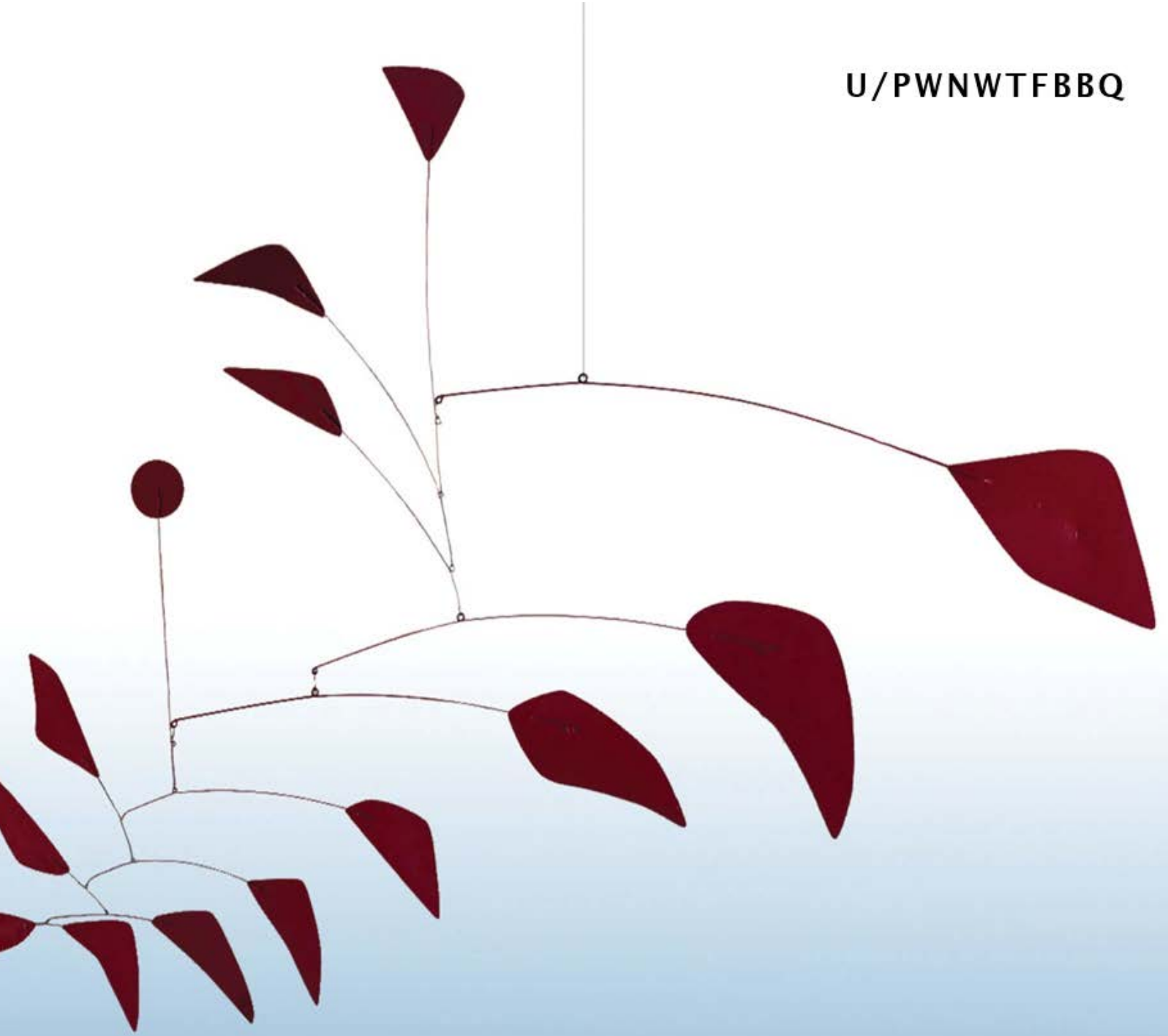


U/PWNWTFBBQ



THE  
**ALGORITHM**

HAS BEEN DOING THIS SHIT FOR YEARS

PARTS 1 & 2



# The algorithm has been doing this shit for years: Part 1

Education | Data

I am not a financial advisor. IRL, I'm an engineer with a strong stats background who spends too much time on the internet.

Aight. So, shit is about to get real real here. Buckle up. Hold onto your tendies. Keep your hands diamond, your balls titanium and your asshole clenched.

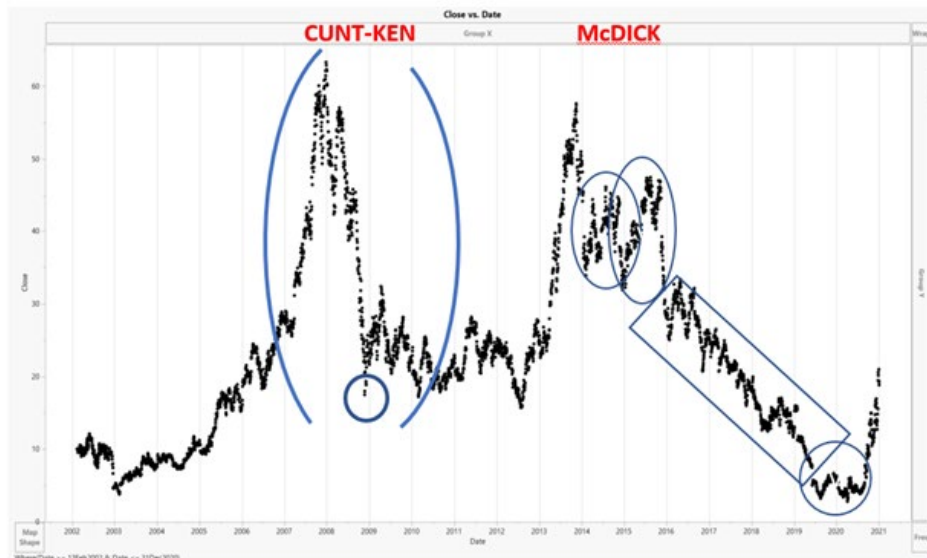
## Background History

Some time ago, I noticed a repeating trend with the GME share price. This was the image was from that [post](#). Since people often made the comment about needing more data to prove if shit was going down, I decided to provide it.



## A History of C\*\*\*-KEN ({}°) and McDICK 8==D~~

Before I go too further, I want to identify a few key time frames. One is the Citadel Unusual Number of Tomfuckery Knavish Economy of Nakedness era occurring in the earlier years of GME (~2008), and Melvin's Constant Decreasing Intentional Current Kbullshit era (~2015), which I will refer to as C\*\*\*-KEN and McDICK respectfully. I have so kindly made a graphical representation of this for your viewing pleasure. Periodically, some of the dates have not been presented for formatting and scaling purposes (and because length doesn't matter, and as a woman, I have no idea what 6 inches really is).

