Savannah River Nuclear Solutions
A Case Study

By Greg Putnam, CFA®

Editor’s note: This is the third of three companion articles describing how institutional investors are moving beyond traditional equity and fixed income by implementing marketable real-asset strategies into a liability-driven investing program.

From an asset allocation perspective, real assets can serve two different but related purposes—portfolio diversification and inflation hedging. The determination for whether a given portfolio might utilize the asset class depends on a number of factors.

For example, a pension portfolio that is funded at below 80 percent clearly needs some growth assets and is exposed to potential inflation risk. But for a pension portfolio that has a 110-percent funding ratio, a more specific liability-driven investing (LDI) hedging strategy that includes an asset allocation focused on fixed income probably makes sense.

Assuming a diversified, liability-aware portfolio composed of equities, fixed income, and alternatives, an allocation to real assets can provide diversification benefits while mitigating risks from unanticipated inflation. Conceptually, real assets are likely to be impacted by the most fundamental supply and demand drivers in the global economy. So one might anticipate that in an economic environment where those fundamentals are controlling the direction of asset prices, real assets would behave differently than traditional, purely financial securities (i.e., equities and bonds).

Practical Considerations
A great deal of quantitative research has been done to demonstrate the effectiveness of LDI as a method that better matches the behavior of assets and liabilities, but a number of practical considerations must be addressed before implementing these strategies.

With respect to portfolio management, no single asset allocation works for all sets of assets and liabilities. A number of different portfolios can provide diversification benefits and accomplish the goal of controlling the level of risk associated with a given level of returns.

When analyzing asset classes and strategies that may make up a portfolio, pension investment managers need to consider, at a minimum, the following potential hurdles to implementation:

- **Investment committee and/or management acceptance of strategies.** If the intent is to utilize strategies that may be new to the organization, have you properly prepared the committee and management? This may require a significant amount of groundwork, including education, quantitative analysis, and perseverance.

- **Liquidity constraints.** Do you understand the corporate balance sheet and/or other funding mechanisms that may play a role in the availability of cash to pay benefits, expenses, and pension contributions? This factor may impact which asset classes are applicable (for instance, if the potential exists for policy changes on the five-year horizon, then private equity lockups may not be acceptable).

- **Staff and/or support capacity.** Do you have the necessary internal (staff) and/or external (investment consultants, actuaries, etc.) resources to manage a higher level of program complexity? The additional asset classes and investment managers likely will require at least an incremental increase in resources dedicated to the management of the pension portfolio.

Case Study
As a case study, I will discuss the pension plan that I am working with at Savannah River Nuclear Solutions (SRNS). The recent diversification process for our $2.1-billion portfolio began approximately two years ago, with an asset allocation that was 65-percent equity, 5-percent passive real estate investment trust, and 30-percent fixed income. So there was some diversification in place but certainly room to diversify further.

By diversifying both within and across asset classes, we have reduced our projected volatility while maintaining estimates for expected returns. After diversifying, our current broad asset allocation targets are 45-percent equity, 30-percent fixed income, and 25-percent alternatives/diversified assets (this includes real estate, commodities, funds of hedge funds, global macro, and credit).

Clearly, our main focus simply has been to diversify the portfolio in an efficient manner as the first line of defense against volatility. Our belief is that diversifying within and across asset classes is the single most-important step we can take for the long-run health of the portfolio, and that this diversification provides the most bang-for-the-buck versus other projects we could have undertaken.

With respect to the practical considerations listed above, the implementation required an integrated approach that included additional dedicated internal resources, an engaged and responsive external investment consultant, and targeted assistance from existing external investment manager relationships. Through the efforts of internal investment staff and an open-
minded pension committee, we were able to explore, learn about, and select a set of diversified strategies that makes sense in the context of the pension plan and the organization.

Our perspective is that we want to achieve the following goals:
- Portfolio diversification (to reduce risk while maintaining expected return)
- Improved funding percentage
- Reduced pension contribution volatility (and improved contribution predictability)
- Adoption of a dynamic asset allocation strategy, eventually culminating in a pension plan that is managed primarily as an asset-liability management (ALM) process

We have made excellent progress during the past two years, but a great deal is yet to be done. The portfolio is dramatically improved and the initial diversification process is nearly complete. But, like many corporate pension plans, we are working toward a higher funding percentage and improved contribution predictability.

We view the process as an evolution, from 1) moderately-diversified (past); to 2) well-diversified (present); to 3) well-diversified and more rigorous with respect to asset-liability management (future). Therefore, the next steps in our evolution will include the increased utilization of LDI-based metrics with respect to our investment portfolio and the adoption of a formal dynamic asset allocation policy (inclusive of targets and triggers).

Conclusion

A variety of investment opportunities are available for LDI programs to pursue. These investment opportunities typically require many of the techniques outlined above (extensive research, timeliness, appropriate internal/external staffing, and unique approval processes). If well-executed, however, they can contribute meaningfully to portfolio performance.

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