Title: 5 Buckets, 1 CeeNiS: The Mechanics of GME Cycles
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Hi Folks,

I realized this week that, while I have written independently about the various mechanics that make up the GME “cycles” that appear in the price of the stock every so often, I have never explicitly put them all together so the smooths can see the whole picture. My goal in this post is to provide a basic overview of the mechanics of the cycles, why they happen, why they are hard to predict, and why we are likely about to see another one.

Let’s jump right in.

CeeNiS

CeeNiS is the name we have lovingly given to the system that the National Securities Clearing Corporation (NSCC) use to net settle trades on the market. This system, the Continuous Net Settlement (CNS) system, or CeeNiS, was designed to do two things extremely well: settle trades between participants, and wash failures to deliver (FTDs). They accomplish this essentially using the mantra “settle first, ask questions later.” I’ve written about this system before, and you can find my original post from the middle of last year on my profile (co-written with u/gherkinit and titled T+69).

Here's how it works. First, all of the buys and sells from all of the participants for that day are crammed into the CNS pipeline for settlement. It then has a matching system to prioritize the marriage between all of the buy and sell orders for the day. In a perfect system, you would expect to have an equal number of buy and sell every day, and everything would net out to zero. In our FTD washing system, this is almost never the case. Typically you will end up with more sell orders due to the various mechanisms of shorting that I will discuss later. So the system marries as many sell orders to buy orders as possible for the day, and whatever is leftover stays in the pipeline to be married at a later date. The following day, the system will then prioritize the marriage of yesterday’s unmatched sell orders to today’s buy orders. If naked shorting continues over time, a net short balance will build within CNS. This pipeline in the best case is T+2 (trades typically should be settled in 2 trading days). However, based on the various rules and loopholes given to the big boys to “make markets,” “provide liquidity,” and “reduce market volatility,” this pipeline in some cases can extend for quite some time (in some cases 1-2 months!). The length of this pipeline is critical to washing naked shorts. Let’s say there are 1,000,000 buy and sell orders each day for a stock, and 300,000 of those sales are naked. Depending on which loopholes are utilized, CNS could juggle 6.9M short shares (nice) before a single FTD popped out of the other end. That is an incredible capacity to wash naked shorts, often in perpetuity.

There’s no better example than looking at the short interest on XRT, which is a retail exchange traded fund (ETF). Pretty much for it’s entire history, this ETF has been over 100% short, and often times as much as 500-1000% short. And while it does spend a good bit of time on the reg SHO threshold list for fails to deliver, it’s generally able to handle this load without too much trouble. Why? Because of the volume traded on the stock. It’s average daily volume is around 6M, while the total shares of the ETF fluctuate between 2-10M roughly. Plug that volume into CNS and you can comfortably wash many multiples of the total shares outstanding because you are trading many multiples of the total shares every week.

A key component of this naked short washing system is VOLUME. You can’t wash nakeds without fresh sell orders.

So take a minute to go look at the price and volume chart of GME over the last year and a half. It is essentially made up of high volume, explosive upward price action periods that feed into diminishing volume, slowly dropping price action periods. This is CeeNiS at work. As they naked short the stock down, the FTDs start to build in the CNS pipeline. The rate at which these FTDs build depend on the “reservoirs” or “buckets” of shares available to feed into the CNS system to keep the system going.

These buckets, or sources of shares, are: 1) legitimate trading of the stock (buy/sell orders from net long positions), 2) borrowable shares, 3) options hedging, 4) ETF creation and redemption, and 5) internalization.

Trading the Stock

This one is the simplest. Any transaction involving a settled long position today can be used to satisfy an unsettled position from a previous day. This essentially resets the clock on the lingering fail and buys more time before that fail must be settled with a buy order. This is why buy and hold has always been anathema to the shorts. If nobody creates volume, shorts EVENTUALLY fail to deliver and they must buy to close. Legitimate volume is required to perpetuate naked short positions. Counterintuitively, the more the stock is traded, the larger a naked short position can grow, and the more violently it can spill out of CNS if there is a liquidity shock on the system.

Borrowable Shares

This one is pretty simple too. People who own shares of GME can elect to lend them and get paid for doing so. Large institutions and funds love doing this on their long positions since they can make money for holding something they were going to hold anyway. Shorts can use legitimate borrows to wash FTDs on naked shorts. However, it must be stressed that on gamestop this is typically one that hasn’t been used in a very meaningful way since the January sneeze, as this is the easiest for retail to spot. Everyone in the GME community knows about the rising borrow rates on GME and the declining availability of shares to short. Shorts don’t want retail to know they are balls deep in GME shorts, it tends to make retail horny for more GME shares. This is an important point that I will return to in a moment.

