Corn volatility has spiked in recent weeks, fueled by weather-related delays in planting crops in the U.S. The record amounts of rain and resulting flooding in the U.S. Midwest, which is bullish for corn and other crops, follows bearish tariff tensions with China which had pushed the July 2019 corn futures contract to all-time lows just two weeks ago.

Source: TradingView

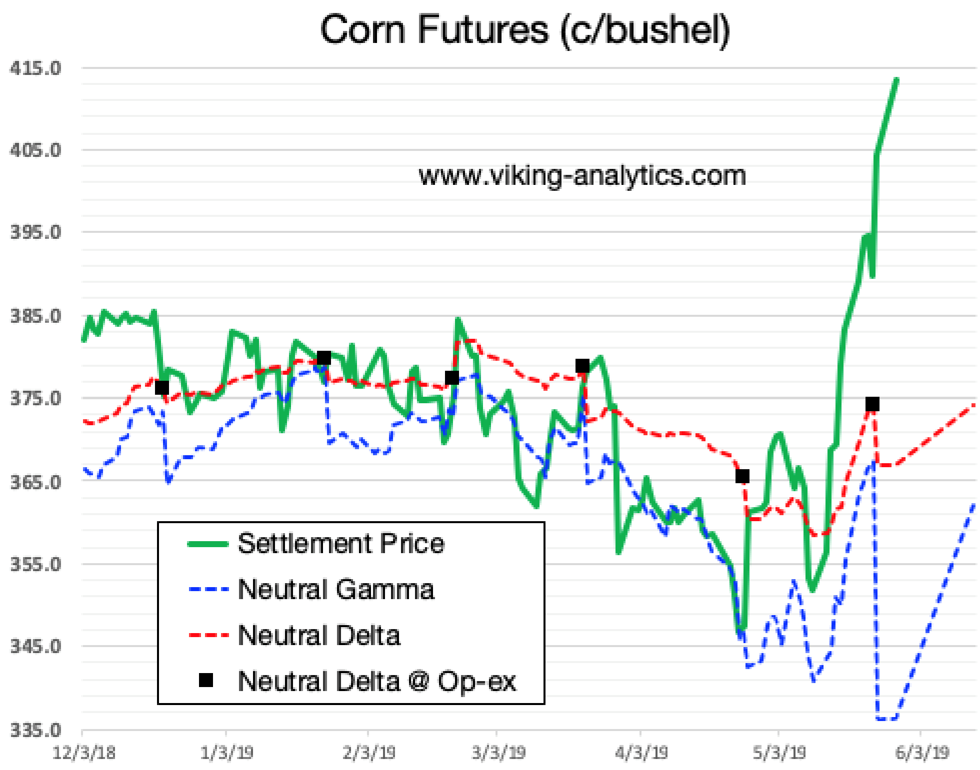
On a weekly chart, we can see that this is the sixth time that the front-month (continuous) corn futures contract has spiked over $4 per bushel since late 2014. In every prior instance, the price was short-lived, and corn quickly retreated towards the $3.50 price level.

Source: TradingView

The corn options market is very liquid, thus providing the opportunity for farmers, merchandisers, and other participants to hedge their exposure and lock in profits or costs. The market makers who facilitate the options trade almost always hedge their exposure instantaneously and dynamically with delta-neutral portfolios. The market makers perform combination trades to (theoretically) hedge their exposure to price while profiting from options volatility. It is these trades that provide with an insight that few follow.

Option Expiration Sweet Spot

Due to order flow, contract rollover, and hedge dynamics, there tends to be a convergence between futures prices and the point of delta neutral as option expiration approaches. We can provide evidence for this convergence for many different stock indices, ETFs and commodities.



Source: Viking Analytics

The chart below shows the regular convergence of the corn price towards market delta-neutral (black square) for the past several months. Last Friday?s option expiration was the first of two option expirations that are priced off of the July futures contract; as a result, we had been informing our followers to focus on the June 21st option expiration rather than the just passed May 24th expiration.

If we call the point of Neutral Delta, the ?sweet spot,? then the options market continues to have a sweet spot of $3.67/bushel for the June 21st option expiration. Also, both the July and November dated option expirations have currently priced in sweet spots in the $3.60 to $3.75/bushel range. These delta neutral levels change as the option participants adjust their wagers and hedges. **Regardless, they portend a sharp drop in the price of corn.**

Corn Futures 5/28/19	Op-Ex 6/21/19	Op-Ex 7/27/19	Op-Ex 11/22/19
Put/Call Ratio	0.48	0.41	0.63
Current Price	$ 413.50	$ 421.25	$ 427.75
Neutral Delta	$ 366.82	$ 359.32	$ 371.42
Neutral Gamma	$ 336.22	$ 317.09	$ 348.89
Neutral Delta Premium	-11.3%	-14.7%	-13.2%
Neutral Gamma Premium	-18.7%	-24.7%	-18.4%
Options Weight	31.6%	25.7%	29.0%

Source: Viking Analytics

Gamma Signals Caution For Shorts

Neutral Delta and Neutral Gamma often trend with price. Extreme divergences between Neutral Gamma and price (such as now) can also point towards short-covering events, and we have outlined this dynamic in two different articles: Perfect Storm in the S&P 500 (Seeking Alpha paywall) and Negative Gamma and the Demise of Optionsellers.com.

Points to Consider

1. The put-call ratios for the key option expirations are all in the 0.4 to 0.6 range. This means that there are considerably more call options than put options. If price continues to rise, then the call sellers may be forced to purchase corn futures to cover their exposure.
2. At the intra-day price shown above, the total value of calls for the three expirations was $850 million greater than the value of puts. This is an unusually large difference in value for the corn market.
3. The basic theory behind the Neutral Delta and Neutral Gamma levels can be found by reading an introduction here: Introduction to Options Sentiment.

Current Trading Plan

The over-bought signal in corn has had my attention for over a week, and I have therefore been stalking a short trade. On the other hand, the data also shows potential for a short squeeze, so I remain cautious, waiting for a confirmation that the upward momentum has dissipated. It will be important to see how price reacts to planting progress over the next few weeks.

This analysis is critical for those trading corn futures and options but should also be of interest to those focused on broader economic activity. The Midwest floods have taken a serious toll on many crops. Couple the potentially bad harvest along with the possible tariffs and the nation?s heartland may be adding to a string of already weakening economic growth

I look forward to any feedback below.

Disclaimer

This is for informational purposes only and is not trading advice.