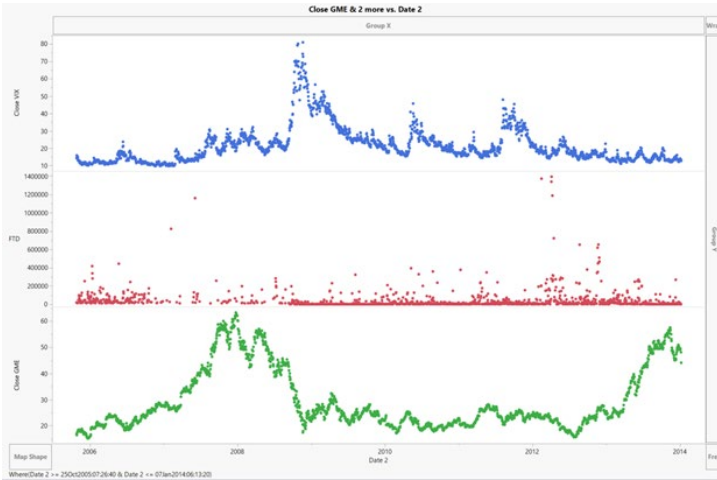


# The C\*\*\* KEN era

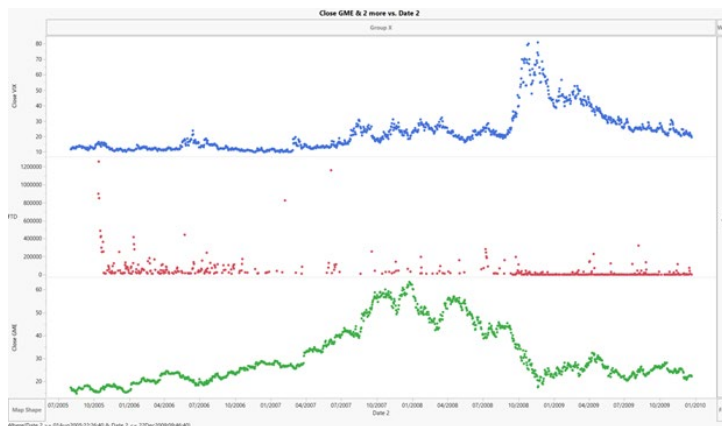
Looking in to the past and the SEC website, Citadel started to place married options in the fucking hundred and thousands starting back in like 2008. (For this table, I stopped consolidating data from the SEC website about 2009 because it's a bitch and I'm half lazy.)

Reporting Date	Title of Class	CUSIP	Value (\$1000)	Shrs / Prn Amt	Sh / Prn	Put / Call	Investment Discretion	Other Managers	Soles
9/30/2009	GAMESTOP CORP	36467W109	1,614	60,958	Sh		Shared-defi	1	60,958
9/30/2009	GAMESTOP CORP	36467W909	5,723	216,200	Sh	Ca ll	Shared-defi	1	216,200
9/30/2009	GAMESTOP CORP	36467W959	9,026	341,000	Sh	Put	Shared-defi	1	341,000
9/30/2009	GAMESTOP CORP	36467W109	4,513	170,488	Sh		Shared-defi	2	170,488
9/30/2009	GAMESTOP CORP	36467W909	4,219	159,400	Sh	Ca ll	Shared-defi	2	159,400
9/30/2009	GAMESTOP CORP	36467W959	2,602	98,300	Sh	Put	Shared-defi	2	98,300
6/30/2009	GAMESTOP CORP	36467W109	256	11,639	Sh		Shared-defi	1	11,639
6/30/2009	GAMESTOP CORP	36467W909	5,769	262,100	Sh	Ca ll	Shared-defi	1	262,100
6/30/2009	GAMESTOP CORP	36467W959	5,144	233,700	Sh	Put	Shared-defi	1	233,700
6/30/2009	GAMESTOP CORP	36467W909	3,119	141,700	Sh	Ca ll	Shared-defi	2	141,700
6/30/2009	GAMESTOP CORP	36467W959	2,296	104,300	Sh	Put	Shared-defi	2	104,300
3/31/2009	GAMESTOP CORP	36467W109	23,567	841,080	Sh		Shared-defi	2	841,080
3/31/2009	GAMESTOP CORP	36467W109	47	1,664	Sh		Shared-defi	1	1,664
3/31/2009	GAMESTOP CORP	36467W909	729	26,000	Sh	Ca ll	Shared-defi	2	26,000
3/31/2009	GAMESTOP CORP	36467W909	5,926	211,500	Sh	Ca ll	Shared-defi	1	211,500
3/31/2009	GAMESTOP CORP	36467W959	667	23,800	Sh	Put	Shared-defi	2	23,800
3/31/2009	GAMESTOP CORP	36467W959	5,084	181,800	Sh	Put	Shared-defi	1	181,800
12/31/2008	GAMESTOP CORP	36467W109	6	265	Sh		Shared-defi	—	265
12/31/2008	GAMESTOP CORP	36467W109	130	6,000	Sh		Shared-defi	3	6,000
12/31/2008	GAMESTOP CORP	36467W909	3,728	172,100	Sh	Ca ll	Shared-defi	1	172,100
12/31/2008	GAMESTOP CORP	36467W909	784	36,200	Sh	Ca ll	Shared-defi	2	36,200
12/31/2008	GAMESTOP CORP	36467W959	2,437	112,500	Sh	Put	Shared-defi	1	112,500
12/31/2008	GAMESTOP CORP	36467W959	134	6,200	Sh	Put	Shared-defi	2	6,200
9/30/2008	GAMESTOP CORP	36467W959	1,502	43,900	Sh	Put	Shared-defi	2	43,900
9/30/2008	GAMESTOP CORP	36467W959	2,521	73,700	Sh	Put	Shared-defi	1	73,700
9/30/2008	GAMESTOP CORP	36467W909	7,783	227,500	Sh	Ca ll	Shared-defi	1	227,500
9/30/2008	GAMESTOP CORP	36467W909	4,772	139,500	Sh	Ca ll	Shared-defi	2	139,500

How fucking bad can this get? Like.... Really? IDK. Let's look at the GME close, GME FTD, and VIX close starting when the FTD was first recorded on 10/12/2005.



