Title: The Algorithm. The Ouroboros - Part 1: Explaining the Quarterly Swings, Sideways Trading and Because Apes Love Dates....
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Note:

I am not a financial advisor. I am an engineer with a strong stats background. These are my thoughts and findings.

Let's Begin with Some Learning: Defining Dividends

This entire theory stems around how the dividend was used to hide any price manipulation and other tomfuckery so we gotta start with defining the dates and shit.

When you check out dividends, it'll have (4) different types of dates that surround it:

* Declaration / Announced Date
* Ex - Dividend
* Record Date
* Payable Date

Here is an example I pulled from the [SEC website](https://www.investor.gov/introduction-investing/investing-basics/glossary/ex-dividend-dates-when-are-you-entitled-stock-and) to describe these dates:

https://preview.redd.it/t5nqfiftqfr71.png?width=624&format;=png&auto;=webp&s;=6e65b5af911009f82d083427c35ac0aa17e2d246

Some Quick GME History:

TLDR: GME gave a cash dividend from 2012 to 2019.

Mathemagics

The table below lists the dates important to the dividend along with related values.

Sources:

· https://www.nasdaq.com/market-activity/stocks/gme/dividend-history

· https://marketchameleon.com/Overview/GME/Dividends/

https://preview.redd.it/defwglfvqfr71.png?width=811&format;=png&auto;=webp&s;=6ff8295c44df1cec6c56b2c7b60f69ed49f134c1

Here are the closing share price relative to the above listed dividend dates.

https://preview.redd.it/0d8zxqkxqfr71.png?width=1064&format;=png&auto;=webp&s;=24bb1494f9d76a4a20f6ecc0d1425b73146da0c3

This is where things start to get weird....

For a while, GME didn't seem to announce when the dividend was going to happen until like 2015 so here

is a zoomed in graph of that time period.

https://preview.redd.it/vo5xtq1zqfr71.png?width=1088&format;=png&auto;=webp&s;=667a288df2525812a
aad18320ec296d43d2a9f46

If we were to subset the data such that we only view the dates when these specific events occurred and graph them with their corresponding share price, we get the follow graph. Nothing really too interesting-ish.

https://preview.redd.it/5ne431h0rfr71.png?width=1353&format;=png&auto;=webp&s;=6f652389e09bb6d5
1c3a410266c44ada90cb0974

However, Since the announcement dates didn't begin until 2015, I went ahead and did some further isolation to focus on this time frame. What's bonkers about this is the extremely high R\^2 values comparing the share prices with the corresponding dates. I also added the surrounding share prices that weren't part a dividend related date to show how linearly the share price was decreasing.

https://preview.redd.it/tgs418x2rfr71.png?width=1360&format;=png&auto;=webp&s;=7b939201da4c15abe
912b1767b8e54de3ef115a2

Despite how GME was a failing brick and mortar company, the dividend value increased despite how the share price was dropping. (This will be important for later. Not now, but later). Let's quickly define the dividend yield and it's relationship to the share price:

https://preview.redd.it/3j7fu4h4rfr71.png?width=711&format;=png&auto;=webp&s;=89165ee3d1aa9d2749
c906a5e06618b2f7f23f36

https://preview.redd.it/4mt53a15rfr71.png?width=1520&format;=png&auto;=webp&s;=e8105e1218e93eaa
67e2a49ee8dc4df78fafef77

Here's another way to look at the data showing the linearity of the dividend yield versus the share price further exemplifying how as time continued, the dividend yield increased.

https://preview.redd.it/6myw95n6rfr71.png?width=1305&format;=png&auto;=webp&s;=f7463719ba810fe9
a6e1e370f9184ba7869a923e

While the argument can be made that an increase in dividend was made to increase the attractiveness to retail investors, I personally would argue against that solely due to the stupid fucking high amount of this fucking dividend.

Just to get a better comparison how fucking stupid high this dividend amount GME was pumping out at this time, here is a current list I quickly pulled when I googled "high dividend stock average." The first link was from this article. Here is the first [link](https://www.nerdwallet.com/article/investing/how-to-invest-dividend-stocks) that came up.

https://preview.redd.it/yi5shu48rfr71.png?width=962&format;=png&auto;=webp&s;=9a71f127535ed895b9
a019ae9f0efc25fb4e47b7

GME passed this list in like 2015 and almost even doubled it during 2018 / 2019. Now, that the dividend has been beaten to death,

Time for Some More LEARNING!!!!

