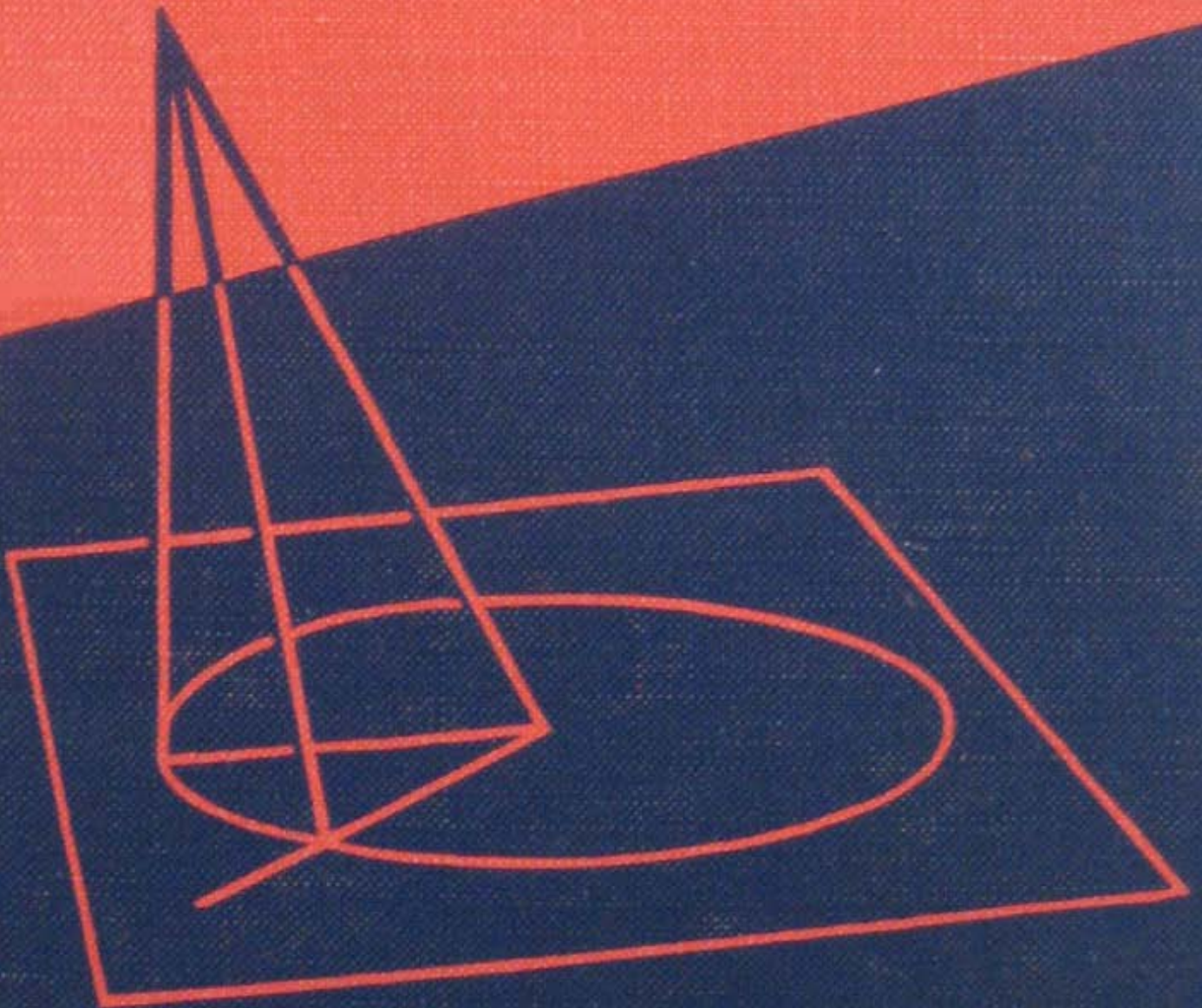


# *Citadel*

**MAY CRASH THE MARKET  
THROUGH NAKED SHORTING ETFs**



**U/NORTHBALANCE**



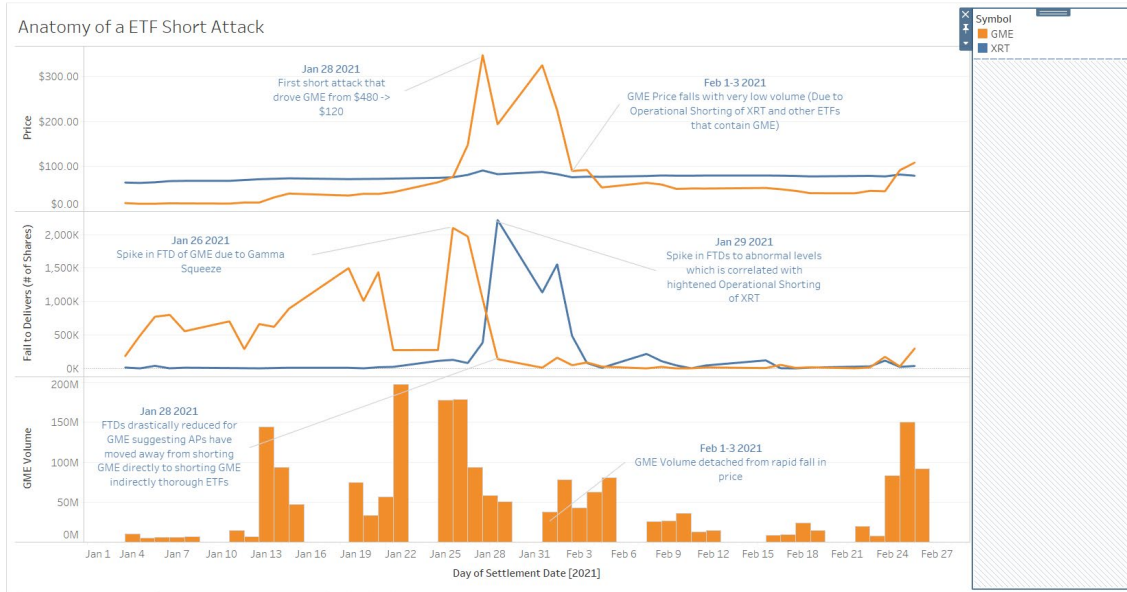


# DD: WHY GME WENT UP TODAY AND HOW CITADEL MAY CRASH THE ENTIRE MARKET BY NAKED SHORTING GME THROUGH ETFS

DD

**TL;DR: Citadel is naked shorting ETFs (Operational Shorting) containing GME to drive down the price, in the first drop in Feb they shorted XRT, and in the past week they have shorted the entire Russell 2000 (IWM). Read the whole thing to learn why this irresponsible action may lead to the crash of the ENTIRE MARKET.**

## Anatomy of a ETF Short Attack in Feb



**Proof of Citadel naked shorting since they are required to buy back NAKED ETF SHORTS TODAY driving up the price.**



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## CLASS IS IN SESSION

Have you wondered recently with reported Short Interest of GME so low (26% of float according to MarketBeat), how has GME gone down more than 50% in the past 5 days with relatively low volume?

Are fellow apes and long whales selling? Answer: NO, look at the OBV



Are Citadel and Friends shorting GME directly? YES, but that alone is not enough to drive down GME price drastically without significant increase in reported short interest.

Are Citadel and Friends hiding short interest through OTC (dark pools) and other shady options mechanisms? Likely yes, but will not explore in this post.

Are Citadel and Friends shorting ETFs directly that contain GME? YES, but that's not the entire picture

Isn't shorting an ETF that only contains 1-5% GME expensive and cost prohibitive?

NO, and here's why.

## Operational Shorting – Naked Shorting ETFs at a PROFIT for Citadel

**What Is an ETF?** An exchange traded fund (ETF) is like a basket of stocks that can be purchased or sold on an exchange like a single regular stock.

**Rise of ETFs** are concerning since they constitute a disproportionately high amount of US trading volume. 25% of all US equity trading volume, but only constitute 5% market cap.

