Editorial

Optimisation remains a key idea in active management. Its main ingredients are the utility function, a quadratic, measured in terms of expected relative return, tracking error, and a coefficient of risk tolerance; plus a large number of constraints, some representing real institutional constraints such as sector, country and even individual stock constraints. Other constraints may not reflect the investment mandate, but are imposed pragmatically to make the optimisation work. Optimisation has, however, come under ferocious and sustained attack over the last decade, due largely to an influential and very readable critique by Richard Michaud (1998), in his book 'Efficient Asset Management'.

One of the central criticisms is that these optimisation procedures tend to error maximise; they pick up the mistakes in the stock alphas, and create

highly unbalanced and unrealistic portfolios. I have always thought that this criticism was well founded and assumed that the habit of practitioners to over-constrain their optimal portfolios was in response to this.

I am currently researching this problem, and a preliminary finding of mine is that the bias in simulated portfolios is drastically reduced exactly when there are a substantial number of constraints. Without boring Journal readers too much with technical details, it is always reassuring to find that pragmatic activities can be justified by theory.

Stephen E. Satchell
Editor

Reference

Michaud, R. (1998) *Efficient Asset Management*, Harvard Business School Press, Boston, MA.