PLAN SPONSOR UPDATE

# DEFINED BENEFIT PENSION PLANS: REBALANCING AS RISK MANAGEMENT TOOL

Rebalancing is defined as the discipline of adjusting portfolio weights to more closely align with the long-term target asset allocation. Investors strategically choose longer-term target weights for their portfolio asset allocation based on return and risk preferences. As asset values fluctuate due to market impact or cash flows, the portfolio becomes overweight by the winners and underweight by the losers relative to the long- term strategic target weights. This cross-asset momentum effect introduces unintended tactical risk and tracking error to the target portfolio. Rebalancing policy entails correction of any drift away from strategic asset allocation weights.

In fixed income dominated portfolios, deviations not only result from market price movements and cash flows (coupon payments), but potentially also the passage of time due to reversion to par value of bonds at maturity. For defined benefit pension plans, liability driven investing (executed via fixed income portfolios) represents a core risk management tool.

In a liability-relative asset allocation, adjusting a liability-hedging portfolio to account for changes in net duration exposures from the passage of time, for example, would fall under the rubric of rebalancing as described by CFA Institute. It is important to differentiate between the rebalancing and tactical shifts in a portfolio. Rebalancing is typically viewed as a risk management strategy while a tactical shift in an asset allocation is typically an implementation of an investment view. that indicates there are near-term advantages to being over or under weight in a particular asset class.

Amid a turbulent market in Q1, 2020, the funded status for most pension plans with return seeking components drifted lower. As a result of market impact, actual asset allocation shifted significantly relative to strategic weights, liquidity evaporated from once assumed liquid assets, and transaction costs increased. Specifically, the allocation to fixed income allocations (traditionally a source of liquidity) increased while allocation to other asset classes contracted. However, fixed income investments became increasingly illiquid - particularly the exposure to corporate bonds and high yield debt. Simultaneously, an unprecedented increase in volatility across asset classes was witnessed, with equities experiencing the most extreme escalation. Even in 100% LDI portfolios, mismatches were created since the performance difference of long Treasuries to long credit was above 25% in Q1,2020. Defined benefit plans were left with an important question: Is it optimal to rebalance now and if so how do we rebalance?

An appropriate rebalancing policy involves the weighing of all relevant benefits and costs.  Also, a rebalancing policy sets rules for when and how a portfolio should be reallocated.

- Ad hoc;
- Calendar-based- monthly, quarterly or annual;
- Range based (symmetric or asymmetric)- percentage threshold on either side of the strategic asset allocation;
- Volatility-based rebalancing- Corridor width is set proportionally to the asset class's own volatility;
- Equal probability rebalancing- a corridor for each asset class in terms of a common multiple of the standard deviation of the asset class's returns such that, under a normal probability assumption, each asset class is equally likely to trigger rebalancing

Typically, rebalancing is most effective either at a periodic set time or when asset allocation drifts outside of a predetermined threshold, or both. Calendar rebalancing incurs lower transaction costs because of lower monitoring overheads; however, frequent rebalancing can add significant transaction costs and it might not be the most appropriate strategy. Accordingly, percent-range rebalancing is a more disciplined risk control policy as it entails rebalancing contingent on market movements without weighing costs and benefits. On the flip side, ad-hoc rebalancing introduces emotion (fear, greed) into the rebalancing decision. The other strategies (volatility based and equal probability rebalancing) are more closely associated with asset allocations subject to risk budget and tracking error constraints.

Absent a rebalancing philosophy and process, a portfolio is subject to significant deviation from policy weights (large tracking error as mentioned earlier) along with higher volatility and larger drawdowns relative to the target. Such an asset allocation (buy and hold) underperforms all approaches highlighted above on a risk-adjusted basis. Conversely, the rebalancing strategies that have worked the best historically are disciplined about buying low/selling high to maintain an appropriate risk profile and take the emotion out of the decision. Disciplined rebalancing has proved to reduce portfolio risk while incrementally adding to overall returns in volatile markets. Other benefits include:

- Rebalancing earns a diversification return.
- Rebalancing earns a return from buying low and selling high.

