

# Gamma Gainers Handbook

## **DISCLAIMER**

Deep Dive Stocks is not an investment advisor. The information contained in this primer is intended only for educational purposes and to demonstrate the research that Deep Dive Stocks has performed on the market. No information contained herein is investment advice. Deep Dive Stocks is not responsible for any gains, losses, realized or otherwise, pursuant to utilizing these educational materials.

#### Welcome!

As a Gamma Gainer you are going to have access to high quality data that packs a pretty powerful punch. Becoming familiar and working towards understanding these data, is going to be key for full utilization of the Gamma Gainer's Newsletter. This means we have to get to know gamma squeezes a bit more than you are probably used to.

Let's get started!

#### What is a Gamma Squeeze?

A gamma squeeze occurs when the arrangement of options on a stock is both odd and significant. The significance of this unique combination is that the options themselves begin to push and pull the price with ever-increasing authority This can occur for various reasons and is important (but not easy!) to identify.

As the options start piling onto the stock in these unusual ways, and they start to push the price significantly in either the up or down direction, their influence can become substantial in terms of how many shares they can force options dealers to sell or purchase.

For instance, the pressures they exert can become so powerful, that the buying and selling caused by the options during a gamma squeeze can even be even greater in volume than the "normal" trading volume! So, the gamma squeezes can have quite significant impacts.

The impact of a gamma squeeze is felt because of its "ipsilateral price influence". What is meant by that is that a gamma squeeze causes shares to be purchased when the stock's price is increasing, and they cause shares to be sold while the stock is decreasing.

In these events, large and drastic changes in price can be experienced as a feedback loop is established: as the price of a stock in a gamma squeeze increases, then the amount of shares that have to be purchased in order to satisfy the hedging requirements from options dealers increases. This increase in purchasing-requirements causes the stock's price to increase even further!

From there, the stock is experiencing a run-away price-action – and it can be quite destabilizing (and profitable!).

#### How many gamma squeezes a day are there?

On average there are around 500 to over 3,000 gamma squeezes occurring on any one day! The amount of gamma squeezes in the market has a direct impact on the market itself, as we will see below.

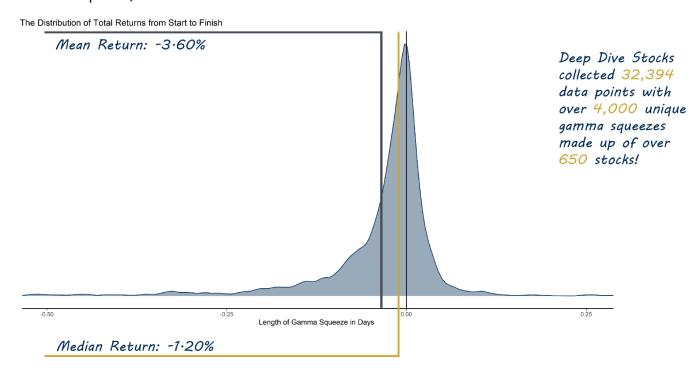
For instance, in times of great market upheaval and instability, it is not uncommon to see gamma ranges increase into the range of 2,000 or even 3,000 a day!

Whereas in more mild and temperate times, the number of gamma squeezes in the market typically hovers around 500-700; much calmer waters.

## What happens to a stock in a gamma squeeze?

Typically, a stock in a gamma squeeze experiences a downwards influence in price. This is contrary to the normal market wisdom but the data support it.

For instance, if we scan the whole market for the past two years and look at the starting and ending price of stocks during a gamma squeeze and the graph the percent change in price from those two points, this is what we see<sup>1</sup>:

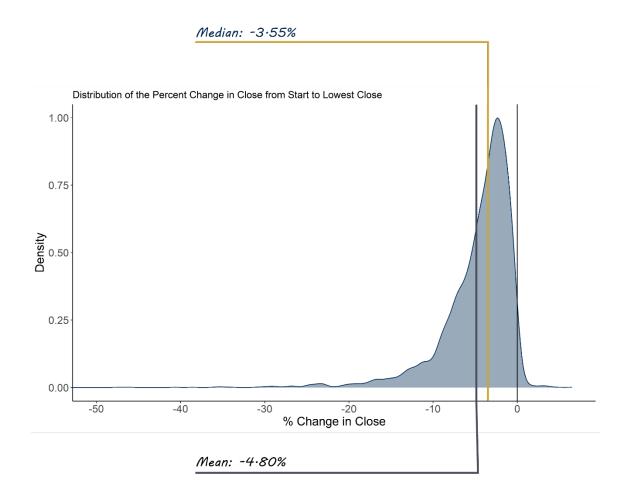


<sup>&</sup>lt;sup>1</sup> Note: the data included in this primer are for stocks that lasted at least 2 days in a gamma squeeze.

The probability graph shows us that the median return from start to finish is negative 1.20%, and the average return is -3.60%! We can see that the area under the curve (the probability) that stock will move towards the negative direction has significantly more volume than the area under the curve (the probability) on the positive side.

But – that's from start to finish. We will see below that this is a part of a gamma squeeze's life cycle called the recovery phase. The recovery phase is when the stock begins regaining its lost value, even though it is still in gamma-squeeze-conditions.

To verify this, let's look at the percent change in the starting price and the lowest price experienced during its gamma squeeze life cycle.



Here we see that the maximum price difference is quite substantial! The average movement in price from the start of the gamma squeeze to its lowest point is -4.80%!

Thus, the data suggest that, indeed, most stocks that are in a gamma squeeze go down but there is a recovery phase that reduces the negative price actions.

