

When hedge funds should hire humans. When they shouldn't

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by Sarah Butcher (<http://news.efinancialcareers.com/uk-en/en/author/sarahbutcher/>) 6 days ago



Surplus to requirement

When should hedge funds hire actual human beings to make discretionary investment decisions, and when should they leave those choices to pre-programmed algorithms? A new paper from Campbell Harvey, an academic at Duke University's Fuqua School of Business and traders at Man AHL (including Sandy Rattray, a former Goldman Sachs managing director in charge of their fundamental strategy group), suggests humans have a place, but so do the algos.

The analysis looked at the performance of 9,000 hedge funds (http://news.efinancialcareers.com/uk-en/en/cifm_sector/hedge-funds-careers) between 1996 and 2014. It categorized them as either systematic (<http://news.efinancialcareers.com/uk-en/241445/working-for-winton-capital/>) or discretionary and looked at whether they were investing in macro or equity long short strategies. It also looked at a variety of risk factors, including traditional risk factors like default risk and market growth that impact the equity, bonds, and credit markets, as well as market dynamic (size, value, momentum, FX carry), and volatility (buying one-month, at-the-money S&P 500 calls and puts at month-end).

Their findings are presented in the chart below.


The first chart suggests human beings are better than algorithms at making investment decisions when they're working for funds following an equity long short strategy. Here, people achieve average returns of 4.09%, compared to the machines' 2.88%. However, the opposite is the case for macro strategies: algorithms achieve 5.01% and humans achieve 2.86%.

It's a more nuanced story when you look at alpha – or the return when the risk factors are removed. Shown in line six of the chart below, this suggests that human beings' advantage in discretionary equity funds' advantage is mostly due to risk factors, like rising markets, and has little to do with actually adding value. When risk factors are stripped out, systematic equity funds return 1.11% and discretionary funds receive 1.22%.

The implication, therefore, is that computers beat humans in both scenarios. Of course, you might argue that any research sponsored by AHL (a quantitative fund) *would* say this, but still: hedge funds might want to think twice before hiring human beings in future.

Performance of systematic macro funds vs. discretionary macro funds:

	Systematic Macro	Discretionary Macro	Systematic Equity	Discretionary Equity
Return average	5.01%	2.86%	2.88%	4.09%
Return attributed to factors	0.15%	1.28%	1.77%	2.86%
Traditional	2.08%	1.58%	1.47%	2.19%
Dynamic	1.28%	0.98%	0.23%	1.08%
Volatility	-3.21%	-1.28%	0.07%	-0.41%
Adjusted return average (alpha)	4.85%	1.57%	1.11%	1.22%
Adjusted return volatility	10.93%	5.10%	3.18%	4.79%
Adjusted return appraisal ratio	0.44	0.31	0.35	0.25



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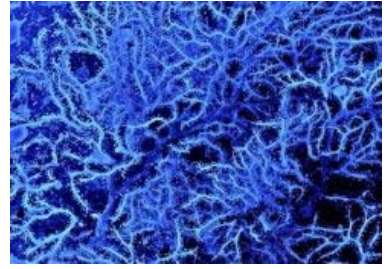
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