Options Hedging

If you have been following what I have been writing over the last couple of months, it’s no secret that I have focused a lot of time on the options chain for GME. And that is because, historically, this is the primary instrument that shorts have used to temporarily suppress the price of GME. Here’s how it works. Options market makers facilitate the buying and selling of all options contracts for a security. There’s a ridiculous idea floating around that GME options folks are selling covered calls to GME hodlers to profit directly off of them. This is nonsense. When someone goes to write an options contract and sell it, a market maker buys it from you. Same thing on the other side of the trade. The market maker just wants to make money on the spread between the bid/ask of the option, and doesn’t want to sustain a long or short position on the stock, so they go into the underlying market and buy and sell the stock to remain price neutral while holding all of these options obligations. Most of the volume we see on a given day for GME is this options market maker hedging activity, constantly buying and selling shares so that they are insensitive to the price of GME.

Market makers enjoy very loose liquidity provisions, allowing them to naked short and fail to deliver that short for very long periods of time. This is to ensure that they can continue to make the market. If, for example, there were no more GME shares available to short, they would have to stop selling puts and buying calls, and the options market would grind to a halt for that stock. But if they can sell naked, then the market keeps moving.

So if I’m a short and I don’t want to borrow shares because retail would see it, I could just buy a lot of high strike put options contracts from a market maker, forcing them to hedge the contracts by selling shares on the market. I have now gotten someone else to short the market for me! And indeed, they have been using ITM puts throughout the entire GME saga to suppress the price via market maker hedging.

ETF Creation and Redemption

This is one area that others in the community know a lot more about than me, but I will simply summarize the mechanism here. ETFs are equities that are built up of other equities. If I want an ETF that tracks the S&P; 500 for example, I would just create a security that is backed by a basket of all of the stocks on the S&P; 500. Then I allow this security to be traded on the open market, where special participants can take advantage of any arbitrage between the security price and the price of the underlying stocks to ensure that the market keeps the value of the ETF equal to the value of the S&P; 500.

The trick is that the ETF instrument is not only backed by stock. It's also backed by cash. If you go into any ETF and look at the list of assets under management, you will always find a line item for cash. This allows participants to go to the ETF, hand it a pile of cash, and take the underlying assets. It gets weirder. You don't necessarily have to take all of the assets in proportion. I could go to XRT, give them a pile of cash, and say "just give me the GME I don't want the other stuff." So long as the total value of the ETF is in line with the thing it tracks, it continues to function. ETFs can also change the number of shares outstanding exist to facilitate further manipulation of the underlying assets it manages. And they have significant liquidity provisions too. So someone who wants to keep a large naked short position on a stock afloat might want to go to ETFs containing that underlying, crack it open, take all of the real shares, and even get the ETF to make some new nakeds for them, and dump it into CeeNiS.

Internalization (or, How Kenny Learned to Boof Mayo and Love It)

Pretty simple here. Stock market makers have a multitude of methods to take legitimate buy orders and short them in dark pools. This method is admittedly more limited than the other methods in washing FTDs. It's more of an intraday tool to try and suppress a breakout that would lead to massive FOMO. But hey, sometimes you just need to "survive one more day." They eventually print to the lit tape and enter CeeNiS. They are limited by their internal risk tolerance when deciding how much mayo to boof.

Putting it All Together

Okay, so we have 5 buckets, 1 CeeNiS. We know that they can use these buckets to wash FTDs and can do so for quite a long time. But eventually, if people simply aren't selling the stock, the fails start to mount and buy ins must occur. This is the underlying market mechanics of the cycles. The cycles have been very controversial in the GME community because people like to try and predict them and they are inevitably wrong. There's a lot of variability in how many of the buckets they choose to use at any given time, how much risk they are willing to maintain, and how much legitimate buying and selling is occurring on the stock.

Now let me tell you why I think we are already in the beginning of what could be a massive GME cycle right now: all the buckets are fucking empty, and the FTDs are already poking out of CeeNiS like a turtle head.

Let's go through each bucket in turn.

Trading the stock

It's no secret that I am very unpopular in some GME circles because I think DRS is stupid. But one of the wonderful things about the DRS movement is that we have some rich ownership data for retail. I have developed models of how DRS will progress over time which you can find in various subs. I have also done a fair amount of work determining the size of the GME community. Using this data about DRS and extrapolating to the entire GME community, I believe that earlier this year the GME reddit community bought and owned the entire float of GME. I'm not talking about all of retail. I'm talking about just reddit. You can see my projection below in blue.