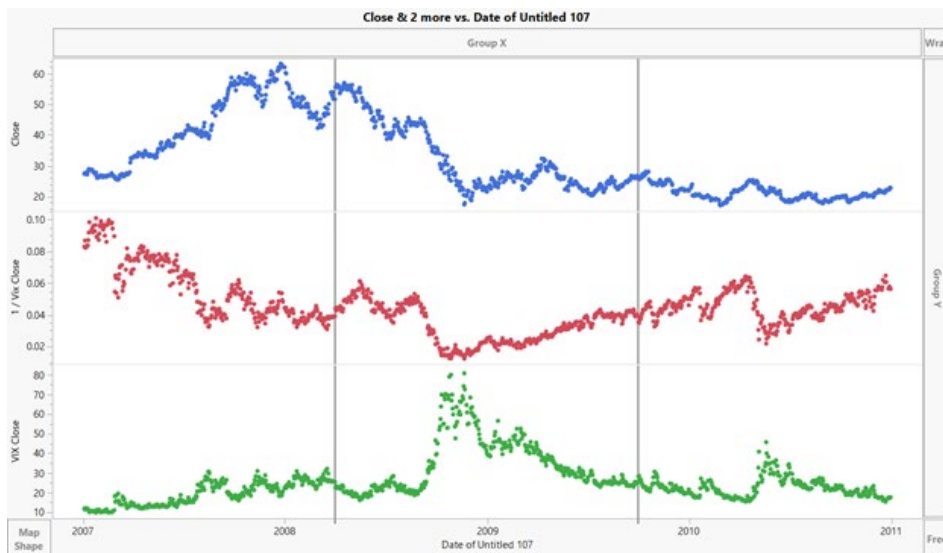
Hmm.... It looks as if shit got real real in late 2008 when the little red dots turned into a stream of menstrual blood basically when GME was getting a bunch of FTD's on the rag, I mean reg.



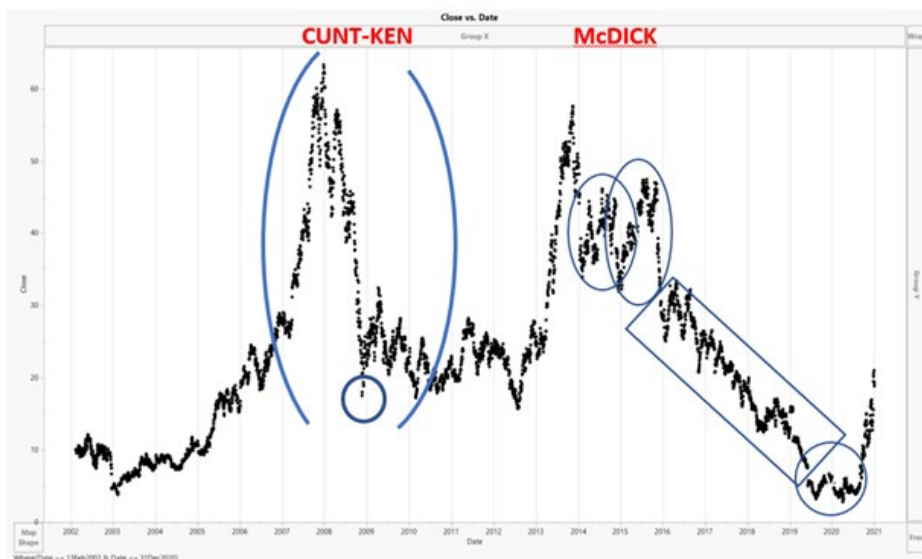
Wasn't Citadel first recorded to fuck shit up in 2008Q3?



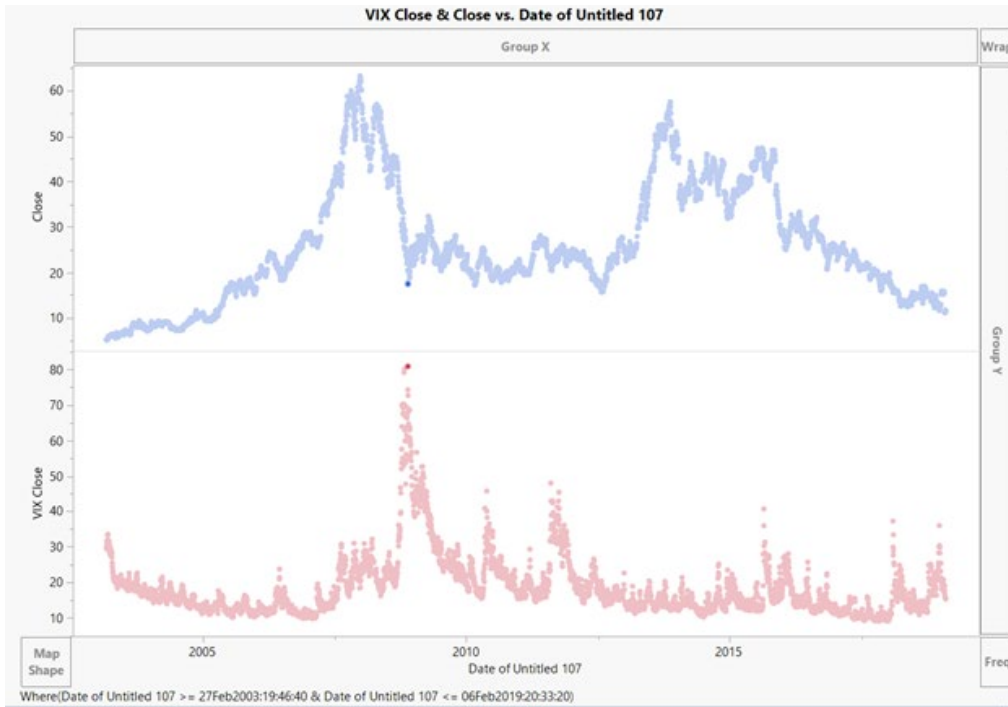
What other fuckery happened around this time?! How fucking bad can this get? Like.... Really? IDK, man. Let's look at a range of values from 01/01/2007 to 12/31/2010 to look at comparing values and also add some lines to show where 03/31/2008 and 09/30/2009 are located. It also looks inverse so let's throw in a 1 / VIX close into that group.



Want to know why I clearly have identified the location of the clit in this blue waffle?!



This is why. Right around 11/21/2008, VIX had a high that will not be seen **again until 2020**.



It would thus be inferred that there is a STRONG Fucking correlation of the inverse VIX to the C\*\*\*-KEN.

## VIX and McDICK

In [May 2014](#) (circled within the first blue ball), GME short interest was noted to be markedly increased from ~18% to 26%.

