



Viking Analytics: Weekly Gamma Band Update

4/5/2021

We share the Weekly Gamma Bands Update by Viking Analytics. The report uses options gamma to help you better manage risk and your equity allocations.

Gamma Band Update

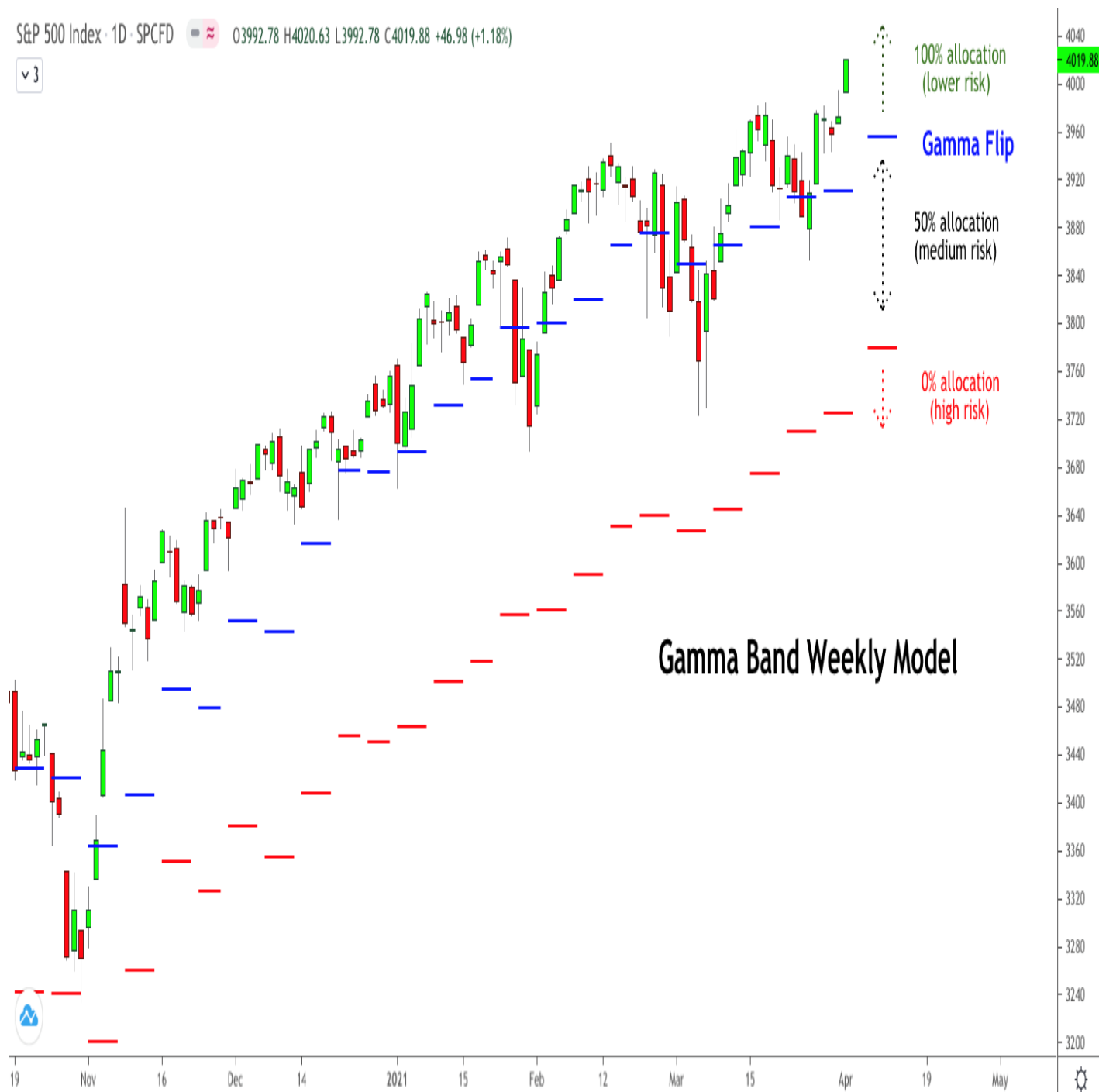
The S&P 500 (SPX) finished a holiday-shortened week with another strong rally, closing at new highs. The Gamma Band weekly model^[1] maintained a 100% allocation to the S&P 500 (SPX) all week, and the Gamma Flip level moved higher to roughly 3,955. When the daily price closes below the ?Gamma Flip? level, the model will reduce exposure in order to avoid price volatility. If the market closes on a daily basis below the lower gamma level (currently near 3,780), the model will reduce the SPX allocation to zero.

