geared toward younger participants. In this case, LDI is implemented for a portion of the near-term, mature liabilities, while the remaining portfolio includes more of the equity risk. As the plan matures, the portfolio will eventually resemble a full-fledged LDI portfolio.

THE LDI MESSAGE

Liability Driven Investing gets the plan sponsor focused on what the true objective is for a pension plan — to provide what's being promised in the plan. The characteristics of the liabilities nowadays can spring surprises that the traditional portfolio mix might fall behind quickly. Employing LDI in the pension plan process will help the employer gain control of the plan, better plan this important benefit to its employees and keep its energy and resources focused on where they should be — its business. PC

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