### Gamestop Corp



Source: Markit

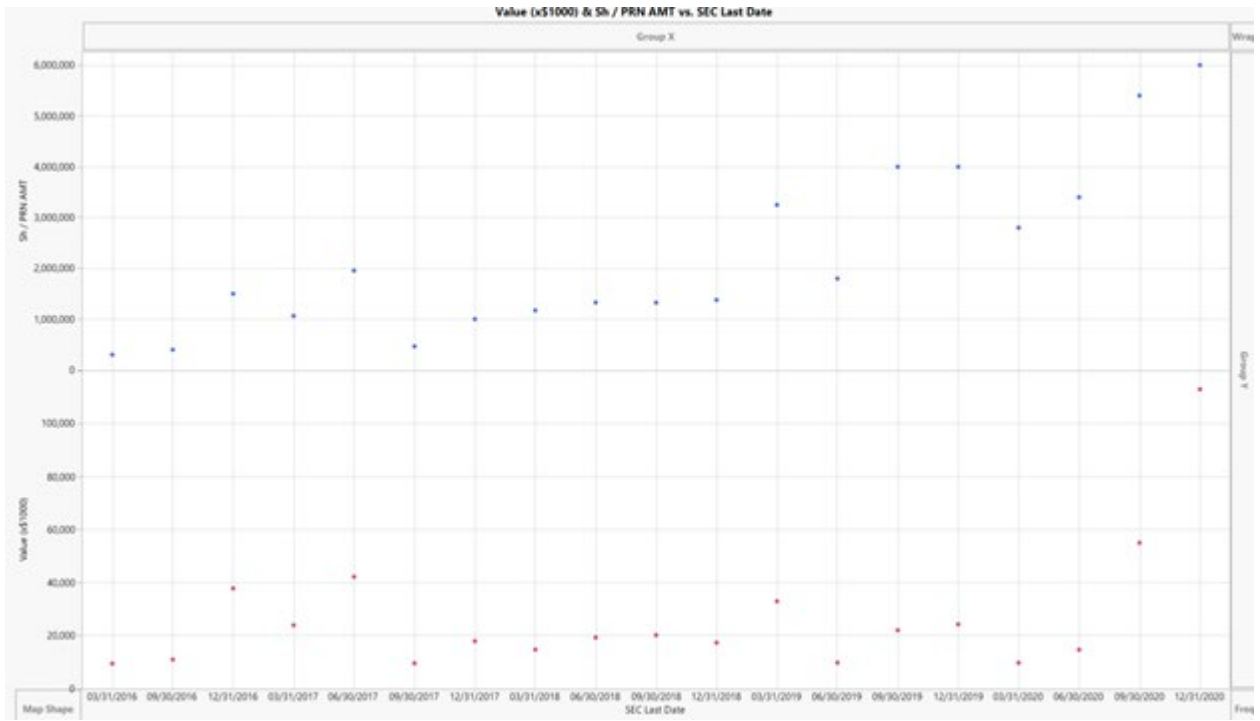


[This value](#) increased from ~25% to 32% in July.

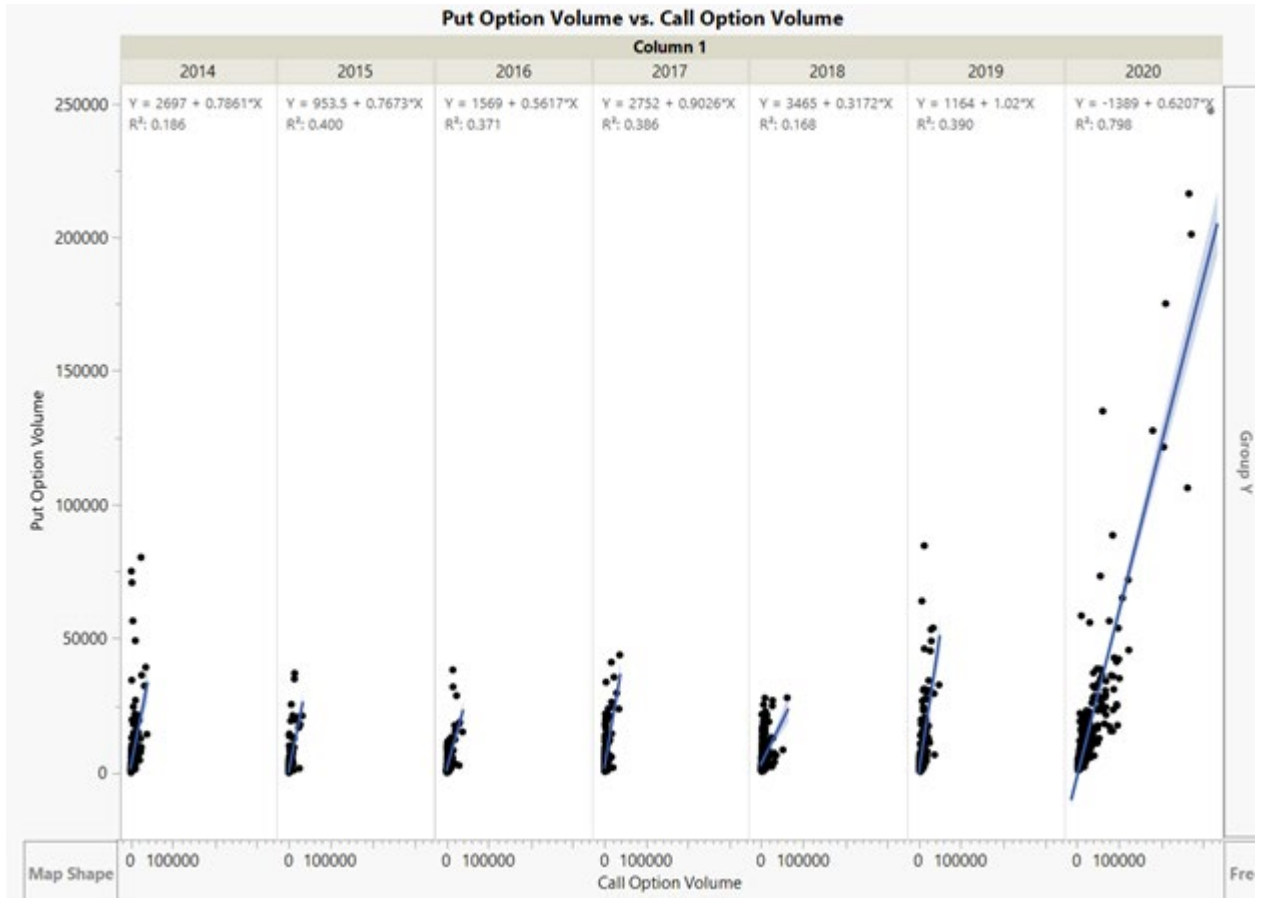


Per the SEC quarterly filing, McDICK entered around the 2nd blue ball.

Date	Melvin Puts	Value (x\$1000)
2016Q1	300,000	9519
2016Q2	N/A	N/A
2016Q3	400,000	11036
2016Q4	1,500,000	37890
2017Q1	1,064,700	24009
2017Q2	1,955,800	42265
2017Q3	465,900	9625
2017Q4	1,001,600	17979
2018Q1	1,173,100	14805
2018Q2	1,328,100	19350
2018Q3	1,325,700	20243
2018Q4	1,378,400	17395
2019Q1	3,250,000	33020
2019Q2	1,800,000	9846
2019Q3	4,000,000	22080
2019Q4	4,000,000	24320
2020Q1	2,800,000	9800
2020Q2	3,400,000	14756
2020Q3	5,400,000	55080
2020Q4	6,000,000	113040



Here is even the call and put volume of by year to show the number of marriages going on:





From the OBV, it doesn't really look like it's retail. The OBV (blue) pretty fucking much remained the same (if not trended a wee bit up) while the share price (black) dropped like hot sauce. Looks a lot like what we've been seeing now while we have been holding it in and prairie dogging it until we hit MOASS.



So.... Like WTF happened in 2019?

[The numbers of shares dropped by a shit ton.](#) This is why we see a drastic dip in the OBV that was presented in the beginning.

