Pension Conundrum: Liquidity Risk

Liquidity is a critical and necessary priority of a pension fund, since it must fund monthly benefits and expenses (B + E) on time. Many plan sponsors use a “cash sweep” or a fixed cash allocation to provide such cash flow. Both strategies are not optimal for a pension plan.

Cash Sweep

A cash sweep usually takes income or cash flow from all asset classes to fund the current monthly B+E. This can severely damage the ROA of such asset classes. According to a research report by Guinness Global found since 1940, dividends and dividends reinvested have accounted for 47% of the S&P 500 total return on a 10-year rolling period and 57% on a 20-year rolling period. So, this data questions the logic of a cash sweep that uses dividends to fund B+E.

As a solution, Ryan ALM recommends that you use a ***cash flow matching (CFM)*** strategy to fully fund B+E. Our CFM model will provide timely cash flows that will fully fund B+E at the lowest cost to our clients. The benefits of CFM are quite substantial:

- Allows growth (non-liquidity) assets to grow unencumbered. Should enhance their ROA significantly.
- CFM buys time. The longer the time, the greater the probability of achieving the ROA for the growth assets.
- CFM will provide certainty (barring a default) of cash flows which reduces or eliminates liquidity risk.
- CFM is an investment grade portfolio skewed to the longest maturities within the area it is funding (i.e. 1-3 years or 1-5 years) that should enhance the CFM yield versus the yield on cash reserves.
- CFM reduces reinvestment risk if interest rates trend downward (as many expect).

Asset Allocation (AA)

Most AA have a cash allocation somewhere between 2% to 5%. Why? Normally you hear it is for liquidity purposes or even diversification. Cash is usually the lowest yielding asset especially when there is a positive sloping yield curve. Due to its very short maturities, cash is usually costing the plan close to a 1:1 cost ratio of present value to future value. The present value of a 3-month T-Bill will be quite close to its future value or a 1:1 ratio. While a CFM portfolio with a 3-year average maturity yielding 4.00% would have a 0.88:1 ratio for a cost reduction = 12%.

As a solution, Ryan ALM recommends separating liquidity assets from growth assets in asset allocation. Let bonds in a CFM strategy be your liquidity assets for the advantages mentioned above. A CFM strategy will have a longer average duration than cash thereby reducing the cost ratio. In this way the liquidity assets and the growth assets are a team that will produce the optimal solutions:

- Enhance ROA by eliminating a cash sweep so growth assets grow unencumbered.
- Reduce or eliminate liquidity risk by fully funding B+E monthly with certainty.
- Enhance the ROA by outyielding cash
- Reduce funding costs

For more info on Ryan ALM, please go to **www.RyanALM.com** or contact
Russ Kamp, Managing Director, at **rkamp@ryanalm.com**
Ron Ryan, CEO, at **rryan@ryanalm.com**