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Something Wicked This Way Comes

Was there a momentum crash in November 2017?

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Something dramatic happened in the stock market during the week following Thanksgiving. Leadership stocks in Technology and Health Care became laggards, and lagging stocks in both Consumer Discretionary and Consumer Staples became leaders. The change was sudden, all within a week, and it seems to have persisted through year end. Was there a momentum crash in November 2017?

- Momentum Crashes Happen In Bull Markets
- Following Crashes Low Beta Outperforms High Beta
- Momentum Crashes are Offset by High Leverage and Rising Liquidity

Offsetting long periods of success, momentum, as an investment style, has exhibited short-term periods of extreme poor performance. Historically, these periods have been fairly sudden, compressed over periods of two to three months, and they have been dramatic, with declines exceeding 80%. July - August 1932 and March – May 2009 are notable dates when this phenomenon is in evidence on a market-wide basis. Studies by Daniel and Moskowitz (2013) and Bohl, Czaja and Kaufman (2015) have named these periods "momentum crashes" and explained the phenomenon.

The research points to inflections in beta being the culprit. Beta is a financial industry term for market sensitivity, and beta has shown option-like behavior under certain conditions. High beta stocks (momentum), associated with deep in-the-money options, are fairly insensitive to changes in market prices. Low beta stocks, akin to at-the-money options, are highly sensitive to changes in market prices. Momentum crashes have occurred most often during rising markets at a moment when low beta market sensitivity rises quickly due to option convexity or possibly cyclicality. The crashes have tended to signal the end of a bear market in the newly, suddenly rising asset class. A bear market represents a market or market segment down more than 20% from its high.

Cycling from high to low beta seems to explain the bulk of the momentum crash phenomenon. However, two other factors seem to play a part in momentum crashes, leverage and market liquidity. JAG Capital Management has found that over time, low leverage is a positive factor supporting momentum stocks. Yet, when momentum crashes, studies indicate that highly leveraged stocks tend to subsequently outperform. This relationship seems particularly daunting for a low leverage momentum strategy in a momentum crash period. Liquidity appears to be the other amplifier. Momentum strategies thrive on low liquidity, and momentum crashes exhibit high equity volumes. Momentum crashes appear to be leverage and liquidity friendly.

Momentum crash studies to date have targeted momentum crashes that impact the entire stock market. However, JAG Capital Management's experience is that momentum crashes can happen within sector groups, resulting in dramatic changes in market leadership over short periods of time. The Bohl study found several 20% momentum crashes over the last few decades. We explore whether such a momentum crash began Thanksgiving 2017 when several sectors exhibited elements of the momentum crash phenomenon.

November's momentum crash occurred during a period of positive performance for the market. The S&P 500 was up over 1% for the final five weeks of the 2017 year. Prior to late November, the Technology sector had been the market leader (+33% YTD) and it had exhibited momentum for nearly two years. The Consumer Discretionary sector was up just shy of 20% for the year, trailing the broad market averages. Over the next month, high beta Technology and Health Care stocks were notably poor performers. For example, Technology stocks Qorvo (2.0 beta), Square (5.3 beta), Cognex (2.8 beta), and Skyworks (1.3 beta) were among the 20 worst performers in the Russell 1000. At the other extreme, stocks with negative betas were among the 20 best performers in the Russell 1000 Index. Consumer Discretionary stocks in this group include The Michaels Companies (-1.3 beta) and Best Buy (-0.8 beta). The beta reversal was not limited to consumer stocks as technology stocks Akamai (beta -0.7) and Twitter (beta -1.9) were also in the top 20 best. While there are many individual instances of beta reversal, using the high beta and low volatility ETFs as a proxy, there is no evidence of a holistic low beta shift.

