Investment Science

Maybank Asset Management

Quantitative investing demystified: Here's what you need to know

Investing strategies driven by math models and powerful computers can open up a new world of trading opportunities. See what's under the hood in the first of a three-part series.

Some call it black-box investing because of its highly secretive mathematical models. Others hail its rise as one of the hottest trends in finance as the world becomes increasingly digitalised.

What's different about this method?

Quant investing is unlike fundamental investing. While fundamental managers tend to rely on intuition and forecasts in their investment decisions, quant strategies rely on **statistical opportunities** that were proven to have worked over long market cycles.

The number of positions fundamental managers take are usually considerably fewer than that of a quant fund. As a result, portfolio profitability depends largely on whether individual stock calls work out. **But for a quant fund, performance depends on broad macroeconomic forces that affect large groups of stocks.**

These differences mean that investors traditionally invested with fundamental fund managers would do well to consider the diversification benefits of a partial allocation to quant fund managers in their portfolio.

Quantitative investing, or **quant investing** for short, is a strategy that deploys mathematical techniques, quantitative modelling and automated algorithms to make investment decisions and execute trades.

Two key characteristics set **quant strategies** apart in today's highly sophisticated, technology-driven financial markets.

1. The first is **computing power.** Quant funds are able to sift through massive amounts of data and find objective evidence of the factors they are seeking to invest in, such as value stocks in a certain sector.

2. The second is **diversification.** Dubbed the "only free lunch" in finance, diversification has been shown to improve the risk-return profile of portfolios. Some quant funds can take hundreds or even thousands of positions – such as going long on the cheaper assets and shorting the more expensive ones – so that they can diversify widely and reduce risk exposures.

What's the secret?

Top quant funds such as Renaissance Technologies' Medallion fund and famed investor Ray Dalio's Bridgewater Associates are tight-lipped about how their quantitative models achieve their market-beating performances, which is why quant funds are often called "black boxes".

By comparison, factor investing is transparent and straightforward. Maybank Asset Management's quant strategies are driven by factor investing, which constructs equity portfolios according to any characteristic – or "factor" – of a basket of securities that explains their return and risk.

For example, a value portfolio will systematically buy into the cheapest stocks in the investment universe. Alternatively, we can build a momentum portfolio that systematically buys into stocks with improving fundamentals that are on a roll. Academic research has shown that these strategies perform well over market cycles.

At Maybank Asset Management Group (MAMG), we utilise a combination of factors that are summed up in the acronym "MTIGERS":

M — **Momentum**
How the stock price behaves

T — **Total Capital Management**
How well the company deploys capital

I — **Intrinsic Value**
How cheap or expensive is the company's valuation

G — **Growth**
How fast the company's finances are growing

E — **Expectations**
How much do analysts like the company

R — **Risk**
How risky is the company's business

S — **Sustainability**
How the company performs on ESG metrics

"Some of MAMG's offerings, such as our first Shariah-compliant Asia Mixed Assets-I Fund, **combine the intelligence and learning power of quant investing with the expertise of our experienced fund managers** to achieve optimal portfolio diversification."

Who is it for?

Quant investing methods are increasingly used by asset managers who want to tap data to optimise their investment performance.

Retail investors, particularly those already familiar with how big data and disruptive technologies have transformed other aspects of their lives, are also warming up to quant funds.

For more information about Maybank Asset Management's Quant funds, please contact your Personal Financial Advisor or Relationship Manager. For more info, visit www.maybank-am.com.my

In our next article, we look at how investors can leverage quant investing, as well as the benefits and risks of doing so.