Frequently Asked Questions about Asset Liability Management

What is Asset Liability Management (ALM)?

Effective pension financial management involves understanding, monitoring, and managing the key drivers of pension plan costs on an ongoing basis. ALM is the process of monitoring the drivers and adjusting strategy as needed to manage the risks that a pension plan poses to a sponsoring entity.

What is Asset Liability Modeling?

Asset liability modeling is an invaluable tool in ALM. It is an extension of the required periodic actuarial valuation that is performed by an actuary to determine, among other things, a plan's funded status, cash funding requirements, pension expense, balance sheet position, and PBGC insurance premiums.

The actuarial valuation is based on a snapshot of plan assets and liabilities, and is by nature focused on the recent past and present, rather than on the future. It tells a plan sponsor what the plan's financial position is, and what the costs will be for the upcoming year based on the current funding strategy adopted by the organization. It does not provide insights into the potential impact of a plan in the future due to a variety of different economic and capital market environments.

Asset liability modeling addresses this shortcoming of the actuarial valuation by performing future actuarial valuations, with each valuation reflecting a particular economic and capital market environment, plan sponsor funding policy, and anticipated demographics of the plan sponsor and the plan. For each future valuation, key financial metrics can be calculated, summarized, and analyzed to develop a risk profile in terms of a range of potential financial and HR outcomes.

Asset liability analysis can be deterministic (scenario-based), in which specific scenarios are tested (What if inflation increases? What if equity markets stay flat?), or it can be stochastic (using Monte Carlo techniques). In this second approach, thousands of scenarios are run and the results are summarized.

Why is ALM important during an economic downturn?

Ongoing ALM is a key to prudent pension plan financial management.

Historically, ALM has been an important part of some plan sponsors' risk management activities. In those instances, asset liability modeling was generally performed every three to five years to ensure that the investment strategy and funding policy were in alignment with organizational goals.

In today's economic, business, and regulatory environment, we believe that best solutions are ones that enable a plan sponsor to understand its position and respond quickly and effectively. Ongoing ALM, with more frequent asset liability modeling, is one key enabler of quick and effective response. As we witnessed in the period from 2000-2002, the funded status of the pension plan can vary significantly in short periods of time. As conditions change, your plan's financial profile will change and your investment and funding strategy should evolve to keep the pension plan risk within your risk tolerance.

The current economic downturn and recent pension legislation (PPA, WRERA) present plan sponsors with business and pension plan management challenges. Further, the challenging external environment may also spur internal changes that can significantly alter the future profile of a plan sponsor and a plan. Specifically:

- Similar to the period from 2000-2002, the capital markets of 2008 significantly reduced pension plan funded status; whereas at the beginning of 2008 a plan might have been able to invest to emphasize protection of its funded status, plan sponsors currently need to consider investment and funding strategies to grow plan assets
- Under PPA, maintaining funded status can be more critical than it was in the past due to funded status benchmarks that must be maintained to avoid benefit restrictions

- Under PPA, plan funding is more volatile due to the scaling back of methods that can be employed to smooth out fluctuations in liability and asset values
- The reduction in pension plan funded status has occurred at a time when many companies' risk profiles have changed and sponsors can ill afford to increase pension plan contributions; actions taken in response to this environment, such as the following, can significantly impact the future financial profile of the plan:
  - Corporate transaction such as a merger, acquisition, or divestiture
  - Reductions in force
  - A change in the plan's benefits, such as a switch to a cash balance plan or the addition of a lump-sum feature
  - A plan freeze
  - Closing of the plan to new participants

In any economic environment, an asset liability modeling study may prove beneficial to stakeholders. For traditional asset classes, it is widely accepted that about 90 percent of a portfolio's performance can be explained by asset allocation, so optimizing the asset allocation to reflect the plan's liability structure and the sponsor's risk profile makes good sense at any time.

What types of changes in tactical and strategic ALM direction might be indicated by an asset liability modeling study?

The deterioration of funded ratios resulting from the economic downturn will lead to higher contributions in many cases, and if not addressed, may lead to unwanted PPA-imposed benefit restrictions.

In the very near term, contributions may be the fastest way to improve funded position, and a plan sponsor may consider a funding strategy to avoid benefit restrictions.

Over a longer time horizon, plan sponsors may seek greater exposure to diversified asset classes and strategies that are expected to provide returns that will close the funding gap. Our approach seeks not only to manage risk but to maximize expected returns per unit of risk. We accomplish this by properly defining risk, by considering additional diversification through additional asset classes, and by targeting asset classes where the plan sponsor has a competitive advantage relative to the market.

