Fundies vs. Quants

Stockholm (HedgeNordic) – In finance, we too often like to think in buckets. Assets are classified as either growth or value, investment products as either passive or active, research processes as top-down or bottom-up, and investment approaches as either systematic or discretionary. The latter will concern us for the purpose of this article.

Alternatives manager AQR Capital Management attempts to explain the two approaches as follows, "... systematic (commonly associated with the term 'quant') generally applies a more repeatable and data driven approach, relying on computers to identify investment opportunities across many securities; in contrast, a discretionary approach involves in-depth analysis across a smaller number of securities and relies more on information that is not always easily codified."

Based on discussions with a select group of Nordic hedge fund managers, this article seeks to highlight some of the main advantages and disadvantages of systematic investment strategies compared to discretionary strategies.

Resilience Against Human Psychology

"The investor's chief problem – and even his worst enemy – is likely to be himself," once wrote Benjamin Graham, the famed value investor. Behavioural biases affect most investors, if not all, and their investment decisions. A systematic and data-driven process, however, can minimise the impact of behavioural biases on decision making.



Pasi Havia, Portfolio Manager at Helsinki Capital Partners.

Pasi Havia, who manages quant-based stock-picking fund HCP Quant, reckons that the main advantage of a systematic strategy is "that human emotions are not involved in the investment process." There is growing evidence that the average investor's market returns significantly lag behind benchmark indices, partly because of their error-prone behaviour. "It has been proven in several academic studies how our own emotions are probably the biggest reason for underperformance," says Havia. He goes on to say that "once the algorithm is in place, it will not panic in a market crash." The algorithm "simply does what it has been instructed to do."

Other Nordic hedge fund managers corroborate Havia's view. Ola Björkmo, who runs systematic market-neutral fund QQM Equity Hedge alongside Jonas Sandefeldt, points out that "a quantitative process allows for a quick, unemotional reaction to new information." Andreas Olsson, the cofounder of Malmö-based quantitative asset management firm OQAM, says that "we try to combine

our human experience and knowledge with a systematic quantitative framework to get rid of our day-to-day biases."



Ola Björkmo and Jonas Sandefeldt, Portfolio Managers of QQM Equity Hedge.

Alexander Hyll, who employs a quantamental investment approach to run long/short equity fund Adaptive Paradigm Alpha, points out that "quantitative strategies negate much of the effects of biases by taking human decision making out of the equation." The Linköping-based fund manager emphasises that a systematic approach "allows finding opportunities that may have overwise been missed, as well as being able to make a fairer assessment of the data than a human could."

Processing Power and Speed

Pasi Havia, the portfolio manager of Finnish systematic equity fund HCP Quant, identifies that another advantage of a systematic investment approach is the ability to "process bigger amounts of information than any human army of analysts would ever be able to." More importantly, a systematic process has the ability to analyse massive amounts of data in a relatively short period. "A quantitative strategy is able to process vast amounts of data fast and execute without emotions involved," summarises Havia.



Alexander Hyll, CEO & Fund Manager at Adaptive Hedge Fund Management.

"The amount of data that can be analysed with the assistance of computation far supersedes human capacity," highlights Alexander Hyll, who manages a Ray Dalio-inspired fund that seeks to capitalise on global paradigm shifts. Although "insight and creativity are abilities that computers do not possess, quantitative methods have power and precision far above human capabilities." Ola Björkmo of Stockholm-based QQM Fund Management shares the view, saying that "quantitative processes"

can utilise all relevant information on each stock across a large investment universe on a daily basis."

Replicating the Human Mind

One cannot really compare any computer with the human brain. No computer, however powerful and sophisticated, can replicate the human mind. "Discretionary strategies revolve around a human's understanding of a subject, which means that the analysis conducted by a human has more depth than a quantitative analysis," Alexander Hyll tells HedgeNordic. "Quantitative strategies can suffer from being overgeneralised, without a layer of understanding, to fit more situations than may be warranted."

Pasi Havia, who uses a fundamentals-based systematic strategy to run HCP Quant, points out that one disadvantage of a systematic strategy stems from the interpretation of company fundamental data. "In some cases, it is obvious and explainable for a human why there can be discrepancies in an income statement or a balance sheet, for example," says Havia. A fundamentals-based quantitative strategy, however, "will often just read the data as reported, which might be misleading."

"History doesn't repeat itself, but it often rhymes," Havia references Mark Twain's well-known saying. "Quantitative strategies are often trained on past history and can work well within certain boundaries." The human mind, however, could be better at confronting "situations that are unknown for mankind," suggests Havia. "When something unexpected happens that is way off the charts and has not happened before in history (for instance double-digit standard deviation event), quantitative strategies can face challenges," he reckons. "Unknown is unknown. It is hard to train something you do not yet know."

Garbage In, Garbage Out

For a systematic, data-driven investment strategy, data quality is paramount. "Quantitative strategies are highly dependent on the quality of data," emphasises Havia. Many of us know of the "garbage in, garbage out" mantra. "If a strategy is fed with incorrect information, the output is also nonsense," says the fund manager of HCP Quant. "This is not to say that discretionary strategies could work with low-quality data either," points out Havia, "but data quality is a bigger challenge for a quantitative strategy."

"Quantitative strategies are highly dependent on the quality of data."

Linköping-based fund manager Alexander Hyll emphasises that "quality of data varies both in terms of method for collection, generalisation, and depth." He suggests that the success of a systematic strategy, as well as a data-driven discretionary strategy strongly depends on data quality. "To perform high-quality analysis, a lot of work and money need to go into collecting and controlling data."

The Best of Both Worlds

Although systematic and discretionary managers have their virtues and pitfalls and may differ in many ways, there is a common ground shared between the two camps. "Both quantitative and discretionary fundamental strategies have their advantages and disadvantages," highlights Pasi Havia. But "they both aim for the same goal" of achieving the investment objectives of different types of investors. "It is good that there is a rich amount of flavours to choose from," says Havia. Björkmo and Sandefeldt, the duo managing QQM Equity Hedge, agree. "We believe that fundamental discretionary and quantitative strategies complement each other in a portfolio."

"Quantitative methods have power and precision far above human capabilities. On the other hand, insight and creativity are abilities that computers do not possess."

On the one hand, "quantitative methods have power and precision far above human capabilities. On the other hand, insight and creativity are abilities that computers do not possess," says Alexander Hyll. "To gain a full understanding, we need the depth of human understanding with the width of technology – a quantamental investment strategy."

This article featured in HedgeNordic's report **Systematic Strategies: When Numbers are the Key!**