

Hedge fund bets show Low Volatility is still far from overcrowded

- Hedge funds tend to invest more in high-volatility stocks
- Limits to arbitrage may not be the primary driver of this anomaly
- Low-volatility is far from being a 'crowded' trade

Thorough analysis of hedge fund data shows that, despite their flexible approach to investing, these funds tend to bet strongly against the low-volatility anomaly. This suggests that limits to arbitrage are not the main reason for this anomaly and that the low-volatility trade is still far from being overcrowded.

The low-volatility anomaly, the finding that low-volatility stocks tend to have superior risk-adjusted returns in the long run, is a well-known phenomenon. Over the past four decades, it has been extensively documented by academics for numerous equity markets across the globe.

Among the frequently cited explanations for this counterintuitive observation are the so-called limits to arbitrage. This concept encompasses a variety of common investment restrictions investors face, such as constraints on leverage, short-selling and being evaluated



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'Hedge funds tend to bet strongly against the low-volatility anomaly'

against a benchmark. But new thorough analysis of past hedge fund returns suggests that this may not be the key driver of the anomaly after all.

Limits to arbitrage are much less of a concern for hedge funds than for conventional asset managers, as hedge funds are typically characterized by an absolute return target and ample flexibility to apply leverage and short selling. One would therefore expect them to be well-positioned to actively take advantage of the opportunity provided by low-volatility stocks. In practice, however, they do not appear to do that, on the contrary.

Significant but negative explanatory factor

We regressed aggregate hedge fund returns on the return difference between low and high-volatility stocks. We then found that this return difference is indeed a highly significant explanatory factor for aggregate hedge fund returns, but that there is an inverse relationship. In other words, hedge funds tend to bet strongly against the low-volatility anomaly.

For this analysis, we used hedge fund indices from two leading providers, Hedge Fund Research and Credit Suisse, over the ten-year period from January 2006 to December 2015. The preceding ten-year period was also taken into account in a robustness analysis. We focused on aggregate indices which include hedge funds from all categories, but also looked at the various sub-category indices.

All hedge fund returns were taken in excess of the risk-free return provided by Kenneth French. We also controlled for a wide number of known explanatory factors, such as the equity premium, the term premium, the standard size and value factors (as described by Eugene Fama and Kenneth French in their well-known three-factor model), and various momentum or trend-following factors.

On the whole, the picture that emerged from the regressions is that the main systematic exposures provided by hedge funds tend towards classic betas, such as the equity risk premium, the emerging versus developed equity return, and the default premium. In addition, our calculations showed a strong bet against the low-volatility anomaly within the equity market, as well as an exposure towards various forms of momentum.

These findings clearly go against the notion that limits to arbitrage are the main reason for the low-volatility anomaly. Other explanatory factors that have been proposed, such as the fact that portfolio managers may be willing to overpay for high-volatility stocks in order to maximize the expected value of their option-like compensation schemes, may be more important.

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An anomaly which is here to stay

The fact that the multi-trillion hedge fund industry is not arbitraging but contributing to the low-volatility anomaly also contradicts the popular view that the anomaly has been largely arbitrated away already, or that it may have turned into an 'overcrowded trade'. These worries were initially caused by rising valuations of low-volatility stocks and significant growth of assets under management, both in active and passive focused low-volatility strategies.

Another contribution of this study is that it identified a new factor with strong explanatory power for hedge fund returns, which adds to the existing literature on hedge fund performance evaluation. Interestingly, the return difference between low and high-volatility stocks turns out to be a stronger explanatory factor for hedge fund returns than many previously documented factors.

Read the related research paper: <https://ssrn.com/abstract=2898034>

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