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FINDING ALPHA

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GameStop Frenzy: the Big Short Squeeze

By Muhammad Abdullah Saif, Co-VP Market Research

How it all began

To begin with, GameStop Corp. (NYSE: GME) is a retailer with over 5,000 stores selling videogames at malls. But the thing is people rarely buy video games at the malls these days due to two main reasons. On the one hand, with COVID-19 induced lockdowns people rarely go to the malls, on the other hand, nowadays most people buy video games by downloading them from the online store, both of which are reflected in GameStop's earnings over the past few quarters. Despite that GameStop's stocks soared as high as 2000% year-to-date at its peaks, the stocks started the year at $18 and surged as high as $483. The company saw its market capitalization rise from $1 billion to as high as $33.7 billion at the peak on Thursday 28 January 2021. [1] During this wild ride, the company's stock trade was halted several times. All major events that took in this market frenzy are highlighted in Figure 1.

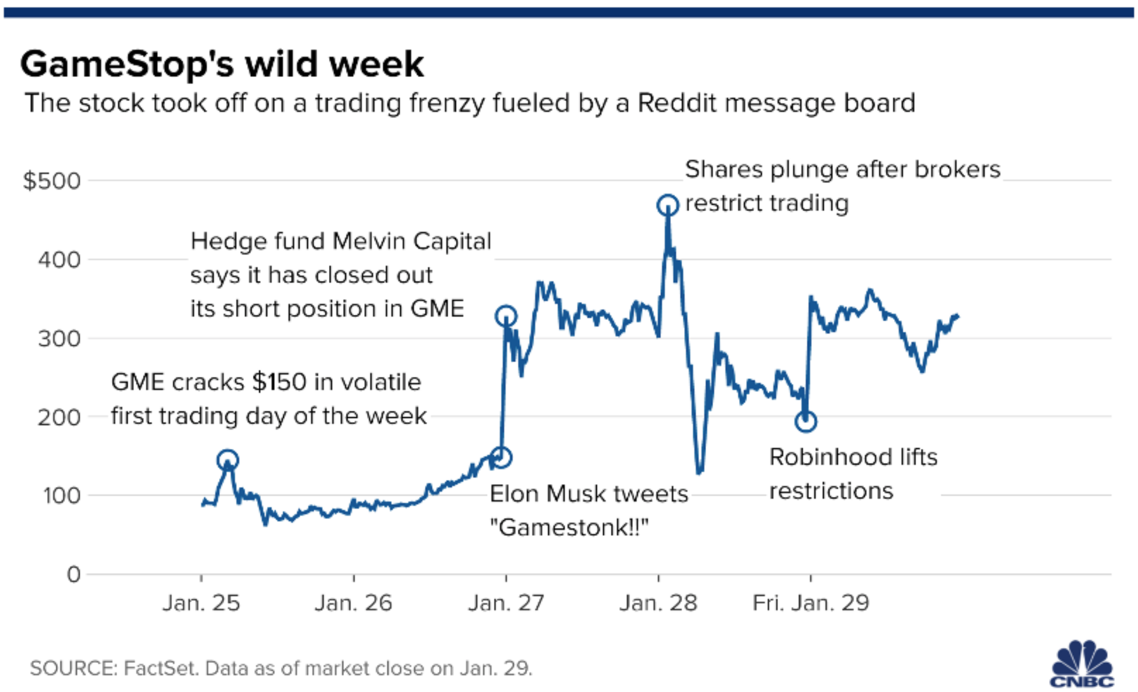

Figure 1: Major events in GameStop's stock price movement

But what caused this

The entire GameStop saga is as a short squeeze forced mostly by an army of retail investors who have raced into the markets over the past year armed with excess cash from COVID-related government subsidies and enabled by commission-free trading platforms such as Robinhood and E-Trade. All of this can be traced back to WallStreetBets, a Reddit forum that has been wildly pumping GameStop's stocks for the past couple of weeks. The people realized that GameStop was the most shorted stock in America and even retail investors bought it together so that they could push the company stock price higher as well as pushing the short sellers to cover their losses, and eventually pushing the price even higher. To put this into perspective, short-sellers have incurred a $6 billion mark to the market loss year to date. Citron Capital, one of
the two hedge funds with large short interests in the company confirmed that they covered their short positions at "a loss of 100%". Similarly, Melvin Capital, the other hedge fund targeted by the retail investors, lost about 30% this year and required a capital injection of $2.75 billion from hedge fund titans Ken Griffin and Steve Cohen to ensure the company didn't go bankrupt [1].

