Is it time to rethink your equity allocation?

CHALLENGES

- Pension plan sponsors struggle to formulate the optimal mix of assets
- Diversification helps, but it isn't a silver bullet
- Plan sponsors must generate both the expected returns needed to meet future obligations and reduce funded-status volatility—and typical diversification strategies only get them so far

RESULTS

- Parametric's Defensive Equity (DE) strategy is designed to produce equity index-like returns over the long term with roughly half the volatility and more favorable downside characteristics
- Positioned to generate expected returns to meet future obligations + help reduce funded status volatility by incorporating the volatility risk premium (VRP)

Investor Challenge

Pension plan sponsors know very well that formulating the optimal mix of assets in a pension plan is a real challenge. At one extreme, they can choose to minimize funded-status risk by holding a fixed-income portfolio that mimics the fund's projected liabilities. At the other extreme, sponsors can choose to hold a set of risk assets that are expected to outperform their liability over the long term.

Unfortunately, expected asset returns in excess of the liability return and low liability tracking tend to be mutually exclusive. The plan sponsor normally must sacrifice one in order to have the other.

Diversification can help—but the typical 60% equity/40% fixed-income portfolio may still produce a significant portion of annualized funded-status volatility when combined with the liabilities of many pension plans.

The Research

We designed our Defensive Equity strategy with four main components:

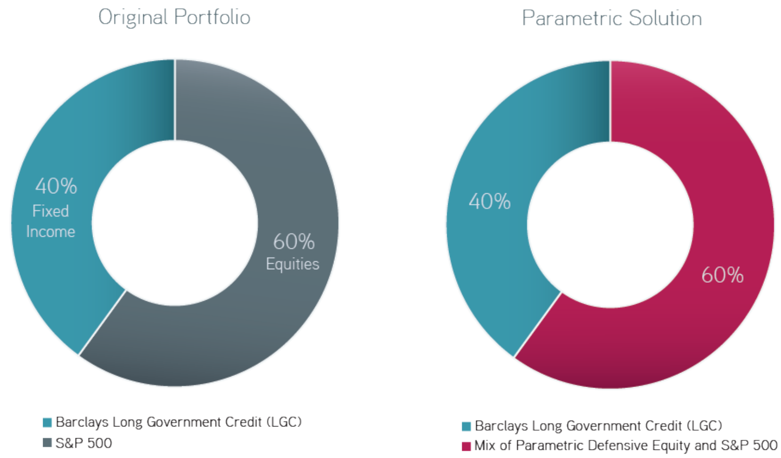
- Short one-month, out-of-the-money put index options
- Short one-month, out-of-the-money call index options
- Long S&P 500® Index equity portfolio created using exchange traded funds (ETFs) (fully collateralizes the short calls)
- U.S. Treasury bills (fully collateralizes the short puts)

First, we compared the Defensive Equity strategy to the S&P 500 Index. We found that:

- The Defensive Equity strategy can be a direct S&P 500 Index replacement and can be expected to perform similarly in a broadly diversified portfolio over the long term.
- The strategy seeks to deliver long-term results above those of the S&P 500 Index with roughly half the volatility.
- The Defensive Equity strategy may produce an excess of 95% correlation to the S&P 500 Index while seeking to reduce the maximum drawdown by 50%.

> Swapping in Defensive Equity for the S&P 500 Index allocation generated better portfolio returns and a reduction in portfolio volatility as compared to the index in many cases. Plus, tracking-error volatility to a pension liability proxy index (CPLI) improved significantly, and the maximum drawdown improved by more than half.

Incorporate Defensive Equity into Your Current Equity Allocation



Source: Parametric. For illustrative purposes only.

Parametric's Solution

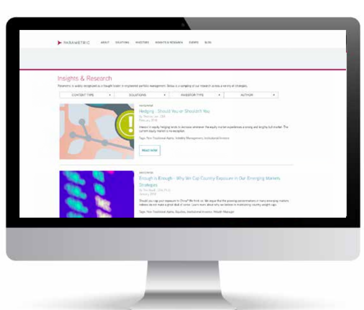
Plan sponsors who are concerned about funding-status volatility should take a close look at how Parametric's Defensive Equity solution may work as a replacement to a traditional domestic-equity allocation. Incorporating Defensive Equity can position the portfolio to benefit from the return-generating potential of equities, but with lower volatility and better liability tracking.

> By replacing a portion of the plan's domestic-equity allocation with Defensive Equity, the plan sponsor may generate both the expected returns needed to meet future obligations and reduce funded-status volatility.

The Results

Over the long run, Parametric's options-based Defensive Equity strategy may be reasonably expected to deliver more attractive risk/return characteristics than equities alone. Our Defensive Equity strategy seeks to structurally reduce equity market risk, while adding a relatively uncorrelated risk premium to enhance returns.

- Defensive Equity strategy: Seeks to capture the VRP
- Modestly change to the typical asset mix: Replace a portion of the domestic-equity exposure with Defensive Equity



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