

# Asset allocation research support to an institutional asset manager

**2X**

cost saving

**100%**customised and automated  
solution**70%**

reduction in turnaround time

## CLIENT CHALLENGES

- An institutional asset manager, managing and advising pension funds, required support in its strategy research and asset allocation division. It needed support with developing proprietary tools, maintaining the in-house code base and other recurring, time-consuming tasks. The client also required econometric analysis and simulation studies conducted.

## OUR APPROACH

- Acuity deployed a team of statisticians and programmers for this project. As a first step, we combined different assets and grouped them into equity, fixed income and real estate buckets. Risk-return optimisation techniques were applied to develop efficient frontiers by using the forecast return/covariance of various asset classes.
- The team then computed optimal asset allocation trajectories (equity, fixed income, others) in target-date funds depending on different risk-tolerance levels.
- Back-tested and simulation-tested rebalancing strategies to arrive at an optimal rebalancing strategy for different asset-allocation levels.
- Created customised MATLAB and Excel tools to automate scenario generation for calculating the optimal glide path for target-date funds.

## IMPACT DELIVERED

- The client was able to reduce turnaround time by leveraging Acuity's resources to implement quantitative analysis and research

- Acuity rapidly developed customised tools and tested and implemented rebalancing strategies. These research tools enabled the client to optimally design pension funds and investment strategies, based on its client requirements
  - One of the tools, based on MATLAB and Excel, was to optimise allocations and generate efficient frontiers by combining asset classes based on client-provided capital markets assumptions
  - Acuity created another customised Excel-based tool to automate scenario generation for calculating the optimal glide path for target-date funds

### About Acuity Knowledge Partners

*Acuity Knowledge Partners is a leading provider of high-value research, analytics and business intelligence to the financial services sector. The company supports over 650 financial institutions and consulting companies through a team of over 6,000+ subject matter experts who work as an extension of the clients' teams based out of various global delivery centres.*

*We empower our clients to drive revenues higher. We innovate using our proprietary technology and automation solutions. We enable our clients to transform their operating model and cost base.*