[Estimation of current and future ownership in the GME reddit community](https://preview.redd.it/5kpgi89hol691.png?width=840&format;=png&auto;=webp&s;=fdc379ae8262e6c8b2efc286df985739a4423243)

Why is this important? Because let's face it, when the price of gamestop jumps 3x, there are people in retail that are selling. They must be. It's the only way that we haven't MOASSed. I know it sucks to think about it, but people are selling the peak and making money and it's not us. Worse, it is because we hold that these volatility cycles are even possible. If we all decided to sell to capture the peak, the cycles would simply end in a massive liquidity dump. But now we are finally at the point where the people who will never sell their shares simply own all the shares. This makes it unlikely that they will be able to heavily rely on retail liquidity to continue to kick the can down the road. Buy and Hold took a long fucking time, but we seem to be just about there.

Borrowable Shares

As I said before, the shorts don’t like to borrow shares because retail can see it. As is evidenced by the 1000 posts a day on reddit about the borrow rate and the borrowable share availability. We all know there aren’t any more fucking shares to borrow. Now compare the number of shorted shares to the number of shares remaining that reddit users don’t own. Oopsies, they sold some shares short to people who will never sell them back. This is evidenced also by the fact that the FTDs on GME are finally starting to rise, exceeding 500,000 in a day at the end of May. So this bucket is empty too. Next bucket!

[Short Interest over time vs. shares not owned by the GME reddit community](https://preview.redd.it/atiud0dnol691.png?width=840&format;=png&auto;=webp&s;=a0b66d214c34cdbb604f8280ae4018b41ae97428)

[Borrow rate over time for GME and shares available.](https://preview.redd.it/2wmqydgqol691.png?width=840&format;=png&auto;=webp&s;=ed64ebb1e249a86c235b2bab86dce695a103252d)

Options Hedging

This is something I have been tracking extensively for most of 2022. We are currently enjoying high call open interest (OI) on the chain, and a shit load of put open interest just fell off from this options expiration (OPEX) on Friday. What does this mean? It means that the market maker now needs to close the shorts it opened for those put contracts to stay price neutral. So next week the market maker is expected to go to the market and start buying millions of GME shares. The shorts can try to suppress the price by purchasing more in the money puts, but at this point the call OI is much larger than usual, so they would be facing an uphill battle. And if people start buying even more call options on the back of market makers buying in, the price would slowly build to the point of FOMO and those ITM puts would get crushed. It’s a very risky move and it’s a dangerous move for the shorts. The options chain is primed for a push upward. As can be seen below, the total delta OI on the chain continues to move on an uptrend, while put delta slowly flounders downwards.

[Total Delta on the options chain, including an ESTIMATE \(OI not updated until Tuesday morning\) of the drop in delta OI from last friday.](https://preview.redd.it/zcfbp6mvol691.png?width=781&format;=png&auto;=webp&s;=21b226b58c502f98a77dad16e6925fa63f279361)

ETF Creation and Redemption

I think most people in the community know that XRT and MEME were on the reg SHO threshold list for quite some time earlier this year. We believe they started using the ETFs significantly to short GME back in December, and were able to use them to extend their FTD washing until March when ETFs rebalanced and they didn’t have access to their short machine. Well they are on reg SHO threshold again, and we just entered the ETF rebalance period. They used it up, they can’t use more next week, and they are about to owe some hella dividends to the people they shorted to. Oh and ETF owners will likely be buying some GME too during the rebalance. Oops. Bucket empty.

Internalization

This is the smallest bucket, and we all know Kenny’s already packed his colon about as hard as possible with mayo. The guy simply can’t help himself. As options market makers go to buy in next week, internalization is very risky, and not very helpful beyond a few days.

Conclusion

So what am I trying to say? If you haven't figured it out by now, the shorts have shorted GME with pretty much all of the buckets, and options market makers and ETF funds are about to be going to market for some sweet, sweet GME shares. This is the epitome of violent upside potential. If calls continue to pour in and any amount of FOMO builds on GME next week, it could absolutely rocket, as the shorts simply are running out of ammo.

This is not financial advice and I'm not going to talk about what activity I think retail could do to light the rocket, I simply wanted to write about the market mechanics behind what we have seen over the last 1.5 years, and why those market mechanics have me very excited for the next week or two.

Happy CeeNiS capitulation, everyone! And stay safe out there!