

Market Insights

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Retail Revolt: A War on Wall Street

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After a year of unprecedented disruption and several vaccines in hand, market participants headed into 2021 with the hope of a return to normalcy. As investors square off against Wall Street, however, market disruption appears alive and well in the new year. GameStop, AMC and other heavily shorted stocks experienced a so-called “short squeeze,” when traders who bet on a fall are forced to buy at elevated prices in order to avoid even greater losses. Ironically, the additional purchasing pressure by traders attempting to cover shorts further exacerbates the supply/demand imbalance, pushing shares higher. The result? GameStop spiked one thousand percent within a matter of weeks, and \$15 billion in losses were reportedly incurred by hedge funds.

How did we get here?

This isn't the first time we've witnessed a flurry of short squeezes. There were episodes of short-squeezing in the early 2000s, and in the 2008 financial crisis, and we saw some of it in August 2020 when short interest in a few Nasdaq stocks surged. What made the GameStop saga unique, however, was the magnitude of the stock appreciation, with GME increasing from \$20 to \$353, over 1600% appreciation, in just 18 days. What began as a retail revolt against short-selling hedge funds led to a broad run on the market, where a few institutional firms hopped onto the bandwagon to make quick money. This

year's GameStop rally represents one of the largest short squeezes in history, but it's important to note that the rally couldn't have happened without the build-up that occurred in 2020.

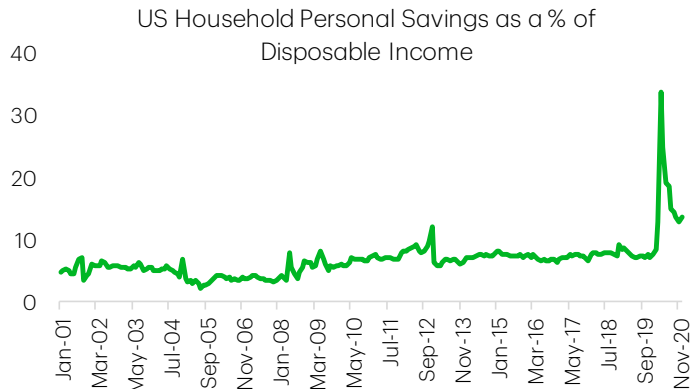
Herewith, a few of the trends that set the stage for this year's short-squeeze mania:

Retail Tailwinds

A new breed of investors emerged in 2020, and in strong numbers, according to a survey out of the UK by Boscobel & Partners that explores the behavioural tendencies of the new traders¹. These new account holders were 50% more likely than experienced investors to get investing ideas from social media. They had a higher risk appetite, with 25% more likely to buy individual names, particularly in the tech sector. And their hobbies tended to include video gaming and online sports betting. They also had plenty of time to indulge in their newest gambling pastime, with around 19% of them furloughed due to the pandemic. In the U.S., major online brokers saw the number of new accounts grow by as much as 170% in the first quarter², and yet another study by DriveWealth³ found that, in 2020, the biggest proportion of new account holders were in their late teens. Commission-free trading also spurred the rise of retail investing in 2020, with a number of platforms beginning to offer free options trading.

Combine that with the free money being handed over as part of the fiscal stimulus and the increase in savings by households in 2020 (Figure 1), and we can see why retail investors have been so enthusiastic.

Figure 1: Savings spike amid the pandemic



Source: Bloomberg as of February 4, 2021

"Gamma squeeze"

When investors buy call options on a stock such as Gamestop, which allows them to buy the stock at a specified strike price, the dealers that sell these options (such as financial institutions) typically hedge their positions by buying the underlying stock, in case the call options are exercised. The number of shares the dealer buys is based on a ratio called an option delta that estimates the relationship between the price of the stock and the option contracts. Delta is an approximation for small changes in stock prices and is not a static number but changes as the stock price changes relative to the option strike price. It is less accurate for large changes in the stock price. Gamma measures the change in the option delta or how much the option price accelerates as the underlying stock price changes. **A gamma squeeze** happens when there is coordinated buying of call options that forces the financial institution to increase their hedge on the stock (i.e., by buying more of the stock) at an accelerated rate, which pushes the stock price up further. For firms such as hedge funds that are short the underlying stock, the consequence of this **gamma squeeze** and accelerating price leads to margin calls and forces the hedge funds to either post more capital as margin or close out their short positions (by buying the stock) at higher prices and suffering losses as a consequence. Closing out the short positions by buying physical stock drives the price even higher. Gamestop was an extreme example of this phenomenon because the short interest on the stock or open call option contracts on the stock was essentially more than the available float or the stock available for trading. This