Technically this can be explained in two parts. A lot of people were short on the GameStop stock, 139% of the GameStop shares available had been borrowed and sold short according to S3 Partners [2]. The reasons for this massive bearish position on the company's stock can be attributed to the falling business prospects for the company with such a high valuation. Short selling involves borrowing the shares from a broker with the promise to return them and selling them at the current price. The seller then buys back the share at a lower price in the future and pockets the difference as profit and the short seller must pay a fee for borrowing these shares and post a collateral based on the investment amount. As the price of the stock rises, the short-sellers have to increase their collateral. And they might be forced to cover their losses by covering their position which involves buying back the stock at a higher price and returning it. This pushes the stock price further up creating a short squeeze. [3]

Secondly, a lot of people on the WallStreetBets sub-Reddit weren't mostly buying stocks but instead were buying call options. This provides the retail trader with leveraged exposure to the stock to gamble on. These call options provide the buyer to buy the underlying stock at a predetermined price called the strike price and if the price of the stock rises, they can sell the stock and pocket the difference as profit. Options are great if the investor is looking to take great risks with much smaller capital as it amplifies the returns however it also amplifies the losses.

The market maker who wrote these call options would have to hedge their exposure by buying some of the shares which is known as the delta of the option. As the price of the underlying stock goes up the hedge would need to be increased to reduce the exposure. This change in the delta is called gamma. To sum, the market maker must keep increasing the amount of the shares they buy as the price of the stock increases to keep their risk minimal with the associated option. As GameStop stock prices went up, this meant that the market makers had to buy hundreds of dollars of more stock to keep the options hedged. This created a ripple effect, as the prices went up, more stock had to be bought which further pushed the prices up more, and so on. Hence a gamma trap. Both the short squeeze and gamma trap combined pushed the prices of the stock up rapidly. As the stock price gained momentum, more and more retail investors joined the bandwagon, it forced the short sellers to cover their positions causing the prices to drive up further [3].

Is it all good for GameStop?

Any company that sees its stock prices rising almost 2000% in a matter of weeks wouldn't mind it. To put it in perspective, 197 million shares of GameStop traded on Friday 22 January 2021 are worth more than $10 billion, If GameStop decided to step into the market and sell some of these shares it could make. For example, if GameStop were to only sell 1% of the day's selling, it would amount to $100 million in stock sales for the company. But this comes with its advantages and disadvantages.

Firstly, it would mean additional capital to reinvest in the company and start initiatives the Redditors are talking about for the company to thrive in these market conditions. Secondly, the company would be diluting its existing shareholders, but it would be doing so as gently as possible.

There are however disadvantages to doing this. One of them being, getting the timing right. Since the stock is on a wild ride and the price fluctuations during intra-day trading have been enormous, therefore timing the sale would be very difficult. Another one would be that even if GameStop did time it right and sold all these stocks at the peak, this would present a problem when the market frenzy would end, and the stock price would drop back to its original levels. The people who bought the stock would have complaints, despite knowing that the stock was extremely overvalued and have fiduciary duties to the shareholders, but GameStop still sold them this stock. This doesn't constitute as securities fraud but might lead to lawsuits. Last June, Hertz Global Holdings Inc.'s stock was also soaring due to the weird retail demand despite the company being bankrupt, when the company decided to step in and sell some of its stock into that demand.

Hertz was able to sell $29 million worth of stocks during this period before the Securities and Exchange Commission stepped in and shut it down. Another option for GameStop would be to use its at-the-market of "ATM" offerings. In these offerings, banks are hired to sell the stocks of the company on the stock exchange in ordinary transactions. GameStop put an ATM offering in place on Dec 8, 2020, when its stocks were trading at $16.35. The company disclosed that its bank could sell stock up to $100 million [4].

Why did Robinhood step in?

