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Nasdaq

Did You “Spot” It? How Options Projected the August Crash and What’s Next with SpotGamma

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How Options Drive Your Returns

Brent Kochuba, SpotGamma Founder



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April '24: Options Anticipate Extent of the Dip



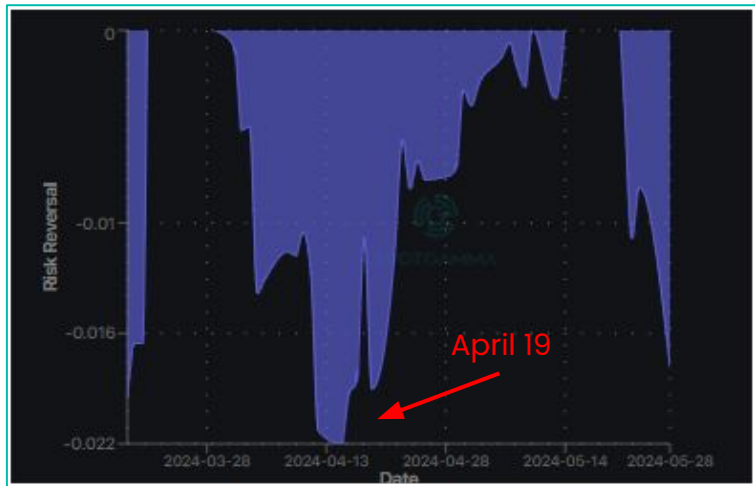
SpotGamma Founder's Note warning subscribers on April 17th:

"we think that the recent jump higher in implied volatility has been more about a normalization from a recent period of unusual calm, and less about high fear. This supports the idea that recent declines were more of a consolidation, vs start of a bear market."

The April market correction saw QQQ drop 5% in one week between April 15 and April 19, with major news largely absent.

Through studying options, traders could see that **the market was not expecting a long-term drawdown**, with elevated volatility due to short-covering versus genuine fear.

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SpotGamma Risk Reversal chart, showing imbalanced demand for puts vs. calls diminishing after April 19th.



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May '24: Options Limit QQQ Earnings Moves

Following Nasdaq traded companies earnings in May, our options analysis suggested a **narrow ~3% trading range for QQQ** for the next week.

	5/22	5/23	5/24	5/28	5/29	5/30
Call Wall	460	465	465	465	465	465
Price	453	457	459	456	451	450
Put Wall	450	450	450	450	450	440

Call Wall: Upper bound of probable daily movement.

Put Wall: Lower bound of probable daily movement.



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Aug. '24: QQQ Breaks 470, Triggering Volatility

QQQ dipped from 459.66 to 424.71 between 8/1 close and 8/5 open, a **drop of nearly 8%**.

The drop on the morning of 8/2 led to a **negative gamma environment**, which primed the market for higher volatility.



QQQ (blue) drops below the **Volatility Trigger** (green), the key level below which we expect bearish feedback loops and heightened volatility.



SpotGamma Founder's Note warning subscribers on August 2nd:

"Outside of a "day trade" we see no reason to hold long stocks and/or be short vol. This is a nasty setup, and an environment wherein we try to protect capital.



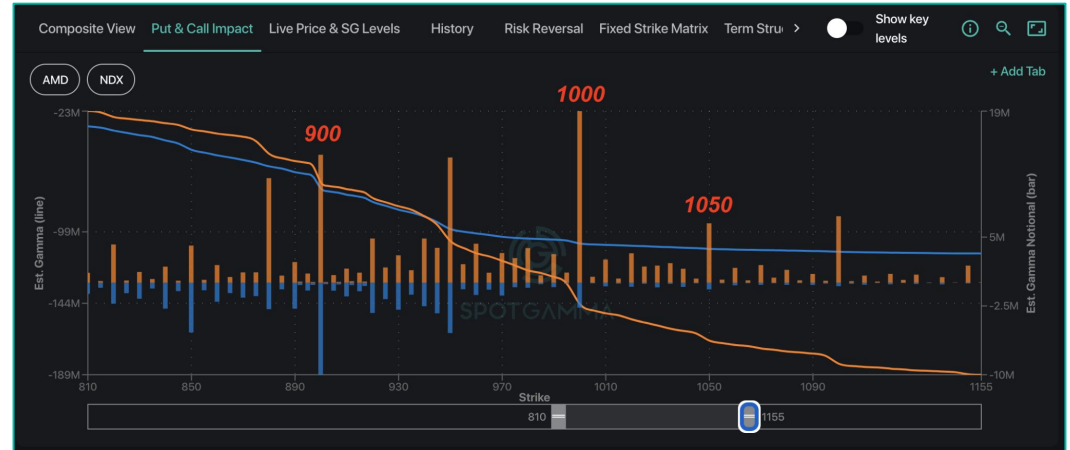
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May '24: Options Amplify the Impact of Earnings

NVDA Support Levels (May 22, 2024)

- From the options market, little resistance between price levels of 1000 and 1050.
- This meant that **NVDA stock price could rise dramatically** post-earnings.



