What Were the Factors that led to the GameStop Short Squeeze?

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by

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The world of finance is rapidly evolving - for better or for worse. The introduction of social media in sentimental stock market trading, and new brokerage apps, combined with the new resurgence of retail investors, has led to some interesting results. These new factors in the stock market have challenged the status quo of the stock market. A group of retail investors has led this change on a Reddit forum known as /r/WallStreetBets

In early January 2021, a group of retail investors collaborated a short squeeze on GameStop stock, creating an attack against the hedge funds on a popular Reddit trading form called /r/WallStreetBets (Faris, 2021). A short squeeze occurs when a stock or other asset jumps sharply higher, forcing traders who had bet that its price would fall to buy it to forestall even more significant losses. The retail traders on /r/WallSteetBets realized that they would have enough leverage to successfully execute this short squeeze against the hedge funds if they combined their buying power. The brokerage of choice for these retail traders was Robinhood. This 0% commission brokerage firm was top-rated at the time for its simplicity and low barrier for entry on investing.

The short squeeze made hedge funds lose a vast amount of profit. By January 28, 2021, Melvin Capital, an investment fund that heavily shorted GameStop, lost 30% of its value since the start of 2021 (Stevens, 2021). This communication to execute /r/WallStreetBets short squeeze occurred on Reddit, a popular social media and news website. The GameStop short squeeze became the first time that many retail traders were able to formulate a plan of this magnitude, and they were able to formulate their plan with the power of social media. It also should be noted that I participated in the buying of GameStop stock during this time.

There are still many questions surrounding the short squeeze that was orchestrated by /r/WallStreetBets. To make more informed decisions on regulating these kinds of events, it is crucial to understand the underlying factors and changes in the finance world that lead to this short squeeze on GameStop by the retail traders on /r/WallStreetBets. These factors include:

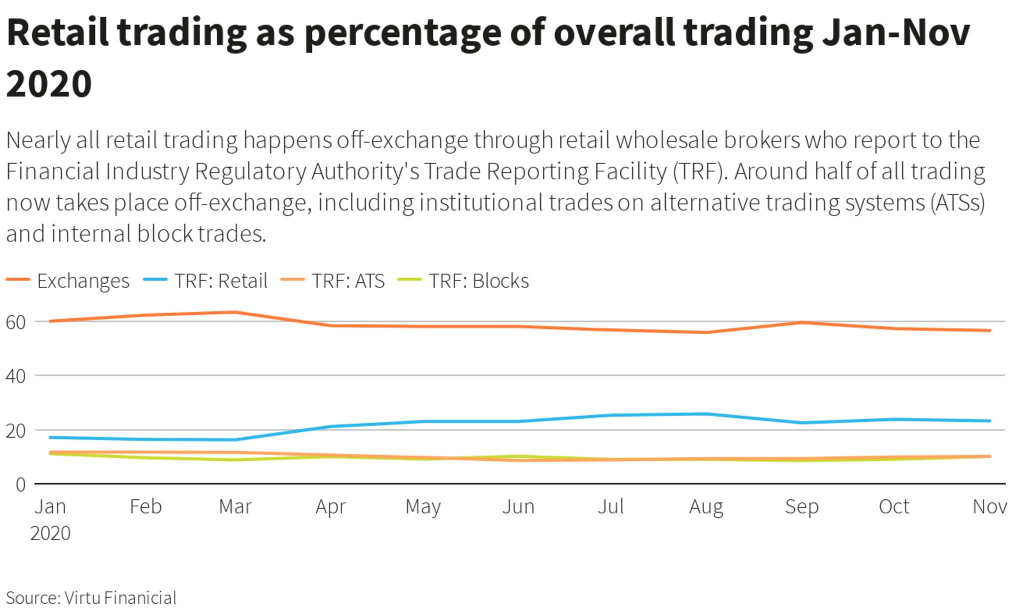
- Shifting demographics and access to technology among retail traders
- Rise of zero percent commission brokerage apps
- Social media’s effect on the stock market via sentimental trading
- Social medias effectiveness at predicting trends in the stock market

Overview of Financial Markets

Before diving into the factors that lead to the /r/WallStreetBets short squeeze strategy on GameStop stock, it is essential to get an overview of the stock market and the roles that retail traders, hedge funds, and brokers play in the stock market.