## To be continued

Images speak louder than words and reddit has a cap on that. So here it [part 2](#).

[part 1 tweet](#)

# The algorithm has been doing this shit for years: Part 2

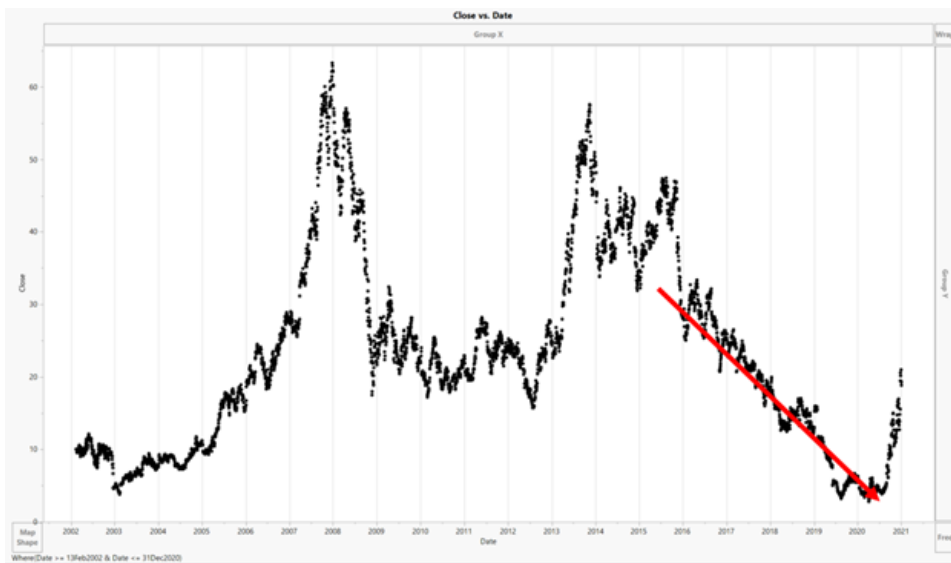
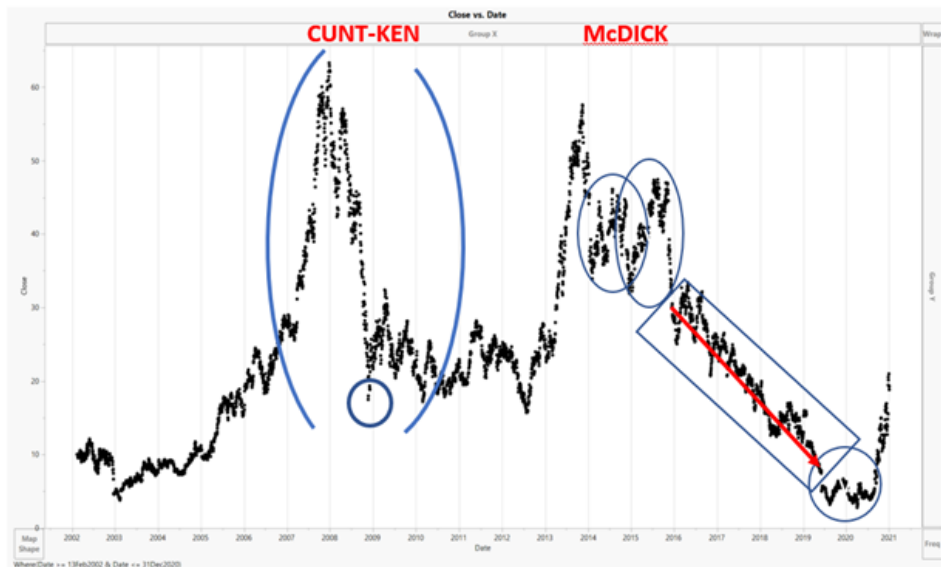
DD

And we're back

This is a continuation from [part 1](#) since I used so many images in explaining myself.

So, we have some options in line pun

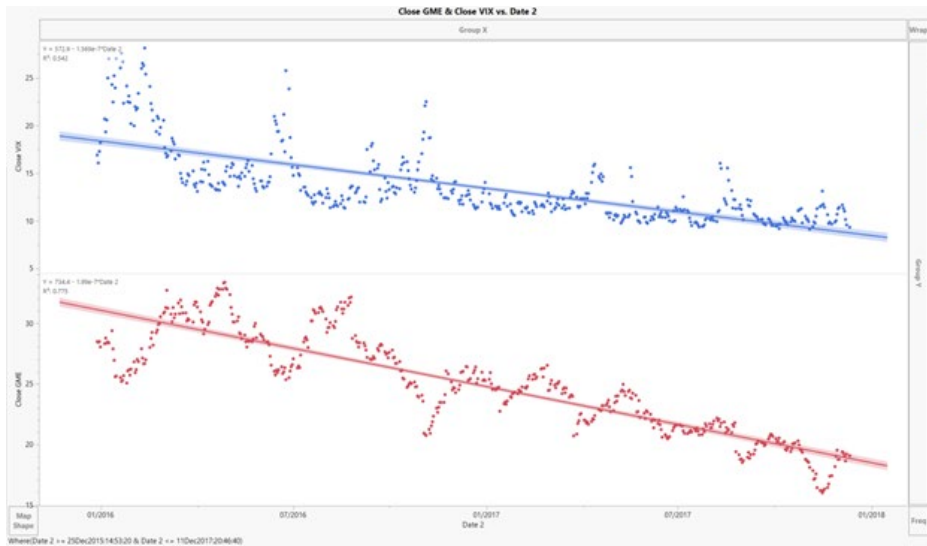
The shaft of the McDICK era was seen to have a noticeable constantly linearly decreasing value from ~2016 to ~2019.



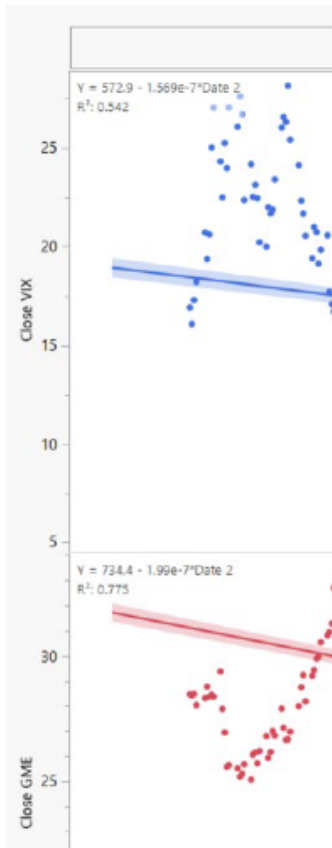
From the OBV, it does not appear that retail is causing the price drop, let's check out the VIX and see what fucking happens when we put these together!!!