**Why is there such a high ETF trading volume?** Answer: Its profitable for the APs

**What is an AP?** An authorized participant is an organization that has the right to create and redeem shares of an exchange traded fund (ETF) like big banks or market makers like Citadel

**How does Citadel make money on selling / buying ETFs?**

**Arbitrage.** The buying and selling of securities in different markets or forms in order to take advantage of the differing prices of the same asset.

**Arbitrage Analogy:**

Think of ETFs like XRT as a fruit basket, and the stocks they contain fruits. Say the XRT fruit basket was \$6 and contained a banana (GME), orange, and apple. And individual bananas are \$1, oranges are \$2, and apples are \$3. The total cost of buying the fruits individually is the NAV (net asset value) which in this case is also \$6. Citadel can make their own fruit baskets by buying individual fruits but they wouldn't make too much money since the price of the fruit basket are usually similar to the NAV. In recent years Citadel and other APs have found a much more profitable strategy – Operational Shorting.





## Operational Shorting Analogy:

Citadel has the ability to NAKED SELL nonexistent fruit baskets (XRT / IWM) at \$6 but not deliver on them until 6 days later. Flooding the market with tons of promised fruit baskets can drive down the price of individual fruits (bananas went from \$1 -> \$0.5, oranges to \$1.8, apples to \$2.7), only to buy back the individual fruits 6 days later at a CHEAPER NAV and deliver those fruit baskets to you. That fruit basket that was delivered to buyers only cost Citadel ( $0.5 + 1.8 + 2.7 = \$5$ ) to make, netting them a cool \$1 while also driving down the price of bananas by 50%.