## How long are stocks in a gamma squeeze for?

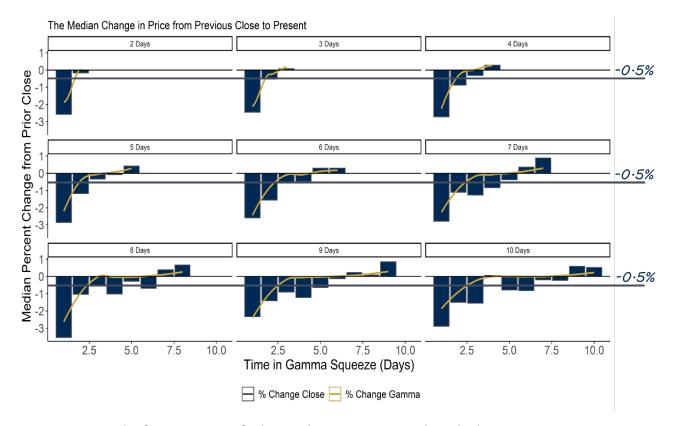
The data show that the average length of time in a gamma squeeze is 6 (trading) days and an average of 12.39 days (trading days, so 12 trading days is 2 trading weeks and 2 days!).

# Do the data help determine when the gamma squeeze will end?

Thankfully, it seems like they do! Since there seems to be a recovery phase in the gamma squeeze's life cycle, it became important to see if there were any leading indicators that the recovery phase was approaching.

If you look at the change in the gamma values as well as the change in the price, we see several important findings. Below is the graph for the change in price from the day prior (the bars) as well as the change in gamma per day.

The bars are grouped based on how many days the gamma squeeze (from the two-year scan) lasted.



The first important finding is that it appears as though about 2/3 of the way through the gamma squeeze, the stock's price will start to experience positive gain days! (The recovery phase in action).

The second finding is that prior to transitioning from negative days to positive days, the change in gamma from the day prior (yellow line) will be near-zero percent.

And lastly, it appears that a day with a change in price greater than -0.5% is a strong indicator that the gamma squeeze is coming to an end.

#### So, what does the Gamma Gainers Newsletter do?

The Gamma Gainers Newsletter scans over 4,500 stocks every day for evidence of a gamma squeeze. However, not all stocks that are in a gamma squeeze are included here. Through data analysis, it was found that certain stocks did not behave as well as some of the others – this mainly means that the Gamma Gainers Newsletter only presents large-, and mega-cap stocks.

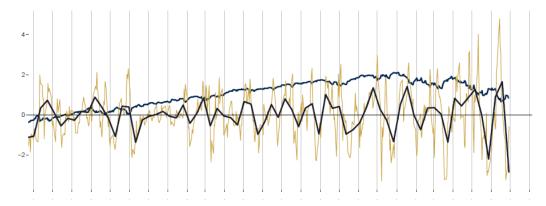
The newsletter then compiles the list of all of the stocks in a gamma squeeze and sends it right to you!

## What about the affect of Gamma Squeezes on the Market?

Determining which comes first, the cart of the horse, can sometimes be a difficult task. Thankfully for us, the task is made sightly easier regarding gamma squeezes and the market because the association is so easy to see. Let's take a look.

Suppose we mapped the rate of change of gamma squeezes throughout the market, then took the running 5-day average and finally took a longer-trend-line of the running-5-day average?

Let's do just that and then place \$SPY on the background to get a picture of the market.

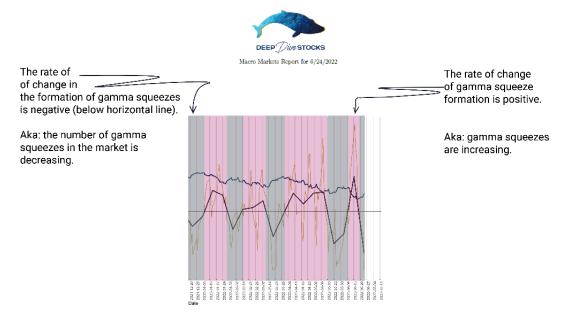


#### Notice any trends?

Depending on the time-frame you look at, although it doesn't quite matter, but you'll see two distinct patterns:

- 1- When the 5-day-running-rate-of-change (gold line) is increasing rapidly (meaning that gamma squeezes are occurring every day at a quicker and quicker rate), the market is headed towards a drop in price.
- 2- When the 5-day-running-rate-of-change (gold line) spikes downwards rapidly (meaning a sudden destruction of gamma squeezes has occurred, the market typically experiences a near-term rise in price.
- 3- When the trend-line for the 5-day-running-rate-of-change line (dark blue) is below the Zero-line (indicating that the overall trend is for destruction of gamma squeezes), you'll notice longer-term price appreciation.
- 4- When the trend-line for the 5-day-running-rate-of-change line (dark blue) is above the Zero-line (indicating that the overall trend is for the creation of gamma squeezes), you'll notice the long-term price depreciation.

Here's a recent example of this behavior from the Deep Dive Stocks' Macro Report:



You should also notice that these two lines, in and of themselves, are quite leading!

#### So, what does this all mean?

The data suggests that for individual stocks that develop into gamma squeezes, the overall change in their value is negative by a maximum of around 5% prior to the recovery phase.

The initiation of the recovery phase is predicated by a non-negative change in gamma from the day prior, as well as some other factors discussed in the Gamma Gainers Primer.

Additionally, we see that the rate-of-change for the number of gamma squeezes in the market is a leading indicator in the overall stability (and thus, price-action) of the market as a whole.

The Gamma Gainers Newsletter scans the market every day looking for stocks in a gamma squeeze, and delivers it right to you.

If you enjoy this type of market data, then you should try out the full market scan for premium members that has this and additional statistically verified data.

Happy trading!