FROM THE SUPERSTONK BEST SELLER LIST

# THE SUNNEVER SETS ON CITADEL PART: I

APES WILL GET
THEIR REVENGE ...



by u/swede\_child\_of\_mine

### Hello Superstonk



# **Preface**

I became bothered by a question a few months ago. The GME saga started with MAJOR fight in the financial landscape between Team Citadel vs. Team Other (Blackrock, Vanguard, etc.), and Superstonk is here now because of Team Other getting Ryan Cohen on the board at GME, then "retail" landed on the scene, now Apes, etc. But this ONE question always bothered me:

What did Citadel do to piss everyone off? WHY would they want to give Citadel the most epic beat down in financial history?

So I spent some time looking into that because it must be good and...

HO BOY, GET YOUR POPCORN, I'VE GOT SOME GOODS TO SHARE WITH YOU AND IT'S GONNA BE JUICY

Note: this is a strategy post. u/atobitt and u/criand focus on macro topics about Citadel's structure in the overall market, but this series is going to be about financial industry strategy. I have a master's degree in business and specialize in strategy and operations. While I don't have direct experience in finance per se, I really enjoy finding the "hows" and "whys" behind what businesses do.

Also, I'll give shout outs to the Apes who did relevant DD before this. Parts of this are my own discovery, parts are building on the work of those who came before :) This is an overall picture.

Symbol indicators:

• [] - request for link to relevant DD (r/Superstonk DD posts or legitimate sources)

### 1.0: Introduction

The Price of \$GME is artificial. Prior posts (1, 2) have covered how Citadel and other players in the market have greedily, illegally conspired to change the price of stocks for their own profit. While Citadel's criminal price manipulation of GME represents a failed scheme to fabricate shares for profit, this was only a small corner of a much larger body of activity. Citadel's overall activity shows a plan to monopolize markets

worldwide and control securities transactions at the exchange level.

Yep.

Buckle up:)

# Key Term

Market Maker (or "MM") – a special role in a stock exchanges around the world. An MM's primary role is to provide liquidity, or "to make sure there are shares available to buy if people want them" as well as "make sure there is a buyer if people want to sell." Exchanges need it: liquidity makes for easy buying and selling.

- A MM is the intermediary for almost any securities transaction. It is positioned between the exchange and
  the brokers/dealers/funds that do not have access to the exchange, or they use the MM to do the buying
  work for them, lol. Or the MM is positioned on the other side of a transaction, supplying the securities in
  demand.
- A MM is always in a position of risk. They are constantly in a place to be on the losing side of a transaction if they "guess" wrong.
- Note: Citadel has many branches, but it's two major branches are its hedge fund and its MM. I will be referring only to its MM activity.

# 1.1: Plus Ultra

Take a moment to marvel at how Citadel has installed themselves in so many markets around the world. They are Market Makers and/or liquidity providers in nearly every major exchange on earth: (*Note: my undersrtanding of a liquidity provider is that it's a bit like a less-powerful MM*)

Citadel Securities own splash page

Making Markets in over 35 Countries



#1 in US retail market making<sup>3</sup>





#1 designated market maker in the NYSE stocks<sup>4</sup>

- US/North America: NYSE, NASDAQ, CBOE (not even going to bother with links here, you know they're there), Toronto
- Europe: London/Ireland, Amsterdam[], Frankfurt[]
- Asia/Pacific: Hong Kong, Singapore, Sydney [], Shanghai []
- (Apologies on missing links, I've saved so many links through this whole drama that I can't find some of my sources anymore. And this is not the full list, this is only what I could put together for this post.)

Citadel is truly an intmidating company based on the position it occupies in markets worldwide.

# 1.2: E Pluribus Unum

So WHY has Citadel strived to achieve such a large footprint across the globe?

Because there is a flaw in the markets across the world: it depends on Market Makers.

- Exchanges are set up to have several Market Makers providing liquidity.
- So the Market Maker has responsibilities for supply and demand of a given security.
- It's an essential service so exchanges empower MMs with exclusive powers and responsibilities.