# GME must be a woman because it has a cycle

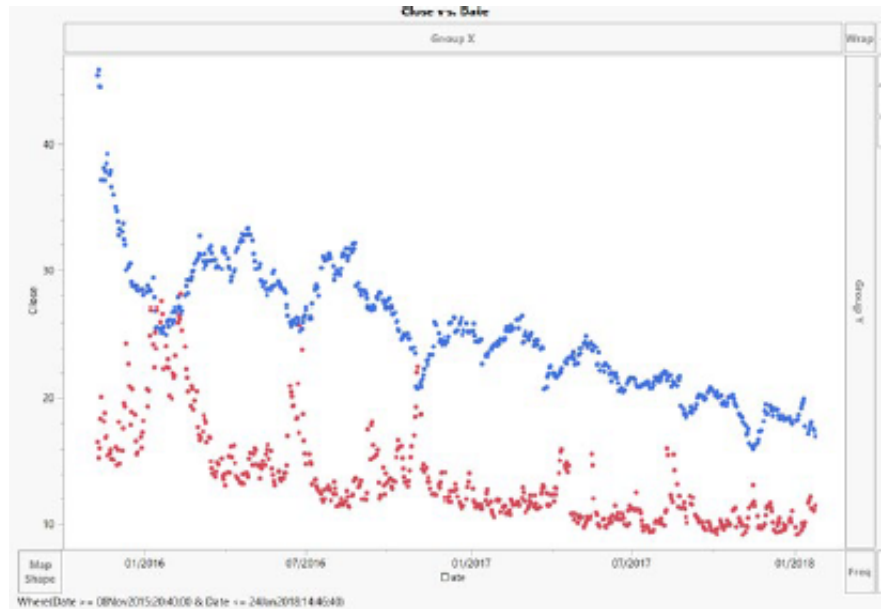
While the VIX R^2 may not be the highest check out the fucking regression equation.



During this time, GME and VIX were decreasing at THE SAME FUCKING RATE.



Shit, the max of the VIX was even equal to the low of GME. Nice double helix.



Same rate as well moving inverse similar to the C\*\*\*-KEN era.

Same rate as well moving inverse similar to the C\*\*\*-KEN era.

## The cycles

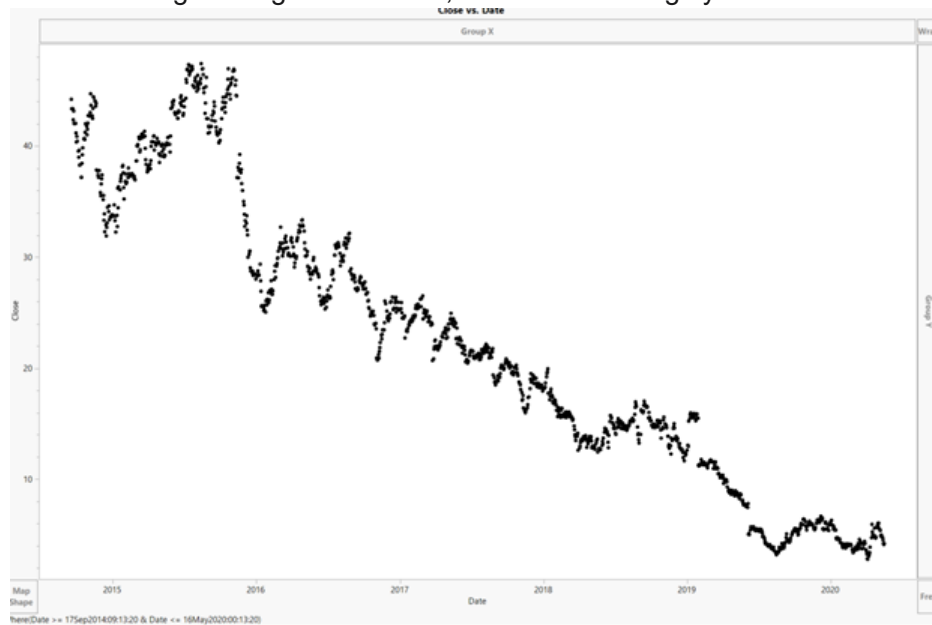
Let's look at volume because that's always a fun one. I've had a column for the median values for that month to add some perspective as well as a column for how much time greater the max is in compared to that median. The median "Median / Max" was about 2.81 so I've highlighted any value greater than 2.9.

