Practical Applications of

Fire! Fire! Is U.S. Low Volatility a Crowded Trade?

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Overview

In the aftermath of the financial crisis, low-volatility products and the research around them have received a great deal of media interest and investment activity. This begs the question: Is low volatility a crowded trade? Harry Marmer of Hillsdale Investment Management has studied the empirical evidence carefully and finds very little to support the notion that there is crowding in US low-volatility strategies at the present time.

In an interview with Institutional Investor Journals, Marmer discusses the deep roots of low-volatility strategies and identifies the signals investors should use to assess the potential for crowding. He explains why performance significantly differs across different types of low-volatility approaches and suggests how to evaluate individual strategies. He also examines the outlook for rules-based quantitative strategies.

Practical Applications

• A passing fad? The low-volatility effect can be traced back more than 40 years in both academic and applied research.
• Crowding signals. A variety of signals may be monitored to detect crowding, including assets under management, cash flow, performance, valuations and factors.
• Strategies differ. Surprisingly for a rules-based quantitative process, there is significant variation in both the volatility and annualized performance results of live low-vol managers, suggesting that investors need to conduct serious research before buying a particular strategy.
• Know your bets. Investors need to understand and monitor both the fundamentals and the factor bets of their low-vol managers in order to validate their processes and assess possible crowding signals.
• Where are we going? While smart beta wins the marketing award of the decade, these concepts are much more than just fancy interior design for investment strategies.
Practical Applications Report

Given the amount of applied research and the media attention that low-volatility strategies have received over the past three years, many investors and consultants wonder out loud if these types of strategies are just another passing fad like the 130/30 strategies of a decade ago, Marmer observes.

In *Fire! Fire! Is U.S. Low Volatility a Crowded Trade?* (published in the Fall 2015 issue of *The Journal of Investing*), Marmer addresses this concern by exploring the roots of low-volatility strategies, which reach back more than 40 years. Pioneering academic research on the CAPM found that the empirical relationship between return and risk was too flat and could not be explained by theory. And as early as 1972, analysis had revealed that equity portfolios with lower volatility experienced higher returns than their riskier counterparts. Refreshed data produced similar results in 1991. Marmer recounts, “There were applied investment conferences in the 1990s that used these empirical studies to point out the possibilities of employing low-volatility–based strategies as an alternative to market-cap indexing.”

Marmer notes that, in an era where investors are driven by risk policy, they have been replacing public equities with private equities, real estate, infrastructure, farmland and other absolute strategies. Marmer suggests investors should consider low-vol strategies that capture the equity risk premium without sacrificing the liquidity required by many of these other asset classes.

A LOOK AT THE NUMBERS

In comparison with market-cap indices, there is very little capital invested in low vol, Marmer notes. According to *Morningstar* data, the assets in US Market Cap Index Funds are 100 times greater than the assets in low-vol/minimum-variance strategies ($2.5 trillion versus $18 billion). In addition, low-vol strategies compose only 4% of the $450 billion in all smart beta strategies.

“Ironically, these results suggest that passive market-cap index strategies are most likely suffering from crowding, as evidenced by the reconstitution effect caused by the rebalancing of these indices, an effect clearly not evident in low-volatility indices,” Marmer says.

Other signals that could be used to test crowding in the low-volatility space include unexpected performance behaviors and unattractive valuations. Marmer uses the S&P 500 Low Volatility Total Return Index (SPLVI) as an indicator of low-volatility performance. Backtests covering the period since 1991 (when the SPLVI went live) clearly indicate that the performance of low-vol strategies is consistent with expectations and do not support the crowding hypothesis, he reports.
Reviewing 19 fundamentals over 24 years of data, Marmer finds no significant evidence of crowding from a valuation perspective. However, he notes that since 2011, the price-to-sales ratio has been higher, perhaps because of changes in SPLVI allocations to financials and industrials—sectors that often have higher price-to-sales ratios than the S&P 500 Index.

