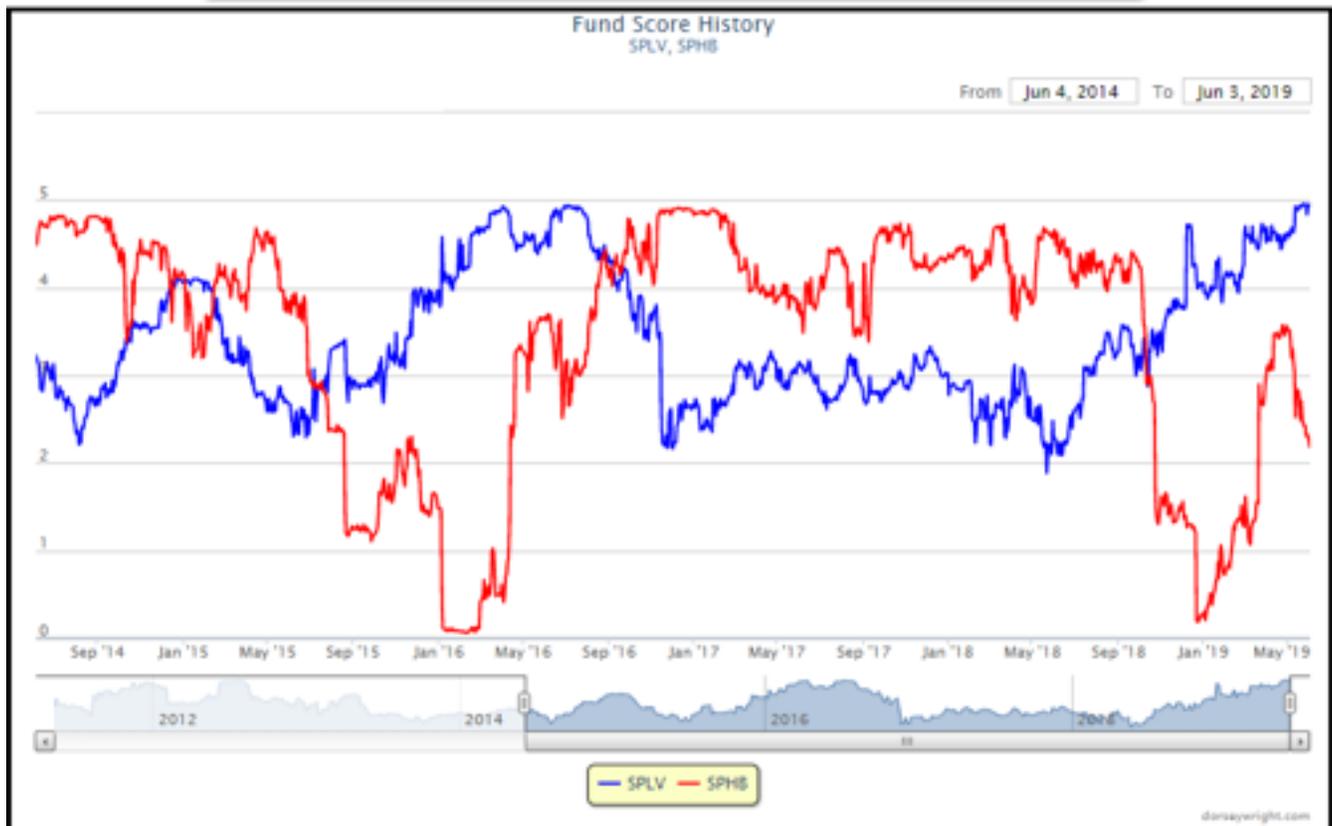


June 7, 2019

## Low Vol vs. High Beta

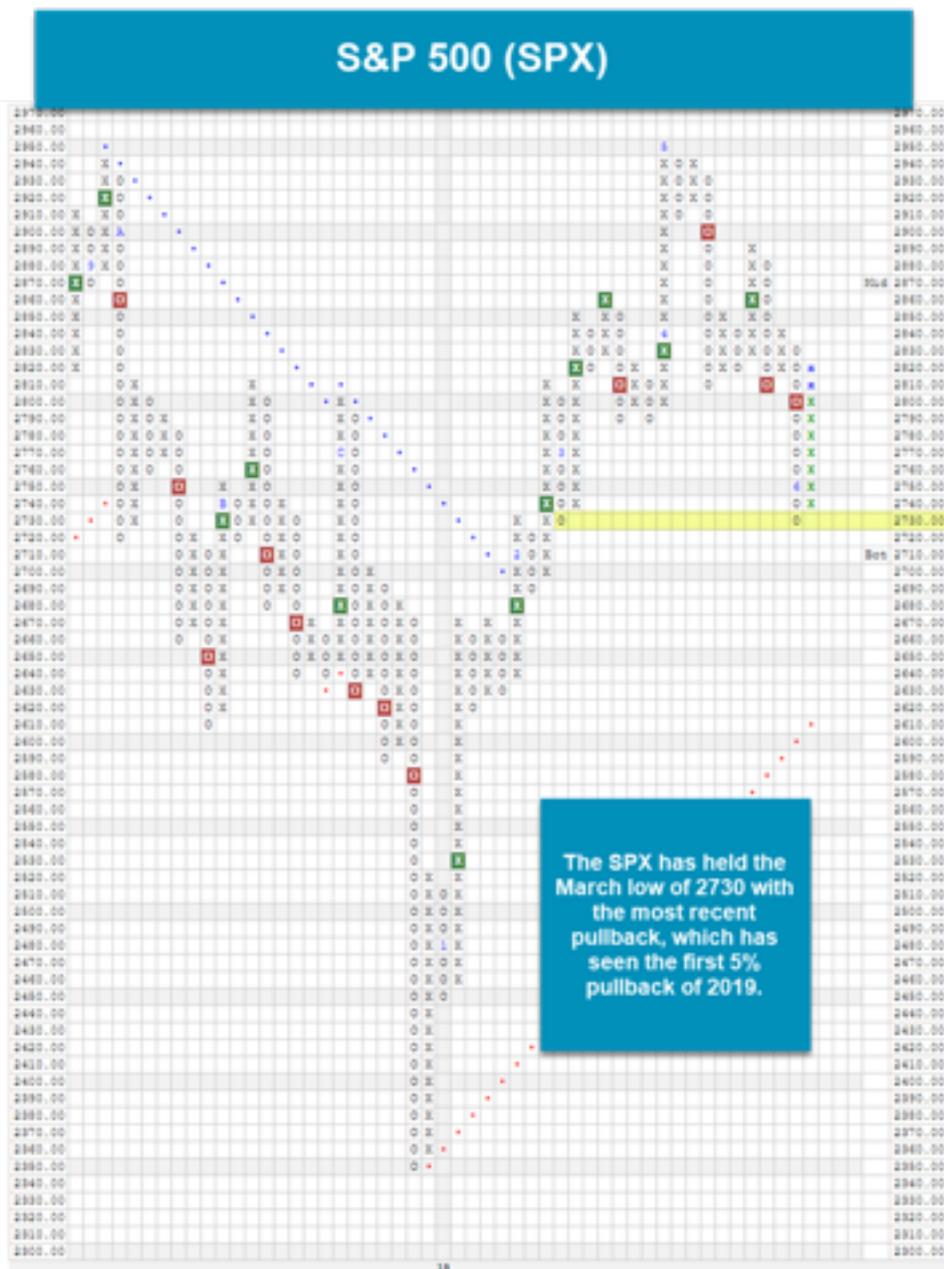
The current market environment, in general, favors Low Volatility over Higher Beta areas, which makes sense given the transition to the "seasonally weak" period of the year. Case in point - Invesco S&P 500 Low Volatility [SPLV](#) versus Invesco S&P 500 High Beta [SPHB](#). SPLV owns a basket of 100 low volatility S&P 500 stocks and SPHB owns 100 stocks from the S&P 500 with the highest betas over the past 12 months. While not truly comparing apples to apples, ie: low volatility versus high volatility or high beta versus low beta, a comparison of the two still paints a picture of the type of investment environment we're in today - one that favors low volatility. Year-to-date, SPHB has not had a bad year, as it's in line with the S&P 500 [SPY](#) at a performance of 9.89% versus 9.86%. However, compared to the SPLV, SPHB is lagging considerably. Year-to-date (through 6/3/19), SPLV is up 14.92%, compared to 9.89% from SPHB. Go back over the past 12 months and there's an even wider differential, favoring SPLV over SPHB, at a +14.23% return for SPLV versus a -13.30% return posted by SPHB. There have been years that have favored SPHB over SPLV; namely 2012, 2013, 2016, and 2017, but lately, it's been all SPLV. Finally, when you compare the scores, it is not surprising to see SPLV leading and the gap in fund score continuing to widen. Today, SPLV is scoring up near 5 while SPHB is close to dropping below 2.