If a plan sponsor is sensitive to cost volatility, then a return-seeking investment strategy may not be advisable because it might not adequately reduce surplus volatility, which drives cost volatility. If this is the case, a plan sponsor may opt for greater exposure to fixed income investments that more closely match the growth and volatility characteristics of the underlying plan liabilities.

A degree of funded status volatility management can be accomplished through various strategies that fall under the general heading of liability-driven investment (LDI) strategies. Initially, this term was used in the U.K. to describe long-duration fixed income products that naturally hedge the interest rate sensitivity inherent in the pension liabilities. These products are generally associated with significantly lowering risk and return expectations. Some plan sponsors have adopted a quasi-LDI approach that focuses purely on interest rate risk. This approach is often referred to as an "interest rate overlay" and requires the use of futures and/or other derivatives. Some plan sponsors have chosen to take this route because it allows them to modestly reduce their plans' overall risk while maintaining expected returns.

Key questions to ask when evaluating current and alternative investment and funding strategies that can be answered with an asset liability modeling study include:

- Is the organization willing to accept higher contributions on average over time, to reduce the chance of an unexpectedly large required contribution?
- What is an acceptable level of balance sheet exposure in terms of the amount and degree of volatility?
- What role does the pension plan play in the overall retirement benefit strategy of the plan sponsor? Are changes to the pension plan being contemplated that would change the emerging benefits in such a way that the investment strategy should change as well?

What actions can result from an asset liability modeling study?

This can best be answered by first recapping what an asset liability study will provide a plan sponsor.

Our asset liability modeling studies do not focus on an isolated portion of the portfolio and are not isolated to a specific risk factor (such as interest rate risk). Asset liability analysis enables the development of comprehensive solutions from the top down, where the first step of our approach is to work with the plan sponsor to determine how much risk should be taken in the plan. Throughout our process, we define risk in an asset liability context and we focus on the risk metrics that are most meaningful to the client's organization. In general, we find funded status volatility and liability tracking error (LTE) to be the most important high-level metrics. Funded status volatility and LTE are indicators of other risk measures, such as cash contributions, pension expense, and balance sheet asset and liability. We believe the circumstances specific to the financial strength of both a client's plan and its business dictate how much risk is appropriate at any time. In addition, we believe it is important both to reduce risk when positive performance is limited by external constraints (e.g., limitations on uses of surplus) and to avoid risks already inherent in the client's core business.

The outcomes of an asset liability modeling study will be investment and funding strategies that not only manage risk but maximize expected excess returns per unit of risk.

The strategies will not be static. We believe that the best processes are ongoing dynamic processes that change with the external and internal environments of the plan sponsor and the changing financial position of the plan. In the ALM context, this is accomplished by ongoing monitoring of the funded position of the plan, and executing dynamic investment and funding strategies that change with the plan sponsor's and plan's risk profile.

How long does it take to conduct an asset liability modeling study?

Studies generally take anywhere from four to eight weeks, depending on the goals of the study and the scope of the analysis. Simple studies that provide plan sponsors with a baseline analysis based on the current funding policy and a straightforward asset allocation take less time than studies involving more asset allocations, complex investment strategies, and multiple funding policies.

Is it in the best interest of participants to consider the plan sponsor's business risks when developing a pension financial strategy?

An argument can be made that the business risks of the plan sponsor should be considered when fulfilling fiduciary responsibility. Unsound business management can undermine sound pension funding and put participant benefit security at risk. Participants lose in only one situation — when the plan sponsor goes bankrupt at the same time that the plan is underfunded. For example, allocating assets in a manner that reduces the chance that poor pension performance will coincide with poor business performance improves the security of participants' benefits. In short, it is prudent for plan sponsors to view the risks in the pension plan in an enterprise risk management framework, and it may be acceptable for plan trustees to do so as well.

Can asset liability modeling study fees be paid from plan assets?

The answer to this question is not a simple yes or no. The key question is whether the expense is a settlor (employer) expense or a plan expense incurred for the proper administration of the plan and investment of plan assets. The answer to this question will depend on the nature of the ALM study and why it is being conducted.

How can we get started?

For more information about Buck's ALM solutions or to discuss an ALM-related challenge, email us at **ALMGroup@buckconsultants.com**.

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