"[For NVDA]...To the upside \$1000 (+5% from here) is the massive level, and if NVDA claims that strike, there is fuel up to 1050 (+10%)."

- SpotGamma Founder's Note on May 22, 2024



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Most Traders Do Not Watch Options



Axios touting dismal job reports as primary driver of stock market rout.

Fears of a [U.S. recession](#) tanked global markets Monday, with Japanese stocks suffering their biggest single-day rout since 1987's Black Monday.

Why it matters: Friday's [dismal U.S. jobs report](#) capped a series of worrying economic signs over the past few weeks, with clear cracks in what had been a robust post-pandemic expansion.

CNN article attributing August 5th correction to weak fed inaction and AI.

Three fears are emerging all at the same time to send markets into a tailspin Monday: Growing worries about a recession, concern that the Federal Reserve has failed to act promptly enough and a belief that big bets on AI may not pay off.

CNBC added weak earnings as a culprit behind the August 5th crash.

KEY POINTS

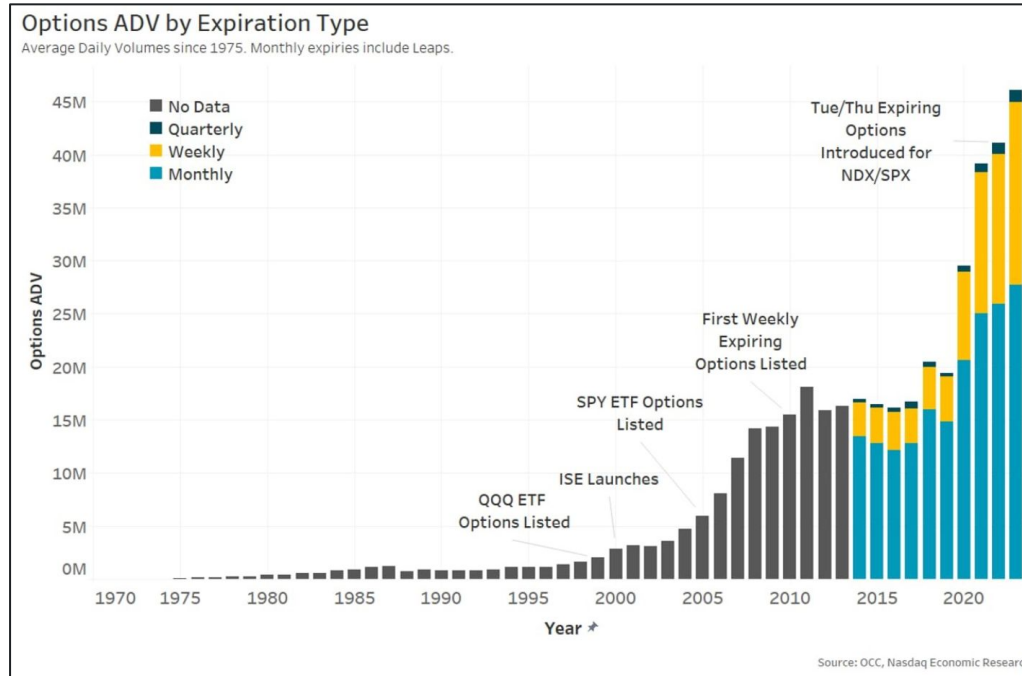
- Worries about the economy and a seemingly slow-footed response from the Fed, along with concerns over corporate earnings, dragged markets Monday.
- Put that against the backdrop of a stock market with high valuation, and it had all the makings of a sell-off waiting to happen.
- "It's just a perfect storm of slowing growth, crowded positioning and risk-off sentiment that's all coming to a head at the same time," said John Belton, portfolio manager at Gabelli Funds.

Pundits rush to provide some cause behind every market movement, yet ignore the options market – ***one of the biggest drivers of daily price action for the US stock market.***



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The Options Market Has Massive Volume



The options market is 3x larger than a decade ago – the influence of options has grown dramatically.



