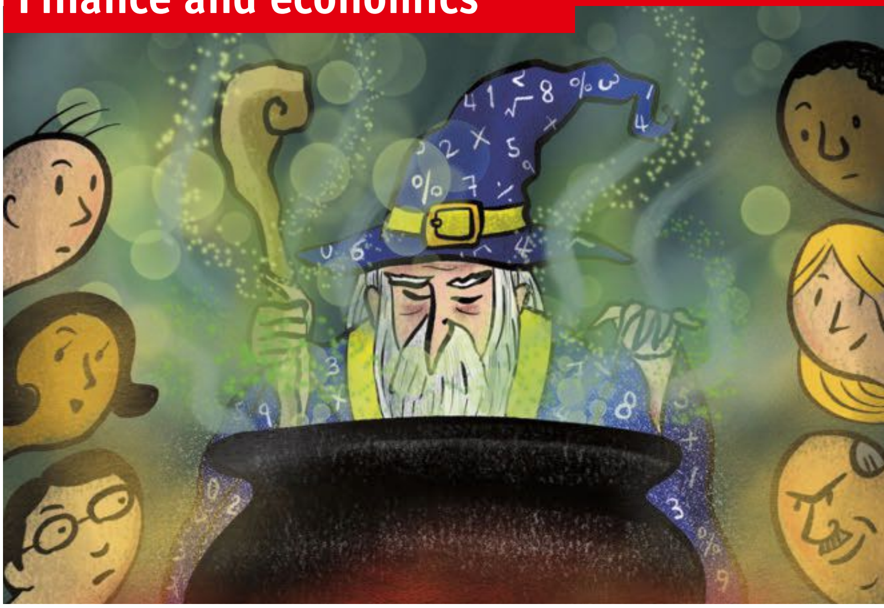

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Trends in investment

Maxing the factors

The trillion-dollar search for a magic market-beating formula

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.

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" 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.

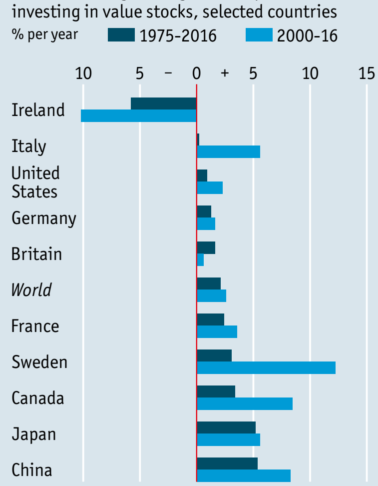
Just as Molière's Monsieur Jourdain was amazed to learn he had been speaking prose all his life without knowing it, any one equity investor is exposed to these factors but may not know it. Research by MSCI, another index provider, found that more than half the performance of active fund managers can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

The why factor

Factor investing, average annual premium from investing in value stocks, selected countries



Source: Elroy Dimson, Paul Marsh and Mike Staunton, "Factor-Based Investing: The Long-Term Evidence", Journal of Portfolio Management, 2017 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 arbitraged 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. ■

Buttonwood | Buck loses its fizz

A weaker dollar has wider implications for the market

AT THE start of 2017, just before Donald Trump was inaugurated as president, a survey of fund managers by Bank of America Merrill Lynch (BAML) found they believed that being positive on the dollar was "the most crowded trade". It turned out they were right to be cautious. On a trade-weighted basis, the currency has fallen by 9% against other major currencies in the past year.

It is not clear what the Trump administration thinks about this. At the recent World Economic Forum in Davos, Steven Mnuchin, the treasury secretary, said: "Obviously a weak dollar is good for us as it relates to trade and opportunities." Although the rest of his statement was more nuanced, it is unusual for anyone in his position to depart from a "strong dollar" line. The greenback duly fell in price.

Mr Trump then followed up with a statement in favour of a strong dollar in the long term, which caused a rebound. Since it was only last April that the president talked about the dollar being "too strong", the markets can be forgiven for being confused. Never mind singing from the same hymn-sheet, the American authorities are using different tonal systems.

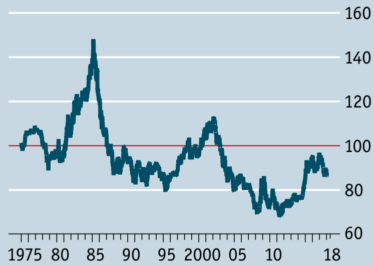
Adding to the puzzle is the administration's focus on eliminating the trade deficit. The recent package of tax cuts, by boosting demand, is likely to suck in imports and widen the deficit. The trade deficit tends to fall during a recession, but that is not a desirable outcome. So it may need a big decline in the value of the dollar to bring about a cut in the deficit, while keeping the economy buoyant.

If the dollar is poised to experience one of its long periods of weakness, as in the late 1980s or the early 2000s (see chart), what would that mean for the financial markets? Much may depend on the reason the dollar is weak. If the weakness is related to bad news about the American economy, then that is usually bad for equities and good for government bonds. The reverse applies if the weakness reflects a boom in emerging markets; that would be a sign of investors taking advantage of exciting opportunities elsewhere.

A turn for the worse

$ trade-weighted index, against major currencies

March 1973=100



Source: Federal Reserve Bank of St. Louis

Current dollar weakness seems to be linked to a rebound in the global economy. That also helps explain why stockmarkets have started 2018 in a buoyant mood. A weaker dollar helps American multinationals, as Mr Mnuchin suggested. Not only does it make their exports more competitive, but their overseas earnings are also worth more in dollar terms. BAML says that, in the fourth quarter, 68% of companies with high foreign sales beat analysts' forecasts of profits and sales. Only 39% of companies with no foreign exposure managed to do so.

Although equities have been performing strongly, Treasury-bond prices have been falling (in other words, yields have been rising). This may suggest that foreign investors need a higher return to persuade them to put their money in a depreciating currency. Another explanation is that American bond investors think stronger economic growth will eventually lead to higher inflation and are demanding higher yields to compensate (see next story).

What about the rest of the world? A weak dollar means a strong euro and thus, all else being equal, tighter financial conditions in Europe. Mario Draghi, the president of the European Central Bank, made some pointed remarks on January 25th about disorderly movements in exchange rates, and their adverse implications for financial and economic stability. He took a more doveish tone on monetary policy than investors expected; the ECB will not want the euro to rise too far. Government-bond yields in Europe have also been rising, so financial conditions are already tightening.

Life tends to be easier for economic policymakers in developing countries when the dollar is falling than when it is rising. The Asian financial crisis, for example, occurred during the dollar surge of the late 1990s. Many countries peg their currencies, formally or informally, to the greenback; if the dollar is rising, they may be forced to tighten monetary policy in order to maintain the link. A weaker dollar gives countries scope to cut interest rates, boosting growth.

Of course, all these trends may go into reverse if they go too far. If a lot of money flows into emerging markets, economies can overheat and an overvalued currency can make exporters uncompetitive, leading to an eventual crisis. If Treasury-bond yields rise far enough, that will prompt capital to flow back into the dollar. Furthermore, a sharp rise in bond yields will put the squeeze on economic growth. Investors do not mind a bit of dollar weakness; they just don't want too much of it.

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