Linked Post Content:
Hello Apes, I am not going to go in depth into the mechanisms of a gamma swap because I don't fully understand them, However, I am just providing the sauce and any other background information for other wrinkle brained apes to possibly go down a rabbit hole. I found these a while ago

\- Sauce #1: https://www.investment-and-finance.net/derivatives/g/gamma-swap.html

\- Sauce #2 (UChicago Math paper on the subject - The Author Roger Lee does tonsssss of reasearch on arbitrage, weighted variance pricing, implied volatility etc.): [https://www.math.uchicago.edu/\~rl/EQF_gammaswap.pdf](https://www.math.uchicago.edu/~rl/EQF_gammaswap.pdf)

TL;DR: "To limit the losses that could arise from a decreasing current price and tap into the potential of a rising current price, an investor can buy a gamma swap and sell a variance swap." This could be an additional practice being used by hedgies to hedge their positions following January.

What is a Gamma Swap?

From the paper above: "A gamma swap on an underlying Y is a weighted variance swap on log Y , with a specific weight function"

https://preview.redd.it/hbfrhaw1br281.png?width=1294&format;=png&auto;=webp&s;=fb3ca8c6ee1d57f4e499ebbec295e1ae53b89d0c

I think it's interesting that the weight function is weighted based on logY ***cough cough*** Log floor guy where you at? ***cough cough *** Anyways, I don't really understand much of the equation in a practical sense but maybe some big brained silverback can make sense. I think the biggest point I wanted to make is that in the explanation of gamma swaps in the article it states "To limit the losses that could arise from a decreasing current price and tap into the potential of a rising current price, an investor can buy a gamma swap and sell a variance swap." So if Shitadel is selling variance swaps for GME they may very well be buying Gamma swaps as well to hedge. Another interesting part from the paper is:

https://preview.redd.it/hc2kjiy4br281.png?width=1300&format;=png&auto;=webp&s;=0a117c4f68124f36d28f9cc544a32639256f7ca6

Ooooo, dispersion trading that's a fancy word, what is that you might have asked?

\- Sauce #3: https://quantpedia.com/strategies/dispersion-trading/

\- "The dispersion trading uses the known fact that the difference between implied and realized volatility is greater between index options than between individual stock options. The investor, therefore, could sell options on index and buy individual stocks options. Dispersion trading is a sort of correlation trading as trades are usually profitable in a time when the individual stocks are not strongly correlated and loses money during stress periods when correlation rises. Basic trade could be enhanced by buying options of firms with high belief disagreement (high analysts' disagreement about firms' earnings)."

So Dispersion good when difference between implied and realized volatility is greatest, which commonly occurs between index options and individual stock options. Did someone say ETFs with GME in it? Idk if

that lines up but that's the first thing that popped in my head.

I thought this was interesting so decided to share. To end this, here is a list of other random ass derivatives loosely tied to variance swaps:

* Variance swaps\]([https://www.investopedia.com/terms/v/varianceswap.asp#:\~:text=A%20variance%20swap%20is%20a,result%20and%20the%20actual%20result](https://www.investopedia.com/terms/v/varianceswap.asp#:~:text=A%20variance%20swap%20is%20a,result%20and%20the%20actual%20result).))
* Leverage swaps
* \[Gamma swaps\](https://www.investment-and-finance.net/derivatives/g/gamma-swap.html)
* \[Entropy swaps\](https://www.investment-and-finance.net/derivatives/e/entropy-swap.html)
* \[Correlation Swaps\](https://en.wikipedia.org/wiki/Correlation_swap)
* \[Conditional variance swaps\](https://en.wikipedia.org/wiki/Conditional_variance_swap)
* \[Corridor swaps\](https://www.investment-and-finance.net/derivatives/c/corridor-swap.html)
* Knock out variance swaps
* \[Forward start variance swaps\](https://www.arpm.co/lab/eb-0-for-start-var-swap.html)
* \[Options on realized variance\](https://fincad.com/resources/resource-library/article/next-generation-variance-derivatives)
* \[Rainbow options\](https://en.wikipedia.org/wiki/Rainbow_option)
* \[Basket Options\](https://en.wikipedia.org/wiki/Basket_option)

Edit: Formatting