creates a feedback loop that makes the short squeeze even more pronounced and propels the stock price much higher at an accelerating pace.

Timeline of Events

November to January 2021

Ryan Cohen, founder of the e-commerce company Chewy, buys a 10% stake in GameStop and approaches the board with a strategic plan to transition the company from a bricks and mortar video game retailer to a more sophisticated and evolved online gaming player. Ryan Cohen gains three board seats. GameStop's share price rallies 13% on the news, closing at \$20.

Mid-January 2021

GameStop remains one of the most shorted stocks in the world, with short interest representing 114% of available shares on the market — that is, the number of shares sold short is greater than the available shares in the market. At the same time, retail investors start hyping up the stock on social media outlets like Reddit and Twitter in the hopes that Cohen's turnaround plan will work, pushing the share price of GameStop higher.

Mid-January 2021 to current

The retail-driven rally in GameStop shares results in massive losses for hedge funds that shorted the stock, forcing many to cover their shorts. Looking at the daily run-up in GameStop's stock price, other hedge funds and quant firms jumped on the bandwagon on the long side, further squeezing the short positions and causing one of the largest short squeezes ever recorded.

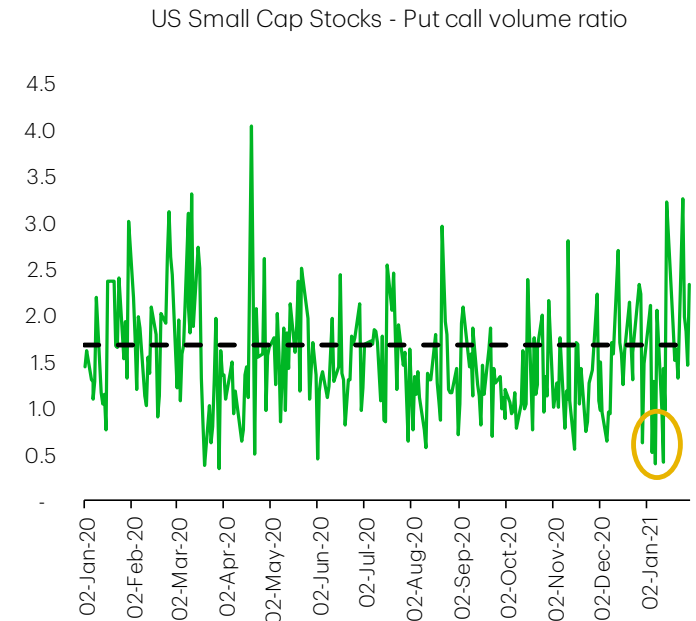
Bullish Since Q3

We've seen extreme purchasing activity in call options since at least the second half of 2020. Purchasing surged last year in June, August, November, and then rose again to 20.8 million contracts over the purchase of put contracts in January 2021 (Figure 2). The premiums small traders spent on those calls were also extreme, with a net of \$10.5 billion difference between money spent on buying calls versus open puts⁴. The same theme is supported by the U.S. small-cap put/call option ratio, which frequently touched the lower side of its average in Q4 2020 (Figure 3). Though the charts indicate the call

Figure 2: Small traders' call option buying vs put contracts

Source: OCC, Sentimentrader, as of February 2, 2021

positions on US equity indices and not particularly the stocks that were part of the Gamma squeeze event, we would like to highlight that the sentiment in the market has turned quite bullish post November 2020, where in a few pockets we are seeing an indication of irrational exuberance. GameStop episode was a classic example of irrational exuberance.