Retail investors' goals are still to make money, but only for themselves. Again, in juxtaposition to large institutional investors, the retail trader often has a much smaller pool of funds (Hayes, 2021) to invest with, giving them far less leverage individually. The Coronavirus pandemic has created an opportunity for the retail investor's resurgence. In the first quarter of 2020 alone, over one million new online brokerage accounts were created (Faris, 2020). After the most extended bull market cycle of all time, the stock market decline in March 2020 due to the coronavirus created a great entry point for new investors looking to generate revenue from the stock market (Faris, 2020). Retail investors accounted for 25% of the total market trades in July and August 2020 (McCrank, 2021). While data is only present up to November, retail investors appear to have played a more significant role in 2021, estimating that retail trades will increase between 6.5% and 8.2% in 2021 (D'innocenzio, 2021). Retail investors also hold 77% of the total market capitalization via stocks (held directly) (Mackintosh, 2020). However, it should be noted that a large majority of these stocks held by retail investors are concentrated in just 10% of the wealthiest population (Mackintosh, 2020). Figure 1 shows the increasing retail trades as a percentage of overall trades:

Figure 1

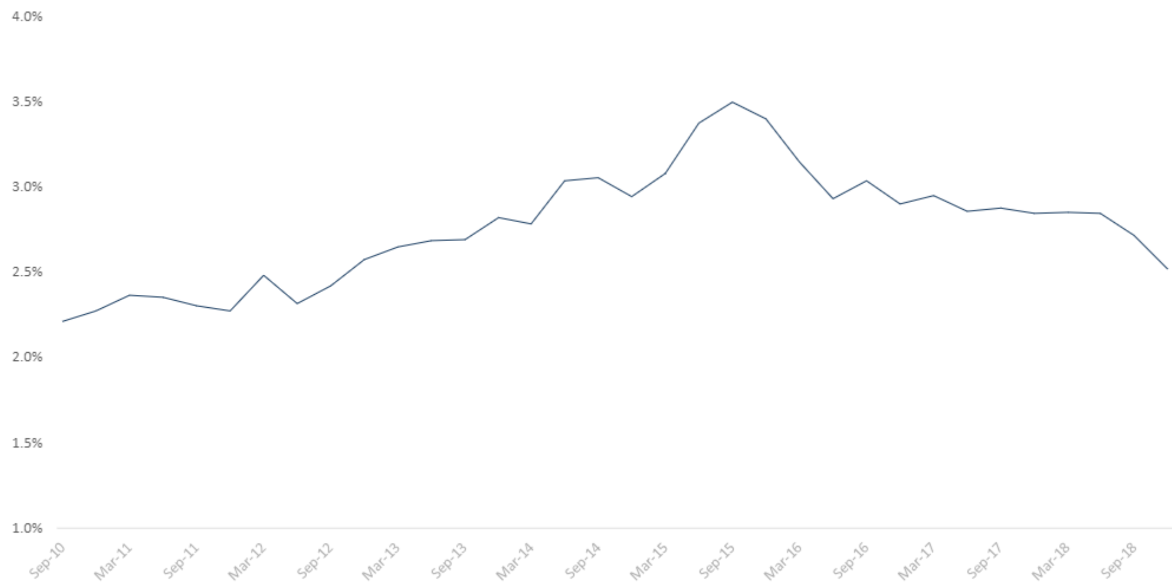


Note. McCrank, J. (2021, February 18). *Explainer: How were more than 100% of GameStop's shares shorted?* Reuters. https://www.reuters.com/article/us-retail-trading-shortselling-explainer/explainer-how-were-more-than-100-of-gamestops-shares-shorted-idUSKBN2AI2DD.

Figure 2 shows that hedge fund ownership of the S&P 500 has slowly been declining over the past few years:

Figure 2

Percent of S&P 500 Market Cap Owned by Hedge Funds (Single Stocks)



Note. Watts, W. (2019, February 21). *Hedge funds hold smallest slice of stock market since 2012*. MarketWatch. https://www.marketwatch.com/story/hedge-funds-hold-smallest-slice-of-stock-market-since-2012-2019-02-21.

Hedge funds today own 3% equity of the U.S. Equity Market. This 3% of equity translates to around $1 trillion assets under management (AUM) (Mackintosh, 2020). Assets under management is defined as the total market value of the investments that a person or entity manages on behalf of clients (Chen, 2020). However, hedge funds contribute more daily liquidity to the market than all household and retail traders. The daily liquidity supplied to the market by hedge funds is higher than all retail traders combined (Nasdaq Economic Research). Hedge funds have high turnover rates, meaning they hold a stock for a shorter amount of time, enabling them to supply more liquidity to the market. Liquidity is valuable because it impacts how quickly traders can open and close their positions (Hayes, 2021).

Hedge funds also have more leverage compared to retail traders. Their use of leverage allows them to make large purchases in the stock market. Hedge funds receive their leverage in several different ways, one of which is by pooling money together from their high-net-worth investors (Depersio, 2021). Another way they increase their leverage is by trading securities on margin. Hedge Funds buy securities on margin, which means they borrow money from a broker to make more considerable investments. Hedge funds can use this strategy to maximize their returns, but it can also magnify losses and increase the risk of failure if trades go against them (Depersio, 2021).

A broker is an individual or firm that acts as an intermediary between an investor and a securities exchange (Smith, 2020). The rise of online brokers has been an essential tool to retail investors, especially Robinhood, a 0% commission-free online brokerage app that was the brokerage of choice for the users on /r/WallStreetBets. Brokerages and brokers are essential to hedge funds and retail investors as the only way they can interact with the stock market is through these individuals/institutions.