## The strategic asset allocation may need to a re-evaluation

Connecting the dots in today's extremely volatile environment, a new asset/liability study may be warranted as some or all of the key considerations for the strategic asset allocation may have materially changed. Specifically, in tandem with the changing market dynamics, individual plan level dynamics may have changed as well, which merits a review of sponsor's key risk and return objectives. Particularly:

- The long-term capital market assumptions – There are material shifts in capital market expectations (risk/returns) amid subdued returns in volatile market conditions and future expectations of the market return to normal levels.
- Change in plan liability profile – probable workforce reduction, potential simultaneous early retirement packages, In-service distributions, active, TV, or retiree lump sum windows, change in future benefit accruals through soft or hard freezes, etc.
- Decline in risk tolerance amid deterioration in funded status - underfunded plans are more likely to have a greater risk aversion to downside risk relative to fully funded plans.

## Glide-path approach and rebalancing- Should plan sponsors rebalance today?

While the current environment is not very favorable for DB plans with PBGC premiums increasing, mortality tables adjusting, discount rates decreasing, return expectations plummeting, annuity rates hovering near historic lows, the wait-and-see philosophy has not been proven to be successful. Given the heightened risks for defined benefit pension plans, it may be prudent to give liability driven investing strategies a thorough consideration. Particularly in an environment where most fixed income asset classes provide very limited income and record low diversification benefits, proven strategies designed to reduce the volatility of the funded status by managing asset/liability mismatches may be the most appropriate risk mitigation tool.

Many of our corporate pension plans, particularly frozen plans, have implemented a glide-path strategy in recognition that funding-status risk is asymmetrical. Glide paths provide a systematic way to adjust the asset allocation to reflect the evolving relationship between risk and return as funding status improves. Although many strategies can be used to implement a glide path, almost all start with funding-status triggers as their basis for rebalancing and strategic asset allocation shifts.

USI generally recommends a One-way Glidepath to be implemented: In instances of significant market volatility - like in March of 2020 - and resulting decline in funding ratios, maintaining a lower-risk allocation could be maintained even if the funding ratio moves adversely to avoid any potential negative impact from re-risking.

While USI philosophically recommends the usage of funded- status as a trigger to rebalance, we have helped Plan Sponsors with other triggers like (1) Interest rates (as it is cheaper to buy bonds in a higher interest rate scenario) and (2) Market conditions (credit spreads, equity levels etc.)

However, it is important to note that triggers based on market conditions are essentially a market-timing strategy and making tactical shifts based on market timing considerations may hinder a plan's ability to reach its Investment Policy Statement objectives. Some Plan Sponsors have been waiting for interest rates to rise for the last 6 years and are facing a lower Funded Status today than six years ago.

Following 10 years of very favorable asset returns and painful liability returns, the first quarter of 2020 was a painful reminder that defined benefits plans are subject to a variety of risks. A review of all available risk management strategies to ensure the portfolio is aligned with the Plan Sponsors objectives and constraints will have to be one of the Top priorities in Q2 of 2020. A crucial component of that evaluation needs to be the harmonized recommendations of actuaries and investment consultants.

## Conclusion

In today's market environment and depending on individual plan circumstances, it may be reasonable to hold off on rebalancing until liquidity spreads, transaction costs and volatility come back to more normal levels. However, that decision can only be deemed appropriate based on specific plan statistics that weigh the transaction cost versus the cost of asset-liability mismatch.

A decision to delay rebalancing would maintain risk and tracking error elevated. Therefore, a disciplined rebalancing approach best aligns with plan sponsor's pre-determined investment policy and risk posture while it balances the need for risk mitigation and cost minimization.

In our view, rebalancing strategies need to be reviewed considering the overall plan risk management strategy. Our actuaries and investment consultants can help build a prudent infrastructure, assist with its implementation and manage its maintenance.