Take a look at the exclusive powers the NYSE gives its DMMs (like a "Super" Market Maker): From the NYSE DMM page

### IMPROVING LIQUIDITY & MARKET QUALITY

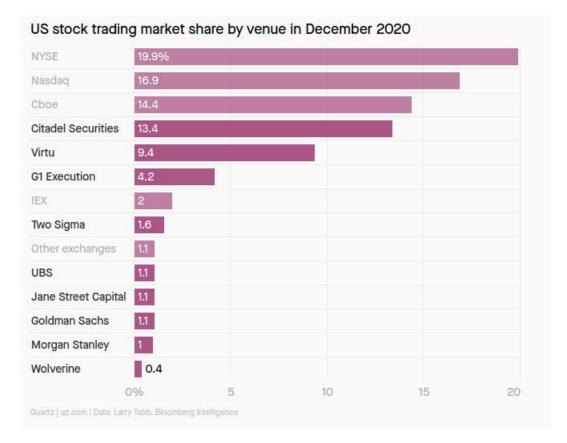
- DMMs are core liquidity providers DMMs are dedicated market makers that provide liquidity in a given NYSE security
  by assuming risk and displaying quotes in the exchange limit order book. In 2019, DMMs accounted for about 17% of
  liquidity adding volume in NYSE-listed securities, on average.
- DMMs reduce volatility DMMs provide price stability by satisfying market demand for a security at competitive prices. If investors are selling, DMMs are typically buying, and vice versa.
- DMMs improve price discovery at the open and close NYSE's opening and closing auctions are the largest single
  volume events of the trading day. DMMs contribute capital in the auctions to satisfy market demand, and provide human
  judgment and communication. Volatility is typically the highest during the first hour of trading as participants digest
  overnight news. DMMs help to establish the right opening price to minimize early-morning volatility.
- DMMs reduce trading costs for investors DMMs enhance market liquidity and reduce quoted spreads.
- DMMs have much higher trading obligations than traditional market makers The table below provides a summary of DMM affirmative obligations under our rules and NYSE-funded liquidity provider incentives to encourage greater quoting and liquidity. For example, unique DMM depth guidelines on the NYSE require them to dynamically add liquidity to the order book when there is not sufficient public liquidity. These depth guidelines are customized by security and change with every trade.
- MMs have Superpowers and wield immense control over securities.
- Exchanges rely on incentives for winning bids (coupons) as a way of creating competition and fair prices at the exchange.

MMs are intended to be balanced by competing against each other

- ...so that the customers (brokers) can get the best value, and the Market Makers are financially rewarded for their service...
- ...but that means the MMs are competing for as many transactions as possible on the exchange. As much as their risk can allow.

So the better the MMs are at managing risk, the more control they have over the exchange (because they capture more of the transactions)

- And there are advantages for MMs who perform better and capture more volume they can leverage the volume to achieve better prices and capture even *more* transactions.
- You've probably seen this chart, but it shows the size that MMs have become: Citadel is almost as big as
  the CBOE the main options exchange for the US



- (Citadel, Virtu, and G1 are all MMs.)
- The important part about that graphic is the NYSE, NASDAQ, and CBOE volumes *include the transactions* with Citadel and Virtu.

The MMs are becoming (or already are) bigger than the exchanges themselves. And the exchanges depend on them.

- Furthermore, the exchange is limited to a certain location, structure, set of regluations, list of securities, etc. Almost all exchanges are for profit.
- But if the exchange provides no security that can't be bought on another exchange, then the exchange needs to compete on best price or else it's revenue goes away.
- And exactly *who* at the exchange offers the best price?
- But a Market Maker is free to engage in multiple exchanges. So if a financial product is available in one exchange, but not another, and an MM is in both exchanges, then the Market Maker can offer it because it a separate entity (if it legally can).
- And the Market Maker is free offer their best price at multiple exchanges, or even directly.