Investors who keep an eye on the Gamma Flip level are more aware of when market volatility is expected to increase. The chart below shows how the length of daily candles tends to be longer when the market price is below or near the Gamma Flip level.

The general idea behind this model is to maintain high allocations to stocks when risk is expected to be lower. For investors who have been conditioned to ?buy low and sell high,? it is counter-intuitive to increase allocations when the market rises, but this approach has shown to increase risk-adjusted returns in the back-test.

S&P 500 Index · 1D · SPCFD  03992.78 H4020.63 L3992.78 C4019.88 +46.98 (+1.18%)

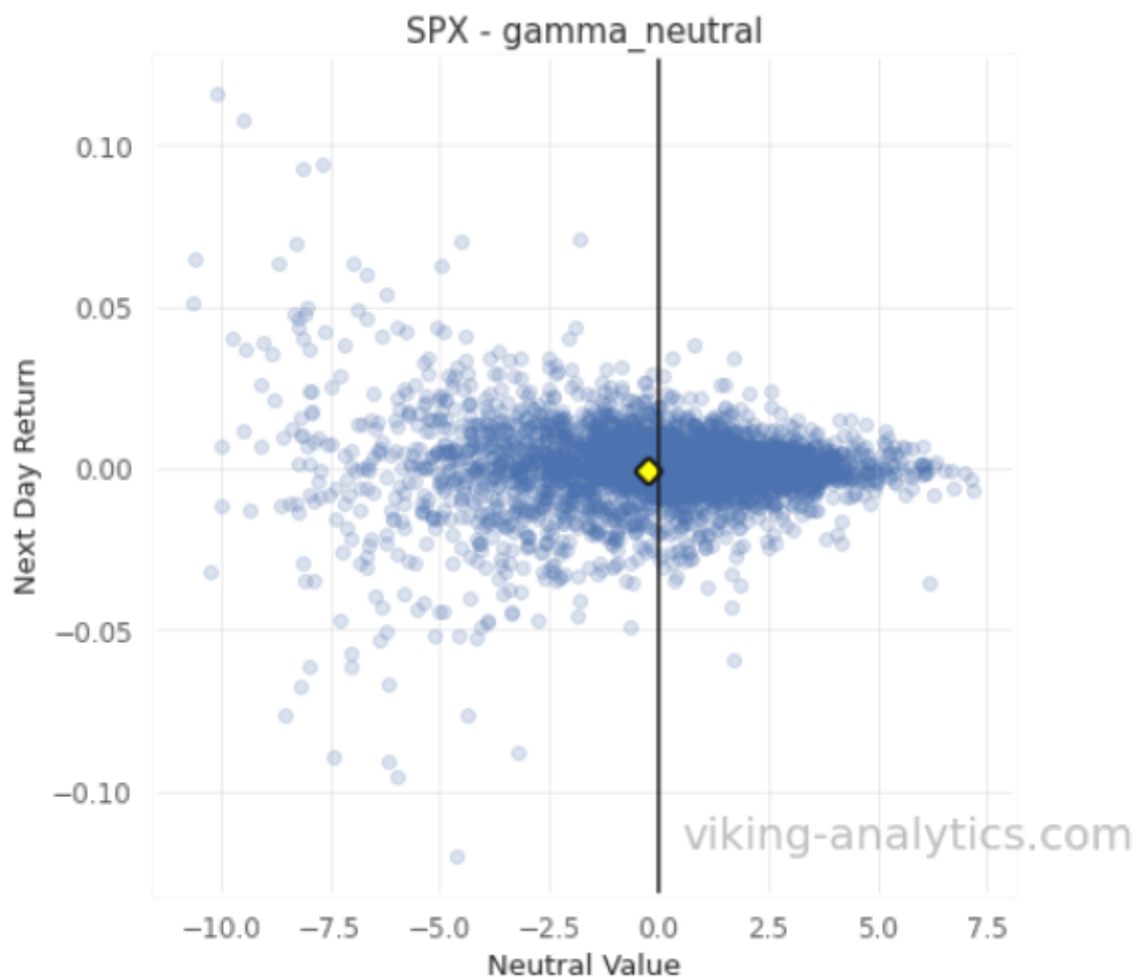
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This is one of several signals that we publish daily in our SPX Report. Overall, we continue to rate the SPX options signals as ?cautiously bullish.? A free sample of the SPX report can be downloaded from this link. Pleaes visit our [website](#) to learn more about our daily reports and quantitative algorithms.

