

FINANCIAL INVESTMENTS

A Modeller's Minefield

Budgeting, it's a cringe worthy word. Optimisation, that sounds more like it! But have you the faintest idea of what it is? And did you know that mathematicians use it to help financial planners increase the expected size of their client's financial nest egg with risks that are acceptable to them and their stage in life?

AMSI Intern, Wei Wu, is well versed in the mathematical technique of optimisation used in finance. In fact, he recently completed an internship at Optimo Financial. Hugh Bannister, Principal, Optimo Financial, has been building energy and financial models using optimisation techniques for over 25 years. He believes the work completed during Wei's internship will allow Optimo to improve its offerings to the market.

One of the challenges in providing good advice is to take careful account of risk. Depending on the client's attitude and stage in life, a conservative or somewhat more aggressive investment strategy may be appropriate. However, it is very difficult to balance all the factors that would deliver a satisfactory strategy for each client's needs. Standard portfolio theory is more designed for institutional investors than individuals.

"People have different investment needs, some invest for the short-term, saving for a house deposit, or long term, saving for their retirement. I was able to apply my mathematical skills to help financial planners find the best investment strategies for their clients by looking at, and taking into account, numerous factors," Wei says.

Hugh tells us: "Optimo had developed an approach to solving this problem. The academic mentors and Wei Wu were able to make certain the proposed approach was theoretically and practically sound and were also able to explore possible improvements."



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Hugh Bannister,
Principal, Optimo Financial



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