Ryan ALM
Asset/Liability Management

Pension Strategy: Play Football!

by

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The wise football coach knows that to win the game one should base your strategy on the opponent. Take advantage of your opponent's weaknesses and avoid your opponent's strengths. This is good advice in sports, but also a winning strategy for pensions. If the **true pension objective is to secure and fully fund benefits in a cost-efficient manner**, then the pension opponent is the liability cash flows of benefits and expenses. Each pension has a unique cost structure of liability cash flows due to different salaries, mortalities, plan amendments, etc. These liability cash flows are actuarial projections (future values (FV)) that are paid monthly, first by using contributions and then the residual by assets. These actuarial projections are not interest rate sensitive and tend not to be volatile because they are FV. Since we do not know the FV of most asset classes (except bonds) most pensions are focused on the present value (PV) of assets versus liabilities which is a volatile and interest rate sensitive game.

There can never be a singular or common objective that fits all pensions. This is why generic market indexes can **NOT** represent the client objective. I ask the question: if your assets outperform the generic market indexes, does that mean asset growth exceeded liability growth? Of course not. Liability growth should be based on actuarial benefit projections (FV) that are priced at a discount rate(s) that can settle (defease) the liability cash flows. This is best represented by ASC 715 or market rates for AA corporate bonds.

Accordingly, the return on asset (ROA) hurdle rate can never best represent the client objective. Each pension has a unique funded status as well as unique liability cash flows. The ROA is a forecast of asset returns… it is **NOT** the proper pension objective since it ignores the funded status and is not a discount rate that you can buy to defease the liability cash flow. Noteworthy, it is **not a calculated return** based on the funded status. It is based on historical returns of market indexes to represent each asset class then weighted to arrive at a singular ROA for total assets. This is why a 90% and a 60% pension can have and usually do have the same or similar ROA. The ROA tends to dictate asset allocation, especially for Public and Multiemployer pensions. This ROA objective has led to great volatility in the funded status with spiking contribution costs since 2000. So what is the proper strategy to beat liabilities and WIN the pension game?

Solutions

Assets need to know what they are funding… net monthly liability cash flows. Since contributions are the first source to fund benefits (+ expenses), assets are required to know and fund the net or residual liability cash flows. This net liability is not calculated by the actuaries (who do a great job on everything else). As a solution, the Ryan team in 1991 developed the **Custom Liability Index (CLI)** as the best representation of the pension benchmark and the true pension objective for assets to fund. The CLI is a custom index that calculates monthly net liability cash flows. This allows assets to match and defease any portion of the CLI. The CLI also calculates monthly returns so performance measurement of assets versus liabilities can be measured.

The **intrinsic value of bonds is the certainty of their cash flows**. Bonds are the only asset class with this feature. That is why bonds have been used since the 1970s as the logical choice to match and fund (defease) the monthly net liability cash flows. The **Ryan ALM Liability Beta Portfolio™ (LBP)** is an investment grade portfolio skewed to A/BBB corporate bonds (or Treasuries if the client requires) that will cash flow match monthly net liability cash flows at a cost savings of roughly 2% per year (approximately 20% for 1-10-year liabilities). We highly recommend that this is how bonds should be deployed in asset allocation… to defease monthly net liabilities chronologically. By defeasing the liability cash flows, you neutralize interest rate risk (the largest risk in bonds) since you are matching and funding FVs. Our LBP should be considered as the **core portfolio** of any asset allocation and replace active bond management versus a generic market bond index whose cash flows look nothing like the client's CLI. The benefits of our LBP are numerous and unique:

Outyield liabilities by @ 50-100 bps + (vs. AA corporate discount rates)
Outyield active bond management vs. bond index… enhances ROA
Reduces Volatility of Funded Ratio/Funded Status
Reduces Funding costs (around 2% per year)
Low Investment Advisory Cost = 15 bps
Neutralizes Interest Rate Risk
Defeases liabilities (derisks)

"Given the wrong objective… you will get the wrong risk/reward"