A hedge fund's purpose is to maximize investor returns and eliminate risk (Gad, 2021). However, a hedge fund also does not take anyone as an investor. They are only allowed to take money from qualified investors or individuals with an annual income that exceeds $200,000 for the past two years or whose net worth exceeds $1 million (Gad, 2021). Contrary to the status quo, hedge funds are not detrimental to the economy. One of hedge funds' main strategies is exploiting unfairly priced stocks, making them more reasonably priced, and lowering stock market volatility (Amadeo, 2021). They have such sway over a company's stock that they can compel them to buy back stock and raise stock prices. They may also force the organization to sell off underperforming properties or companies, allowing it to become more competitive and profitable (Amadeo, 2021).

Retail Traders – Changing Demographics

The changing demographics and increasing lower barrier to entry was an impactful factor that helped lead to the /r/WallStreetBets short squeeze. There has been an increase in the number of retail traders compared to previous years. Retail trading has increased enough to be "largely responsible" for the new elevated stock prices and record-high options activity (Graffeo, 2021). There has also been an increasingly significant shift from retail traders investing in growth companies to companies with lower profitability and higher volatility (Graffeo, 2021). Experts consider this type of trading to be much riskier as trading these companies' stocks can be hazardous but return huge profits much quicker than the market average if the trade is proven successful.

One of the demographic changes in retail traders might explain their change to a riskier strategy. An explanation for retail traders generally being male is that men and women differ in their risk tolerance and risk tolerance perception. A study found that, in comparison to women, men are more likely to invest in volatile assets like stocks (Jianakoplos and Bernasek, 1998). Men and women also differ in their perception of the internet. For example, Women view online shopping as riskier than men and are more likely to shop in person rather than online. (Garbarino and Strahilevitz, 2004). Studies have also shown that men are more likely to trade stocks more frequently than women. From 1991 to 1997, 35,000 households' stock portfolios were examined, and it was discovered that men traded stock 45% more frequently than women (Barber and Odean 2001). It is fair to assume that women find online stock trading to be riskier than men and that, as a result, they are less likely to engage in online stock trading.

Another demographic change that could lead to the conclusion of retail traders taking riskier strategies is the change in age demographics among retail traders. According to economists and financial analysts, risk-taking decreases with age, and older investors tend to hold fewer stocks. According to survey respondents' observed asset allocation and reported willingness to take risks, young people appeared to take more risks than the older generation (Jianakoplos and Bernasek 2006). The same study that examined 35,000 households' stock portfolios found that young investors held more volatile portfolios and that trading frequency decreased with age (Barber and Odean 2001). Given that online stock trading is a self-service technology associated with a wide range of risks, it is reasonable to conclude that online stock traders are more likely to be younger.

Another notable demographic among online retail traders is that they tend to be more educated compared to non-traders. A study indicated that people with higher education levels are more likely to search for more financial information and more likely to search on the internet (Lin and Lee, 2004). Below is a table displaying the survey results that interviewed retail traders and non-traders (Hou, 2015).

Table 1

Demographics of Online Traders vs. Non Traders

	Traders (N=200)		**Non-Traders (N=1479)**		**χ^2 Statistic**
	Frequency	Percent	Frequency	Percent	
Gender					
Male	125	62.5	666	45.0	$\chi^2 = 24.75$
Female	75	37.5	813	55.0	$p < .001$
Age					
18-29	29	15.2	269	18.7	$\chi^2 = 3.20$
30-49	75	39.3	511	35.6	$p = .362$
50-64	64	33.5	446	31.1	
65+	23	12.0	210	14.6	
Education					
Some School	4	2.0	66	4.1	
High School Graduate	33	16.7	442	30.1	$\chi^2 = 48.74$
Some College	43	21.7	415	28.2	$p < .001$
College Graduate	58	29.3	321	21.9	
Post-Graduate	60	30.3	230	15.7	
Income					
Less than $20,000	8	5.0	127	10.8	
$20,000 to under $40,000	26	16.1	250	21.4	$\chi^2 = 41.86$
$40,000 to under $60,000	22	13.7	266	22.7	$p < .001$
$60,000 to under $100,000	45	27.9	307	26.2	
$100,000 or more	60	37.3	221	18.9	

Note. Hou, J. (2015, February). *Online Stock Trading: Do Demographics, Internet Usage, and Attitudes Matter?* . https://ijbssnet.com/journals/Vol_6_No_2_February_2015/2.pdf.

