Title: Very smart Female Actuary: Delta Neutral Pricing and Gamma
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Created 2021-05-12 03:18:27 UTC
Permalink: /r/ratioatblessons/comments/naf7py/very_smart_female_actuary_delta_neutral_pricing/
Url: /r/Superstonk/comments/na952e/gme_delta_neutral_price_update/
Is_self: False

Hello! So my post yesterday ended up getting a much bigger response than I expected, so thank you! If you missed it, I used the delta neutral price to help predict the $145 floor on Monday and the $135 floor today. This post is an update to the prior version with options data processed through 5/11 EOD.

[Prior Post: GME Bouncing Off Delta Neutral](https://www.reddit.com/r/Superstonk/comments/n9cutk/gme_bouncing_off_delta_neutral_price_today/?utm_source=share&utm;_medium=web2x&context;=3)

I updated the graph below with data through 5/11:

[GME Graphs with Options Data Through 5\/11](https://preview.redd.it/0yeayfivaky61.png?width=910&format;=png&auto;=webp&s;=0ac30a860941b415ccfb61f22584c2d935c88965)

[Dashboard Update w\/ Data Through 5\/11](https://preview.redd.it/6phx87sudky61.png?width=1804&format;=png&auto;=webp&s;=43cd30adc50c3533985df844fefe3a45f2caddc1)

Reminder, Delta Neutral Price is the underlying GME price that creates a total market delta of 0 across all GME options (all expiration dates) for a given data date. The Delta Neutral price is one part of the model I built for trading. I'm not sharing all my data, but wanted to share this piece of the model to help give a little peace of mind when the price plummets.

My general theory is that as the underlying approaches the delta neutral, the call options have a flash sale. As people buy up the call options, MM have to buy the stocks, which shoots the price back up. I can see this in the options volume for days on/after times equity approaches the delta neutral. Just my theory though, I haven't found much outside research on this topic.

A few points based on my observations studying the delta neutral price:

* For more equities, the stock price doesn't like to go below the delta neutral price. There are exceptions, like the VIX/Gold, which like to stay under the delta neutral price.
* If the stock price does go below the delta neutral price, then pressure starts to build up (usually in the form of gamma), and releases in big ways, like what happened in February.
* The delta neutral price doesn't seem to necessarily help with price prediction. It can mostly be used to help define floors (often bounces off them if the price gets too close), or if the delta neutral price decreases with the underlying price, it can support the decrease going down.

Notes from the 5/11 Update:

* The delta neutral price dropped slightly to $133. This is not necessarily a bad thing. Remember, it's just a theoretical price floor, not a prediction of future price moment.
* For example, you can see that the delta neutral price kept dropping after the price started rebounding on 4/26.
* The total market gamma is still negative, which is still good for nice price bounces.
* Call volume was 57% of total volume today, up from 46% yesterday. That's good!
* Call volatility is still unusually low for GME, which is still reflected in the call prices. Hoping it will attract more call buyers.

Disclaimer: I'm just an actuary that likes to play with options data and builds models to trade for a hobby. I have no experience trading professionally or offering any advice to anyone. This all came out of a lot of personal research, and have observed it working pretty consistently with the stocks I track (ones with high

options volume). No one has peer reviewed my work, and I can't find support for this on the internet/in books. Therefore, please take this made up theory from a nobody on reddit with a grain of salt.

TLDR: Don't worry about price drops. Just buy the dips and hold.