PowerShares S&P 500 Low Volatility ETF (SPLV) /
PowerShares S&P 500 High Beta ETF (SPHB)

BEG DATE	END DATE	SPLV	SPHB
7/25/2012	8/26/2014	28.1%	92.9%
8/26/2014	2/11/2016	4.6%	-30.9%
2/11/2016	4/27/2016	9.6%	36.9%
4/27/2016	6/27/2016	1.7%	-13.6%
6/27/2016	12/29/2017	16.6%	59.1%
12/8/2016	8/21/2017	9.8%	-3.9%
8/21/2017	1/5/2018	5.9%	21.7%

Source: Bloomberg, JAG Capital Management

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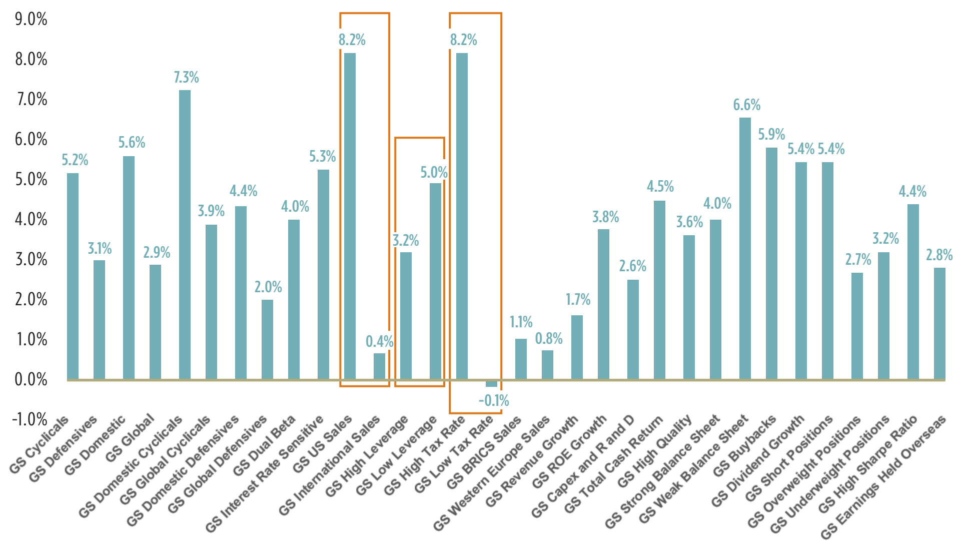
Performance of Goldman Sachs Stock Baskets
11/21/2017 - 1/2/2018



Source: Bloomberg, JAG Capital Management

Single stock data does indicate some move from high to low/negative beta stocks over the final five weeks of 2017, with examples of lower beta stocks outperforming. High beta underperformers were mostly concentrated into Technology and Health Care sectors, but low/negative beta outperformers were widely scattered among sector groups. While the market activity relative to beta is mixed, data on leverage is also not conclusive. Highly leveraged companies including Mattel (47% debt ratio), Axalta Coating Systems (57%), Southwestern Energy (62%), FirstEnergy (52%), and Rite Aid (62%) were among the worst performers. The top 20 performers over the final five weeks of the year contain a higher average debt ratio than the worst performers but fewer of the highest leveraged companies. Looking from leverage to liquidity measures, liquidity does not appear to support momentum crash conditions. November NYSE share volume was down 21% over that of the previous November. December statistics have not been published yet, but a December 22 report from Marketwatch indicates that US trading volumes were on track to hit a three-year low as of that date. Neither the performance of highly leveraged stocks nor the evident liquidity in the markets confirm the momentum crash thesis. Increasing ETF volumes might prevent this equity volume indicator from having the impact it may have had in historic periods.

- Individual Examples Exist of a Low Beta Shift, but ETF Data Not Supportive
- Low Leverage Outperformed High Leverage which is not Consistent with a Momentum Crash
- Volume Did Not Increase During the Suspected Momentum Crash

At JAG, we see evidence of a high beta to low beta move in the equity markets over the last five weeks of the year. That positive rotation appears to be most pronounced among the Consumer Discretionary and Consumer Staples sectors, but Industrial and Basic Material sectors exhibited strong performance as well. A momentum crash scenario would historically suggest that one or all of these sectors would be exiting bear market conditions. Perhaps a case can be made for exiting a poor relative performance condition, but certainly not a bear market. Both the leverage and liquidity amplifiers of a momentum crash scenario appear to be non-confirming at this time.

Momentum Crash, No. Earnings Revision Emphasis, Yes.

It has felt like a momentum crash for much of the last five weeks of the year, but our research says it does not qualify as one. Instead, it appears that it might be a year-end rush into stocks with positive earnings revisions, some of which are tax rate sensitive stocks following passage of tax legislation in Congress. We think factors other than beta will drive returns in the months ahead.

ABOUT JAG

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