This information is relevant because individuals' knowledge acquisition is linked to their schooling. According to studies, more educated people are more likely to look for and use knowledge. This analysis, coupled with the fact that between 2000 and 2018, total undergraduate enrollment in degree-granting postsecondary institutions increased by 26 percent (from 13.2 million to 16.6 million students), by 2029, total undergraduate enrollment is projected to increase to 17.0 million students (National Center for Education Statistics, 2020). The number of educated people rising over the past decade, and the fact that educated people are more likely to search for financial information on the internet could help explain the increased number of retail traders.

These shifting demographics explain the recent actions taken by retail traders; help explain how the short squeeze could be executed on /r/WallStreetBets. It's safe to assume that taking stock market advice from anonymous users on the internet is a risky endeavor. The /r/WallStreetBets short squeeze is even more dangerous considering that they were taking a bet against large institutional traders (hedge funds).

Retail Traders - Technology

The internet and technology are factors that could help explain the continually increasing number of retail traders. A study found that online retail traders were more likely to use the internet daily than non-traders. The research shows that among online retail traders, 88% of online traders use the internet daily, as compared to just 66.2% of non-traders (Hou, 2015). Technology has dramatically lowered the barrier of entry for people looking to enter the stock market. Now more than ever, people have more access to information than at any point in time before. With this new plethora of information, regular people (retail traders) can make more informed decisions about their investments.

Smartphones and online brokerage apps like Robinhood, Webull, E*TRADE allow retail traders to get real-time updates on their investments, trade stocks, and get their financial news anywhere they have an internet connection. Another advantage that today's retail traders because of the internet is the lower fees from brokerage firms due to increased competition (Fuhrmann, 2019). Robinhood, for example, has a 0% commission fee, meaning they do not charge for trades like the majority of brokerage firms do. The internet has had a tremendous impact in giving individuals power, allowing them to obtain more financial information and significantly lowered amateur traders' cost to enter the stock market.

Overall, technology has helped retail traders gain an advantage in the stock market. Allowing them to check their portfolios and manage their trades anywhere there is an internet connection is a huge impact that has allowed them to make more significant returns. **S**

Social Media

Decisions are often based on a reasonable assessment of data, but research suggests that emotional sentiment often plays a role, especially in investment decisions (Lucey & Dowling, 2005). Social media often plays a role in these emotional investment decisions and was one of the most significant WallStreetBets short squeeze factors. Reddit was the "Homebase" of the WallStreetBets users to plan their strategy, but word quickly spread to other social media platforms like Twitter. The combination of these two social media platforms allowed for a massive amount of people to begin joining in on the short squeeze in an attempt to gain some profit. Twitter has a far more significant number of users compared to Reddit. Twitter has 192 million active daily users (Lin, 2021) compared to Reddit's 52 million active daily users (Dean, 2021). This large pool of users helped WallStreetBets grow the GameStop stock.

However, Twitter has been continually helpful in helping retail traders make choices regarding the stock market. Business professor Johan Bollen reported that "Twitter data could predict the Dow Jones Industrial Average with 87.6% accuracy" (Grossman, 2010). To put the significance of Twitter's accuracy in context, David Dreman, a famous stock guru, has the highest accuracy in predicting the stock market among his contemporaries, only has a score of 64% accuracy (Swedroe, 2013). Twitter data predicting the stock market's moves are exceptionally significant and show the power that these retail traders have over the stock market. This type of behavior also displays "herd instinct" or "herd mentality." Herd instinct is what drives humans to act like those around us. This kind of thinking is what gave the WallStreetBets' short squeeze strategy to become so successful.

Although Twitter is an excellent resource for predicting moves in the stock market, not all accounts that give stock advice have the same amount of weight. Social media's emotional sentiment about a company's stock that spreads quickly via Twitter or another platform is more likely to be integrated into stock prices rapidly. In contrast, a viewpoint that spreads slowly take longer to be incorporated into stock prices and therefore is more likely to forecast stock prices in the future. Researchers studied 2.5 million Twitter postings about companies in the S&P 500 and compared these "tweets" to the firms' stock prices in the S&P 500 (Sul et al., 2016). The results found that accounts with less than 171 followers significantly impacted the stock's returns on the next trading day, ten days, and 20 days (Sul et al., 2016). Surprisingly, they also found that tweets from accounts with less than 171 followers and not retweeted, meaning the tweets were not reposted anywhere else on Twitter, were found to have the most significant impact on the future stock returns (Sul et al., 2016). Based on this research, a trading strategy using this method could expect to yield 11-15% returns, about as much as the average mutual fund.