As a sanity check, let's do some basic investing learning just to cover our bases as to why other tickers could see the same thing. Pulling from [investopedia](https://www.investopedia.com/articles/active-trading/090115/understanding-how-dividends-affect-option-prices.asp) detailing how dividends related to options volume:

*The payment of dividends for a stock impacts how options for that stock are priced. Stocks generally fall by the amount of the dividend payment on the ex-dividend date (the first trading day where an upcoming

dividend payment is not included in a stock's price). This movement impacts the pricing of options. Call options are less expensive leading up to the ex-dividend date because of the expected fall in the price of the underlying stock.*

At the same time, the price of put options increases due to the same expected drop. The mathematics of the pricing of options is important for investors to understand so they can make informed trading decisions.

The key take away is....

Calls are cheap AF on the Announcement and Ex-Dividend Date

So if I were a corrupt, greedy asshole....

with a bunch of naked shorts that may or may not need to be "covered," I would probably want to buy calls to to cover these naked shorts when they were the cheapest. (Un)fortunately, I'm just an asshole. So I, as a retail investor, don't do that shit. Going back to the mathemagics and data...

Some MORE weird shit but with options

GME is shorted to shit so I pulled the options data from market chameleon. That data only goes to like 2013Q3 to present so that's what we're going to see below.

Since the dividend seems fucky, I added those dates in as well to see what the fuck was going on. Immediately, one can see how the announcement date often has both the highest IV30 as well as the highest volume just overall during the this 2013Q3 to 2019Q1 - ish time period.

https://preview.redd.it/um9iwb7brfr71.png?width=1283&format;=png&auto;=webp&s;=58e8234a70310013 6d7761956641dbeb7be0f2af

Let's also add the overnight change because that was a significant variable I used to estimate August 24 mini squeeze so for more data dumping.

https://preview.redd.it/2l01hfpcrfr71.png?width=1353&format;=png&auto;=webp&s;=b50ddaa7903d446ec 7773f17e0982d159827996a

Let's see how the daily options volume compares to daily trading volume. I even extended the time frame to mid-2020 for better comparison. Cool. Cool. Cool. Days with the most options volume are the same days with the highest trading volume.

Let's put it ALL Together!!!

https://preview.redd.it/zyksuo3frfr71.png?width=1517&format;=png&auto;=webp&s;=1e8fa2a4e4913fba70 51b9d90451442364442b72

Back to our Roots

From a DD I did a while I ago, I identified this dates as the most significant:

https://preview.redd.it/08tuk3ggrfr71.png?width=513&format;=png&auto;=webp&s;=aa091b2d5c859a2031 b5028ae3bd0e170ac8a8a4

Joining those dates I was able to isolate with the first dividend table and calculating the net total days, we get!!!

https://preview.redd.it/peli3w8irfr71.png?width=1256&format;=png&auto;=webp&s;=2fc32d4a90ef6cee869 f621f959686ab1a3e9535

Let's make a graph of those net days

https://preview.redd.it/vd4yguujrfr71.png?width=1087&format;=png&auto;=webp&s;=373b44ddaee6f2dbc1c6918476b1ea2bcfbe85a4

What does it MEAN + some tin foil hatting-ish

Many have stated that if we know this shit is going on, they can change the algo. I don't think they can because of potential reasons that are not verified:

* There is no one to do the programming.
* The otiginal people that programmed this could be dead so no changes have been made. Who knows how long this thing has been going on?
* The most recent programmers left.
* They literally don't even know how to. Since this is a black swan event and so many variables are going bonkers, there is no model to use to even know which variables to change.
* They potentially only have 1 shot at fixing the script. It's done ok thus far so they let it keep doing what it's been doing and pray for a bailout.
* The fear of making even the smallest mistake and causing a crash aka MOASS.

Key takeaways

* GME experiences quarterly swings due to the IV30 values which were entered around a dividend that was previously given.
* Call options are bought around this time to make it appear as if the naked shorts are covered because call options are cheap AF.
* Although this dividend is no longer in play, the algorithm still is acting as if it is and thus we see mini squeezes around when a dividend would have been given out. This is why we see repeating dates.
* My current guess for the next mini squeeze is November 23, 2021 (11/23/21 -- Fibonacci Sequence Day and also an almost numeric palindrome.)

Why the January Squeeze?

TLDR: Taxes

To be continued....

TLDR:

* The share price is manipulated.
* Keep those hands diamond. Those balls titanium. And your butthole clenched.
* Hold the line.
* November 23, 2021.

Edit 1: I forgot to get into the sideways trading bit but I guess that for next time.

Edit 2: [tweet](https://twitter.com/pwnwtfbbq/status/1445014638979006465?s=20)

Edit 3: Removed duplicate text and fixed some typos

Edit 4: Change 11/23 to November 23, 2021.

Edit 5: Had to further explain why I don't think why the algorithms can be changed.

Edit 6: Added more about the algos not changing due to the lack of programmers that know how to do so.