



Quant Insights

BEAM Performance During the Recent Market Turmoil

- The recent market turmoil provides an opportunity to assess the performance of BEAM strategies in extreme market conditions. We find that BEAM TRS and D-BEAM strategies have generated cumulative returns of about 5% and 6% from February 24 to March 9, 2020, whereas the S&P 500 declined by 19%.
- We document that BEAM strategies perform well not only during market turmoil but also during normal times. For instance, D-BEAM has an information ratio of about 2 irrespective of the level of the VIX.

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Ben Dor and Xu (2015) documented that the information contained in corporate bond returns can be used to construct equity portfolios. They documented that a monthly BEAM (Bonds in Equity Asset Momentum) strategy, which buys stocks the corresponding bonds of which outperformed relative to peers and sells short stocks the corresponding bonds of which underperformed relative to peers, produces an improved risk-return profile compared with a standard equity momentum strategy. Over the last several years, we found that BEAM is robust across geographies, working equally well both in US and European markets (Ben Dor, Guan and Rosa, 2018), and at monthly and daily frequency (Ben Dor, Guan and Rosa, 2019).

Spiralling COVID-19 outbreaks around the world have caused a global financial turmoil, making the last two weeks quite eventful. US and global stock prices dropped about 20% and the 10-year Treasury rate declined around 100 basis points. In a surprise move, on March 3, the Federal Reserve cut the federal funds target rate by half a percentage point to combat a potential economic slowdown. And over the last weekend, a Saudi-Russian price war sent oil prices down 40% in just a couple of days. The recent market conditions provide an opportunity to assess the performance of the BEAM strategy in extreme market environments.

This note examines the performance of BEAM from February 24, 2020 just a couple of days after the S&P 500 reached its all-time high, to March 9, 2020. We consider two versions of the BEAM strategy. The first version is a monthly strategy (henceforth, BEAM TRS), and is based on a tradable total return swap (TRS) offered by Barclays (Bloomberg ticker: BEFSBEAM Index). Importantly, the returns of the BEAM swap are net of transaction costs and fully attainable, as they already take into account all practical trading aspects, including price impact, shorting costs, and execution lags. The second version is a daily BEAM (henceforth, D-BEAM) strategy, and reflects daily rebalancing, is implementable, but its returns are gross of transaction costs.

Figure 1 reports the daily returns of the two strategies since February 24, 2020. To get some perspective, we also report the performance of the S&P 500 and the VIX. The last row reports the cumulative returns (i.e., sum of the daily returns). BEAM TRS and D-BEAM generated cumulative returns of 5.2% and 5.7%, whereas the S&P 500 declined by about 19%. Furthermore, BEAM returns are generally positive and remarkably stable over time. Of note, while the S&P lost more than 7% on March 9, both BEAM strategies generated daily returns above 2%.

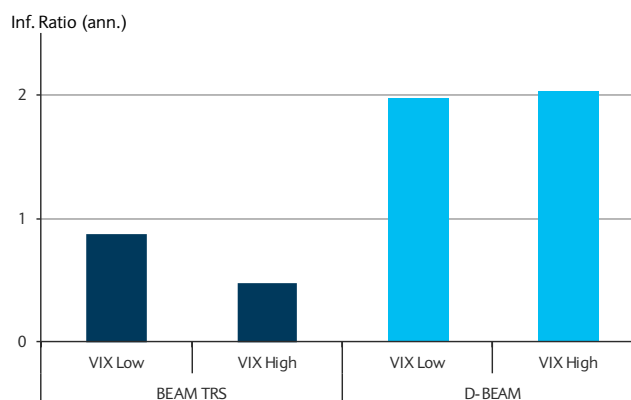
FIGURE 1
BEAM Returns Since February 24, 2020

	BEAM TRS	D-BEAM	S&P 500	VIX Level
2/24/2020	-0.2%	0.3%	-3.4%	25
2/25/2020	0.6%	-0.1%	-3.0%	28
2/26/2020	0.7%	0.8%	-0.4%	28
2/27/2020	-1.4%	0.8%	-4.4%	39
2/28/2020	-0.2%	-2.5%	-0.8%	40
3/2/2020	0.7%	3.4%	4.6%	33
3/3/2020	0.8%	1.1%	-2.8%	37
3/4/2020	0.2%	0.4%	4.2%	32
3/5/2020	1.3%	0.4%	-3.4%	40
3/6/2020	0.5%	-1.0%	-1.7%	42
3/9/2020	2.3%	2.2%	-7.6%	54
Cum. Ret.	5.2%	5.7%	-18.7%	

Source: Compustat, Bloomberg, Barclays Research

BEAM performs well not only during market turmoil but also during normal times. Figure 2 reports BEAM annualized information ratios depending on the level of VIX (above or below its median value, 16.8 in the sample 2001-2020). The BEAM TRS sample starts in February 2007, as this represents the beginning of its back-testing period. BEAM information ratios are uniformly positive. For instance, D-BEAM information ratio is around 2 both when expected equity volatility is high, as well as when expected equity volatility is subdued. BEAM TRS information ratio is even higher during calm periods, at 0.9 and 0.5, respectively.

FIGURE 2
BEAM Information Ratios for Low and High VIX Levels



Note: The sample period is February 2007-March 2020 for BEAM TRS and January 2001-March 2020 for D-BEAM. This table displays the information ratios for low and high VIX levels. The High (Low) level of VIX is above (below) its median (16.8 in the sample 2001-2020). The information ratio is the ratio between annualized average returns and volatilities.

Source: Compustat, Bloomberg, Barclays Research

References

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