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Watching Options Is Your Trading Edge

Options Affect All Traders

**Stock
Traders**

**Options
Traders**

**Futures
Traders**

Note: This is not for Crypto & Non-US Markets

Why? Because Options Flows Move Price

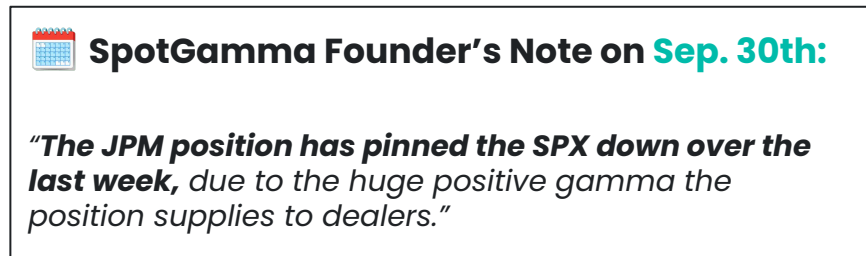
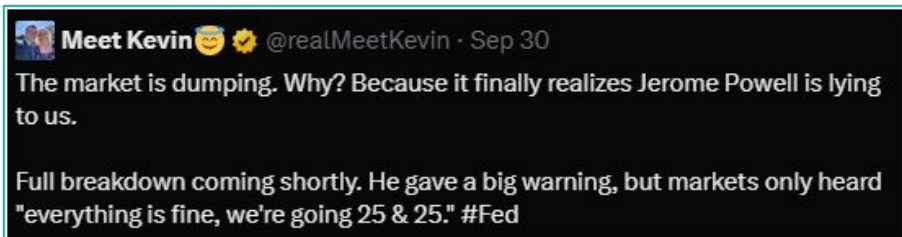


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You Will Miss Out By Not Watching Options

Most ignore how options move markets...

*...So paying attention **will set you apart.***



Market influencer X post from Sep 30, 2024 - to an audience of over 350k

SpotGamma Founder's Note, published the same day, explaining the brief drop using options analysis.

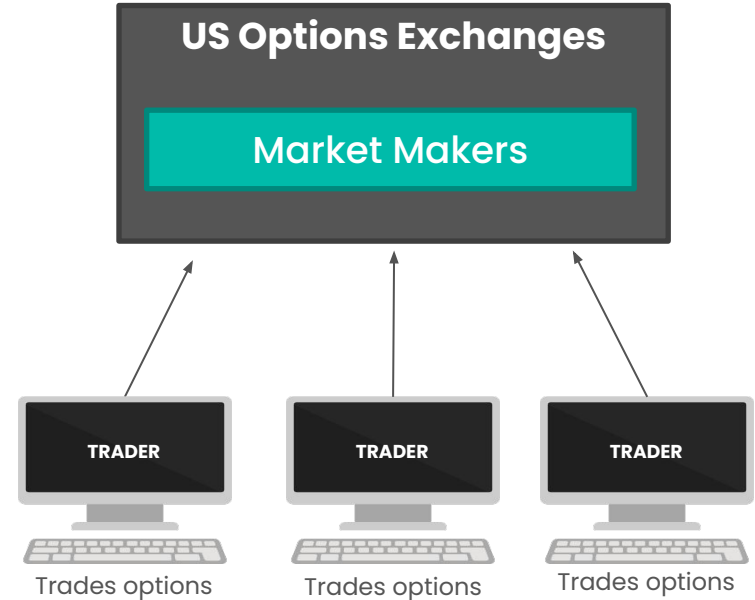


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Why Options Matter: Dealers Have to Hedge