What advantage does the exchange itself have? They can't provide *anything* that the Market Makers themselves can't/don't provide.

• As an analogy, if you are used to shopping for separate items across several stores – food at the farmers market, clothes at the mall, etc. – a company like Amazon or WalMart will have an advantage by selling the same items for a comparable price in one convenient place.

It's "malls" vs. "Target/WalMart/Amazon/Costco" all over. We all know who won that one.

## 1.3: Man o' War

I mentioned "volume" earlier – that is going to be key here.

 Market Making is already very risky, but the size of the established players make it prohibitive for new entrants. A new MM would need significant advantages to compete against Citadel, Susquehanna, and Virtu who will have superior positioning, expertise, technology, market understanding, funding, risk tolerance...

"The way to think about Citadel is as the Amazon of trading," says Spencer Mindlin, a capital markets technology analyst at Aite Group. In an industry that relies heavily on technology, Citadel has forged ahead by playing "a game of scale. You reach a point where it's impossible for others to compete," he says. [emphasis mine] - Quartz

### Backstory:

- In the early 2010's Ken tired to make Citadel an investment bank and failed (lol)....
- ...but it ended up being one of those "lemons to lemonade" things for him. Because Ken realized that other MMs were *banks*, which were a major disadvantage. You see, *Banks* were encumbered with "regulations", "capital requirements" and stupid "investors". But Market Makers didn't need a bank, so they didn't need to have those pesky constraints.
- Then Ken stopped trying to be a bank. Which meant he could capture the MM market.
- Citadel went on to buy out competing Market Maker assets from Citi, Goldman Sachs/IMC, and KCG to grow his market share and reduce competition.
- And now, the Market Maker field is NOT competitive. The number of DMMs in NYSE has decreased over the years.
- Citadel has heavily "leveled-up" and is bar none THE biggest player on the field.

This is why Citadel is in so many exchanges. Successful practices can be copied from one exchange to the next, with market advantages and rewards that scale. Why shouldn't Citadel be a MM in every major exchange on earth?

• But you realize what this means, right?

The exchanges have become commodities. They are necessary for fulfilling their role as a securites selling venue, but have no unique value to themselves.

"We already have 16 stock exchanges, over 30 ATSs and handful of market maker SDPs, do we really need the banks to further fragment liquidity?" [emphasis mine] - Themis Trading

The TRUE value to the market is a firm that spans multiple exchanges and offers the breadth of securities available at competitive prices.

# 1.4: The Commonwealth

But, but -- what about compeition? What about Virtu, G1, and the MMs in other countries? I thought you said this was a cOmPEtITivE field.

It's true, Virtu & G1 do "compete" against Citadel. But they have an... "interesting" relationship which prompts some theories and requires further investigation.

- First, Citadel needs to maintain the appearance of a free market to avoid antitrust lawsuits. They also need other Market Makers to offload the transactions that they are unwilling to take. A duopoloy or even triopoly is fine as long as they control the market.
- Second, from Virtu's perspective (they're the largest competitor so I'll use them here), it doesn't make sense to go head-to-head directly with Citadel on transactions Citadel has better positioning and a technological edge.
- And directly competing with a superior opponent would be expensive for Virtu. However, they would stand to profit from joining with Citadel if they took the same positions as them.
- And wouldn't you know it, Apes have discovered that Virtu and Citadel are doing the exact same things across many tickers. Here are 2 famous ones: MAX-D, GME [Any more Apes want to do asset comparison between Citadel & Virtu? CALLING SUPERSTONKS MOST QUANTED] (s/o to u/BadassTrader, u/JustBeingPunny, u/Sti8man7)

- That said, Virtu could still compete *indirectly* they would need to find a niche where they could gain an advantage and separate themselves from Citadel...
- ...and oh look Virtu seems very focused on client experience, where Citadel is focused on product and market position.

So Virtu is disincentivized to directly compete against Citadel, and is incentivized to coordinate with and complement Citadel.

