

# Pension Confusion: Find the Liabilities

by  
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**Securing and funding liabilities in a cost-efficient manner with prudent risk is the true pension objective.** Although liabilities should be the focus of pensions, it is hard to find liabilities in asset allocation, asset management and performance measurement... especially for Public and Multiemployer Plans, as these plans are asset only focused. Private plans are very much liability driven although they have opted out of pensions to buy Insurance BuyOut annuities as a major trend for over ten years. Given the 500 bps increase in the Fed Funds rate in the last two years, Private plans need to revisit the economics of BuyOut annuities versus a defeasance strategy (cash flow matching). I think they may find that a defeasance strategy has definite cost advantages today.

So, what's the matter? There is an obvious disconnect between assets and liabilities because liabilities are missing from every critical asset function:

## **Asset Allocation (AA)**

**Liabilities are like snowflakes, you never find two alike** as each pension plan has a different labor force, salaries, mortality and plan amendments. There can never be a generic market index to replicate any plan sponsor's unique liability cash flows. Liabilities are the domain of the actuary. They produce a very thorough annual report detailing and itemizing numerous liability calculations. The actuaries do an amazing job given the huge number of calculations. They have a tedious and most important function as the calculator and custodian of the liabilities. This voluminous work is usually presented as an annual report a few months after the end of the fiscal year. More importantly, the actuary calculates the funded status which should be the focus of asset allocation, asset management, and performance measurement.

Most pension asset allocations are based on earning a target ROA or hurdle rate. The ROA is calculated by weighing the expected return for a series of asset classes. Each asset class has its own ROA based on its index benchmark estimated return. Pension consultants are quite diligent in analyzing each asset class and assigning the proper weight to achieve the target ROA and risk behavior. Thorough quarterly reports are presented by the consultants to plan sponsors detailing the risk/reward of every asset manager versus the index benchmark assigned to that asset class as the bogey. As a result, generic market indexes are the driver and focus of asset allocation.

**AA should be responsive to the funded status of each client.** A 90% funded plan should have a much more conservative AA than a 60% funded plan. But most, if not all, asset allocation models ignore the funded status and focus on achieving the target ROA with the highest probability of success and prudent risk based on historical returns of a database that is almost 100% generic market indexes. The historical risk/reward behavior of numerous generic market indexes are

inputs into an AA optimization model that provides a baseline allocation of each asset class. The pension consultant will then massage those weights to best fit each client. Too often plan sponsors have similar asset allocations no matter what their funded status is because they have similar ROA targets. This has led to inappropriate AA especially in the late 1990s and early 2000s that were heavily skewed to risky assets although the pension plans were greatly overfunded then. Had pensions defeased their liabilities then through a cash flow matching strategy with investment grade bonds, they could have secured their surplus victory and stabilized low contribution costs. Instead, the equity correction of 2000-02 wrecked the funded status of almost all pensions causing spiking contribution costs which have not subsided even today.

Without knowledge of the *economic funded status* on a frequent and accurate basis, AA cannot function effectively. If the market value of assets is the most accurate measurement of asset valuation then the same is true for liabilities. The Society of Actuaries (SoA) delivered a research paper “Principles Underlying Asset Liability Management (ALM)” years ago that warns of erroneous accounting valuations and recommends that pensions create a set of economic books:

“A consistent ALM structure can only be achieved for economic objectives. Accounting measures can sometimes *distort* economic reality and produce results inconsistent with economic value. Because ALM is concerned with the future asset and liability cash flows, the natural *focus of ALM is economic value.*”

Ryan ALM Translation: Pension plans need to create a set of “*economic books*” so ALM can function effectively. It’s all about asset cash flows funding liability cash flows. A *Custom Liability Index (CLI)* is the method and proper benchmark to create economic books.

With a CLI in place, consultants and plan sponsors can now know monthly the true economic funded status and liability growth rate. With a CLI, consultants now possess pertinent and private information for each of their clients that no other consultant would have.... a significant advantage over competition. The CLI allows consultants to now customize the AA to best fit the clients dynamic funded status with timely adjustments. Although the actuaries don’t produce a CLI, it is based on the private actuarial projections of benefits, administrative expenses and contributions. Ron Ryan and his team created the first CLI in 1991 as the true benchmark of a pension. The Ryan ALM CLI provides all of the calculations needed for efficient AA, ALM, and performance measurement.

### **Asset Liability Management (ALM)**

It would be hard, if not impossible, for an asset manager to manage assets versus a generic market index if it came out annually, months after the end of the fiscal year with no transparency (index constituents not shown) and it wasn’t priced at the market. Well welcome to the pension world of liabilities. Liabilities are an annual actuarial calculation that has little or no transparency (projections usually not shown) and is priced at the ROA (GASB) as the discount rate. The ROA discount rate is certainly not a market rate you can buy to settle the liabilities. The ROA discount rate is one of the accounting distortions of economic reality the SoA referenced.

This was the message from the SoA. You need to create a set of economic books for ALM to function effectively. This is why a CLI is the critical step in ALM. **Assets need to know what they are**



**funding. The answer is usually net liabilities defined as (benefits + expenses) – (contributions)** since contributions are the first source to fund the liability cash flows. Because net liabilities are not calculated in the actuarial report, the CLI should be a requirement to understand the net liability cash flows that asset cash flows must fund. Such net liability cash flows are also monthly which is another calculation made by the CLI.

If the true pension objective is to secure benefits in a cost-efficient manner with prudent risk, then **cash flow matching (CFM) must be the proper and best ALM strategy**. CFM used to be called dedication and has been a stable approach to pension investing for over 50 years. Bonds are the only asset class with the certainty of its cash flows. That is the intrinsic value in bonds and the reason why CFM should be the core portfolio of any pension. As the funded ratio improves, a higher allocation should be given to CFM to secure more and more benefits while stabilizing the funded ratio and contributions.

### **Performance Measurement**

Once the CLI is in place, it will provide monthly calculations of the net liability growth rate (returns). Total asset growth (returns) versus the total net liability growth rate is the critical performance measurement. If all of the asset managers outperformed their generic market index benchmarks but total asset growth underperformed total net liability growth rate... the plan loses. This loss shows up in higher pension expense (contribution costs) and a lower funded status.

With a liability objective, the terms Alpha and Beta now take on a different perspective. Liability Alpha is the excess return of asset growth rate versus the liability growth rate. Liability Beta is now the portfolio that matches the liability cash flows it is funding. With the CLI, liability Beta is now a Liability Index Fund. Without a CLI, performance measurement is comparing assets versus assets... this is in sharp contrast to the pension objective of assets versus liabilities.

*“Where is the knowledge we have lost in information”*  
T.S. Eliot