Yes	Month	Max Volume	Median Volume	Median / Max	Yes	Month	Max Volume	Median Volume	Median / Max
2012	Jan	6956000	3350800	2.075922168	2016	Jan	8089400	2769000	2.921415674
2012	Feb	8534000	3099150	2.753658261	2016	Feb	3286800	1767250	1.859888732
2012	Mar	11151700	3632900	3.069641333	2016	Mar	8247200	2526250	3.264801682
2012	Apr	5003000	2917050	1.715088874	2016	Apr	22220500	2135100	10.40724088
2012	May	12019700	3285050	3.658909301	2016	May	9935800	2963600	3.352611688
2012	Jun	8637800	3185000	2.712025118	2016	Jun	4522100	2255700	2.004743539
2012	Jul	3817800	2040100	1.871378854	2016	Jul	7792200	2505700	3.10978968
2012	Aug	11132700	3850900	2.890934587	2016	Aug	14493400	2360100	6.141010974
2012	Sep	7087200	3392800	2.088894129	2016	Sep	3607000	1790300	2.014746132
2012	Oct	4904600	2337300	2.098404142	2016	Oct	5481500	2151200	2.548112681
2012	Nov	10941900	2913800	3.755199396	2016	Nov	13653300	2321100	5.882254104
2012	Dec	4447500	2521900	1.763551291	2016	Dec	3383300	1964800	1.721956433
2013	Jan	11131200	2857500	3.895433071	2017	Jan	14823900	2288950	6.476288254
2013	Feb	9977800	3084800	3.234504668	2017	Feb	7757900	1752900	4.425751612
2013	Mar	9843200	1990950	4.943971471	2017	Mar	15944600	2934200	5.434033575
2013	Apr	7021500	2998650	2.341553699	2017	Apr	3754500	2345300	1.600861297
2013	May	13867200	2908850	4.767244787	2017	May	14212000	2428700	5.851890205
2013	Jun	8900700	4152100	2.143662243	2017	Jun	4211400	2314150	1.81984746
2013	Jul	4706300	1900650	2.476152895	2017	Jul	3838400	1615400	2.376129751
2013	Aug	10136900	2138650	4.739859257	2017	Aug	20500700	2123500	9.654202967
2013	Sep	3692300	1751650	2.107898267	2017	Sep	2072150	1334700	1.615230558
2013	Oct	3179800	1561000	2.037027546	2017	Oct	2578400	1702400	1.514567669
2013	Nov	14608000	2547750	5.73290158	2017	Nov	20142400	3821500	5.270809891
2013	Dec	8215700	2968200	2.767906475	2017	Dec	4361300	2971500	1.467709911
2014	Jan	23506700	4541300	5.176205051	2018	Jan	15445800	3662600	4.217168132
2014	Feb	6983900	3448600	2.025140637	2018	Feb	5640900	3031200	1.86094616
2014	Mar	10618300	2958200	3.589446285	2018	Mar	25461800	3969900	6.413713192
2014	Apr	6783500	3352200	2.023596444	2018	Apr	11133000	3692900	3.013891522
2014	May	6017900	2586600	2.326567695	2018	May	10236900	4039850	2.533980222
2014	Jun	5057100	2058700	2.456453101	2018	Jun	25824000	5148600	5.015732432
2014	Jul	12551200	2169500	5.785296151	2018	Jul	4721800	2147900	2.198332556
2014	Aug	8578300	2092000	4.100525813	2018	Aug	14694900	2529100	5.810327785
2014	Sep	3073200	2078000	1.480346821	2018	Sep	17471600	2791000	6.259978502
2014	Oct	4116200	2483600	1.657352231	2018	Oct	4059800	2241300	1.811359479
2014	Nov	18761100	2570000	7.300038911	2018	Nov	12480800	2754300	4.531387285
2014	Dec	6784300	4135400	1.640542632	2018	Dec	4423000	2436600	1.815234343
2015	Jan	7436600	3212700	2.314750833	2019	Jan	32870300	2984900	11.01219471
2015	Feb	2434400	1363100	1.785929132	2019	Feb	4271500	2820200	1.514608893
2015	Mar	5495800	1772500	3.100592384	2019	Mar	6171600	3089900	1.997346192
2015	Apr	2464800	1332100	1.850386608	2019	Apr	26597900	4415700	6.023484385
2015	May	8682800	1198400	7.245327103	2019	May	5697100	2654050	2.146568452
2015	Jun	3292800	1833550	1.795860489	2019	Jun	39354200	5071700	7.759567798
2015	Jul	2715600	1499100	1.811486892	2019	Jul	16778200	5880000	2.853453574
2015	Aug	8430500	1619000	5.207226683	2019	Aug	29177300	5691400	5.1265937
2015	Sep	2536900	1659000	1.532870091	2019	Sep	34005000	8914250	3.814678745
2015	Oct	2302100	1151950	1.998437432	2019	Oct	8154900	4213100	1.935605611
2015	Nov	16933800	1986950	8.522509374	2019	Nov	5210400	2889950	1.802987767
2015	Dec	6593000	2790550	2.362616688	2019	Dec	19517800	4482100	4.354610562
					2020	Jan	12561900	3532100	3.556496135
					2020	Feb	4820600	2742300	1.757867483
					2020	Mar	7722200	4348300	1.775912426
					2020	Apr	13506600	4064300	3.323229092
					2020	May	4068100	2440350	1.667014977
					2020	Jun	10606400	3553900	2.98443963
					2020	Jul	4555400	2351100	1.937561142
					2020	Aug	37976000	3341100	11.36631648
					2020	Sep	34752500	9816600	3.540176843
					2020	Oct	77152800	8705350	8.862687887
					2020	Nov	31983500	6461550	4.949818542
					2020	Dec	30652700	8580400	3.572409212

Let's see how many times each month were highlighted:

Month	Count
Jan	7
Feb	2
Mar	7
Apr	4
May	5
Jun	3
Jul	2
Aug	8
Sep	3
Oct	1
Nov	8
Dec	2

Hmmm... Jan, Mar, Aug, and Nov were the most frequent months that had a stupid high volume. I did not include 2012 solely because I like nice formatting. During the McDICK, we see oscillating cycles that have been occurring for a shit long time.



Seems like quite the commonly occurring overnight changes. Also, I focused on overnight change since I made the assumption retail isn't really a factor (#SorryNotSorry Europoors) and therefore, more just hedge fund fuckery. Overnight has been calculated as:

$$\frac{Open_n - Close_{n-1}}{Close_{n-1}}$$

Looking at values from 2012 to 2020, it looks as if the greatest ones occurred like the end of each quarter. Interesting.

Year	Month	Overnight Change	Year	Month	Overnight
2012	Jan	-0.844394819	2015	Jan	-3.56633
2012	Feb	-2.450166113	2015	Feb	-1.04361
2012	Mar	-1.324503311	2015	Mar	-4.36075
2012	Apr	-0.938333375	2015	Apr	-0.62913
2012	May	-4.318613244	2015	May	-6.47088
2012	Jun	-2.137643379	2015	Jun	-3.98784
2012	Jul	-1.042944849	2015	Jul	-0.94125
2012	Aug	-1.269941127	2015	Aug	-6.03234
2012	Sep	-0.569421813	2015	Sep	-1.19845
2012	Oct	-1.07758616	2015	Oct	-0.47732
2012	Nov	-1.332153641	2015	Nov	-12.6061
2012	Dec	-1.919597902	2015	Dec	-0.61657
2013	Jan	-7.353535394	2016	Jan	-9.83009
2013	Feb	-6.900410552	2016	Feb	-0.71644
2013	Mar	-4.536865613	2016	Mar	-10.8097
2013	Apr	-1.083585173	2016	Apr	-0.36563
2013	May	-2.298507463	2016	May	-6.35055
2013	Jun	-1.177047601	2016	Jun	-1.85267
2013	Jul	-0.788108534	2016	Jul	-0.65086
2013	Aug	-2.020806323	2016	Aug	-8.63178
2013	Sep	-0.805643472	2016	Sep	-1.6546
2013	Oct	-0.946745543	2016	Oct	-0.59376
2013	Nov	-4.290617931	2016	Nov	-1.53689
2013	Dec	-0.500700981	2016	Dec	-0.10667
2014	Jan	-15.26919241	2017	Jan	-7.31462
2014	Feb	-1.103225637	2017	Feb	-1.85304
2014	Mar	-4.7044	2017	Mar	-10.6007
2014	Apr	-1.268336266	2017	Apr	-1.46042
2014	May	-1.377753075	2017	May	-3.30008
2014	Jun	-0.503452544	2017	Jun	-3.0303
2014	Jul	-1.770763298	2017	Jul	-0.66269
2014	Aug	-0.725872213	2017	Aug	-0.92068
2014	Sep	-0.713603694	2017	Sep	-5.51424
2014	Oct	-1.989252635	2017	Oct	-1.26162
2014	Nov	-10.16639868	2017	Nov	-11.2098
2014	Dec	-2.333421423	2017	Dec	-2.19298
2015	Jan	-1.18552798	2018	Jan	-20.0645
2015	Feb	-0.990361323	2018	Feb	-1.4419
2015	Mar	-2.887349758	2018	Mar	-4.48663
2015	Apr	-0.792272859	2018	Apr	-12.2772
2015	May	-0.653918544	2018	May	-1.76887
2015	Jun	-0.703907795	2018	Jun	-29.7954
2015	Jul	-1.010105578	2018	Jul	-3.861
2015	Aug	-6.625029818	2018	Aug	-2.30548
2015	Sep	-2.23634887	2018	Sep	-17.6817
2015	Oct	-0.92080573	2018	Oct	-1.7452
2015	Nov	-15.58838337	2018	Nov	-0.88968
2015	Dec	-5.59199725	2018	Dec	-19.3548
2016	Jan	-3.566333682	2019	Jan	-11.9705
2016	Feb	-1.043611629	2019	Feb	-4.71976
2016	Mar	-4.360749917	2019	Mar	-14.3791
2016	Apr	-0.629128202	2019	Apr	-6.77362
2016	May	-6.470977318	2019	May	-3.47107
2016	Jun	-3.987842765	2019	Jun	-8.48126
2016	Jul	-0.941249625	2019	Jul	-1.47783
2016	Aug	-6.032341418	2019	Aug	-2.11864
2016	Sep	-1.198449024	2019	Sep	-9.52381
2016	Oct	-0.47732301	2019	Oct	-4.89251
2016	Nov	-12.60610834	2019	Nov	-3.39967
2016	Dec	-0.616570304	2019	Dec	-17.8276



