Title: GME Volume Distribution by Exchange and Dark Pool
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This post expands on the graphs done by u/theRealVeale as shown in the latest example here:

https://www.reddit.com/r/DDintoGME/comments/q1fbpq/dark_pool_nyse_volume_percentages_nyse_5day/

I did not exclude quad witching days and index inclusion changes as done in that post, so that might be something for me to change going forward (if this post is actually useful).

This is not financial advice. I do not recommend taking any actions based on this post, which is shared for information purposes only. I am looking for any suggestions or other feedback. I will probably also make some updates since I'm not good with reddit markdown syntax. edit: yeah, formatting edits immediately

\# TLDR and Comments

Moving averages of volume breakdown between exchange groups (NYSE, Nasdaq, Cboe) and "Dark Pool" were calculated for the past 6 months through October 4. These averages appear to show recent trends:

\- downward trend for Dark Pool starting around late August

\- upward trend for NYSE starting around late August

\- slight upward trend for Cboe starting around mid-late August

\- significant changes in NYSE seem to coincide with opposite changes in the other three, just to different extents at different points in time

However, I believe there are not enough data points yet to draw conclusions from these recent trends. For example, Dark Pool volume percentage had a similar--albeit smaller--downward trend from approximately middle of April through middle of May. So this look at volume distribution may end up having no useful value...or it may be the start of a real trend due to many people deciding recently to **DRS some or all of their GME shares**.

\# Graphs

One thing I have learned is that you should always put the pretty stuff near the top. So here they are: 6-month volume distribution graphs between the four highest-volume-percentage exchange groups.

[GME Volume Percentages, 5-Day Simple Moving Average, 6-Month View](https://preview.redd.it/otkgjq2vmmr71.png?width=1991&format;=png&auto;=webp&s=8191ef831d2b73273ad63169d52adb21fff6da48)

[GME Volume Percentages, 5-Day Weighted Moving Average, 6-Month View](https://preview.redd.it/eu87fi93nmr71.png?width=1991&format;=png&auto;=webp&s;=4d74206df673336a8a72c7910eb7dbcd57d29aa7)

[GME Volume Percentages, 10-Day Simple Moving Average, 6-Month View](https://preview.redd.it/inatuhq5nmr71.png?width=1983&format;=png&auto;=webp&s;=60cb3964f4b67c5249ca2bce35a16d0124bc8993)

[GME Volume Percentages, 10-Day Weighted Moving Average, 6-Month View](https://preview.redd.it/md5z6ch7nmr71.png?width=1993&format;=png&auto;=webp&s;=8b1cfb22a2c62cdb281c18324e0fe91369230797)

\# Data

I used the same data source that others have been tracking:

https://chartexchange.com/symbol/nyse-gme/stats/

On the day I started this, the site provided data going back to July 2020. I kept all of the raw data but chopped it down to just the last 6 months to keep the graphs from being too big. GME also started its relatively low volume trend around the beginning of April, so it makes sense to focus on this time period and ignore the unusual events of late January and Mario Day.

The numbers for similar-but-different exchanges were combined (added) as follows:

\- NYSE comprises: NYSE, NYSE Arca, NYSE National, NYSE American

\- Cboe comprises: Cboe EDGX, Cboe BZX, Cboe BYX, Cboe EDGA

\- Nasdaq comprises: Nasdaq GSM, Nasdaq PHLX, Nasdaq BX

Other exchanges in the data set do not have a significant sustained share of the volume, but honorable mention to IEX that got up to 7.8% on June 15, 2021!

\# Calculations

There have been some interesting one-day peaks and crevasses in daily volume percentage since June. Perhaps someone can identify possible reasons for these dates:

\- June 25 (NYSE up, Cboe down, Nasdaq down, Dark Pool minimal change)

\- August 3 (NYSE up, Cboe down, Nasdaq down, Dark Pool down)

\- September 17 (NYSE up, Cboe down, Nasdaq minimal change, Dark Pool down)

In order to look for trends, I calculated a Simple and Weighted Moving Average in 5-day and 10-day time periods for a total of 4 data sets. Wikipedia link if you're interested in a lot more detail:

https://en.wikipedia.org/wiki/Moving_average

The Simple Moving Average (SMA) is simply an average of the values across the given time peroid. For the Weighted Moving Average (WMA), I used a fairly simple linear weighting function, as follows:

\- 5-day WMA: 0.04 + 0.08*x , where x in {0,...,4} ; values: (0.04, 0.12, 0.20, 0.28, 0.36)

\- 10-day WMA: 0.01 + 0.02*x, where x in {0,...,9} ; values: (0.01, 0.03, 0.05, 0.07, 0.09, 0.11, 0.13, 0.15, 0.17, 0.19)

Why 5-day and 10-day? I don't really know other than "1 trading week" and "2 trading weeks" seemed like good timeframes for calculating averages. I also like to see the differences in the output, like the peaks and crevasses being more prominent and short-lived in the WMA graphs (also more in the 5-day than 10-day, of course). Would like any thoughts on this.

\# DRS

I don't know about anyone else, but I love buying from Computershare and transferring shares to them for that sweet, sweet DRS feeling! I'm not convinced yet that it is impacting the volume distribution, but I'm excited to find out. I am much, much more excited to see what happens when all outstanding shares are in DRS....