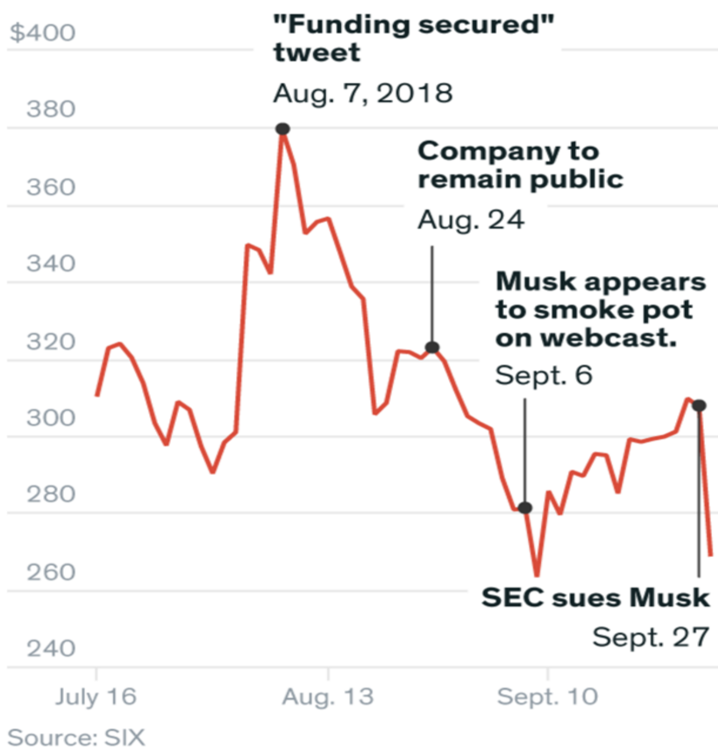
Social media has a more significant impact on the stock market compared to traditional media. Traditional media would be major broadcasting companies, newspapers, and magazines, while social media would include blogs and Twitter. Researchers found that social media had a "significantly greater impact" on the stock market compared to these traditional media outlets (Jiao & Walther, 2016).

A spotlighted stock on social media can be very beneficial or very detrimental to the stock price. Twitter is one of the most popular social media platforms for sharing thoughts and opinions quickly. A study done on the effects of tweets on the stock market found that "there is a signal worth investigating which connects social media and market behavior" (Ranco et al., 2015). This effect can be observed in single tweets. In August 2018, Elon Musk infamously tweeted that Tesla's stock price was "too high," which caused the stock price to fall 10% immediately (Shead, 2021). This is not the only time Elon Musk's tweets affected the financial world. Dogecoin is a cryptocurrency launched in December 2013 created as a joke by Billy Markus, a software engineer. Dogecoin has never been seen as a viable investment and has taken a backseat to other cryptocurrencies like Bitcoin and Ethereum. On February 4, Elon Musk tweeted that "Dogecoin is the people's crypto." Shortly after this tweet, Dogecoin's price rocked up by 50% (Jolly, 2021).

As you can see by the Figure 3 below, Elon Musk's tweets and actions on the internet directly affect Tesla's stock price.

Figure 3

Tesla Stock Price Compared to Elon Musk Tweets



Note. Dounis, F. (2020, June 5). *Elon's Golden Gift: Predicting the Stock Price Of Tesla With Twitter And Machine Learning*. Medium. https://medium.datadriveninvestor.com/elons-lethal-mistake-predicting-the-stock-price-of-tesla-with-twitter-and-machine-learning-5e89282ce75f.

The WallStreetBets Short Squeeze

A short squeeze of the stock of American video game retailer GameStop and other stocks occurred in January 2021, resulting in significant financial losses for some hedge funds and substantial losses for short-sellers. About 140 percent of GameStop's public float had been sold short, and the scramble to fill those positions as the price soared pushed it even higher (McCrank, 2021). Members of the subreddit r/WallStreetBets, an internet forum on the social news platform Reddit, were the ones that started the short squeeze, but a significant amount of retail traders from Twitter also got involved (Faris, 2021).

Below is a graph detailing the volume and the stock price of GameStop (GME) during this time in January when the short squeeze took effect on the stock price.

Figure 4

GameStop Stock Price during the WallStreetBets Short Squeeze

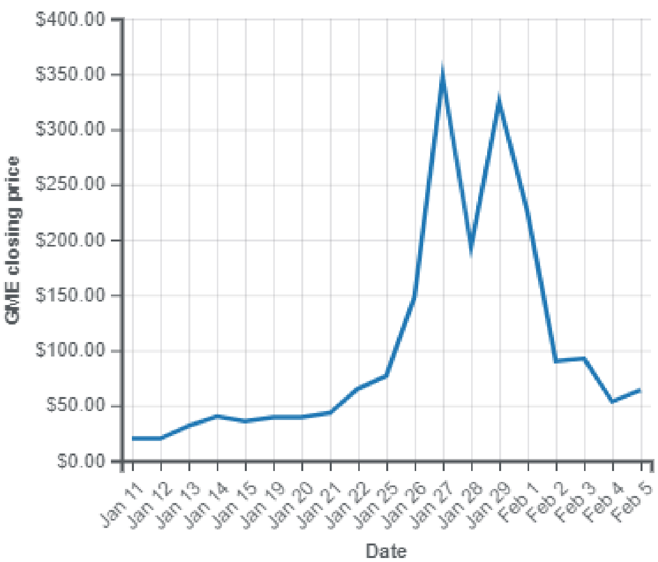
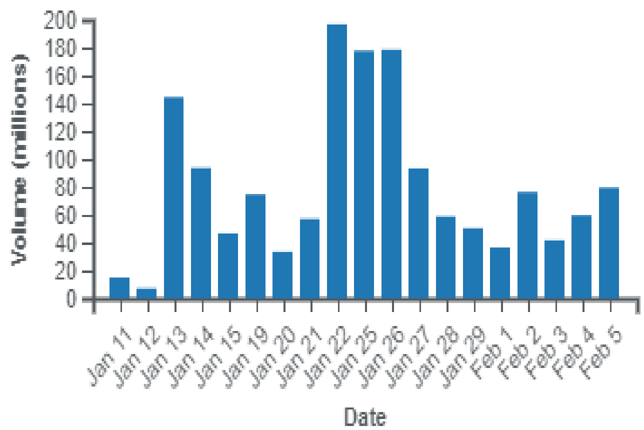


