Seeking Alpha

# Smart Beta Over Generations: Low Volatility

Sep. 12, 2017 10:11 AM ET1 comment
by: Ploutos


**Summary**

- In this series, I am depicting the longest time series data I have for my selected market-beating factor tilts.
- Many new indexed fund launches demonstrate outperformance over a limited horizon. The data in this article stretches decades.
- Low volatility has been questioned as a fad that is driven by expanding multiples on low vol stocks driven by historically low interest rates.
- In a study stretching back more than 50 years, this article shows that low volatility, especially when complemented by the size factor, generates tremendous risk-adjusted outperformance.


A couple of months ago I saw a press release for the ProSports Sponsors ETF (FANZ), which seeks to track the official corporate sponsors of teams in the big four U.S. sports leagues. The idea is that these companies must have available free cash flow to afford the rising costs of sponsoring sports franchises, and this fund will allow investors to gain exposure to the financial spornsors of sports teams. Adelphia (Tennessee Titans), Enron (Houston Astros), Conseco (Indiana Pacers), MCI/Worldcom (Washington Wizards), and a host of failed airlines and crisis-stricken banks have adorned the names of arenas and stadiums before failing. I do not want to be long an equal-weight portfolio of sports sponsors, but that's just me.

I can not blame the ETF providers though, investors have eschewed the underperforming active managers and gravitated towards lower-cost passive strategies. They are simply trying to find a theme that they can embrace, and sports are an easy attachment for many.

In this series, I am going to lay out for Seeking Alpha readers the longest datasets I have available on my five key factor tilts that comprise my "5 Ways to Beat the Market" series. Previous articles have covered the size factor and value stocks. By providing datasets that all extend past half a century, I hope to show that these particular factor tilts can stand the test of time and consistently capture structural alpha over long time intervals. I want a theoretical underpinning to my thematic factors, and not just simply an emotional attachment to recreational leagues.

The table below shows the returns of the U.S. equity market divided into 25 cohorts based on capitalization level and trailing volatility. In this dataset stretching back to 1963, there are a couple of notable relationships. Generally, small caps outperform large caps and low volatility outperforms high volatility. The extremes are the most interesting data points. Small cap low volatility has generated high teen returns, but the highest volatility small caps have actually generated negative returns. Low volatility and size are important factor tilts to understand, but the combination of these two factor tilts generates some truly fascinating results.

**Annualized Returns (July 1963 - July 2017)**

| | Lowest Volatility | Low Volatility | Median | High Volatility | Highest Volatility |
|---|---|---|---|---|---|
| Smallest | 17.15% | 17.98% | 16.07% | 11.05% | -2.59% |
| Small | 15.62% | 16.55% | 16.14% | 13.61% | 3.54% |
| Median | 13.79% | 14.23% | 15.32% | 13.70% | 6.11% |
| Large | 12.95% | 13.26% | 13.18% | 12.48% | 7.10% |
| Largest | 9.72% | 10.92% | 10.41% | 9.12% | 8.15% |

This sub-portfolios are formed by using the variance of daily returns over 60 days for NYSE, AMEX, and Nasdaq listed stocks. By definition, the lower volatility cohorts have lower return variability, and size also influences the dispersion of returns.

**Annualized Volatility (July 1963 - July 2017)**

| | Lowest Volatility | Low Volatility | Median | High Volatility | Highest Volatility |
|---|---|---|---|---|---|
| Smallest | 13.93% | 19.43% | 22.29% | 25.89% | 31.74% |
| Small | 13.81% | 18.01% | 20.26% | 23.34% | 30.05% |
| Median | 12.59% | 16.38% | 18.43% | 21.23% | 27.69% |
| Large | 12.68% | 15.29% | 17.46% | 19.77% | 26.22% |
| Largest | 11.72% | 13.66% | 15.28% | 17.42% | 22.97% |

While I often use annualized volatility as a risk measure, certainly some buy-and-hold investors only carry about maximum drawdowns or minimum returns over some long-dated time horizon. Below, I have calculated from the dataset the worst 10-year returns for the different sub-portfolios. Low volatility may lag in bullish equity environments, but the downside protection is meaningful. Each of the lowest volatility cohorts by size produced positive returns over this period.

**Worst 10-yr Returns (July 1963 - July 2017)**

| | Lowest Volatility | Low Volatility | Median | High Volatility | Highest Volatility |
|---|---|---|---|---|---|
| Smallest | 6.85% | 6.49% | 4.59% | -0.20% | -20.75% |
| Small | 3.67% | 5.10% | 3.03% | -0.12% | -10.60% |
| Median | 1.39% | 3.74% | 4.56% | 1.93% | -5.85% |
| Large | 2.48% | 3.66% | 2.25% | 0.97% | -7.21% |
| Largest | 0.05% | -0.21% | -1.71% | -6.10% | -10.38% |

I attempt to capture the outperformance of low-volatility, small-cap stocks through the PowerShares S&P SmallCap Low Volatility Portfolio ETF (NYSEARCA:XSLV), which owns the 120 stocks with the lowest trailing one-year volatility in the S&P 600 SmallCap Index. The underlying index for this exchange-traded fund has generated nearly 14% annual returns since mid-1995, besting the S&P 500 by 4.7% per year.

In Capturing Structural Alpha in Low Volatilty Small Caps, I regressed the S&P Small Cap Low Volatility Index against the French portfolios back to the beginning of the index in mid-1995. This index is more closely correlated to the small (not smallest) low and lowest volatility cohorts. The aforementioned exchange-traded fund has only been outstanding since February 2013, and has bested the S&P 500 (SPY) by 1.28% per year including this year's relative underperformance. That short time horizon featured a strong equity market; low volatility strategies will garner most of their outperformance in risk-off environments.

I hope this article built a compelling case for the low volatility factor tilt. It is a subject I have written about extensively, and Seeking Alpha readers are welcome to check out my series on low volatility from July 2015.

Across size cohorts, low volatility has generated risk-adjusted outperformance, and within the smaller size cohorts has generated tremendous long-run outperformance in a dataset stretching back to the Kennedy administration. I will take that factor construct over sports sponsors any day.

**Disclaimer:** My articles may contain statements and projections that are forward-looking in nature, and therefore inherently subject to numerous risks, uncertainties and assumptions. While my articles focus on generating long-term risk-adjusted returns, investment decisions necessarily involve the risk of loss of principal. Individual investor circumstances vary significantly, and information gleaned from my articles should be applied to your own unique investment situation, objectives, risk tolerance and investment horizon.

**Disclosure:** I am/we are long XSLV,SPY.

I wrote this article myself, and it expresses my own opinions. I am not receiving compensation for it (other than from Seeking Alpha). I have no business relationship with any company whose stock is mentioned in this article.