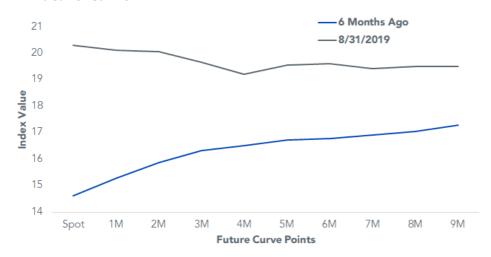
THE INVERTED VIX CURVE: WHY IT'S IMPORTANT

Gaurav Sinha - Associate Director, Asset Allocation and Modern Alpha 09/23/2019

Besides the <u>yield curve</u> that our fixed income team likes to talk about, there is another curve that inverted recently, and that warrants attention from asset allocators in Q4 2019. Typically, the <u>Chicago Board of Options Exchange (Cboe) Volatility Index (VIX)</u> is an upward sloping curve-VIX contracts further out trade higher than the nearer contracts. This means there is more uncertainty as you go further out in the future.

However, in August, this trend reversed, and VIX <u>one-month contracts</u> traded higher than VIX three- and six-months contracts. We can blame this higher near-term uncertainty on trade tensions, slowing growth and <u>Federal Reserve (Fed)</u> policy. In any case, it means risk is back in vogue. For asset allocators, this implies hedging <u>volatility</u> is more critical now than it was earlier this year.

VIX Future Curve



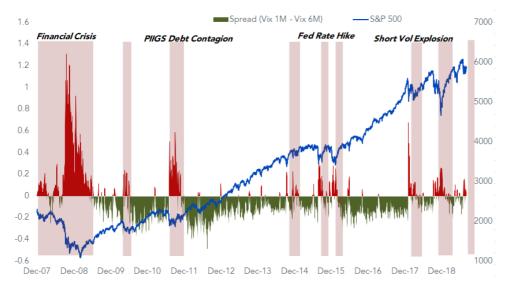
Sources: Bloomberg, WisdomTree, as of 08/31/19. Past performance is not indicative of future results. You cannot invest directly in an index. "Spot" is the most recent contract on the future curve while other points indicate how far out in the future they mature, e.g., "1M" means a contract maturing one month from the as of date.

Historically, here's what an inverted volatility curve has meant:

- 1. Higher volatility in the near term.
- 2. More negative equity swings.
- 3. Higher income opportunity via selling volatility contracts.

VIX 1M Inversion: Canary in a Coal Mine





Sources: Bloomberg, Cboe, 12/31/07-08/31/19. Past performance is not indicative of future results. You cannot invest directly in an index. Financial Crisis refers a period from 2007 ending to beginning of 2009, PIIGS Debt Contagion refers a period in min 2011 where European peripheral countries went thru a potential default scenario, Fed Rate Hike refers to market volatility following Fed's first rate hike in a decade in Dec 2015 and Short Vol Explosion refers to a period in Feb 2018 where markets crashed and VIX spiked massively and various short-volatility strategies suffered. Vix 1M – Vix 6M spread is difference between standardized VIX generic 1M future series and VIX generic 6M future series.

How Can WisdomTree Help?

As volatility comes back into the conversation, the <u>WisdomTree CBOE S&P 500 PutWrite Strategy Fund (PUTW)</u>, which tracks <u>Cboe's PutWrite Index (PUT Index)</u> could be a great instrument for providing long exposure with the ability to mitigate downside risk during volatile markets.

A few PUTW highlights:

- During upward trending markets in 2017, PUTW still delivered returns above 10%. The <u>S&P 500 Index</u> was up ~+22%. *Please visit <u>PUTW's Fund detail</u> page for standardized performance.*
- Similarly, in 2009, the PUT Index rose 31.5%, outperforming the S&P 500, which returned +26.46%
- PUTW has a beta of approximately ~0.6, thus reducing volatility.

