

## Better than beta?

Feb 28th 2008

From The Economist print edition

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### Managers' superior skills are becoming harder to prove

WHAT exactly are fund managers selling? At heart, they are offering exclusivity. In the complex world of financial markets, the client wants the best brains to look after his money. Picking the right fund manager is like shopping at Saks Fifth Avenue or having your shoes made by Manolo Blahnik. But unlike a posh retailer, a fund manager cannot guarantee to provide a superior service year after year. Indeed, he cannot even be sure of offering a positive real return. All too often, clients hand over their money to managers that have performed well in the past, hoping that this superior record was down to skill rather than luck and that it can be replicated in the future.

Historically, fund managers' appeal has been due to two things: risk reduction through diversification, and an ability to pick the right assets. Think back to the 19th century. Victorian investors faced specific risk because they usually held only a handful of securities in their portfolios. To avoid this risk, they often sought the help of their accountants or solicitors. Those professionals soon found themselves with a lucrative sideline in investment advice. Investment trusts (which still exist today) were set up because it was more efficient to bundle together clients' assets into pooled portfolios. Mutual funds were built on similar principles; by agglomerating the assets of a whole range of clients, it was possible vastly to reduce specific risk.

But since the development of index-tracking funds in the 1970s, the business of diversification has become commoditised. Clients can get access to a broad portfolio, such as the shares in the S&P 500 index, for fees of a fraction of a percentage point of the assets a year. Indeed, the widespread use of indices has dramatically changed the fund-management business.

Originally, indices were devised (often by newspapers) as a means of assessing the stockmarket's mood. Then it occurred to investors that they could use the indices as

a means of judging whether their fund manager was doing a good job. As they became more sophisticated, they realised that fund managers would be able to beat the index, in the long run, by taking more risks, and started to move to risk-adjusted performance measures that combined returns with volatility. These led to the development of alpha, a measure of a fund manager's skill, defined as the ability to produce superior risk-adjusted returns.

## It's all Greek

In recent years there has been a move to separate the effect of alpha from that of beta, which is the portion of an investor's return that comes straight from the market. Thus, if the S&P 500 index rises 8% and an American equity-fund manager delivers a 10% return, the investor gets eight percentage points of beta and two of alpha. Arguably, the client should pay top dollar only for the two additional points, not the eight he could have received even from a low-cost index-tracking fund.

But alpha is quite hard to define. As Andrew Lo of the Massachusetts Institute of Technology points out, to primitive people, everyday technology like cars and televisions can seem like magic. Alpha is a bit like that: it is the part of investment returns that we do not understand.

Investors' attempts to isolate alpha from beta have taken several forms. One is the "core-satellite" approach: the bulk of the money is placed in index-tracking funds and the rest allocated to managers with a proven record of outperforming the market. Often the index-tracking money is invested mainly in developed markets and the satellite money goes to areas such as emerging markets, where an active manager is more likely to be able to outperform the index.



Consultants argue that in the past clients devoted too much of their "risk budget" to equities, in the belief that they would beat bonds over time (the so-called equity-risk premium). Instead, they should have concentrated more on alpha because the returns earned from it are more likely to be uncorrelated than market returns, offering a better combination of risk and reward.

Another approach to finding alpha is to give managers more latitude to stray from the index; in the jargon, to be "benchmark-agnostic". The idea is that managers should pick the best shares regardless of their weighting in the index. This should produce better returns in the long run, even if it sometimes causes them to lag the index in the short run.

As John Brennan of Vanguard (which, as it happens, is one of the largest index-tracking managers) says, "if you're going to have an active fund, make it take active bets." As well as its well-known mutual funds (including one \$122 billion behemoth that tracks the S&P 500 index), Vanguard offers a range of actively managed funds which it contracts out to other managers. "When we hire someone with an active mandate, we want them to take risk," Mr Brennan continues. "Me-too stuff will get you nowhere."

In a way, this change has been good for the fund-management industry, in that it has given individual fund managers more creative freedom. No longer are they forced to buy shares in a company they dislike simply because it has a 5% weight in the index. There has been a fashion in the mutual-fund industry for "focus funds" that own only 20-30 stocks rather than the hundreds needed to track the market. As Jim Connor of Morse, a consultancy, puts it, "the industry has gone from a manufactured model to more like the music industry where it looks for talent that can produce hits."

But betting on alpha really puts the onus on the fund manager to do better than the market. That explains the increasingly widespread use of performance fees. The idea is that the manager should receive only a modest base fee to help cover his fixed costs, but should take a bigger share of the gains when he succeeds in delivering alpha.

Unfortunately for clients, the alpha delivered by the average fund manager is negative. That is because the performance of the average investor mirrors that of a broadly based index, before allowing for costs. Since costs are often sizeable, the average fund manager is doomed to underperformance.

Even when a fund manager can beat the index, his problems are not over. Just as beta has been commoditised, so, in a way, has alpha as academics have started to break down its components. Most stockmarket indices are dominated by larger companies, which means that active managers' best chance of outperforming lies in buying the shares of smaller businesses. Another tried-and-trusted route to outperformance is to take a "value" approach: buying the shares of companies that look cheap on some valuation measure, such as the ratio of the share price to profits. The rationale is that investors can become overpessimistic about the prospects of struggling companies.