Figure 5

GameStop's Volume during the WallStreetBets Short Squeeze



Note. Data from Yahoo Finance

As seen in figures 4 and 5, there were many people taking place in the trading of GameStop stock. The volume graph indicates the number of trades that are happening, while the price graph shows the significant jump in price due to GameStop's short squeeze.

In January 2021, Reddit users on the /r/WallStreetBets subreddit laid the groundwork for a short squeeze on GameStop, which resulted in a substantial increase in the stock price. The plan happened quickly after Citron Research predicted that the stock's value would fall (Lyons, 2021). For two weeks, the stock price rose 1,500 percent, and the high volatility caused trading to be suspended several times (Li, 2021). On January 25, more than 175 million shares of GameStop were traded, surpassing its 30-day average volume of 29.8 million shares, according to Dow Jones market data (Wallace, 2021). After the stock closed with a 92.7% increase in share price on January 26, Elon Musk tweeted "Gamestonk!!!" along with a link to the r/WallStreetBets subreddit (Bursztynsky, 2021), which spread the word about the short squeeze and drew in more retail traders into the execution of r/WallStreetBets GameStop short squeeze causing the price of the stock to rise to over $200 (Morrow, 2021). Elon Musk has millions of followers on Twitter, and his tweet gave the short squeeze more momentum. On January 28, the stock rose to $483, nearly 190 times higher than the stock price just nine months earlier in April 2020, and briefly hit above $500 in premarket hours on the same day.

Below is Table 2, detailing the volume and price of the stock as the short squeeze going on.

Table 2

Change in Stock Price and Volume for GameStop During the Short

Day	Price (USD)	Change		Volume
		Net	%	
January 11	19.94	+2.25	+12.72%	14,927,612
January 12	19.95	+0.01	+0.05%	7,060,665
January 13	31.40	+11.45	+57.39%	144,501,736
January 14	39.91	+8.51	+27.10%	93,717,410
January 15	35.50	−4.41	−11.05%	46,866,358
January 19	39.36	+3.86	+10.87%	74,721,924
January 20	39.12	−0.24	−0.61%	33,471,789
January 21	43.03	+3.91	+9.99%	57,079,754
January 22	65.01	+21.98	+51.08%	197,157,946
January 25	76.79	+11.78	+18.12%	177,874,000
January 26	147.98	+71.19	+92.71%	178,587,974
January 27	347.51	+199.53	+134.84%	93,396,666
January 28	193.60	−153.91	−44.29%	58,815,805
January 29	325.00	+131.40	+67.87%	50,566,055
February 1	225.00	−100.00	−30.77%	37,382,152
February 2	90.00	−135.00	−60.00%	78,183,071
February 3	92.41	+2.41	+2.68%	42,698,511
February 4	53.50	−38.91	−42.11%	62,427,275
February 5	63.77	+10.27	+19.20%	81,345,013

Note. "NYSE". www.nyse.com. Data From NYSE

/r/WallStreetBets did not only target GameStop, but they also targeted other companies that the hedge funds shorted in an attempt to expand their profits even further. On January 27, the members of /r/WallStreetBets targeted AMC theaters (AMC), another stock that the hedge funds significantly shorted (Warren, 2021). AMC jumped from $4.96 to $19.90 in stock price. It seemed at the time that /r/WallStreetBets was going after any stock that the hedge funds had shorted. Looking to increase their profits again, but this was around the time that brokers like Robinhood took notice of the short squeezes happening and began to enact restrictions on the stocks touched by the short squeeze. Below is a table dictating all the stocks that were affected by /r/WallStreetBets.