Robinhood decided on Thursday 28 January 2021 to limit customers from trading in GameStop's share. The company faced a lot of backlash on social media, however, once a bubble gets to a certain point the rage is almost inevitable and it was more of a question as to when the company would step in to protect its customers and itself. They're better off right now if they let the bubble get even bigger. If the bubble had gotten to a similar point as the Dot-com bubble of 2001 or the mortgage crisis of 2008, people would've been blamed. But, as history tells us, these people would've been the companies and media who facilitated the purchases instead of the people who actually bought the shares. The bubbles also have negative consequences on the bystanders who were never part of it as seen in prior crisis. [5]

There was a more quantitative explanation for Robinhood stopping all trades related to GameStop's trades on its platform, that is any stock trade involves an extension of credit. Whenever a stock trade takes place, the clearance of the trade and money takes place two business days later after the trade is made and this is called the "T+2 settlement". This involves a certain degree of risk as the stock price can fluctuate during this period and hamper the ability of the creditor to receive payment for the stocks. This risk is mitigated through a system of clearinghouses that process the trades. The clearing brokers who are the members of these clearinghouses post a collateral that serves as a guarantee that they will pay off their settlement obligations. These clearing brokers in turn get collateral from institutional investors. Generally, this isn't a problem for the brokers and the clearinghouses. However, with the great level of volatility involved, sufficient collateral must be posted to cover the risk as the broker will not be able to meet their obligations. These collaterals that need to be put up with the DTCC usually behave like margin in a brokerage account which can create a significant cash crunch for the brokers on volatile days. To sum it up, it's the DTCC requiring Robinhood and other brokers to put up sufficient collateral just in case these brokers are able to withstand the price movement in GameStop's shares for the next two business days.

It could quite possibly go to zero as well. With the risk associated with the settling of trades attributable to the high volatility and increased trading volume of these stocks, brokers have to put up more collateral as a guarantee. A spokesman for the DTCC stated that the industry-wide collateral required had increased to $33.5 billion from $26 billion by the end of the day on Friday 29 January 2021. Therefore, Robinhood drew down several hundred million dollars from its existing line of credit and stated that it was raising an infusion of more than $1 billion from its current investors. Hence, it is expensive to be a broker for such stocks and it makes sense for them to stop their trades. [6]

[1] https://www.bloomberg.com/news/articles/2021-01-27/melvin-capital-closes-out-its-gamestop-position-cnbc-reports
[2] https://ca.finance.yahoo.com/news/gamestop-short-sellers-reload-bearish-175645685.html
[3] https://www.bloomberg.com/opinion/articles/2021-01-25/the-game-never-stops
[4] https://www.bloomberg.com/opinion/articles/2021-01-25/the-game-never-stops
[5]
https://www.bloomberg.com/opinion/articles/2021-01-28/robinhood-s-right-to-save-gamestop-gme-traders-from-themselves
[6] https://www.bloomberg.com/opinion/articles/2021-01-29/reddit-traders-on-robinhood-are-on-both-sides-of-gamestop?
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Bitcoin's Record High Price of Above $40K in Early January Stirs Bubble Fears

By Kelly Wan, Co-VP Market Research

Bitcoin, the world's most valuable cryptocurrency, traded at $41529.29, its new record high, at around 7:59 a.m. EST on Jan 8th, according to data from Coindesk. The record came only 5 days after it surged to an all-time high of more than $34K and doubled its value in less than a month. However, it slid back to below $40K later that day and briefly dropped below $30K twice in a week at the month end as it struggled to regain momentum after the peak. Ever since 2011, Bitcoin's price has been accelerated in parabolic which has raised the concerns of a potential mega bubble.

This article will discuss how Bitcoin's price surged in the past year with the increasing exposure in the mainstream, the involvement of institutional investors and retail investors, and comment on the rising bubble fear due to the long-term parabolic uptrend movements in Bitcoin.

Bitcoin's Growing Adoption as a Payment Method

On Oct 21st, PayPal Holdings, Inc. (NASDAQ: PYPL) announced the launch of the cryptocurrency payment service that allows customers to buy, hold and sell Bitcoin from their PayPal account. Starting in early 2021, PayPal customers will be able to convert Bitcoin balance to fiat currency with neither incremental fees nor additional fees from PayPal merchants. With more than 300 million consumers and merchants that PayPal has, plus that the company is also considering expanding the crypto payment service to another popular payment app, Venmo, and select international markets, the future demand of bitcoin would significantly increase [1]. Besides, major companies that including Microsoft, Home Depot, Starbucks and Overstock started accepting Bitcoin payments [2]. This indicates that Bitcoin has stepped up in the competition with central bank digital money.