The increased sophistication of indices means that investors can get access to factors like value and small-cap stocks at low cost; they have become betas. So fund managers who outperform with the benefit of these factors are not really demonstrating alpha at all.

Indeed, there are now very few markets that investors cannot access cheaply, thanks to the explosive growth of a vehicle known as exchange-traded funds (ETFs). These are quoted stockmarket vehicles that hold baskets of shares designed to track a benchmark. The first one was launched in 1993. By 2000, ETFs had just \$74 billion in assets. But by June last year there were more than 1,000 products with just over \$700 billion in assets, estimates Morgan Stanley, an investment bank. By 2011, the bank forecasts, the sector will have \$2 trillion under its belt.

## Exchange-traded Lego

What makes ETFs so attractive is their flexibility. Funds have been established to cover almost any asset class, from Asian property to oil. That has given retail investors an easy way of getting exposure to assets they might previously have been able to access only in a more costly, or roundabout, fashion. Those who foresaw gold's surge to a record high, for example, have been able to buy an ETF that tracks the metal's price instead of paying a mark-up for gold coins or buying shares in a mining company and taking a bet on the management's competence.

Paradoxically, the biggest advantage of ETFs—their cheapness—also turns out to be the biggest barrier to their acceptance by retail investors. The low fees leave no margin to pay commission to intermediaries, who therefore have little incentive to sell them. ETFs have been a success in the American market, which is more attuned to fee-based rather than commission-based financial advice; in other markets it is up to small investors to discover the benefits of ETFs for themselves.

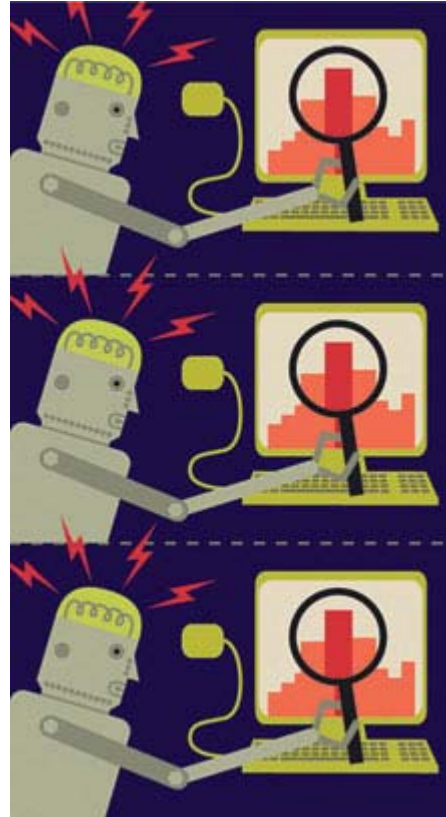
But ETFs have also been bought by institutional investors such as pension funds and even by those modern-day masters of the universe, hedge-fund managers. One reason is that an ETF represents a quick and easy way for investors to take a view on an asset class. Say a hedge-fund manager believes that the Japanese market is set to surge. If he were to assemble a portfolio of stocks, he would have to do a lot of research and might choose the wrong ones. Instead, he can simply buy an ETF linked to a broadly based benchmark such as the MSCI Japan index.

So ETFs could be viewed as a set of Lego bricks from which an investor can assemble a do-it-yourself portfolio. They can also be used to replicate the style biases that, some would argue, have often been mistaken for fund-manager alpha.

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One example is WisdomTree, an American company set up with the help of Michael Steinhardt, a hedge-fund legend, and with the intellectual backing of Jeremy Siegel, a noted academic. It runs ETFs that are weighted on the basis of the cash dividend paid, rather than the market value of the company concerned. The total expenses of its domestic funds amount to a quarter to a third of a percentage point, a small fraction of the costs of a traditional mutual fund. And yet over the ten years to March 30th 2007 its approach would have returned 11.2% a year in the American market, around two-and-a-half percentage points more than the broadly based Wilshire 5000 index. Other companies have come up with similar ideas. Research Affiliates has an index that uses four "fundamental measures" relating to sales, profits, dividends and asset, or book, value.

These ideas have their critics. Some argue that such "active ETFs" are contaminating the purity of the sector's appeal and increasing the costs paid by the investor (because the components of the index have to be changed more frequently). Others would say there is nothing new about the techniques; they are merely value investing in a new guise. Even if that is so, they still pose a considerable threat to traditional fund-management houses. The value school is one of the most respected approaches to investing. If its returns can be matched by funds that mechanically use a few ratios, why pay the fees demanded by active fund managers?



Even hedge funds are seeing their territory invaded. Its managers are the high priests of alpha. Clients have so much faith in their skills that they are willing to pay 2% annually (as well as a 20% performance fee) for the privilege of having their money managed by them. One particular hedge fund was recently able to charge 5% a year and 44% of performance.