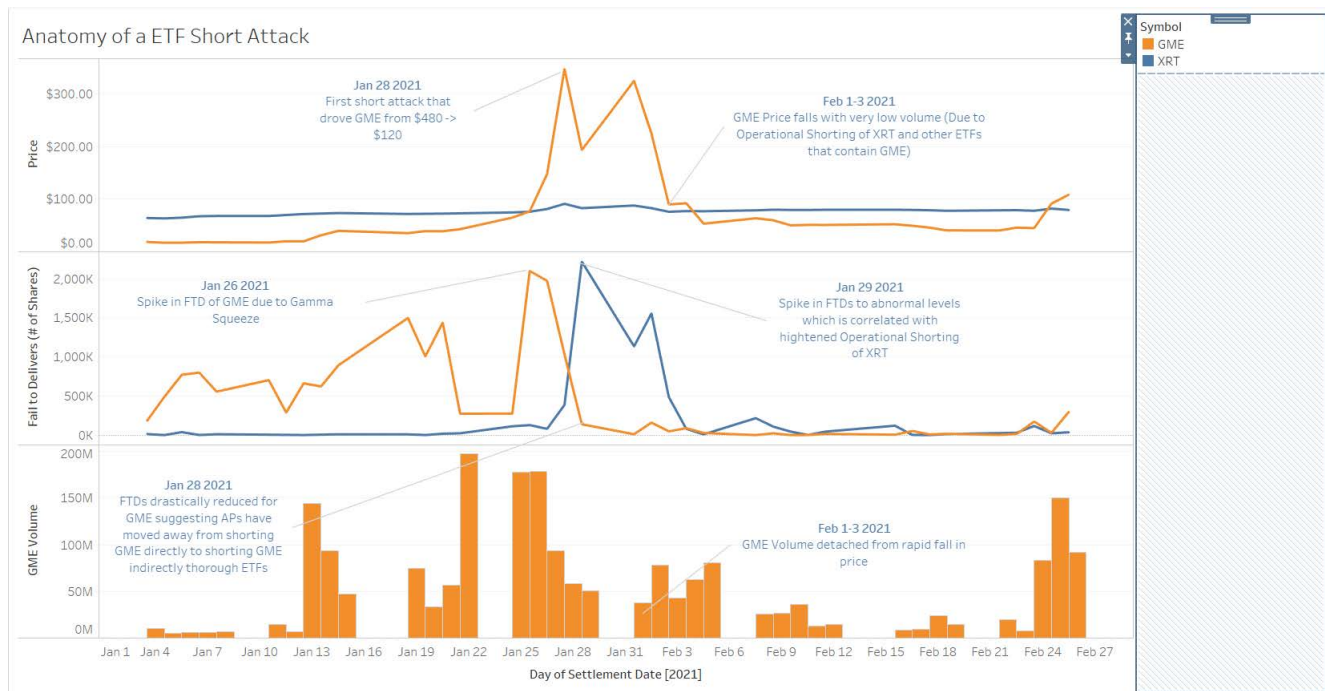
## Operational Shorting by Citadel

When faced with “excess buying” pressure for ETF shares, **the AP/MM can sell shares “naked” and then locate or create the shares at a later time (up to T+6 for “bona fide” market making)**

Market makers, often commercial banks or hedge funds, create ETFs for their issuers by buying the securities that the funds are supposed to represent. **But they've discovered that they can make a predictable return by delaying the purchases and selling you nonexistent exchange-traded fund shares that they will create later.** These transactions are a form of shorting – Operational Shorting as coined by Richard Evans, Professor at the Darden School of Business.

## Okay.. What does this mean for GME?

**Citadel is willing to NAKED SHORT ANY ETF containing GME, and by extension the ENTIRE MARKET (will show later) to drive down the price of GME.**



# If Citadel Shorted ETFs to Drive Down GME Price, Why Did It Go Up Today?

SEC Rules that Citadel must deliver on naked ETF shorts by T+6 by buying back the underlying shares. Today lines up just under this restriction from the first time IWM was shorted on Mar 18.



## Should Operational Shorting Make Apes Scared?

**Operational Shorting HAS NO PREDICTIVE VALUE ON THE PRICE OF UNDERLYING ASSETS 1 WEEK LATER. Unless apes scared and paper hand**

Citadel MUST buy back the underlying stock on ETFs sold short at (T+6) WHICH MEANS IF YOU DON'T PAPER HAND THEY MIGHT HAVE TO BUY BACK GME AT A HIGHER PRICE THAN WHEN THEY STARTED SHORTING

### Operational Shorting and Future Returns

	ETF		NAV FF4 $\alpha$ (t+1) (3)	Weekly Return			
	FF4 $\alpha$ (t) (1)	FF4 $\alpha$ (t+1) (2)		ETF FF4 $\alpha$ (t+1) (4)	ETF FF4 $\alpha$ (t+1) (5)	ETF FF4 $\alpha$ (t+1) (6)	ETF FF4 $\alpha$ (t+1) (7)
Operational Shorting - Weekly % (t)	1.331*** (11.70)	-0.232*** (-3.03)	-0.027 (-0.35)	-0.341*** (-3.81)	-0.250*** (-2.75)	-0.031 (-0.13)	-0.265*** (-2.78)
Create Orders - Weekly % (t)	-0.076 (-0.77)	-0.140* (-1.87)	0.004 (0.06)	-0.105 (-1.17)	-0.091 (-1.08)	-0.154 (-0.79)	-0.028 (-0.29)
log (Market Cap), at (t-1)	-0.022** (-2.57)	-0.039*** (-4.08)	-0.033*** (-4.02)	-0.040*** (-3.82)	-0.032*** (-3.78)	-0.045*** (-3.82)	-0.044*** (-3.72)
Average Share Turnover (t-1)	-0.097 (-1.05)	-0.188** (-2.00)	-0.018 (-0.19)	0.013 (0.13)	0.194 (1.02)	0.090 (0.39)	0.058 (0.28)
Amihud Illiquidity Measure (t-1)	0.024 (0.99)	0.040 (1.49)	0.013 (0.87)	0.012 (0.59)	-0.001 (-0.05)	-0.043 (-0.95)	0.025 (0.78)
Observations	551,252	550,664	550,664	249,579	222,161	60,958	158,914
R-squared	0.077	0.082	0.086	0.197	0.073	0.085	0.089
ETF & Date Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ETF & Date Clustering	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ETF Sample	All	All	All	Non US-Equity	US-Equity	US-Equity	US-Equity
Liquidity Mismatch (ETF vs Underlying)						Low	High

Suggests Operational Shorting has NO NET EFFECT on the underlying share price 1 week later.

