# HOW YOU COULD HAVE MITIGATED THE CORRECTION IN US EQUITIES IN THE FOURTH QUARTER OF 2018

### March 2019

Last year finally broke the 9-year bull run in equity markets.

That length has only been matched once since 1950's<sup>1</sup>. Most of this bull run was accompanied by extraordinary low volatility for equities. In 2017, the Cboe SPX Volatility Index (hereafter VIX Index) – dubbed as a measure of markets expectation for forward volatility – traded at close to 10, which is about half its long-term average of 20. And then the end of 2018 happened.

Below I cover what measures could have been taken to avoid the bloodbath in equity markets that we have been seeing since Q3 of 2018.

The WisdomTree Cboe S&P 500 PutWrite UCITS ETF (ticker: PUTW) tracks the total return performance, before fees and expenses, of the Cboe S&P 500 PutWrite Index (hereafter PUT Index). This index, broadly speaking, is designed to sell European style put options with 1-month maturity on the S&P 500.

The PUT Index has an established track record of handling stress and potentially reducing significant risk when comparing to the volatility of the S&P 500.

Let's see how it performed in 2018.

Out of total 63 trading days in Q4 2018, the S&P 500 had 38 negative trading days. The true test of any volatilityreducing strategy lies in its relative performance on negative days. The following table compares the PUT Index's performance to the S&P 500.



<sup>&</sup>lt;sup>1</sup> Dates: 31 December 1990 – 31 December 1999. Source: Bloomberg and Standard & Poors

FIGURE 1: CHARACTERIZING THE 4TH QUARTER OF 2018 BY POSITIVE & NEGATIVE TRADING DAYS OF THE S&P 500

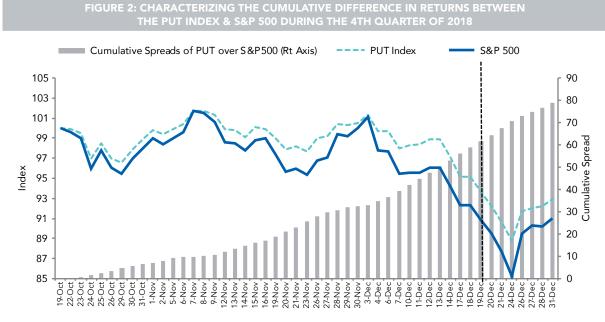
	Days When S&P 500 Closed Negative	Days When S&P 500 Closed Positive
Total # Days	38	25
Days Where PUT Index Lagged S&P 500	4	22
Average S&P 500 Return	-1.10%	-1.14%
Average PUT Index Return	-0.86%	0.85%
Average Daily Downloads Protection by PUT Index Relative to S&P 500	-0.24%	

Source: Bloomberg, with data from 30 September 2018 to 31 December 2018. **Historical performance is not an** indication of future performance and any investments may go down in value. You cannot invest directly in an index.

Quick takeaways:

- + The PUT Index outperformed S&P 500 on 34 of 38 negative days.
- On an average it delivered a downside protection of ~24 bps each one of those down days.
  Taking a deeper look

Below figure shows the three phases of Q4 2018, specifically for the PUT Index and the S&P 500.



Source: Bloomberg, with data from 19 October 2018 (date of sale of first monthly option during the fourth quarter of 2018) to 31 December 2018. **Historical performance is not an indication of future performance and any investments may go down in value. You cannot invest directly in an index.** 



- In Phase 1, volatility did increase, but the starting level and finishing level of the S&P 500 over this phase was not extremely different. It's important to consider that the S&P 500 hit its record high closing price on 3 October 2018, so after this date the VIX Index did tend to increase and the market started to exhibit a series of sharp corrections and recoveries, each a few days in duration.
- + Phase 2, by rolling into the second option of quarter when the VIX has spiked (owing to the correction in October 2018), the PUT Index collected a richer premium, which helped the total return build over the S&P 500.
- Finally, in Phase 3, as the PUT Index sold its third option for the quarter, the buildup of previous outperformances and elevated volatility ensured that the PUT Index continued to outperform the S&P 500 Index, even when there was a mild rally in equities towards year's end.

#### CONCLUSION

There is a popular saying, "When the going gets tough, the tough get going." I think similarly true colors of any risk-reduction strategy are not revealed on days when markets are hunky-dory; rather they come on volatile and stressful days.



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