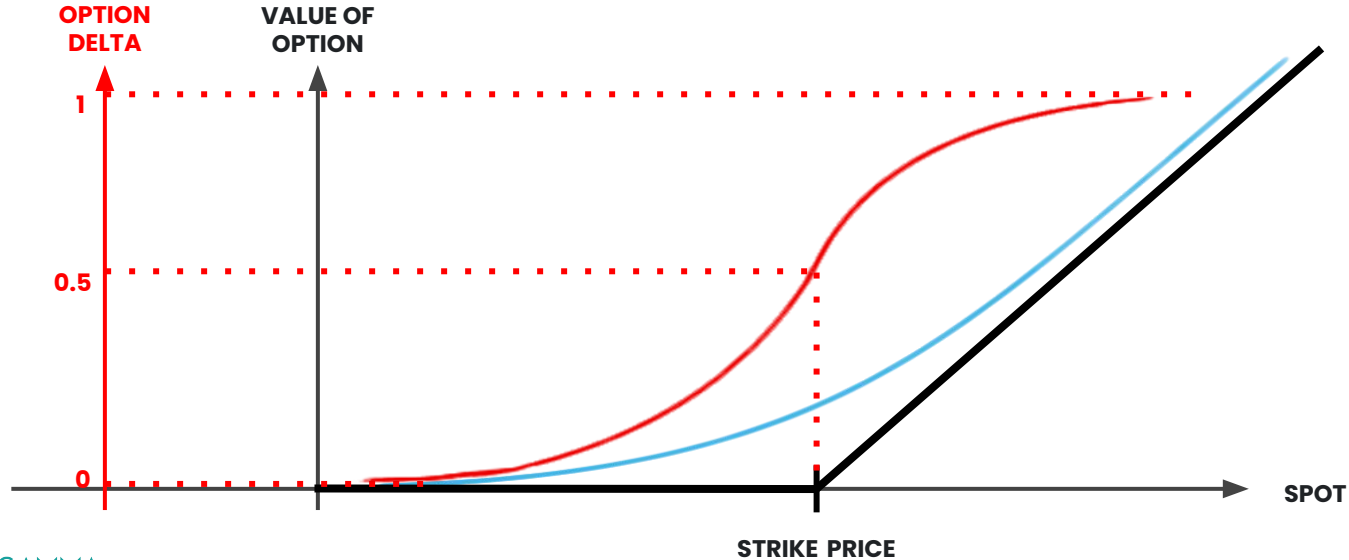
- **Trading Partner:** When you buy a call or put, this contract must be sold to you - almost always by a market maker.
- **Liquidity Provider:** Market makers fill orders near fair value on trades if other traders are not available to take the other side of the order.
- **Commission/Profit:** Market makers collect profits from the difference of the bid/ask spread, and not from market movements - meaning they don't bet on a stock's direction.



Delta: The Secret to Dealer Hedging

Definition: Delta Measures the change in option value with respect to change in spot price.

Delta can be used to calculate the number of shares required to hedge an options position.



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Dealers Use Delta to Hedge their Trades

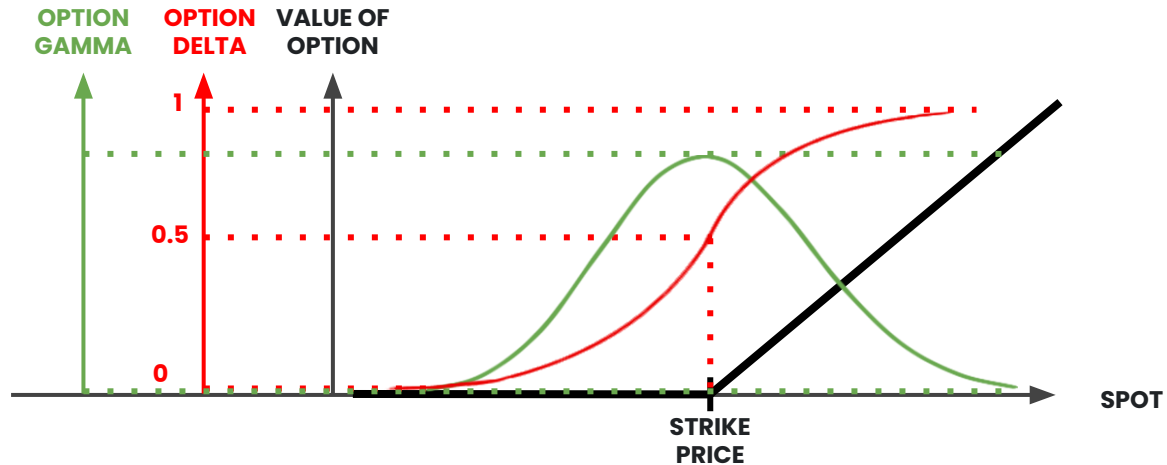


- **Delta hedging** is a risk management technique which attempts to use option strategies without taking on directional risk (measured in units of delta).
- Dealers hedge to become **delta neutral** to minimize directional risk exposure by buying/selling the underlying stock.

Gamma: Delta Changes With Price

Definition: The rate of change of Delta with respect to price of the underlying.

Gamma determines how many additional shares need to be bought or sold *to adjust* an options position.