Figure 3: Heavy call positioning in small-caps in Q4 2020

Source: Bloomberg as of February 4, 2021

February 3, 2021

Panel Deconstruct

It may take some time to identify and fully dissect the confluence of factors that led to these events, by which point it may already be clear whether the GameStop phenomenon represents the beginning of a new paradigm, or merely a blip on the long road to recovery. For some sense of what this all means for retail and institutional investors alike, we asked our partners at EHP Funds, Picton Mahoney and Polar Asset Management to offer their insights.

Kenneth Sue, Senior Alternative Investments Analyst, TD Wealth: **Thanks for taking the time to join us. Can you start off by giving us a sense of how significant this event was for you?**

David Picton, President, Picton Mahoney Asset Management:

I think you'll find that this group probably weathered this a whole lot better than some of the headliners, just based on the amount of risk controls that we all have. So, if I look at our Liquid Market Neutral strategy, we were up modestly through the month, then we gave back some. We probably ended January down 60 bps, and as of today we're back up at all-time highs again.

Jason Mann, Chief Investment Officer, EHP Funds:

Almost exactly the same, actually. We were down 60 bps in our Advantage Long/Short Fund. Most of our other funds were actually up, but that one is more exposed to the U.S. Then all that unwind has moved things the other way. All quality stocks have gone back up and a lot of these lower-quality stocks have gone back down, so it's back to all-time highs.

Bill Peckford, U.S. Equity Long/Short Strategy Lead, Polar Asset Management Partners:

For the whole month of January, our Long/Short Fund was up about 2%. We did, however, have one of our worst days ever on Wednesday January 27, 2021. The combination of all the other funds that were deleveraging, selling popular longs, some of which we own, and covering their shorts, some of which we're short, so we were caught up a little bit in some of the short-squeezing that retail was doing, but probably the bigger effect had to do with other participants who were deleveraging and hurting our fund. It was one of the worst alpha days for long-short funds, so it was a bad day for us.

Sue: *What do you think was the main factor driving this retail rebellion?*

Picton:

I think GameStop had three areas of flow that contributed to it. There have been a lot of concerned people saying that short-selling should be banned. I would argue that poor risk controls at short-sellers should be tightened, and that was the biggest contributor to the losses those guys suffered. A manager must have tight controls in place, otherwise having exposure to a crowded position in an illiquid name can result in significant damage at some point in time. The second thing that happened was that you had a collaborative group develop within the Reddit forum, and they expressed their views either through individual stocks or, more importantly, through options, which led to the third level of flow: the gamma risk hedging. So, whenever a market-maker takes on a position, they have to hedge it, and as the price changes, their hedging ratio changes, at an exponential rate, and that gamma becomes an incredible flow driver. I'm not sure whether it means anything about society or anything philosophical. I think it's more a matter of individual investors who are being gravitated into a market that has been increasingly entering a bubble-like stage.

Peckford:

I agree with much of what Dave said. You asked what drove the "rebellion." Well, we believe the media is simplifying the narrative. There were plenty of participants involved in this new "short squeeze wave," ranging from banks and hedge funds, to retail investors. So, it's not totally clear to me how much of what happened is really a social movement versus a whole bunch of people trying to make some money on a short squeeze. There's also the fact that there have been so many new retail accounts. Retail account growth in the U.S. by the top five brokerage firms is up 180% from the beginning of 2020, and these new account holders are trading a lot. That generation is used to mouse-clicking their way to everything (banking, groceries, etc), so the fact that they're mouse-clicking their way through trading is not a surprise.

Mann:

In our view, there isn't one single factor but a confluence of many factors. Commission free-trading, direct stimulus cheques and easy access to trading both stocks and options set the stage. Message boards certainly aren't new, and the chasing of returns in speculative stocks by a retail crowd mirrors what we

saw during the dot-com boom. What has changed in this cycle is the undertone of populism and inequality that led to leaders like Trump being elected, and that has only been made worse by the pandemic. This "us against them" rallying cry has been a strong catalyst to move many retail traders to make risky trades not necessarily for profit motives, but to inflict damage on the perceived establishment. The combination of these factors, plus a number of hedge funds with looser risk controls, lit the powder keg that resulted in the Reddit Rally.

