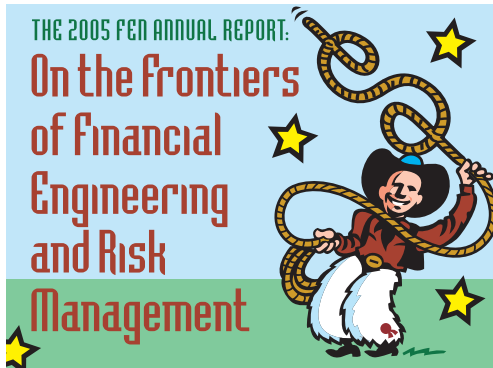


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The Hedge Fund Advantage in Equity Management

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Professional equity managers have usually worked for mutual funds, but now equity management within hedge funds is rivaling this presence, a trend I see as permanent, with important implications for quantitative asset management. The better managers will ply their wares within hedge fund structures because it is more efficient, and the benefits of this efficiency are shared by everyone: portfolio managers, hedge fund owners and investors.

The hedge fund industry has been growing at a rate of roughly 20 percent a year and currently stands at about \$875 billion. Its growth has only just begun. Certainly fees may come down, returns may not be as great as they once were and investor restrictions will have to change to allow access for the masses, but the logic of using a hedge fund versus a long-only mutual fund to gain equity exposure is compelling, suggesting a permanent change in the investment landscape.

There are two reasons why equity managers have been moving to hedge funds. First, more objectively measured subjects tend to attract and keep better talent. They attract better talent because talent realizes it can get identified more easily, and therefore paid more (hedge funds get a piece of the profits and generally have higher fees which can then be shared with the portfolio manager). They keep better talent because bad managers are also more easily identified: while an average mutual fund manager consistently underperforms the market, a beta neutral hedge fund manager whose shorts outperform his longs rarely lasts more than a couple of years.

Secondly, hedge fund managers can go long and short, which effectively doubles the effectiveness of most strategies. Think of a strategy that ranks stocks from best to worst. Mutual fund managers can only go long the top stocks, while hedge fund managers can go long the top stocks and short the bottom stocks. Most strategies are symmetric, that is, if you are measuring attractiveness by a certain metric, that same metric identifies overvalued stocks.

The table above shows the monthly stock returns for ranked deciles from several seminal papers on cross-sectional equity return anomalies. The data cover different time periods, and some use excess returns as opposed to total returns, but the key point is that these well-known anomalies are representative of any cross-sectional pattern one finds in the data: symmetry, a strategy that identifies attractive longs generally identifies attractive shorts.

Most academic arbitrage portfolios that are used to present anomalies adopt a long-top-decile/short-bottom-decile approach, because this would be the most efficient way to exploit a strategy that works. Constraining a strategy to long-top-decile-only lowers the statistical significance of the finding, which implies a lower Sharpe ratio for the implemented strategy.

Most strategies aren't as straightforward as these anomalies, in that they are not strict rules like book/market, but the pattern persists. Managers who think companies with the most X are most undervalued would most likely find those companies with the least X to be most overvalued, and so even

a fundamental style that examines semi-quantitative attributes will probably find itself equally rewarded on the short end.

It should be noted that even the best shorts probably will not make money. For example, over the past 40 years the U.S. equity market has gone up seven percent a year. A great manager might expect seven percent outperformance on his longs and shorts. That means the longs make 14 percent and the shorts make zero percent on average, netting a 14 percent return. One might ask what the difference is if a great hedge fund manager returns 14 percent, while a similarly skilled but constrained, long-only hedge fund manager also makes 14 percent? The shorts for the hedge fund are truly a hedge, not part of generating a return — they add value solely in their volatility minimization — so the hedge fund manager does not take on market risk, which increases the Sharpe ratio, making the ability to evaluate him easier.

The average equity mutual fund manager will underperform the S&P 500 by about 2.5 percent per year. According to CSFB, the Equity Long/Short and Market Neutral hedge fund strategies have averaged 11.7 percent and 9.5 percent, respectively, since 1994. Burton Malkiel and Atanu Saha have recently pointed out there is severe bias to most hedge fund indices, from both survivorship and backfill (the infamous Long Term Capital Management, for example, is not in most indices). Nevertheless Malkiel and Saha only debit the hedge fund returns by 3.7 percent to account for this.

Monthly Returns by Decile as Reported in Seminal Cross-Sectional Anomaly Articles				
	Momentum	Mutual Fund Momentum	Market Cap	Book/Market
1	0.79	0.01	0.50	0.48
2	1.12	0.23	0.19	0.87
3	1.25	0.34	-0.03	0.97
4	1.24	0.36	-0.05	1.04
5	1.28	0.40	-0.12	1.17
6	1.34	0.38	-0.19	1.30
7	1.36	0.45	-0.19	1.44
8	1.43	0.43	-0.21	1.50
9	1.53	0.59	-0.29	1.59
10	1.74	0.68	-0.34	1.88

Momentum: Jegadeesh and Titman (1992), Mutual Fund Momentum: Carhart (1997), Market Cap: Reinganum (1981), Book/Market: Fama and French (1992). Datasets use different period.

That still means that on average there is more alpha in hedge funds than mutual funds, or perhaps more accurately, there is some alpha in hedge funds, but none in mutual funds.

Investors can benefit from risk managers who piece together a collection of index futures, and then separately consider the alpha from investment managers. The futures are for getting exposure to risk factors, those nondiversifiable, positive drift portfolios that are the building blocks to a diversified portfolio. This is a well-known Markowitzian optimization problem outside the skill of many current asset managers, and therefore represents an opportunity to those cursed with relatively more math than people skills. The quest for

alpha, being separate from risk factor evaluation, is made much simpler, because now there is no confounding by ambiguity about the appropriate benchmark. Going forward, a more clearly separated risk factor and alpha management will create greater accountability and more efficient management, which is why a portfolio of equity hedge funds and futures will dominate long-only equity funds. ■

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