Table 3

Selected stocks experiencing sharp price increases (USD)

Security (symbol)	Price high[a]	Jan 22	% chg.
AMC Entertainment Holdings, Inc. (AMC)	20.36	3.51	480.1%
AMC Networks Inc. (AMCX)	59.83	49.38	21.2%
American Airlines Group Inc. (AAL)	21.77	15.82	37.6%
BB Liquidating Inc. (OTC Pink: BLIAQ)	0.30	0.01	3000%
Bed Bath & Beyond Inc. (BBBY)	53.90	30.21	78.4%
BlackBerry Limited (BB)	28.77	14.04	104.9%
Build-A-Bear Workshop, Inc. (BBW)	8.40	4.52	85.8%
Eastman Kodak Company (KODK)	15.15	9.46	60.1%
Express, Inc. (EXPR)	13.97	1.79	680.4%
Fossil Group, Inc. (FOSL)	28.60	9.87	189.8%
Genius Brands International (GNUS)	3.36	1.57	114.0%
iRobot Corporation (IRBT)	197.40	98.94	99.5%
Koss Corporation (KOSS)	127.45	3.34	3,715.9%
Ligand Pharmaceuticals Incorporated (LGND)	191.59	142.62	34.3%
The Macerich Company (MAC)	25.99	14.58	78.3%
Naked Brand Group (NAKD)	3.40	0.44	672.7%
National Beverage Corp. (FIZZ)	196.43	98.44	99.5%
Nokia Oyj (NOK)	9.79	4.20	133.1%
Palantir Technologies Inc. (PLTR)	45.00	32.58	38.1%
Siebert Financial (SIEB)	18.50	3.70	400.0%
Tootsie Roll Industries, Inc. (TR)	58.98	30.14	95.7%
Virgin Galactic Holdings, Inc. (SPCE)	59.43	34.28	73.4%

Note. "NYSE". www.nyse.com. Data From NYSE

On January 28, Robinhood halted GameStop purchases, AMC Theatres, BlackBerry Limited, Nokia Corporation, and other volatile stocks from its trading platform (Winck, 2021). The restrictions that Robinhood placed on their app were soon followed by other brokerage firms like Charles Schwab, TD Ameritrade, and Webull (Goldstein, 2021). The owners of this stock were only allowed to sell, which caused a sharp decrease in the restricted stocks' value. Their decision was criticized heavily by retail traders, politicians, and other figureheads in the financial sector as market manipulation (Rodrigo, 2021). Since this decision, there has been a series of class-action lawsuits against Robinhood. The first lawsuit claimed that Robinhood "purposefully, willfully, and knowingly removing the stock 'GME' from its trading platform amid an unprecedented stock rise thereby deprived retail investors of the ability to invest in the open market. "Another lawsuit claimed that Robinhood's actions were made "to protect institutional investment at the detriment of retail customers." (Rodrigo, 2021).

Robinhood and other brokerage firms responded to this negative feedback and explained their reasoning behind their stocks' restrictions. On January 29, the brokerage firms stated that their reasoning for halting the apps was a lack of collateral for trades (Mackenzie, 2021). Since there is a two-day period between when investors buy a security and when cash and shares are exchanged, brokerage firms must post collateral at clearinghouses to ensure that their clients' orders are adequately settled (Fitzgerald, 2021). If the firm fails, the collateral will prevent the cascading failures of other firms. The brokerage firms stated that the collateral could not be raised in time, and trading would need to be halted. On February 1 and 2, GameStop's stock price plummeted, losing more than 80% of its value from the previous week's intraday high. On February 2, GameStop stock dropped 60 percent, closing below $100 for the first time in a week. According to reports, around $27 billion in value was lost (Lipschultz, 2021).

Other assets were impacted by the short squeeze and were subject to company trading limits, such as AMC and Blackberry shares, which also lost value. According to research, the decline was caused in part by limitations imposed by Robinhood and other brokers on the number of shares that clients could buy at once (Monica, 2021). Despite the downturn, some users on r/WallStreetBets rallied to persuade others to keep their shares, claiming that they would increase in value or that doing so would send a political message (McCabe, 2021). In response to Robinhood's restrictions, the total market capitalization of all cryptocurrencies rose to over US $1 trillion due to brokerages suspending purchases of GameStop and other shares, Dogecoin's value rising by more than 800% (Cuthbertson, 2021). Dogecoin was pumped up by users of the subreddits r/CryptoCurrency and r/SatoshiStreetBets to make it "the next GME/Bitcoin." (Cuthbertson, 2021). Furthermore, after Elon Musk endorsed Bitcoin in his Twitter bio, the world's largest cryptocurrency rose 20% in value to more than $37,000, partly due to the rise in the GameStop share price by Reddit users (Browne, 2021). The trading of Dogecoin on Robinhood was then restricted (Warren, 2021).

