ETF landscape becomes more global and advanced

According to ETF 2020, asset flows in the developed markets of the U.S and Europe will continue

Commenting on the survey, Christophe Saint-Mard, partner at PwC Luxembourg says: "upgrading technology, resources and processes will be critical as the ETF landscape becomes more global and advanced, with a wider array of investors and

duct landscape in particular. MiFID II and Retail Distribution Review (RDR) are set to ban the use of commissions by independent financial advisors which to date worked against ETFs in the retail market. Going forward, active ETFs are

Christophe Saint-Mard.

To download a copy of PwC's report, 'ETF 2020: Preparing for a new horizon', please visit PwC Luxembourg website, http://www.pwc.lu/en/fund-distribution/poster.jhtml.

Factor Investing And Behavioral Finance

Which Factors?

Multi-factor models have become an important tool for investors seeking for smoother returns and diversification effect. They ensure for investors long-term outperformance with a low active correlation among factors. Moreover, investors can build their own multi factor model as various approaches exist when it comes to combine these factors; it will depend on their investment belief, level of sophistication and knowledge about factors. Investors can also choose whether they will apply a simple equal weighting or a more dynamic weighting strategy. Among the various weighting methodologies, equiweighting factors seems to be the favored approach due to its ease of implementation and the Sharpe ratios generated compared to other methodologies. It is not only popular and transparent, but also prevents strongly concentrated positions.

Some of the well-known and widely studied factors or styles generally considered in such strategies include Value, Low Size, Momentum, Low Volatility, Dividend Yield and Quality. These key factors capture stock characteristics such as valuation ratios, market capitalization, relative returns, or standard deviation. Historically, they have earned statistically significant positive excess returns over market capitalization weighted indexes and experienced higher Sharpe ratios.

Behavioral Background

One of the main questions remains whether these factors will continue to outperform the market and generate positive excess returns. Modern finance advocates see factors as rewarding a systematic source of risk, and behavioral finance advocates see the same factors as rewarding investors systematic errors. However, the first camp tends to recognize that Fama's market efficiency and the CAPM of Sharpe, Lintner, Treynor and Mossin are unable to explain the excess returns earned by most of these factors. For instance, Price Momentum strategies cannot be explained by their systematic risk. Likewise, Value stocks are not riskier.

All factors previously described exploit market anomalies and inefficiencies such as errors in expectations, underreaction and overreaction or loss aversion that have been largely explained by behavioral biases in numerous academic research papers.

In 1993 Jegadeesh and Titman identified a 3- to 12-month performance continuation pattern in stock prices. They discovered that on average the stocks that outperformed over the last 3 to 12 months are the stocks that will outperform during the next 3 to 12 months and vice-versa. The behavioral explanation behind the Price Momentum is the cognitive dissonance bias. No human being likes to be wrong, hence once an investment decision has been made, an accumulation of information of the opposite sign will be needed before investors change their minds, slowing the integration of new information into prices.

Another market anomaly that has been observed, and most likely the oldest, is the value anomaly. On average, value stocks outperform the market over the next 3 to 5 years. These companies are identified by using factors such as Price to Book or Price to Earnings. The behavioral explanation is to be found in the agency theory.

Surprisingly for some, the main objective of asset managers is not to maximize the value of the portfolio of their client or fund, but to keep their jobs. Hence, they will tend to avoid companies that are cheap – usually for a good reason – and will prefer to stick with the crowd, buying glamour and well-known names that everyone holds.

These value stocks which are not necessarily riskier will post earnings surprises that are systematically more positive than for the glamour ones. Indeed, value strategies generate higher returns because they exploit the suboptimal behavior of the typical investor, while glamour stocks are easier to justify to sponsors as they appear to be prudent investments. Moreover, most investors have a shorter time horizon before value strategies start to pay off.

Arbitrage

Based on these explanations, it seems unlikely that human nature will change and remove these biases alone any time soon. However, arbitrage can take place. In May 2013, McLean and Pontiff have reviewed 82 stock characteristics and identified three distinct periods for each anomaly: (1) within the original study's sample period, (2) outside of the original sample period but before publication, and (3) post publication.

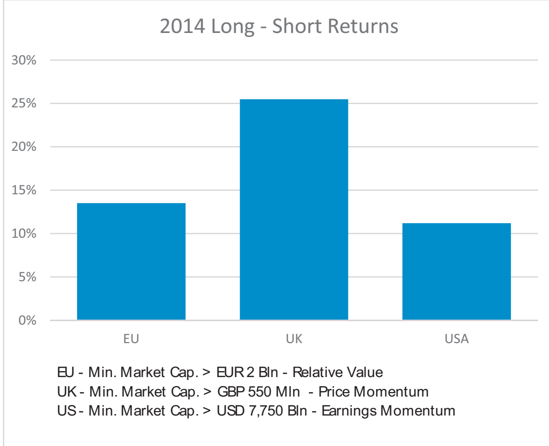
They observe that the variance, turnover, dollar volume and short interest all increase significantly in characteristic portfolios post publication. Indeed, trading occurs in characteristic portfolios when academic research draws attention to these strategies. Characteristic portfolios that contain larger stocks with smaller bid-ask spreads and stocks with high dollar volume decline more post publication, in opposition to the characteristic portfolios that are costlier to arbitrage.

A working paper written in 2013 by Chordia, Subrahmanyam and Tong, looked at recent trends in capital market anomalies in the US equity market. They show that increased arbitrage (explained by the decline of tick size to decimals, hedge funds, or algorithmic trading) led to an attenuation of anomalies over time, and that only one or two have accentuated over the dozen studied. For example, illiquidity exhibits significant evidence of attenuation whereas idiosyncratic volatility strengthened.

In Practice

Our own research shows that the attenuation revealed by single factors needs to be reassessed for each country, both for developed and emerging markets. Also, once combined, these factors continue to generate statistically significant profits, proving that if arbitrage might have eroded part of the explanatory power of some factors, especially at shorter term horizons, the behavioral biases still exist and remain profitable after costs.

The chart below displays compound monthly long-short returns on 3 investable universes similar to the Stoxx 600, the FTSE 350, and the S&P 500 based on monthly or quarterly rebalancing depending on the model used. All stocks are equal-weighted.



Alexandre COLIN, CEO of behave!, Luxembourg

Valentine LAMBRECHTS,
Master in Economics & Finance, HEC Liège

Chan, Louis K. C., Narasimhan Jegadeesh and Josef Lakonishok, Momentum Strategies, Journal of Finance, 51 (December 1996), 1681-1713
Chordia T., A. Subrahmanyam and Q. Tong, Trends in Capital Market Anomalies, Working Paper, May 2013
Jegadeesh, Narasimhan and Sheridan Titman, Returns to Buying Winners and Selling Losers: Implications for Stock Market Efficiency, Journal of Finance, 48 (March 1993), 65-91
La Porta, Rafael, Josef Lakonishok, Andrei Shleifer, and Robert Vishny, Good News for Value Stocks: Further Evidence on Market Efficiency, Journal of Finance, 52 (June 1997), 859-874
McLean R.D. and J. Pontiff, Does Academic Research Destroy Stock Return Predictability?, Working Paper May 16, 2013