UNLESS Coupled with direct shorting + retail paper handing

Translation: APE DONT GET SCARED BY NAKED ETF SHORTING OF CITADEL, THEY MUST BUY BACK THE SHARES SENDING PRICES UP 6 DAYS LATER

# Conclusion

Findings from Evan's paper on ETF Short Interest and Failures-to-Deliver: Naked Short-Selling or Operational Shorting?

If higher levels of FTDs spill over from one ETF to another within the same AP or across different APs with overlap in their ETF market making activities, **operational shorting could increase financial instability**. When we examine the impact of FTDs across different ETFs, **we find evidence consistent with this contagion-like effect**. Moreover, we also find that **APs that are closer to their maximum regulatory leverage limit are more likely to operationally short**. These results suggest ETF trading relies on an inter-connected network of liquidity providers which, at times, pursue positively correlated **trading strategies that can be detrimental to the overall market.**"

## Additional Findings on Operational Shorting and Financial Linkages

- APs who are operationally short in one ETF, are more likely to be operationally short in other ETFs for which they serve as an AP (intra-AP linkage)
  - Proof in point: Citadel began shorting XRT to drive down the price of GME in Feb, and more recently have shorted IWM to drive down the price of GME again
- A given AP has higher operational shorting when other APs have higher levels of operational shorting (inter-AP linkage)
  - Higher operational shorting by Citadel linked to higher operational shorting by other APs
- Looking at regulatory constraints on AP leverage, **we also find that the closer a firm is to its regulatory leverage limit, the higher levels of operational shorting. This is consistent with a contagion-like effect that could cause entire market instability.**

CITADEL AND FRIENDS ARE FUCKED AND ON THE BRINK.  
UPTICK IN RECENT ETF NAKED SHORTING SIGNALS THAT THEY ARE  
CLOSER TO THEIR REGULATORY LEVERAGE LIMITS.

EXPECT MORE NAKED SHORTING OF ETFS BUT THESE ADDITIONAL  
SHORTING MAY LEAD TO ENTIRE MARKET INSTABILITY

I WILL HOLD MY BANANAS TO THE MOON

**Edit:** To clarify, my summary is that naked shorting of ETFs is easy and profitable for the APs. And while operational shorting has no net effect on the NAV of all the stocks in an ETF, they have realized it is an effective way to drive and magnify the direction of a single stock in the ETF in the direction they want it to go via other methods like direct shorting of GME.



Translation: today's rise may have been premediated by the APs since they knew they had to cover from shorting IWM 5 days ago. **Whether GME keeps rising after today no one can answer and specific dates don't matter since APs have multiple strategies to delay or shorten the delivery dates on shares sold short.** THE most effective way for **me** to deal with APs who have become more and more leveraged is to **just buy and hold.**

**Edit 2:** Typos

**Edit 3:** Remove call for upvote as mods requested

**Edit 4:** This is not investment advice, I just like the stock.

### **Sources:**

Evans, Richard B. and Moussawi, Rabih and Pagano, Michael S. and Sedunov, John, ETF Short Interest and Failures-to-Deliver: Naked Short-Selling or Operational Shorting? (March 3, 2021). Darden Business School Working Paper No. 2961954, 2019 Academic Research Colloquium for Financial Planning and Related Disciplines, Available at SSRN: <https://ssrn.com/abstract=2961954> or <http://dx.doi.org/10.2139/ssrn.2961954>

**Richard Evans – Darden School of Business Slides on Operational Shorting**

<https://jacobslevycenter.wharton.upenn.edu/wp-content/uploads/2018/09/Evans-Slides.pdf>

**Youtube video of Evans giving a talk to Wharton's on Operational Shorting**

<https://youtu.be/ncq35zrFCAg?t=1641>

**SEC Fail to Deliver Data**

<https://www.sec.gov/data/foiadocsfailsdatahtm>