“Interestingly enough, in examining the time series fundamentals of low vol, one particular observation was the stability in fundamentals. Perhaps this may partially explain the superior results of low vol relative to market-cap indexes.”

Marmer also looked at factor crowding, a phenomenon that may affect some types of rules-based quantitative strategies. For example, low-vol strategies consistently display a higher dividend yield relative to the market. Higher-dividend-yielding stocks have become increasingly popular, especially with retail investors, since the financial crisis.

While flows to these stocks have been significant over the past four years, says Marmer, they represent only a small percentage of the total equity market. The dividend yield spread between the SPLVI and the S&P 500 has recently narrowed, mainly due to the decline in yield of the SPLVI stocks. This could be an early indicator, but Marmer points out we have seen these yield spreads before and that all other potential indicators are “normal.”

Studying a variety of indicators, there is very little evidence of crowding in US low-volatility strategies. But like any other investment strategy, investors should always understand and monitor the drivers of results.

LOW-VOL STRATEGIES: NOT ALL THE SAME

Marmer also examined the live performance results of low-vol managers and found some very surprising results.

He compared the live track record of low-vol strategies and found almost a 700 basis point spread in volatility and a 1,300 basis point spread in annualized returns between strategies, based on the past three years of data in eVestment Alliance’s database. “These huge differences in results are the opposite of what we expect and also what we would find with passive managers replicating a market-cap index. This underscores the point that low-vol strategies can vary considerably. Investors need to understand how these differences occur and whether they are a function of skill or portfolio construction.”

Even investment manufacturers question whether a pure low-volatility strategy is a sustainable approach for investors or think that factor tilts may be required to tame the large tracking error risk that is their natural outcome, Marmer states.

Such investor concerns are reflective of the dispersion in low-volatility live results. Marmer suggests these variations can arise from many differences in such strategies, including: Equity universes, definitions of risk (standard deviation of returns, versus beta, versus standard error, etc.), constraints, stock-weighting systems, input frequencies and rebalancing methodology. “As reflected in the results, the scope for differentiation is unlimited. Caveat emptor”

“Strategies that are purely low-volatility driven have defined return and risk payoffs. Any drift from these payoffs is a key ‘crowding’ indicator.”

Low-Vol Managers Deliver Mixed Results:
✓ 700 bp spread in volatility
✓ 1,300 bp spread in annualized returns between strategies
KNOW YOUR BETS

The wide variation in live performance results for low-vol managers also led Marmer to conclude that “investors should always be aware of the implicit factor bets and fundamentals in their portfolios.”

This is especially important with monitoring the potential for crowding. Investors should monitor key residual factors over time for unusual behavior. For example, low-volatility strategies sometimes exhibit an unintentional “value” bias. Although these factor bets are a side effect of the pure low-volatility stock-selection process, investors should monitor these fundamentals as possible indicators of crowding.

“Strategies that are purely low-volatility driven have defined return and risk payoffs. Any drift from these payoffs is a key ‘crowding’ indicator,” Marmer explains. Investors must also recognize that although low-vol strategies may display value-like features, they are not a substitute for active value investment approaches.

Marmer outlines other areas worth monitoring. “The most obvious place to begin with is the asset size of your low-vol manager, for size goes hand-in-hand with trading and implementation diseconomies, which can reduce the efficiency of your strategy.” Other potential crowding indicators include media coverage to see what the “crowd” is buying, liquidity of the top holdings, key fundamentals and intra-portfolio correlations to assess if low-vol stocks are moving together.

THE FUTURE IS BRIGHT AND SMART

In its simplest form, a pure rules-based, quantitative low-volatility strategy is the ultimate basic smart beta strategy. As investor interest and manager design grow, factor tilts and other enhancements will be added, Marmer predicts. “It is at this advanced stage that these concepts become exciting, as we now have a common language in which to talk to investors about proven quantitative investment strategies based on recognized risk premia—such as value, momentum, quality, cap, yield and, of course, low volatility.”

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