

Title: Three months in swaps: Evidence of hidden shorts in ETF, unusual CFDs, and good news
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****TLDR: Swaps have been reported publicly since mid-February. From the three months of data, we were able to observe three things:****

- * **Evidence of hidden shorts in ETFs: Lent-out shares of XRT on suspicious dates.****
- * **Contracts for Difference (CFDs) can be used to short a stock; GME has unusual CFD trades.****
- * **Good news: We can see that other traders go long GME.****

A short squeeze occurs when there is a lack of supply and an excess of demand for the stock due to short sellers having to buy stocks to cover their short positions [1]. For GME, the theory says that massive short positions are hidden in options, naked shorts and swaps. This article is about swaps. The reporting of swap trades started only in mid-February, three months ago. I inspected the swaps data and will give you an overview in this post.

****Types of swaps:****

In principle, Swaps are bets on a price movement. These derivatives can be used to go long or short. Swaps do not have a direct impact on the price of the underlying, but the hedging of these derivatives can influence the price.

Let us first revisit how a hedge fund can enter a short position. An interesting paper about the financial crisis in 2008 [2] described different ways to get around short-selling bans:

>A short sale can be replicated by a suitable option or futures strategy. For example, the put-call-parity allows investors to obtain the same exposure as with a short strategy by buying a put option, writing (selling) a call option and borrowing dollars. [...] It also requires transaction costs to be sufficiently small. Furthermore, precise put-call-parity only holds for European options (those that can be exercised only on the maturity date, but not before). Traders may also construct synthetic short positions by selling futures contracts and buying bonds with the same maturity. [...] A short position can also be taken through spread bets, ****contracts for difference (CFDs) and total return swaps****.

Contracts for Difference (CFDs):

- * CFDs are bets on the stock price difference at the beginning and at the termination of the trade.
- * I'll simplify and assume that most of the CFD trades are initiated as short positions. You may say - CFDs are not allowed in the USA; well, open an account in Canada or in the EU then.
- * There are clear advantages of CFDs for short sellers: (1.) Leverage. (2.) They do not cause FTDs and are independent of how liquid the stock is. (3.) There are almost no rules for shorting with CFDs. **"CFD instruments can be shorted at any time without borrowing costs because the trader doesn't own the underlying asset."** [3]

Portfolio swap or total return swaps:

- * In a portfolio swap, the swap holder gives money to the counterparty to buy (or sell) a stock. When the trade is terminated, the counterparty sells (re-buys) the stock and gives the returns back to the swap holder.
- * Portfolio swaps are very similar to total return swaps. Usually, portfolio swaps are preferred.
- * The trading parties can take portfolio swaps in the form of a basket, i.e., the initial transaction is not money but a basket of shares. This type of swap can lend shares and is very useful for short selling.
- * In contrast to CFDs, most portfolio swaps are taken as long positions, but with one exception: Swaps done as ***basket*** transaction are probably short positions.

****Limitations of what we can observe:****

The swap data reporting started on 2022-02-14, and thus any earlier data is unknown. Swaps have a lifetime of up to ten years, so the fog of unreported data may still hide a significant position.

We have swaps reporting data with a single underlying as mandated by the SEC; swaps with "a basket of multiple stocks" are regulated by the CTFC and not yet to be reported.

Swap trades are reported in a structured form. Still, the DTCC keeps the information of the trade parties highly secret. Amendments to existing transactions are also not linked to their original entry. This obfuscation makes it a bit hard to find out the real open positions. Automated trading makes it even harder. Therefore, we will only look at the daily volume in swaps. So, regardless of whether it is a new, a closed, or an updated position, those count towards the daily volume. We will also use "Quantity" as a volume measure that tells us the number of shares in the swap.

Before we start with the plots: *****Notional Quantity" == Number of shares;**** and *****Notional Amount" == USD.****

****Evidence of hidden shorts ETF in XRT:****

XRT is interesting because this ETF had a substantial short interest and contains GME shares. The theory says that GME shorts are hidden in ETFs. Authorized Participants can dissolve the ETF shares into the individual stocks; and then use these share to short a stock without causing FTDs. ETF shares can be lent-out using basket portfolio swaps:

[The two large green spikes: probably lent-out shares; the first spike was so large, it surpassed the range of the reporting form \[at least 250 million USD\]](<https://preview.redd.it/b9n82xzjzlz81.png?width=3510&format=png&auto=webp&s=d529eebd32f6bf0c84beca3686eb0ba5232ec55f>)

A single trade increased an unknown basket swap position (short) by over 250 million USD in March, with an expiration date in 2025. Afterwards, several trades reduced it by 315 million USD. This trading pattern went along with a huge short interest in XRT. There are two start dates linked with these basket swaps: 2020-08-20 and 2021-01-04, exactly when the liquidity issues in GME began! *Coincidence!?! I think not!*

As I speculated in a previous post \[4\], the swap holder may have exited his long-term swap position and entered more short-term options, maybe to prepare for a squeeze. I also investigated other ETFs that contain GME (IJH, MDY, VTI, IJK, MEME, VB), but none of these ETFs had such significant swap trades - or the transactions haven't surfaced yet.