In periods when the VIX curve inverted, the PUT Index has beaten the S&P 500 by a large margin (table below):

Top 5 Longest Periods When Normalized VIX 1M Was Consistently Above Normalized VIX 6M



Period			PUT Tr.	S&P 500 Tr.	Total PUT
Start	Period End	Period Length	Index	Index	Excess Return
5/30/08	7/20/09	416	-16.4%	-30.0%	13.60%
7/26/11	12/14/11	141	-1.4%	-8.2%	6.71%
1/26/18	5/9/18	103	-0.5%	-5.6%	5.10%
12/4/15	3/10/16	97	-2.9%	-4.3%	1.41%
5/3/10	7/8/10	66	-10.0%	-10.6%	0.58%

Sources: Bloomberg, Choe. Past performance is not indicative of future results. You cannot invest directly in an index.

Conclusion

PUTW can be a great hedge in this environment. If there is a trade resolution or market rally, PUTW's strong positive correlation to equities could potentially provide positive returns. If markets fall, it can help provide cushioning and income, especially in a more volatile environment. Investors should be cautious of buying either pure short or pure long vol strategies. The former can potentially wipe out total exposure, while the later can act as a drag on total returns due.

Important Risks Related to this Article

Double-digit returns were achieved primarily during favorable market conditions. Investors should not expect that such favorable returns can be consistently achieved. A fund's performance, especially for very short periods, should not be the sole factor in making your investment decision.

There are risks associated with investing, including the possible loss of principal. The Fund will invest in derivatives, including S&P 500 Index put options ("SPX Puts"). Derivative investments can be volatile, and these investments may be less liquid than securities, and more sensitive to the effects of varied economic conditions. The value of the SPX Puts in which the Fund invests is partly based on the volatility used by market participants to price such options (i.e., implied volatility). The options values are partly based on the volatility used by dealers to price such options, so increases in the implied volatility of such options will cause the value of such options to increase, which will result in a corresponding increase in the liabilities of the Fund and a decrease in the Fund's NAV. Options may be subject to volatile swings in price influenced by changes in the value of the underlying instrument. The potential return to the Fund is limited to the amount of option premiums it receives; however, the Fund can potentially lose up to the entire strike price of each option it sells. Due to the investment strategy of the Fund, it may make higher capital gain distributions than other ETFs. Please read the Fund's prospectus for specific details regarding the Fund's risk profile.

Performance is historical and does not guarantee future results. Current performance may be lower or higher than quoted. Investment returns and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Performance data for the most recent month-end is available at wisdomtree.com.

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For standardized performance and the most recent month-end performance click here NOTE, this material is intended for electronic use only. Individuals who intend to print and physically deliver to an investor must print the monthly performance report to accompany this blog.

For more investing insights, check out our <a>Economic & Market Outlook

View the online version of this article here.



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DEFINITIONS

Yield curve: Graphical Depiction of interest rates on government bonds, with the current yield on the vertical axis and the years to maturity on the horizontal axis.

Federal Reserve: The Federal Reserve System is the central banking system of the United States.

Volatility: A measure of the dispersion of actual returns around a particular average level. .

CBOE S&P 500 PutWrite Index (PUT): Measures the performance of a hypothetical portfolio that sells S&P 500 Index (SPX) put options against collateralized cash reserves held in a money market account. The PUT strategy is designed to sell a sequence of one-month, at-the-money, S&P 500 Index puts and invest cash at one- and three-month Treasury Bill Rates. The number of puts sold varies from month to month but is limited so that the amount held in Treasury Bills can finance the maximum possible loss from final settlement of the SPX puts.

<u>S&P 500 Index</u>: Market capitalization-weighted benchmark of 500 stocks selected by the Standard and Poor's Index Committee designed to represent the performance of the leading industries in the United States economy.

<u>Beta</u>: A measure of the volatility of a security or a portfolio in comparison to a benchmark. In general, a beta less than 1 indicates that the investment is less volatile than the benchmark, while a beta more than 1 indicates that the investment is more volatile than the benchmark.

