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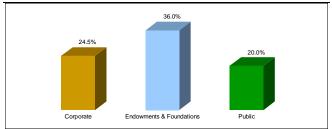
The Inherent Instability of Hedge Funds

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During the 1990s enthusiasm for the hedge fund concept reached a fever pitch. The excitement came in time for its fiftieth birthday, and the question was "Why did it take so long?" After all, the basic idea was that a hedge fund, since it could sell securities short as well as buy them, should be able to make money in any market environment. The 1940s theory evolved in complexity in the years after modern portfolio theory became popular. Sophisticated hedge funds promised performance of one percent a month with low volatility. That isn't why their popularity took off, however. What excited investors was that some hedge funds were putting up dazzling performance numbers of 50–100% in a good year, and who wouldn't pay a one percent management fee and 20% of the profits for that? Hedge funds became the place to go for alpha, or positive performance unrelated to the market itself.

Hedge funds gathered momentum as endowments and foundations, guided by their trustees, invested a portion of their funds in the latest leading-edge investment strategy. They wanted to show they were ahead of the curve or at least on it. By the beginning of this year, 36% of all endowments and foundations had some money in hedge funds. Their average allocation was 18%.

Percent of Institutions Owning Hedge Funds



Source: Morgan Stanley Asset Management, Russell/Mellon Analytical Services Hedge Fund Survey, February 21, 2002

Unlike some others, I do not think we are in a hedge fund bubble that is going to end in disaster. I expect a number of new and old funds to close down, but the concept will endure. What is becoming apparent to me, however, is that the basic structure of an individual hedge fund may be unstable — and that is something important for investors to think about. The case for instability starts with the fact that the two largest and best-known funds have changed structure dramatically. Tiger Management effectively closed down and returned investors' money, while Soros Management changed its focus from aggressive macro management to an endowment orientation, and most of the outside investors took back their money. Both of these funds had outstanding records over a long time but ran into a difficult two-year period. Size was blamed for some of the trouble; both had reached around \$20 billion. The fund that subsequently took the title for the largest, Pequot, split in two last year, with each part at about \$8 billion. Two other large successful funds have returned capital to the limited partners to maintain a manageable size.

To understand why hedge funds are hard to institutionalize, consider the talented portfolio manager at a large mutual fund who decides he wants to be in business for himself and manage a hedge fund. He is frustrated with the problem of managing a large amount of money amid the constraints of benchmarks. He leaves and takes one or two analysts with him. After all, the hedge fund business is one of the easiest-entry businesses on the planet, with law firms, accountants, and prime brokers ready to set you up virtually overnight.

The portfolio manager's reputation is strong, and his team raises \$250 million. If the fund is up 10% in the first year after the 1% management fee, the firm will have gross income of \$2.5 million (or \$2.63 million if the management fee is charged quarterly, as it usually is), plus 20% of the \$25 million appreciation, or \$5 million. The \$7.5-plus million should be enough to compensate the team and cover

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expenses, but the group will probably not be ecstatic, since good portfolio managers and analysts at large institutions are paid very well these days. It is also worth pointing out that not too many hedge funds start out with \$250 million. During 2001 the average fund started with only \$45 million, and in 2000 with \$70 million.

What if the fund has a flat year? Then the revenue flow is only the \$2.5 million management fee. While that may be enough to keep food on the table, it will not be enough to convince them that they did the right thing by leaving where they were. In a difficult market, what happens if the fund declines by 10%? Then the fund probably has a "high water mark" to make up, which means that there is no profit participation until it recovers the loss of the previous year. The founder of the fund has his pride at stake, so he will keep going, but the talented analysts may find their loyalty waning. If they are good, they can probably get a job at one of the many start-up hedge funds without the high-water-mark albatross. Their departure will leave the original hedge fund short of staff, and the high water mark makes it more difficult to attract replacement talent.

Now let's look at the super-successful hedge fund. Even in difficult markets like those of 2000 and 2001, this fund is up 25% each year. The profits pool (after management fees) is \$12.5 million the first year (25% x \$250 = \$62.5 x 20% = \$12.5 million) and \$15.6 million the second. Now we're beginning to talk about some serious money. Since performance is good, the fund is not likely to remain a sanctuary for the original investors. Outsiders will clamor to get in and the fund will grow rapidly. The team may find itself forced into buying and shorting larger-capitalization companies. It may be more difficult to borrow securities for the short positions, and the traders may have more trouble accumulating the long positions. Suddenly, the hedge fund discovers that success is changing its style of investing.