The aftermath following the short squeeze left many investors, institutional and individual, with a large amount of profit or a large number of losses. Melvin Captial lost 53% of its investments (Mackenzie, 2021). Citron Research also took a huge loss and now no longer offers short-sell analysis after 20 years of service (Crabill, 2021). On January 26, short-sellers (mainly composed of hedge funds) reported lost $6 billion (Greifeld & Lifschutz, 2021). Several hedge funds were able to cover their short positions and sold shares to reduce leverage and market exposure, combined with the restrictions based by Robinhood and other brokers, allowed the hedge funds to recover some of their losses (Aliaj et al., 2021). However, executives at GameStop and BlackBerry were able to sell more than $22 million on their stock since January 1 and made a massive profit from the short squeeze that WallStreetBets orchestrated (Gandel, 2021).

While the short squeeze was credited initially to retail investors, it was later confirmed that hedge funds were responsible for a large portion of GameStop and related stocks' market action, having profited handsomely from the short squeeze (Chung, 2021). Senvest Management, a hedge fund that had previously purchased a 5% stake in GameStop when the stock was trading at $10, made a $700 million profit after Elon Musk tweeted, "Gamestonks!" (O'Dwyer, 2021). Providing further evidence of the role that social media was playing during this short squeeze. In January 2021, Mudrick Capital Management made a profit of nearly $200 million on its AMC debt holdings and a profit of $50 million on call options on AMC and GameStop stock (Chung, 2021). While these hedge funds were making money, there was a considerable loss for retail investors who decided to hold on to GameStop stock as an act of political protest against institutional traders and brokers like Robinhood. Many institutional investors and /r/WallStreetBets users purchased GameStop and other impacted securities when they reached or shortly after their peak prices (Darbyshire, 2021). Although the stock prices were steadily falling, other investors kept on to their long positions, despite widespread calls on /r/WallStreetBets to hold on to the failing stocks. During an "ask me something" session on /r/WallStreetBets, entrepreneur Mark Cuban also advised GameStop buyers to keep their stock if they could (Ponczek et al., 2021). Many retail investors sustained huge losses as stock prices continued to fall (Darbyshire, 2021).

Conclusion

The SEC is currently conducting interviews with Reddit, Robinhood, GameStop, and some The SEC is currently conducting interviews with Reddit, Robinhood, GameStop, and some hedge funds to decide how to handle situations like this in the future (Newmyer & Lynch, 2021). The SEC's investigation into the GameStop craze is not the first time it has looked into the connection between the Internet and securities fraud. However, the market regulator has been slow to regulate the use of social media and other emerging technology in financial markets (Newmyer & Lynch, 2021), a flaw that could thwart attempts to solve the GameStop case. To track investment patterns, companies should use software to control social media chatter. Institutions can reduce unintended market shifts and better manage market investment risk by identifying retail trader investment strategies in advance. Ticker Tags, Awario, Agorapulse, Hashtagify, and Twitter's toolset are excellent resources (Sonnenberg, 2020).

Another one of the key takeaways from the events of the short squeeze was that there need to be regulations set when it comes to undue risk. The problem that was highlighted by the short squeeze was that the brokers could not protect themselves, and they were not able to raise enough collateral to cover the trades and thus had to halt trading on the affected stocks. Brokerages should have policies in place to minimize the risks associated with high volume/high volatility events.

The Average Equities Daily Trading Volume has been increasing over the past few years. The steady rise is because more retail traders are entering the market (Fitzgerald, 2021). In 2019, the average daily trading volume was $7 billion. In 2020, the average was $10.9 billion. Now in 2021, the average is $14.7 billion (NNW, 2021). These brokers cannot keep up with trading volume on their platform when a volume surge occurs. A volume surge is when the interest in one particular stock suddenly increases. It is often the indication of a significant stock move, up or down (MarketVolume). These apps, specifically Robinhood, have also been known to have technical difficulties during these volume surges. During these market surges, slowness or lack of access to certain features and issues trading certain asset classes on the no-fee app were common complaints. Others said that they were unable to view their account balances (Abdel-Qader, 2021). These issues should be thoroughly tested and resolved so that these bugs do not hurt retail investors when trying to trade stocks on their platform.

Hedge funds, some of which have lost billions of dollars by taking short positions on stocks that retail traders have purchased, are now scrutinized more strongly for taking such prominent short positions. While there is no need to regulate the hedge funds' short position, the GameStop situation should signal hedge funds that they need a strategy change for short selling. Citron Research, the previously mentioned hedge fund, is attempting to adjust its strategy to fit this new financial world. They no longer offer short selling analysis even after it has been a considerable part of their strategy for 20 years (Crabill, 2021).

To summarize, there needs to be more attention to social media when it comes to sentiment trading. Brokers and institutional traders can adjust their strategy based on their data from social media. Brokerage firms need to be more prepared for volume surges and test their apps for bugs better during times like volume surges. Finally, hedge funds should adjust their strategies when it comes to short-selling stocks. The reason that /r/WallStreetBets was able to pull off their plan was that the hedge funds were taking out such prominent short positions on these stocks, thinking that no one could take advantage of their position. The users on /r/WallStreetBets saw this flaw in the hedge funds' strategy and took advantage of it.

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