

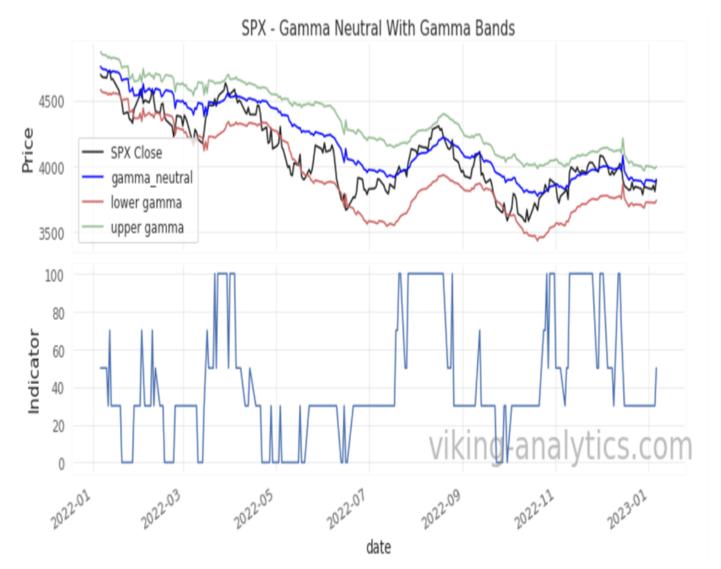
Viking Analytics: Weekly Gamma Band Update 1/10/2023

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.

The S&P 500 (SPX) just shy of the gamma flip level on a strong Friday rally. Technically, 3,870 is an important pivot for the month of January, and we closed above it.

Our gamma band model enters the week with a 50% allocation to the SPX. The model will move to a full allocation if the market rises and closes above the gamma flip level, currently near 3,900. This model will fall to a 0% allocation if SPX closes below the lower gamma level is currently near 3,755.

The chart below shows how price (in black) relates to the gamma flip (in blue) and the lower gamma level (in red).� The indicator below the price chart shows the daily positioning allocations.



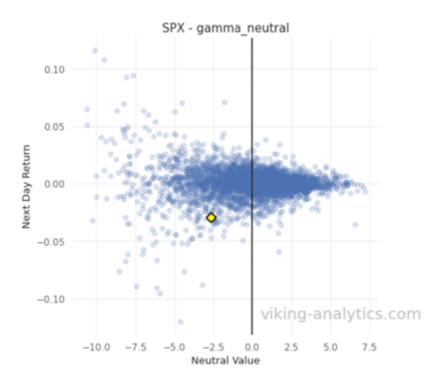
The Gamma Band model[1] can be viewed as a trend following model that is shows the effectiveness of tracking various levels of market gamma. When the daily price closes below Gamma Flip level, the model will reduce exposure to avoid price volatility and sell-off risk. There is also an allocation adjustment whether the trend of gamma flip is positive or negative. If the market closes below what we call the ?lower gamma level,? the model will reduce the SPX allocation to zero.

The main premise of this model is to maintain high allocations to stocks when risk and corresponding volatility are expected to be low.� 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.��

Risk management tools like this have become more important than ever to manage drawdowns like the one we are currently in. The Gamma Band model is one of several indicators that we publish daily in our SPX Report (click <u>here</u> for a sample report).� Please visit our <u>website</u> to learn more about our trading and investing tools.

The Gamma Flip - Background

Many market analysts have noted that <u>daily volatility in the S&P 500 will change</u> 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

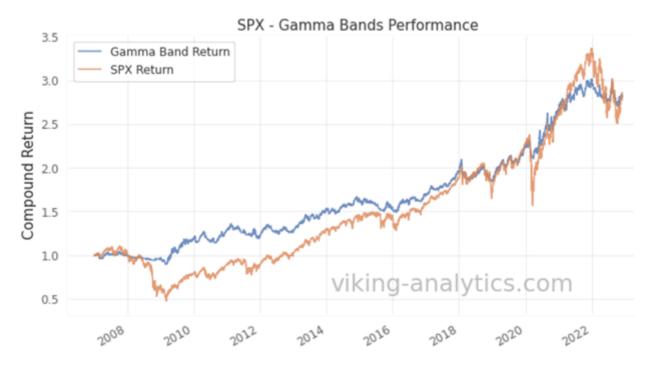
The purpose of the Gamma Band model is to show how tail risk can be reduced by following a few simple rules.� The daily Gamma Band model has improved risk-adjusted returns by

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.�

[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.

	sharpe	kurtosis	annual_vol
Gamma Band Return	0.70	7.22	0.10
SPX Return	0.42	11.62	0.21

* Gamma Bands improve backtested Sharpe by: 65.2%



Disclaimer

This is for informational purposes only and is not trading advice.� The information contained in this article is subject to our <u>full disclaimer</u> on our website.

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Authors

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