Then there will be the inevitable personnel problems that come with success. Analysts who came up with the most rewarding stock selections will want a larger share of the partnership pie. They may also want their own fund to manage, and some will want to start a new firm with their own name on the door. The high-spirited cohesive team suddenly appears to be a loose collection of free agents. There are also the collateral effects of people getting rich. If you have been doing well managing a nine-figure hedge fund for several years, you have begun to build a fortune of significant size. One day you realize that it is more important to manage your own money well than to manage some-

one else's for a fee. Some funds have stopped taking new clients or increased their fees to discourage investors. Some, like Jeff Vinik, have returned the outside investors' money and continued to operate as an investment firm for the partners.

An outside investor in hedge funds may accept this life cycle analysis the way a portfolio manager looks at a stock. Most investors do not expect to hold a stock forever, and most hedge fund investors have a portfolio of funds and recognize that they will be weeding out the less promising and adding new ones annually. Our in-house fund-of-funds group recommends 25 funds for adequate diversification by institutions, and our quantitative analysis team thinks you need 15.

Our hedge fund group at Morgan Stanley Asset Management also did an analysis of Sharpe ratios (return per unit of risk) by fund size and age. They determined that the best performance is likely to be found in funds between \$25 million and \$200 million in size. Very small funds (less than \$25 million) do better than large in some specialized areas like bond arbitrage and stock index arbitrage, while large funds lag the medium-sized ones pretty much across the board. Young funds tend to do better than mature ones. That's probably because they are started by a manager whose style is working well at her former firm, and her strong performance continues for a while in the new entity. Then, as the market style shifts, the management of the fund becomes more of a struggle.

Return/Risk by Size (annualized Sharpe ratios)

(1996	-Septembe	r 2001)				
	Fund Size (\$MM)					
	<25	25-200	>200	All Funds		
All Hedge Funds	0.9	1.2	0.8	1.1		
Bond Arb	1.3	0.7	0.0	1.0		
Convertible Arb	1.3	2.0	n/a	2.3		
Distressed Securities	0.4	0.8	1.5	0.7		
Long Bias	0.9	1.0	0.8	0.9		
Macro Trading	0.4	0.3	0.4	0.4		
Market Neutral	1.1	2.1	0.2	1.7		
Merger Arb	0.6	1.3	0.7	1.2		
Short Bias	0.2	0.2	n/a	0.3		
Stock Index Arb	2.4	1.9	n/a	3.3		

Return/Risk by Age (annualized Sharpe ratios)

(1996–September 2001)									
	<1yr	1–2yr	2-3yr	3–5yr	>5yr				
All Hedge Funds	2.3	1.4	1.5	1.0	0.9				
Bond Arb Convertible Arb	2.5 n/a	0.8 4.4	0.8 2.4	0.1 2.1	n/a 1.1				
Distressed Securities	1.5	n/a	n/a	0.9	1.1				
Long Bias	1.9	1.3	1.3	0.7	0.7				
Macro Trading	1.1	0.3	0.4	8.0	0.3				
Market Neutral	2.3	1.8	1.0	2.4	1.5				
Merger Arb	2.0	1.1	1.8	1.1	0.9				
Stock Index Arb	2.6	1.4	1.4	1.4	2.1				

Notes: Size- and age-stratified portfolios are equally-weighted and rebalanced monthly. "n/a" denotes a size bucket with insufficient funds. Assumes 5% hurdle rate. Source: Morgan Stanley Quantitative Strategies

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In a way it is sad that, unlike mutual funds, hedge funds have not been able to sustain themselves through a succession of management generations. Only Cumberland seems to have been able to do that, as far as I know. Any business so potentially lucrative should be able to develop into something of lasting value, where the income stream, if not

the performance fee, could be capitalized. Is the instability related to the nature of the talent attracted to these funds? Is it the pressure of performance investing that discourages team satisfaction? It is a conundrum worth solving, for it has philosophical as well as financial significance.



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Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12–18 months.

Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12–18 months.

Underweight (U). The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12–18 months.

More volatile (V). We estimate that this stock has more than a 25% chance of a price move (up or down) of more than 25% in a month, based on a quantitative assessment of historical data, or in the analyst's view, it is likely to become materially more volatile over the next 1–12 months compared with the past three years. Stocks with less than one year of trading history are automatically rated as more volatile (unless otherwise noted). We note that securities that we do not currently consider "more volatile" can still perform in that manner.

ANALYST INDUSTRY VIEWS

Attractive (A). The analyst expects the performance of his or her industry coverage universe to be attractive vs. the relevant broad market benchmark over the next 12–18 months.

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