Unlike most stocks that can be evaluated based on their financial statements and projects, or other currencies that are backed by the government which would be influenced by the monetary policy inflation rates and other macroeconomic factors, the main determinator of bitcoin is the principle of demand and supply. This is because the supply of Bitcoin is limited and can only be created by the "miners" who provide the computational power, and up to today, there are more than 18M bitcoins in the world out of 21M that can be mined. Therefore, the significant increase demand of bitcoin that the crypto payment transformation would bring in the next few years was immediately reflected in the price of Bitcoin as the price surged 5% on that day followed by uptrend movements for the new few days (Figure 1).

Figure 1: Price Changes Movement of Bitcoin (BTCUSD)

Institutional Investors Came Out as Believers of Bitcoin in 2020

As Bitcoin began to go mainstream, a lot of digital asset funds started adding more bitcoins to their portfolio in order to enable investors to gain exposure to Bitcoin without holding it. Grayscale Investment has the largest Bitcoin portfolio with over $21 billion in BTC and currently under management in the Grayscale Bitcoin Trust. According to Kevin Rooke, a digital asset analyst who's known for his insightful tweets, recently revealed that Grayscale has acquired around 100K BTC in the second half of 2020 [3].

Despite the digital asset funds started acquiring more bitcoins, major institutional investors including JPMorgan and Goldman Sachs started adopting Bitcoin as a reserve asset. According to Messari, a cryptocurrency research company, there are 81154 BTC held in publicly listed companies by the end of last year [4]. The reason behind this is that U.S. Federal Reserve and Congress had distributed trillions of U.S. Dollars to the market and most of the American households ever since the COVID-19 spread across the U.S. last year, and this rose the concern for inflation. Bitcoin is a perfect investment for hedging against highly correlated markets such as S&P 500 and Nasdaq since its price is uncorrelated to other asset classes.

A Fear of Missing Out Has Retail Investors Coming Back to The Game

This is not the first time we are seeing a surge for Bitcoin, in 2017, a retail-led rally pushed it to nearly $20K and crushed more than 50% a month later. After almost 3 years, with more and more institutional investors enter and safeguard the market, this may lead to more liquidity and less volatility in prices as well as improvements in market structure [5]. In addition, with the ongoing pandemic, many people started saving more, spending less, and developing interest in investing [6].

