

Past Performance... is NOT indicative of future performance!

How many times have you read a disclaimer on an investment prospectus or research paper promoting an investment because of its past performance record. It is usually implied that the recommend investment will revert to its mean average return over time. In fact, that is how most asset allocation models work where they use the mean average returns of several index benchmarks over the last 10 to 25 years or so as the ROA of each asset class going forward. Reversion to the mean may be just a mean way of looking at investment potential. Said differently...**Hope is not a prudent strategy!** and **Beware of Averages!**

The investment horizon of today is certainly different than the last 10, 20 or 30 years. We would have to go back to the late 1970s and early 1980s to revisit an inflationary environment like we have today. The COVID pandemic of 2020 led to a sharp economic slowdown where the GDP was down -19.2% for the first six months of 2020. Both the worldwide supply shortages that began to appear as a trend that we still live with today and the reactionary Federal Government stimuluses to this pandemic have become the major causes for our current inflationary trends that are unique and seldom seen in America. It is difficult to find periods similar to the last two years in American economic history. This makes any future performance forecasting a very uncertain and risky undertaking.

Inflation – Is 8.5% for the 12 months ending July 2022 (as measured by the CPI-U). The last time the CPI-U inflation rate was over 8.0% was January 1982 at 8.3% the period of 1979 thru 1981 (1979 = 11.3%, 1980 = 13.5%, 1981 = 10.3%).

Recession – The “classic” definition of a recession is two consecutive quarters of negative GDP growth. Given that GDP growth was (1.6%) in 1Q and (0.9%) in 2Q 2022 would suggest that we are in a recession. That said, the last time America had a recession was: 1Q and 2Q 2020 = (19.2%) decline in GDP. History reveals that recessions are not frequent:

12/07 – 06/09	(18 months)
03/01 – 11/01	(8 months)
07/90 – 03/91	(8 months)
07/81 – 11/82	(16 months)

Inverted Yield Curve - Today we have an inverted Treasury yield curve (defined as yield difference between 2-year and 30-year Treasury) of -27 basis points (3.25% - 2.98%) starting in March of 2022. Every inverse yield curve since 1978 was a harbinger of a recession. There have been eight previous inverse yield curves in the last 30 years with an average duration of 12 months. The last time America had an inverted yield curve was:

08/19 lasted 6 months
01/06 lasted 22 months
02/00 lasted 10 months
08/89 lasted 2 months
12/88 lasted 6 months
01/82 lasted 4 months
09/80 lasted 13 months
08/78 lasted 21 months

Risk

We believe that *risk is best defined as the uncertainty of achieving the objective*. For a pension, the true objective is to secure benefits in a cost-efficient manner with prudent risk. To our knowledge, there are only two ways to secure benefits:

Insurance Buyout Annuities (IBA)
Cash Flow Matching (CDI)

IBA tend to be expensive since they charge a premium of around 4%. In addition, they require liabilities to be priced off the ASC 715 discount rates (AA corporate yield curve) or Treasury STRIPS.

Cash flow matching or cash flow driven investments (CDI), is a very old, tried and proven fixed income strategy utilizing investment grade bonds that cash flow match liability cash flows chronologically. **The intrinsic value of bonds is the certainty of their cash flows.** We don't believe that bonds should be used as performance or growth assets. We urge pension sponsors and their consultants to use bonds for their value... as liquidity assets. How do you reduce the risk of not securing benefits?

We believe the answer is... BUY TIME!

We highly recommend separating liquidity assets from growth assets. Let bonds be the liquidity assets whose mission is to secure benefits chronologically. Let bonds cash flow match liability cash flows for the time you need for growth assets to perform. Given time, equities (as measured by the S&P 500) perform well but they need time. The more time you give equities... the better the returns.

This is best accomplished by transferring the cash and bond allocation assets in kind over to cash flow match net liabilities + expenses. The Ryan ALM cash flow matching model (Liability Beta Portfolio™ or LBP) will calculate with near precision the cost to fund net liabilities + expenses in a cost-effective manner chronologically. Since liabilities are funded initially by contributions, using the LBP model to cash flow match net liabilities chronologically may be able to fund more liabilities than you think. Assume that a 15% bond + cash allocation could match the next 10 years of net Retired Lives benefit payments + expenses chronologically. Based on the Ryan ALM Liability Beta Portfolio™ (LBP) model we show a cost reduction on the future value of benefits and expenses of about 1+% per year or @10% on cash flow matching the first 10 years of net liabilities (projected benefit payment schedule – projected contributions).