### Fund Score Comparison: Low Vol (SPLV) vs. High Beta (SPHB)



Over the course of the past week, the only change that we saw unfold within DALI was the Fixed Income asset class overtaking Commodities by one signal. Fixed Income, in particular Treasuries, has strengthened quite a bit over the course of the past month as interest rates have fallen to their lowest levels in over a year. As a result, Fixed Income has picked up eight RS buy signals moving to arrive at its current tally reading of 159, which is one higher than Commodities but well below US Equity (294) and International (248).

With that said, we wanted to take a quick look at the S&P 500 (SPX) this week, given the recent bout of market volatility. On April 30th, the S&P 500 hit a closing high of 2945.83, and through the close on Monday (6/3), was down 6.84%, which is the first time this year the market has experienced a pullback of 5%, or more. What's notable from a technical perspective, though, is that with the past couple of trading sessions the market has bounced off a support level of 2730, which was the March low from earlier in the year. The long-term trend of the SPX is still positive here, and the chart is now within a few boxes of returning to a near term buy signal, which would occur with the move to 2850.



As it relates to 5% pullbacks in the market, this is the first of 2019, but certainly not an uncommon market occurrence. As a matter of fact, over the past 91 years the S&P 500 has experienced a pullback of 5%, or more, 308 times, which means that, on average, the market experiences a little over three 5% pullbacks per year. In 2018 we saw a total of five such pullbacks, three of those coming in the last three months of the year. Each year, except one, since the end of 2009 we have seen at least one 5% pullback in the market, with the exception of 2017, while 2011 experienced eight occurrences. One of the bigger questions, though, might be how much more downside have we historically seen following a 5% pullback. Well, the average this decade is about -2.75%. In other words, once the 5% mark is hit, we have seen less than 3% further downside, on average. There were two events which saw another 10+% downside following a 5% pullback this decade, and they occurred in 2011 and 2018, excluding those two events the average is even lower at -2.14%. Based on the closing price of SPX, we hit a 5% pullback on May 29th and saw a little over one percent of additional downside, so from a historical perspective, based on this decade, it has been a “normal” market pullback.

With that said, while market “pullbacks” are normal, they have come with much less frequency this decade than most. So far in the 2010s the market has seen a 5% pullback 27 times, or 2.7 times on average each year. This is lower than the overall average of 3.3 per year and much lower than the average of the previous decade of 4.7 per year as the 2000s experienced a total of 47 such moves.

## S&P 500 Pullbacks by Decade

Decade	Number of 5% pullbacks by decade	Average number of 5% pullbacks per year by decade	Average peak to trough moves during 5% pullbacks
1930s	76	7.6	-7.63%
1940s	28	2.8	-9.84%
1950s	19	1.9	-8.97%
1960s	19	1.9	-10.47%
1970s	30	3.0	-10.53%
1980s	29	2.9	-9.65%
1990s	24	2.4	-8.15%
2000s	47	4.7	-10.72%
2010s	27	2.7	-8.71%

*Data based on closing prices of the S&P 500 (SPX)*