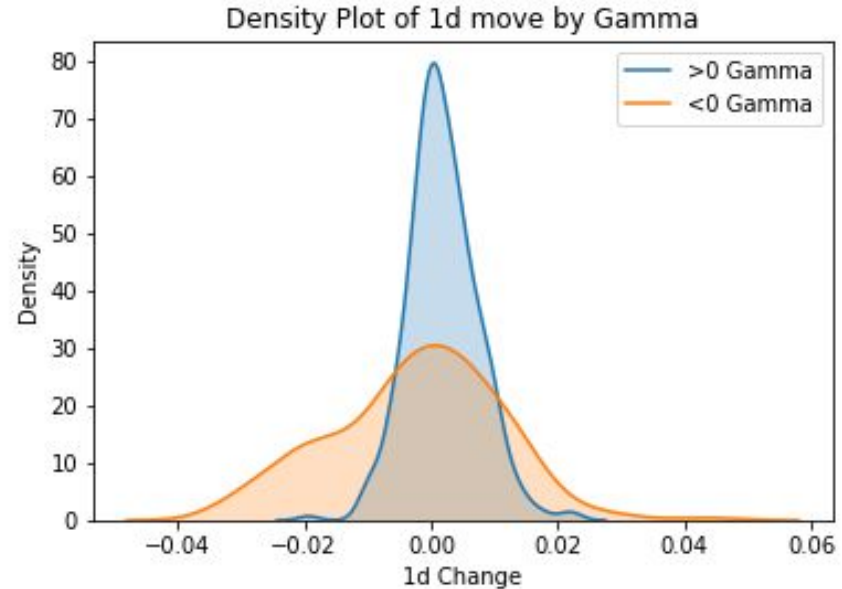


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Gamma Can Forecast Volatility

Positive Gamma: Lower volatility, with a narrower trading range.

Negative Gamma: Heightened volatility, with a wider trading range



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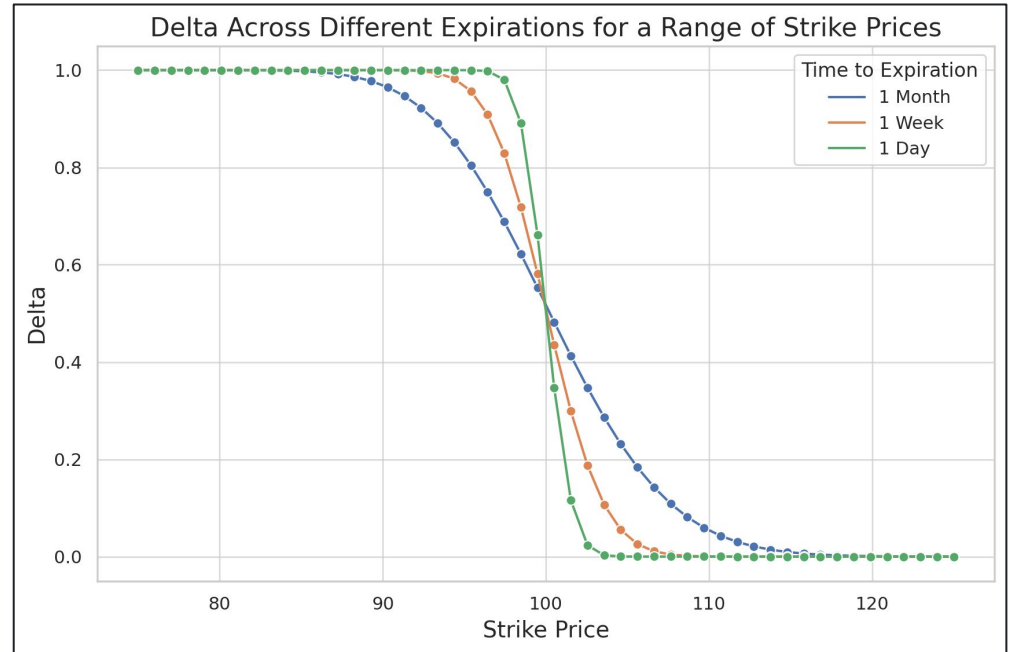
Charm: Delta Grows or Decays Over Time

Definition: How delta changes with respect to time.

Charm captures how fast the price of an option will change as time passes, as near-the-money options have greater potential for large price swings.

Example Scenario:

- Consider a call option with a delta of 0.5 and 30 days to expiration.
- As days pass the delta will increase for in-the-money calls and decrease for out-of-the-money calls.



Questions?



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