Let's check the months that had the highest overnight change as well as volume, and look into the minute candles to see what they fuck is going on. Behavior looks REALLY fucking similar on these days:







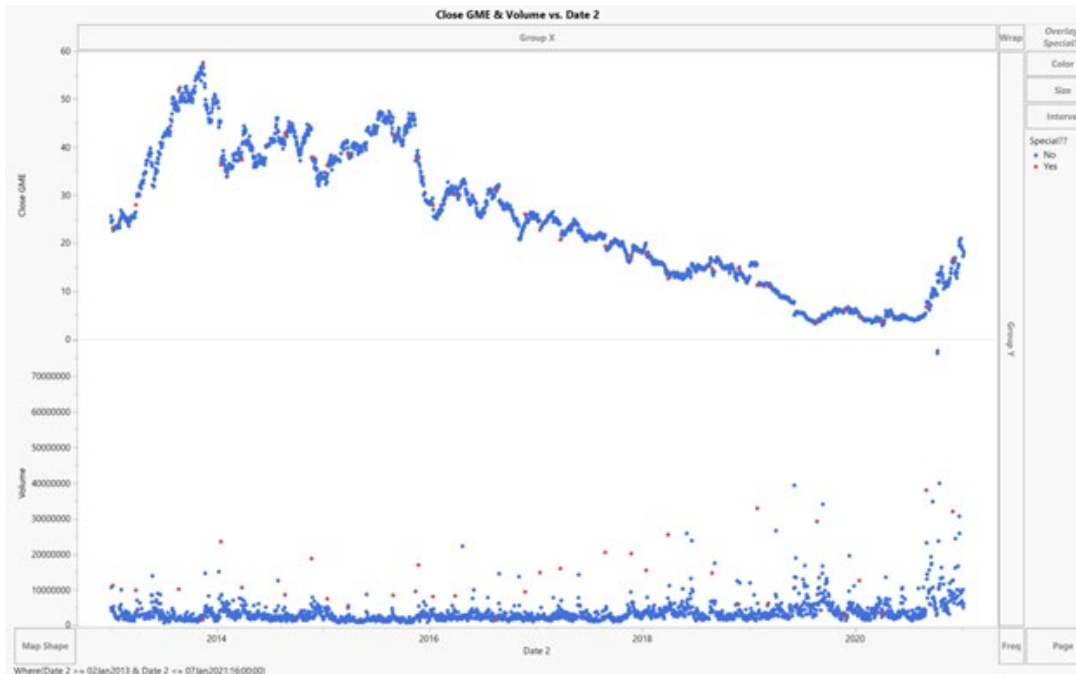
Let's make a fancy table to list the day of the month and year. Well, shit on stick. They often have bene occurring around the same time frame if not the same fucking day. 2019 seems all fucked but remember how the OBV dropped due to the share repurchase?

	Jan	Mar	Aug	Nov
2013	1/8/2013	3/28/2013	8/22/2013	11/21/2013
2014	1/14/2014	3/27/2014	8/22/2014	11/21/2014
2015	1/14/2015	3/27/2015	8/28/2015	11/23/2015
2016	1/12/2016	3/28/2016	8/26/2016	11/23/2016
2017	1/13/2017	3/24/2017	8/25/2017	11/22/2017
2018	1/12/2018	3/29/2018	8/27/2018	11/26/2018
2019	1/29/2019	3/8/2019	8/22/2019	11/26/2019
2020	1/14/2020	3/30/2020	8/31/2020	11/30/2020

Let's check the number of net total days in between those days:

	Jan	Mar	Aug	Nov	
2013			79	147	91
2014	54	72	148	91	
2015	54	72	154	87	
2016	50	76	151	89	
2017	51	70	154	89	
2018	51	76	151	91	
2019	64	38	167	96	
2020	49	76	154	91	

Let's check these dates out. The red dates are for the ones from the greatest overnight change and you can also see how they often are the ones with a ridiculously high volume as well.



## Conclusion / Thoughts

C\*\*\*-KEN and McDICK have been acting in extremely similar ways due to both exhibiting a stupid number of married options. The most recent data has been showing cycles that have been repeating itself with even the dates being basically the same. Ultimately, shit has been fucked up for a long time.

## TLDR

The algo for GME has been so stupidly overpowering anything else that even the dates are pretty much the fucking same. Hold the fucking line.

## Peer Review / Comments

I've already ran this by some peers on the discord. [u/Leenixus](#) made a [post](#) from my findings. [u/Leenixus](#) had this specifically to share:

-All you need to know is that the 30 largest NSCC participants need to post / give this money to the NSCC(DTCC) once a month for netting monthly expiring options (e.g the options expiring on the '3rd Friday of each month).

This does NOT mean funds. NSCC participants are broker dealers. So the 30 largest may include brokers that self clear their funds (eg. Citadel) but it may also include exclusively clearing houses (eg. Apex). The list is publicly available and does NOT include any hedge funds directly.

-The amount they HAVE to post to the NSCC's account is the largest amount they previously required to post in the last 24 months (In our case it's 2021 January, cause all those options having to be cleared marged RH).

This, while true, is again NOT a fund. It is broker specific and front brokers like RH are obviously more at risk due to their size compared to something like Fidelity. However, notably, RH would NOT be on this list at all since they are no way a top 30 NSCC member

-The top 30 NSCC members have to post / give this money to the NSCC on the 3<sup>rd</sup> Friday of each month and the 2 days before that.

They have to give to the NSCC BY this date not necessarily on it.

On the 7<sup>th</sup> Business day, the NSCC returns the SLD to the Participants (if there's anything left). If there's nothing left from the SLD and it was all used to net positions, then the NSCC (DTCC) will margin call the participant and request an additional SLD (Robinhood 28 January)

This is NOT accurate. Robinhood's additional SLD was a direct result of market volatility at the end of January. There is nothing to suggest this since they were either 1) not on this top 30 list (which they very likely were not) or 2) in the RH prospectus for their IPO they explicitly state exactly what led to their additional liquidity requirement and THIS was not part of it.

Edit: Added peer review / comments

changed net days table since it was off by a cell

[GME share price sauce](#)

[Part 2 Tweet](#)

