

## Maxing the factors

# "Factor investing" gains popularity

*But the age-old search for a magic market-beating formula still looks forlorn*



Print edition | Finance and economics

Feb 1st 2018

RETAIL investors tend to dream of finding a wonder stock—a Netflix or Apple that will multiply their savings many times over. But institutional investors cannot commit too much capital to one individual company. Instead, they hope to pick the right kind of stocks, a broadly based group that will beat the market.

Two or three decades ago, fund managers would have attempted this feat by favouring one industry over another. They might, say, have bought energy stocks in the hope that the oil price would rise, while avoiding retailers because of fears about consumer spending. But in these days of computers and algorithms, there are more systematic approaches to beating the market. The aim is to find stocks with characteristics or "factors" that make them outperform. In the industry jargon, funds tracking these factors are known as "smart beta". The money allocated to smart-beta exchange-traded funds has reached \$658bn; all told, more than \$1trn is invested in an explicitly factor-based fashion.

ADVERTISING



inRead invented by Teads

### Latest updates

Will the Supreme Court deal a blow to trade unions?

DEMOCRACY IN AMERICA

The economic returns to university

GRAPHIC DETAIL

Why United Airlines has got into a flap over a peacock

GULLIVER

Definitions vary, but there are four or five long-established factors that seem to make shares perform differently from the rest of the market: size, value, yield, low volatility and momentum. The first of these is based on the fact that small companies have tended to outperform large ones. "Value"

See all updates

refers to companies that look cheap relative to their assets, which have tended to beat those that look expensive. "Yield" means shares with a high dividend yield, which do better than those with a low yield (though that may be just another version of the value effect). "Low volatility" means those shares that move less violently than the overall market, which also tend to perform better than the average. Finally, "momentum" seeks to profit from the observation that shares which have risen in the past continue to do so.

Research by Elroy Dimson, Paul Marsh and Mike Staunton of the London Business School has shown that these factors have achieved superior returns in numerous countries over many decades (see chart). But they are not wholly reliable. Sometimes the factors can underperform the market for long periods. S&P Dow Jones, an index provider, monitors 17 different factors. It found that only five beat the S&P 500, its main benchmark, last year.

Just as Molière's Monsieur Jourdain was amazed to learn he had been speaking prose all his life without knowing it, any one equity investor is exposed to these factors but may not know it. Research by MSCI, another index provider, found that more than half the performance of active fund managers can be explained with reference to the most common factors.

"Smart beta" funds, which focus on one or more factors, are subtly different from conventional index funds that track a benchmark. They hope to beat the market, like active managers, but at lower cost. These are dangerous waters. Fund managers have plenty of incentives to find anomalies that appear to work, to entice money



Economist.com

from clients. Run enough data tests, and some strategies will appear to outperform. A paper by Kewei Hou and Lu Zhang of Ohio State University and Chen Xue of the University of Cincinnati found 447 stockmarket anomalies in the academic literature. Their attempt to replicate the findings showed that nearly two-thirds lacked statistical significance; on a more conservative approach, the failure rate rises to 85%.

Still, the best-known factors have been too successful for too long for it to be a statistical quirk. Broadly, there are two possible explanations. One is that higher returns compensate for some form of risk. Smaller stocks are less liquid and more expensive to manage, for example. Value stocks look cheap because the firms' businesses genuinely are more risky. Though they believe in efficient markets, with no easy ways to outperform, Eugene Fama and Kenneth French, two leading academics, have backed Dimensional Advisors, a fund-management company that uses size and value factors to pick investments.

A second explanation relies on behavioural explanations. Momentum may play a role when investors are slow to realise that a company's fortunes have changed for the better; a few cotton on early, driving up the share price, and then others follow suit. The low-volatility effect may be because investors instinctively prefer to buy high-volatility stocks which they believe will produce excess returns, leaving low-volatility stocks comparatively cheap.

Another puzzle with anomalies is why they are not arbitrated away. If some assets deliver higher returns, why do investors not pile into them and drive the price higher? A recent paper from Sushil Wadhwani and Michael Dicks of Wadhwani Asset Management found that such "crowding" may have reduced the returns from the "carry trade", a popular strategy involving borrowing low-yielding currencies and investing in higher-yielding ones. At a London Business School event in November, René Stulz of Ohio State University suggested that, as more investors took a factor-based approach, excess returns would indeed decline, though not

disappear. But Cliff Asness of AQR Capital Management, a fund manager, argued that valuations did not suggest factor exposures were particularly overcrowded at the moment.

An easy, obvious way of beating the market can, by definition, never be found. Everyone would follow it, so it would generate the average return. But the financial markets are a statistician's delight, with thousands of companies and price data that change every second. People will keep crunching the numbers in search of the magic factor that makes their fortune.

*This article appeared in the Finance and economics section of the print edition under the headline "Maxing the factors"*