The Gamma Flip - Background

Many market analysts have noted that [daily volatility in the S&P 500 will change](#) when the value of the SPX moves from one gamma regime to another. Some analysts call this level the ?gamma flip.? The scatterplot below shows how price volatility (on the y-axis) is increasingly lower as the value of SPX rises higher above the Gamma Neutral level (on the right side of the chart). When the value of the S&P closes lower than Gamma Neutral (to the left of the chart), volatility increases.

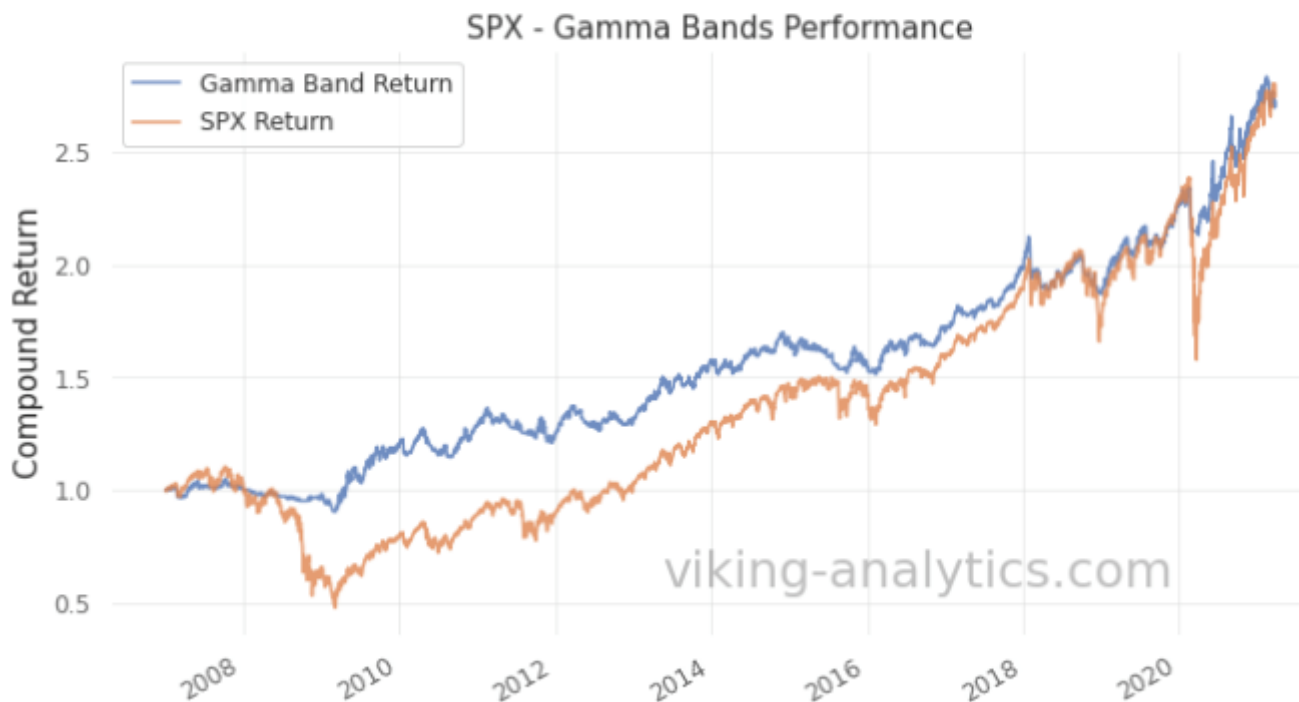


Gamma Band Model ? Background

The purpose of the Gamma Band model is to reduce tail risk. The daily Gamma Band model has improved risk-adjusted returns by over 60% since 2007. The graph below demonstrates how this approach can limit drawdowns while maintaining good returns. A quick video introduction of the Gamma Band model can be seen by following [this link](#).

	sharpe	kurtosis	annual_vol
Gamma Band Return	0.75	7.88	0.10
SPX Return	0.45	12.65	0.21

* Gamma Bands improve backtested Sharpe by: 65.9%



Disclaimer

This is for informational purposes only and is not trading advice. The information contained in this article is subject to our [full disclaimer](#) on our website.

[1] The Gamma Band model in our SPX Market Report adjusts position size daily based upon the daily closing levels of SPX value and calculated Gamma Neutral. The Weekly Gamma Band model is shown for illustrative purposes only.

Authors

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Rob McBride has 15+ years of experience in the systematic investment space. He is a former Managing Director at a multi-billion dollar hedge fund. Furthermore, he has deep experience with market data, software, and model building in financial markets. Rob has a M.S. in Computer Science from the South Dakota School of Mines and Technology.