So how do you buy time? The answer is... cash flow match liabilities for the time you need.

Matching liabilities chronologically should buy time for the non-bond assets (Alpha assets) to perform. Given time (10 years) most non-bond asset classes tend to outperform bonds. Since liabilities behave like bonds there is a high probability that non-bond asset classes would outperform liability growth (earn liability Alpha) over an extended time horizon especially at today's low yield on bonds and liabilities. This would enhance the funded status allowing for reduced contribution costs or increased benefits or both. Our LBP also has numerous benefits that enhance the pension plan:

Secures Benefits

- Cash flow matches + funds monthly Retired Lives benefits chronologically

Reduces Costs

- LBP reduces Contribution, Funding and Asset Management Costs:
- (LBP Fee = 15 bps... less than most active bond managers)

Reduces Volatility

- Reduces volatility of Contributions and Funded Ratio

Reduces Risk

- Risk = Uncertainty of Funding Benefit Payments (LBP funds benefits with certainty)
- Projected Benefit Payments are Future Values (FV have No Interest Rate Sensitive)

Enhances ROA

- LBP should out yield most active management bond portfolios

Buys Time

- Liability Beta Portfolio Matches & Funds Liabilities Chronologically
- Moves deficit out longer extending the investment horizon
- Buys Time for Non-bond assets (Alpha assets) to grow
- No dilution of Alpha asserts to fund benefits

However, most bond allocations are for active bond management versus a generic index benchmark(s). As the designer of the Lehman bond indexes from my days as the Director of Fixed Income Research at Lehman, I can tell you unequivocally that generic bond indexes look nothing like a projected pension benefit payment schedule. Such a mismatch will distort the cash flows and risk/reward behavior of assets vs. liabilities. The major issues and differences are:

Fixed Income Management Versus Generic Bond Indexes

- Does not fund benefits + expenses
- Aggregate Index = low yielding @ 3.72%
- Generic bond index \neq plan sponsor's liabilities
- Index skewed to long bonds + Government securities
- Performance (value added) = small to none (after fees)
- As a result, cash flows do not match plan sponsor's liabilities

So how do you buy time? The answer is... cash flow match liabilities for the time you need.

But the worst difference and discrepancy is... all about cash flows. Active bond management is focused on outperforming the returns of a generic bond index benchmark. As a result, cash flows are not a consideration. But no matter what generic bond index is chosen; the fixed income assets cannot produce enough cash flows to fund benefits + expenses. As a result, bonds will require help from performance assets to fund benefits... a cash sweep from all asset classes! This will create dilution and disruption of the growth rate of such performance assets. With the Liability Beta Portfolio™ in place as the core portfolio to fund the shorter Retired Lives net liabilities (1-10 years), the Alpha assets are now free to grow without being diluted or unencumbered to pay any benefits. Alpha assets returns will be volatile, but the Liability Beta Portfolio™ bought time (10 years) for the Alpha assets to grow.

Logic

Let the performance assets (Alpha assets) perform (grow) as the liquidity (Beta) assets provide cash flow sufficient to fund benefits plus expenses.

Ryan ALM's Mission...

Solve liability driven problems thru low cost, low risk solutions.

About Ryan ALM, Inc.

Ryan ALM was founded by Ronald J. Ryan, CFA on July 12, 2004 as an Asset/Liability Management (ALM) firm. The firm builds a turnkey system of proprietary synergistic products designed to measure liabilities as a Custom Liability Index (CLI) and manage assets to the CLI as a Liability Beta Portfolio™ (LBP).

Ryan ALM is unique in having its own proprietary Index company named ALM Research Solutions, LLC. This company builds both custom and generic bond indexes. Such indexes range from Custom Liability Indexes (CLI) to ETF Indexes.

Our Liability Beta Portfolio™ (LBP) is our proprietary cost optimization model that "cash flow matches" clients projected liability benefit payment schedules at the least cost using investment grade bonds. It has been back-tested for several years showing a consistent cost savings of @1% + per year (i.e. 1-10 year liabilities = 10%+ cost savings). Our LBP best represents the core portfolio of a pension plan.

Our team has been recognized for our expertise and results including Ron Ryan having won the William F. Sharpe Index Lifetime Achievement Award.

“Where is the knowledge we have lost in information”

T.S. Eliot