portfolio construction forum

Research review: Quality and momentum investing

Ron Bird | University of Technology Sydney | 05 June 2017

Investing in stocks based on their "quality" is commonly an integral part of the investment process for a significant proportion of the better quantitative investment managers. However, unlike other commonly used factors (value, size and momentum), very little research has been undertaken on the quality factor – which makes the first newly released paper below very interesting.

The second paper discusses a new way to measure – and so implement – momentum. The simple idea behind momentum investing is to buy stocks that have done well in recent times and avoid those that have performed poorly. It's a strategy that has generated very good returns over periods dating back over half a century. So any improvement in what has proved to a very successful strategy is of much interest.

1. Survey of Quality Investing

- Jason C. Hsu, Vitali Kalesnik, & Engin Kose | 19 May 2017

In recent years, factor investing has experienced a resurgence in popularity under the moniker "smart beta". Several traditional factors, such as value, size, momentum, and low beta, are well defined and have been researched heavily in academia as return anomalies for many decades. Practitioners applying quantitative strategies for enhancing returns have also exploited these factors. Today, these factors each define a distinct smart beta category (think of style boxes for smart beta strategies) and are the foundational building blocks for the now-ubiquitous multi-factor products.

As the authors of this paper note, a well used factor which has not been subjected to much analysis is "quality" where "quality" is a combination of various measures. However, there is great variation in the measures that the practitioners use when arriving at their quality score. Hence, the homogeneity that exists within the industry when it comes to measuring factors such as value, size and momentum does not apply when it comes to the quality factor.

Therefore, the authors point out, the quality factors used by some might add value while those used by others do not – with success being dependent on the ability of the measures included in the score to independently contribute to outperformance.

The authors find that there are seven common measures used in the industry to obtain a score for the quality factor across stocks. These are profitability, earnings' stability, capital structure, growth in profitability, accounting quality, payout/dilution and level of investments. The author's assess the ability of each of these variables to add value as part of



a quality factor score and find that only four of these measures – profitability, accounting quality, payout/dilutions and the level of investments – seem to stand up to scrutiny.

The conclusion that one can draw from this analysis is that not all quality factors are equal, and so it is possible for the quality factor of one investor to do well while that of another is languishing.

2. Returns Signal Momentum

- Fotis Papailias, Jiadong Liu, Dimitrios D. Thomakos | 20 May 2017

"Time series momentum" is calculated by the returns of a stock over some prior period. It looks at the direction of the movements in a stock's price during the period (i.e. positive and negative movements).

The authors of this new paper argue that trends in the signs of these price movements are positively related to mean returns and negatively related to individual security's volatility. Empirical evidence in a large universe of commodity and financial futures supports this "returns signal momentum" factor showing that strategies based on returns signal momentum result in higher returns, Sharpe ratio and lower drawdown when compared to time series momentum and other benchmark strategies.

The authors conclude that returns signal momentum can benefit investors as an effective strategy for speculation and hedging.



Ron Bird is a Professor with the Business School of University of Technology Sydney. From 1989 to 1998, Ron held a number of non-academic roles include heading the asset consulting practice and global research unit of Towers Perrin, and investment positions with Westpac Investment management and GMO. Ron returned to academia in 1999 in the Finance department of UTS. For the past 15 years, Ron has also been the director of the Investment Management Analyst Course (IMAC), a key component of the Certified Investment Management Analyst[®] certification program for Australian candidates.