Sue: *Is this going to change the landscape for the foreseeable future? For example, will retail attacks on crowded shorts become a regular concern?*

Mann:

Short squeezes are nothing new. These risks have always existed, and we've had processes in place to identify them long before this event. That said, the "weaponized options" theme is a relatively new risk given that options have become favoured by the retail crowd as a way to leverage up their investing. We've been highlighting this in recent quarterly notes and it's a real risk to consider because it can massively accelerate a short-squeeze event or exacerbate a sell-off if dealers get short gamma. We've started monitoring weekly and monthly options activity, as well as popular message boards, as part of our risk-management process. We suspect this particular market theme of retail attacks will die off as they ultimately lose money on these trades, get spread too thin across multiple stocks, are co-opted by the spamming of message boards by promoters and hedge funds themselves, and as more employees return to regular work. But the consequences of easy money will likely show up as another form of risk, and these types of euphoric markets need to be closely monitored for emerging trends.

Peckford:

Yeah, this isn't new. There have been plenty of short squeeze events over the years, but with most things these days, it's faster and quicker due to ease of communication and the formation of communities online.

Sue: *How do you think the regulators will respond?*

Peckford:

I had to explain to my 17-year-old daughter a little bit of what happened, and I gave her the "used car" analogy. So, you have a \$10,000 used car. Some people are buying it for \$9,900, some people are buying it for \$10,100. And

then a bunch of guys get together on Reddit and decide they should trade it for \$300,000 — well, this is going to end badly. So, there was an outcry when the trading platforms halted buying of GameStop. What they were saying was, “No, no, we should let them pay \$400,000, \$500,000, \$1 million for this car! We should let them do that,” and actually, I agree. We should let them do that. There will be people who make a lot of money, and there will be others who lose a lot of money, and that’s how capitalism and the markets work. But you can see the logic of why regulators would look at whether there should be rules to stop this movement as there were individuals who were buying a used car for \$300,000, and as a result they would end up losing a lot of money. I hope there’s no significant regulatory change. The market works pretty well almost all the time.

Picton:

When they announced those halts in GameStop, even though as hedge-fund managers we know there’s an unwinding going on and we’d probably benefit from that, I was somewhat saddened because it’s just going to open up more of a divide between the theoretical haves and these new people who are just trying to get into this thing for the first time, and that absolutely invites regulatory scrutiny. It opens up debate about whether we should change short-selling and all these things. So, my hope is that they’ll look at it, they’ll understand that a lot of this was somewhat isolated and they will review some bad risk management at some hedge funds. They hopefully won’t find that there’s any real collusion going on. And it’ll be a light touch. Should they bring back, for instance, some kind of uptick rule? Yeah, why not. Should they increase capital requirements? Yeah, they should. Should they go much further than that? I do not think they should. I think they’re just getting into a dangerous zone of altering a market that’s actually worked pretty well.

Mann:

I’d argue that, if anything, we might actually see more constraints placed on these trading houses like Robinhood, where if you want to trade options you’re welcome to, but you have to take a course, you have to do some educational pieces. I think that’s been the failure of these platforms, that they really have not given the tools to the people, other than just saying, go for it and it’s free. They haven’t taught them how to do these kinds of trades with any sort of risk control, so if it was to come to Canada, I wouldn’t be at all surprised to see the OSC place constraints around that for inexperienced traders.