But how much of what hedge funds are delivering is really alpha rather than beta? Research suggests that the correlation between hedge-fund returns and the S&P 500 index is already high and getting higher. Worse still, hedge funds are becoming more strongly correlated with each other. Although the hedge-fund industry is very diverse, there have been times in recent years when nearly all the sectors have fallen in unison. This suggests that all of them may be exposed to some common underlying factor.

## Grow your own hedge

Bill Fung and Narayan Naik at the London Business School have analysed the performance of the hedge-fund industry over a decade and identified seven or eight

factors that seem to be responsible for the bulk of its returns. All these factors, the two academics claim, can be replicated at low cost in the market, capturing most of the benefits. So it is possible to set up a fund that offers returns akin to those in the hedge-fund industry but is able to charge much lower fees.

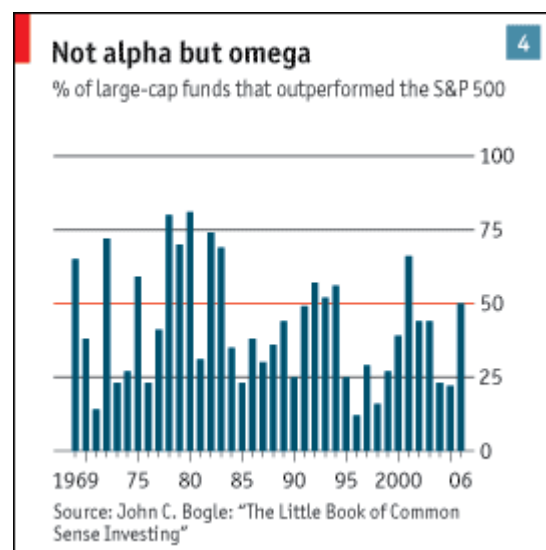
Investment banks have (slightly surprisingly, given their close links with the hedge-fund industry) piled in, producing funds that clone individual hedge-fund strategies. Naturally, many hedge-fund managers are scathing about the banks' efforts. A cloned portfolio is necessarily backward-looking, they say, so investors will be buying what hedge funds used to own, not what they are about to buy. Furthermore, clones will capture the entire beta but none of the alpha of the industry—and it is the alpha that makes hedge funds worth buying. Messrs Fung and Naik accept that hedge-fund managers display skill, but would argue that most of the time this alpha is absorbed by their fees.

Returning to Professor Lo's definition of alpha as the portion of investment returns that we do not understand, it seems possible that as more and more analysis is undertaken, this portion will become smaller and smaller. The “magic” may turn out to be sleight of hand, or it may be random. Some fund managers will always outperform the market, but there is little hope of identifying them in advance.

Cloning represents a particular threat to the quantitative school of fund management. The quants, as they are known, use computer models to identify patterns and relationships in the markets that have been profitable in the past. They are often staffed by the brightest academic minds in mathematics and physics. Quants generally have no interest in visiting a company, sampling its products or meeting its management. Whereas traditional fund managers look at the fundamentals, such as the quality of a company's business model or the nature of its competitors, the quants try to take the subjectivity out of fund management by concentrating on the numbers alone.

Some quants have a long-term perspective, but many take advantage of the liquidity of modern financial markets to trade very frequently indeed; companies such as AQR, D.E. Shaw, Highbridge and Renaissance often form a substantial portion of daily trading on the New York Stock Exchange. They may aim to conduct their trades in a matter of milliseconds as they try to exploit fleeting anomalies. Some funds put their computer servers very close to stock exchanges for a minuscule reduction in the time it takes for data to be transmitted down the wires.

Quants have been remarkably successful over the past decade, but in August last year something went badly wrong: within the space of a week many of their models ceased to work. The quants thought they had built diversified portfolios by selecting



stocks on the basis of a host of different criteria that had previously had low correlations with each other, but suddenly a lot of the factors started to move in the same direction. Some funds put in a dreadful performance; for example, Goldman Sachs's Global Alpha fund lost 38% on the year.

The problem seemed to be that if you set computers to analyse the same set of data, they are likely to come up with similar investment strategies. As positions became crowded, returns started to fall, prompting the quants to use more borrowed money to improve them. When the credit crunch hit, one fund was forced into cutting its positions, bringing down the prices of stocks held by all its rivals and setting off a downward spiral.

## **Reinventing quants**

This does not mean the end of quant investing. "To believe the quant game is over you'd have to think reasonably priced, reasonable growth stocks will underperform," says Gus Sauter of Vanguard, which runs quant-based funds. But it does mean that in future quant managers may have to reconsider how much leverage to build into their funds, and will have to try even harder to find factors that their rivals are not exploiting. Mike O'Brien of Barclays Global Investors (BGI) says the sector needs to move away from "data mining" and adopt a scientific approach, using quant techniques to provide a sound basis for original investment thinking. Instead of letting the data generate the ideas, BGI now tries to turn the process on its head, coming up with ideas first and then testing them on the data.

But the quant funds may face a challenge from the clones, which use computers to identify a series of factors that produce attractive investment returns. On the face of it, that does not look very different from what the quant funds do. Quant managers may come up with a lot more factors than the clones, but in practice just a few of them account for most of the returns. And the more mechanical and replicable the process of investment gets, the harder it becomes to justify high fees.