****Unusual CFDs in GME:****

Usually, when any trade is performed or reported, this generates a spike in the plot. However, some CFD positions are regularly updated, which can be observed as a continuous line pattern (not a spike). I've inspected many tickers (from Rüssel 1000 ;-)), and found ***this pattern is highly unusual***. Only a few other tickers have a similar pattern, many of which also had price surges in January 2021.

[GME timeline, daily traded swaps. In general, spikes on this plot are new trades. However, there is also some trader who constantly announces his CFD position.](<https://preview.redd.it/pgoi63zozl81.png?width=3510&format=png&auto=webp&s=504f3d10c8ae10ecccc18b888d352b23f9af052c>)

Often those trades are made as a pair with distinguishing parameters, which may be towards multiple counterparties or as part of a hedging strategy. Those positions were entered on interesting dates: 2021-02-18, 2021-05-21, 2021-08-20, and 2021-11-19. The most recent date is 2022-04-01. If you look up the stock chart, each of those trades was after a bull phase. See how these spikes appeared ***after*** a price increase happened? (well, sometimes timed a bit poorly). Conservatively estimated, the rolling CFD position is at least 100k shares.

Another indicator is the expiration date of the CFDs: Those will expire on January 25th and April 12th 2023, and in 2026.

****Good news - We can see other traders go long:****

When Ryan Cohen bought 100k shares in March, swaps decided to follow. In May, the portfolio swaps activity returned:

[Similar to the GME plot above with GME but with "Money" on the y axis.](<https://preview.redd.it/erzm7bsujlz81.png?width=3510&format=png&auto=webp&s=0dbfe9d847b90158850009a8bc340dc26d735334>)

Furthermore, GME.N, the NYSE-traded equivalent of GME had two interesting swap trades:

[GME.N timeline. Usually not very active, but there are huge trades in March.](<https://preview.redd.it/2aopz6z1klz81.png?width=3510&format=png&auto=webp&s=3e347e85b9d1bfc062ab738f4159d3ad96f27c99>)

In GME.N, someone entered a 17 million USD and a 21 million USD swap in March, just after the 100k shares buy-in of Ryan Cohen. Both trades are more significant than any other swap trade in the GME ticker. Is there a reason to trade in this ticker rather than directly in GME?

This bullish sentiment in March also appeared in GME swaps. A second bullish phase happened in the last two weeks; we saw that already on Thursday when the trading was halted. This volatility already announced itself in the swaps the day before, when several trades ranging up to 4 million USD appeared.

I see this as a sign that "big money" goes long GME; someone who spends that money on a swap did a proper risk assessment.

****Other stocks for comparison:****

Let's first look at a regular boomer stock; in case you typed wrong while buying, here is GM:

[GM swaps; Green line: someone bought 3 million GM stock through portfolio swaps in March. Red line: a short position in April using a basket portfolio swap.](<https://preview.redd.it/226o7zybkz81.png?width=3510&format=png&auto=webp&s=abe59170fe56d2b30d3f439b772d64a49e001b00>)

[Ah, well, Popcorn also has this unusual pattern with CFDs. However, the NYSE traded ticker does not have these bullish trades of GME.N; but rather a few large basket portfolio swaps (maybe new shorts!). Also, the CFDs here expire only in 2026.](<https://preview.redd.it/p3odk2ueklz81.png?width=3510&format=png&auto=webp&s=6fb4c89643e9895ac35fec8daf17c437126b3ee1>)

[BBBY timeline](<https://preview.redd.it/a4adzcboklz81.png?width=3510&format=png&auto=webp&s=f29662630e31aa77d061442ee257afd44a15e12a>)

BBBY. Orange: Multiple swap positions were terminated in March, largest transaction has 800k shares; someone terminated his large portfolio swaps. Blue line: A CFD with 300k shares daily peak, several long-term CFD positions from January surfaced.... *How I interpret this: Short sellers did not learn from their mistakes and increased their short position on BBBY in January.*

[BRK-B also had an interesting pattern....](<https://preview.redd.it/kn69ky2tklz81.png?width=3510&format=png&auto=webp&s=a18bf299fe8e35abe2cac2afd03ad8cf05655269>)

[1] (https://en.wikipedia.org/wiki/Short_squeeze)(https://en.wikipedia.org/wiki/Short_squeeze)

[2] Short selling regulation after the financial crisis – First principles revisited, Grünewald et al., 2010,

\[3] <https://www.investopedia.com/articles/stocks/09/trade-a-cfd.asp>

\[4] "Swaps my be linked to the enormous short interest of XRT" by [[u/MyFirstBanana](https://www.reddit.com/u/MyFirstBanana/)](<https://www.reddit.com/u/MyFirstBanana/>)