Mann:

I think this is the same lesson that has been learned over and over again. It was learned in the ‘20s, it was learned during the Nifty ‘50s, it was learned in the dot-com era, and it needs to be relearned by each new successive group of investors. Too much speculation and euphoria, coupled with excessive valuations and easy money, can create a reflexive response in investors to take on too much risk — whether in the form of retail trading activity, or hedge funds adding too much leverage or making overly concentrated bets. Easy money, while likely necessary to avoid recessions or depressions, can have unintended consequences and actually sow the seeds of the next risk event, and ironically these risk “tails” aren’t confined to market sell-offs but also market blow-offs. It’s hard to see where this stops because this time — even though there’s tons of late-cycle activity — we have the Fed telling us they’re nowhere near raising rates and they’re going to be plowing a lot of stimulus into the market. And this time around, unlike in ‘08, there’s no moral hazard. No one is blaming the Fed for flooding the market with liquidity or blaming Congress for adding stimulus because it was for all the right reasons. So, our view is that, if we’re using the ‘99 dot-com analogy, we might just be coming out of ‘98, with the long-term capital and the Fed plowing money into the system. We might have another couple of years of this craziness.

Peckford:

I would say the main lesson is, don’t underestimate the power of retail investors, and this has been true going back to 1999. I remember back then, all of a sudden, you’re running into taxi drivers and bartenders and everybody is buying stocks, and there are two effects. First, when you add them all together, it’s a lot of money. But there’s also a second effect, which is important. These new traders don’t really have the same valuation tolerances and risk controls, and therefore, they could start paying \$300,000 for that \$10,000 “used car.” That’s a bit of a problem. Social media has exacerbated the ability of retail to buy and sell the same stocks at the same time. This is going to be with us for the rest of time. There’s a lot of retail investors. They’re able to mouse-click their way to whatever they want to do and I think we should all just assume that’s a fact of life for the rest of our careers. If you lived through the 1999 investment period, then you know it kind of rhymes with this period. I remember when the first 10 or 20 or 30 stocks looked like completely crazy valuations and I thought, “Wow, this is insane.” And then a year later, there were 200 or 300 that looked like that. So, you have to be a little bit careful assuming that it’s the top tomorrow, but is it a sign of a lot of speculation and probably a sign that we’re getting closer to the top? I would say yes.

Sue: *What is the main lesson to be learned here, and how does it all end?*

Picton:

Certainly, the conditions are ripe for a bubble. I would have argued that 2020 was going to be the bubble year, and then this little thing called Covid came along, and we changed monetary policy even more dramatically. We cut rates further, we bumped quantitative easing through the roof and we even changed policy around inflation to say that we're going to not even think about thinking about raising rates until inflation averages 2%. In 1999, by the time the bubble got under way, the central bank was already tightening rates. In this case, though, we're going to be six months away from one of the best economic recoveries we've ever seen, with the most amount of money in the system, with a whole bunch of funds that have to systematically re-leverage, including the ones that deleveraged last week ... and with no policy

response in sight to this growth. And so what we're seeing today in GameStop to me is symptomatic of a number of variables that you'll likely see this year and continuing. I think the GameStop episode actually demonstrates an amazing democratization of the system. New platforms are allowing more and more people to get into the market, to do things like alternative strategies, or to speculate on single stocks or whatever the case may be. The only thing that's missing from it is the responsibility to educate people who are doing that. And that's where I think the damage is going to occur when this thing finally settles down, who knows how far from here.

Sue: ***Thanks again for your time and thoughts.***

The Way Forward

We remain invested and aligned with managers that have strict risk control measures, have a stop-loss on shorts, refrain from participating in crowded trades and keep their exposures on the short side more diversified. Given the massive rise in household savings and increased retail participation in the markets, there is no guarantee that these kinds of short squeezes are completely avoidable, but as long as the positions of our managers are backed by strong fundamental rationale and strict risk-control measures, our active managers should remain unscathed.

Massive bullish sentiment is evidenced by the fact that short interest on a median S&P 500 stock is also at 1.6%,

the lowest since 2010⁴. While we don't believe we are in the last leg of a bull run, one needs to be cautious of segments that are experiencing steep appreciation without commensurate profits and strong balance sheets.

However, if we remove certain pockets of frothy growth stocks, the broad market — especially traditional cyclicals and quality value — still have upside potential from an earnings growth perspective as economies return to normalcy in either the latter half of 2021 or in 2022. As quoted by John Maynard Keynes: "Markets can be irrational longer than you can remain solvent." As rational investors, we can mitigate our risks while acknowledging the fact that we have zero direct control over market returns. □

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