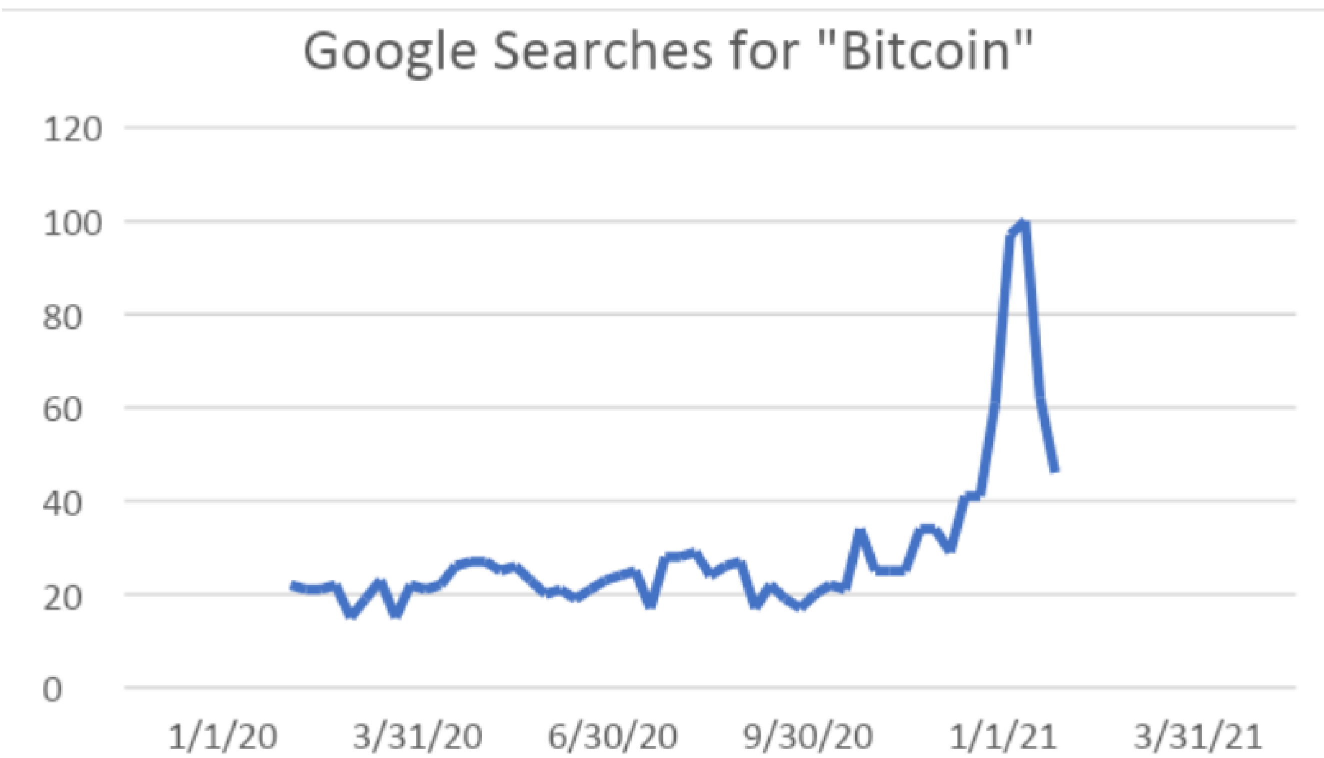

Figure 2: Google Search Trend of "Bitcoin"

Therefore, with the record-breaking rally starting at the end of 2020, many retail investors race to capture some of the wild gains in the market. Crypto exchanges that including Coinbase and other online trading platforms have seen a spike in activity recently and Google trends data also shows that web searches for bitcoin rose since last December [7]. On the other hand, with the benchmark equity indices toppled a series of record highs, including S&P 500 surged over 70% since last March and the Nasdaq 100 almost doubled, and the global rising money supply for pandemic recovery, many people worried that the stock market bubble would burst as the vaccinee distribution proceeds. By contrast, Bitcoin has a fixed supply of 21 million coins which allows it to resist inflation and is considered as an investment to diversify the portfolio [8].

Is Bitcoin Going to Be the Digital Gold or Is This Another Bubble?

Bitcoin bulls believe that the cryptocurrency can be compared with gold and eventually be used as an inflation hedge. Gold has been served as a powerful inflation hedge for strong increases in inflation since it is a scarce resource and a speculative investment that is not based on interest payment or revenue, so it holds value while currencies decrease in value. Similarly, as for Bitcoin, the supply is limited and the value depends mostly depend on the principle of demand and supply plus that its decentralization feature, which would make Bitcoin the “digital gold”. Moreover, according to JPMorgan Chase & Co., Bitcoin has the potential to reach $146K in the long term as it competes with gold and its market capitalization of around $575 billion would have to rise by 4.6 times [9].

However, some analysts believe that a massive Bitcoin bubble will exist due to the cryptocurrency survived through several peak-to-trough drawdowns of over 80% in less than 10 years with the bubble burst spectacularly in 2018 and entered the bear market [10]. As we already saw a decline of more than 10% after the record high and the trend-following retail investors stepping into the game, professionals are worried about the Bitcoin fever would end with a burst.

Some professionals also suggest that Bitcoin’s unsatiable due to its transaction feature is still being using frequently in illicit financing [11]. In addition, in an interview with Bloomberg, economist Rosenberg questioned the scarcity of bitcoin and suggested the supply constraint might be dynamic [12].

As limit supply is one of the reasons it's popular and people are racing to mine more bitcoins, then if the quantity of Bitcoin passed the 21M protocol in the near future, the whole Bitcoin market would be in shock and might end up with a burst. Therefore, at the end of the day, these analysts believe that the digital currency rally will come to an end.

Based on the analysis of Bitcoin's value and drivers, the cryptocurrency would continue being in volatility, but the risk of the mega bubble burst is low in the short term since that the market became more mature with the involvement of institutional investors and exposures to the mainstream.

[1] https://newsroom.paypal-corp.com/2020-10-21-PayPal-Launches-New-Service-Enabling-Users-to-Buy-Hold-and-Sell-Cryptocurrency
[2] https://www.buybitcoinworldwide.com/who-accepts-bitcoin/
[3] https://news.bitcoin.com/crypto-advocates-think-joe-bidens-3-trillion-stimulus-plan-will-bolster-bitcoin
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[9] https://www.bloomberg.com/news/articles/2021-01-05/jpmorgan-sees-146-000-plus-bitcoin-price-as-long-term-target?sref=0Mdkq1G7
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[11] https://coingeek.com/the-btc-bubble-will-pop-soon/
[12] https://www.bloomberg.com/news/videos/2020-12-17/bitcoin-is-in-a-massive-bubble-economist-rosenberg-says-video?sref=0Mdkq1G7