

A SMART APPROACH TO PORTFOLIO MANAGEMENT

2008 was a watershed year for pension plans—and not in a positive way. Here's how to make sure it doesn't happen again

THE PAST 12 MONTHS, to use a cliché, was a watershed year for the pension fund industry as market movements exposed the flaws in management practice. Global solvency declined dramatically as the asset-liability mismatch was exposed (as was the irrelevance of bad LDI); hedge funds did not deliver alpha; rebalancing policies revealed their flaws; liquidity dried up; and equity became the only asset to sell, causing further problems. However, there were warning signs and many analysts shouted “Wolf!” only to be ignored.

The Capital Asset Pricing Model (CAPM) is the primary source of the problem. Academics ignored the impact of pension fund behavior on markets. First, these investors worry about relative risk and performance, which affects the choice of investment strategy and manager. Second, the focus on optimal portfolios (à la Markowitz) assumes certain asset correlations, masking the bet that investors make on markets, and economic factors that drive these bets. Finally, static solutions to dynamic portfolio problems ignore the time dimension in making decisions. For example, one

has little confidence in a manager with a short track record and pension funds are not indifferent to the performance path relative to a benchmark.

CIOs dealt with four major shortcomings: (i) static prescriptions to manage assets in dynamic markets, especially for strategic asset allocations (SAAs) and naïve rebalancing; (ii) asset managers who offered naïve “magic bullet” solutions to sell products rather than solve pension fund problems, most evident in LDI and multimanager programs; (iii) performance measures/fees unadjusted for risks or skill, serving the asset manager more than the pension plan—most evident in hedge funds, but quickly followed by mainstream asset managers; and (iv) benchmarks are difficult to replicate in the futures market, constraining CIOs from being nimble in managing a fund (without taking “fake” tracking error), as markets zigged and zagged. The value attached to dynamic decisionmaking was miniscule, with many analysts deriding “market timing,” without realizing that every bet in a portfolio, starting with the SAA, is market timing.

There has been considerable introspection on expected return and volatility assumptions, but relatively little attention has been paid to the correlation statistic. Ignoring the fact that correlations across two assets (or managers) may be dynamic, investors must focus on a much simpler problem, namely, understanding the implied bet in choosing a correlation value in setting an SAA or creating multimanager portfolios. A low correlation between stocks and bonds is caused by the fact that they respond differently to economic growth, interest rates, oil, sentiment, etc. The same is true for every other correlation statistic between two assets or two managers. Therefore, in setting an SAA or in selecting a portfolio of managers and assuming specific correlations (and expected returns), pension funds are making a bet on these economic relationships, *and one must exploit them in the implementation and management of a portfolio.*

Static policies for dynamic markets undoubtedly are flawed and have to be changed with the support of appropriate liquid, transparent, and low-cost futures-based benchmarks. Implicit bets (especially in the static SAA, rebalancing and liability and currency hedges) need to be made explicit and managed dynamically. Naïve performance measures have to be improved to adjust properly for risk and highlight confidence in skill or lack thereof—and the CAPM needs to be revamped dramatically.

Investors must understand how various market factors influence assets or managers and then develop a set of rules so that as the factors evolve over time, the optimal portfolio evolves simultaneously. For example, as the price of oil rises, the optimal portfolio may be 59% stocks/41% bonds (versus a 60/40 SAA) and the optimal liability hedge may be less than 100%. I term this “View-Based” rebalancing. Similarly, as solvency declines, a “View-Neutral” LDI would reallocate the optimal SAA to be overweight in a liability replicating fixed-income allocation. As Woody Brock states, the future is about optimal strategies rather than optimal portfolios. Effective CIOs will establish optimal portfolios for specific states of the world and then dynamically adjust their portfolios as the market moves from one state to the next. Developing rules to track market movements, and their impact on liabilities, beta, and manager decisions, creates a systematic process that generates consistent recommendations not easily influenced by emotion (though clearly leaving scope for applying informed judgment in the implementation of these rule

recommendations).

SMART (Systematic Management of Assets using a Rules-based Technique) management of assets and liabilities leads to improved solvency and a lowering of ALM risks. It is about good process—namely, only measured and monitored risks can be managed. It is about rules that make explicit the underlying factor relationships, and alert overburdened and underresourced CIOs to make key decisions to position their portfolios appropriately for better solvency (and not just a return over an investment benchmark). Good risk-adjusted performance measures ensure that the managers they hire generate, and are compensated for, risk- and skill-adjusted performance. The information ratio is shown to be a poor risk-adjusted performance statistic—one that can easily be gamed by an astute manager. Therefore, manager compensation must be changed so fees are based on risk-adjusted performance and can be deferred until skill is established.

Following the Great Recession, it is clear that pension fund management must change, with greater emphasis put on dynamism in the management of assets and liabilities to improve solvency, with which will come greater transparency and governance. No longer should investors wonder whether decisions are driven by return, correlation, or volatility—a result of black-box systems. It is my hope that pension funds, as a group, do not follow Mark Twain's advice when he stated, “Never put off until tomorrow what you can do the day after tomorrow.”



Arun Muralidhar has experience in and has written extensively on pension reform, asset allocation, and currency management. Arun is Chairman and Founder of M^{cube} Investment Technologies LLC (www.mcubeit.com), and Chairman and Chief Investment Officer of AlphaEngine Global Investment Solutions (AEGIS). Arun is the author of *Innovations in Pension Fund Management* and co-author with the late Prof. Franco Modigliani of a book on reforming Social Security, titled, *Rethinking Pension Reform*.