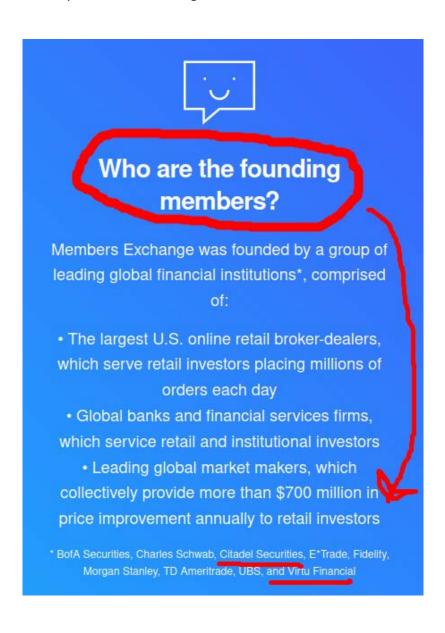
Monopoly much?

# 1.5: The Crown Jewel

If you STILL believe that being a Market Maker IS competitive and that exchanges are NOT commoditized, and that Virtu and Citadel are taking the same positions for non-collusive reasons ("Exchanges are the pumping heart of a free economy! Of course EXCHANGES have control and NOT the Market Makers, the Market Makers are just making the plays they see are winners"), and you need even more convincing... I have bad news. About 9 months ago the MEMX exchange opened.

Why is that a big deal? Who opened the exchange? Let's check the MEMX website...

• Oh.



- Citadel and Virtu (and some other players you might recognize) OPENED THEIR OWN EXCHANGE.
  - Yeah.



"But, but – they wouldn't open their own exchange to profit at the expense of the market, would they?"

• On the MEMX own splash page

As the only member-owned equities trading platform, MEMX will represent the interests of its founders and their collective client base, comprised of retail and institutional investors, on U.S. market structure issues.

- "MEMX will represent the interests of its founders" MEMX.com
- So, founders first, everybody else after. FROM. THEIR. OWN. FUCKING. SPLASH. PAGE.

"But, but – maybe it's just a small side thing and it's not really going anywhere?"

Right. Yeah. Sure.

MEMX Breaks Multiple Monthly, Daily Records as It Climbs to 6<sup>th</sup> Largest Exchange in U.S.

May 03, 2021 08:30 AM Eastern Daylight Time

JERSEY CITY, N.J.--(BUSINESS WIRE)--MEMX, a market operator founded by a diverse group of participants to benefit all investors, today announced multiple performance records, including scaling the exchange market share ranks to close out April as the 6th largest of the 16 U.S. equity exchanges. MEMX is the fastest growing equities exchange in the country, with monthly double digit increases in average daily trading volume.

"But, but – wouldn't that piss off the other exchanges? They would want to attack the MEMX founders in some way, right?"

Yup.

June 16, 2021 6:24 PM PDT Last Updated 21 hours ago

### **Business**

'Meme' stock prices may not properly reflect demand -NYSE president Exchanges have become so commoditized and Market Makers have such an entrenched advantage that the dominant Market Makers have opened their own exchange, MEMX, whose primary purpose is to serve their interests at the expense of other exchanges.

"Free market."

# TL;DR

Citadel is/was moving to monopolize securities transactions at the exchange level.

- Market Makers have the most control over transactions at exchanges.
- Citadel is the largest Market Maker across exchanges worldwide (can't find the sauce []).
- Citadel has more power than the exchanges do, offering more products, more ways to purchase them, in more venues than the exchanges.
- Citadel has even started its own exchange in September 2020, which is growing rapidly.
- MM Competition is deterred from directly competing with Citadel they have too much influence, and competitors are incentivized to coordinate with Citadel, not compete.
- The number of MMs have decreased in major exchanges while Citadel's market share is growing.

Structurally speaking, Citadel is in a position to directly control the price of many securities and transactions at the exchange level.

And that's not even all of it. Part 2 coming soon...

