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Control Failures in the 2021 GameStop Stock Event

Mememes have been a big part of internet culture for as long as I have been alive. Jokes have been around much longer. But who knew that jokes could impact the world so drastically? Who would have realized that a post on Reddit would lead to hedge funds losing hundreds of millions of dollars? While it was possible that something like that could happen, it wasn't probable—until GameStop. In January 2021, as COVID-19 was still running rampant around the world, GameStop was on the brink of bankruptcy¹. You would think that is a seemingly minute detail in comparison to a pandemic, but it isn't. Due to the pandemic, people were sent stimulus checks². And that was liquid assets. Assets that could be used in trading on the stock exchange. In a coordinated effort by retail investors on r/WallStreetBets, GameStop's stock price skyrocketed, triggering a rare event in the stock market, a short squeeze³⁴. This short squeeze caused hedge funds to lose \$6 Billion and left trading platforms in shock and disarray⁵.

¹ "What is the story of Gamestop's near bankruptcy in 2020?" *youexec.com*, <https://youexec.com/questions/what-is-the-story-of-gamestop-s-near-bankruptcy-in-2020>.

² "Economic Impact Payments." *treasury.gov*, U.S. Department of the Treasury, <https://home.treasury.gov/policy-issues/coronavirus/assistance-for-american-families-and-workers/economic-impact-payments>.

³ "GameStop Short Squeeze." *Wikipedia*, Wikipedia, https://en.wikipedia.org/wiki/GameStop_short_squeeze.

⁴ Tengulov, Angel. "How Prevalent Are Short Squeezes? Evidence From the US and Europe." *Harvard Law School Forum on Corporate Governance*, University of Kansas School of Business, 28 September 2023, <https://corpgov.law.harvard.edu/2023/09/28/how-prevalent-are-short-squeezes-evidence-from-the-us-and-europe/>.

⁵ "GameStop Short Squeeze." *Wikipedia*, Wikipedia

The GameStop Short Squeeze in 2021 was an example of a gray rhino risk that exposed critical vulnerabilities in Market System Failures and External Events Failures.

Before delving into the details, what exactly happened? What is a short squeeze? Who was affected? And who or what caused it? The entire short squeeze boils down to a few key things. Hedge funds, like Melvin Capital, were borrowing GameStop stock (GME) and selling it to investors at the market price because they believed that the price for GameStop's stock would go down because GameStop would be filing for bankruptcy⁶. They would buy back the GME stock that they sold at a lower price before they returned it to their stock lenders. In doing so, they would make money on the stock, profiting from the difference between the selling and repurchase price. This is an example of shorting a stock, betting against the growth of a company⁷. However, a short squeeze is where a stock's value grows instead of declining, forcing short sellers to buy the stock at a higher price than they sold it for. This happens because of an unexpected rise in the stock price, which makes short sellers cover their position, skyrocketing the price⁸. So, what happened with GameStop? Well, a retail investor named Keith Gill⁹ (DFV) did. As a quick aside, retail investors are non-professional investors who use their own money on the stock market¹⁰. Under his alias, DFV posted a photo on the subreddit r/WallStreetBets that consisted of a trade that was worth \$53,000¹¹. He also argued on YouTube and Reddit through a variety of analyses

⁶ "What is the story of Gamestop's near bankruptcy in 2020?" *youexec.com*,

⁷ Beers, Brian. "Short Selling: How It Works." *Investopedia.com*, Investopedia, 20 November 2024,

⁸ "short squeeze." *wikipedia*, https://en.wikipedia.org/wiki/Short_squeeze.

⁹ "Keith Gill." *Wikipedia*, https://en.wikipedia.org/wiki/Keith_Gill. Accessed 4 February 2025.

¹⁰ Borlovan, Patricia. "The Rise of the Digital Retail Investors and Their Revolution." *SeedBlink Blog*, 27 May 2022,

¹¹ "GameStop Short Squeeze." *Wikipedia*, Wikipedia

that the stock was being undervalued¹²¹³. This led to retail investors pouring cash into GameStop. On top of that, another user, Stonksflyingup, added fuel to the fire, making a video explaining the short position that was held by Melvin Capital would be impacted by the short squeeze, and illustrated it very graphically, with an image of Chornobyl¹⁴. Melvin Capital lost 30% of their short bets and needed a \$2.75 Billion bailout from Citadel and Point72 to survive¹⁵¹⁶. This led to the idea of buying GameStop stock becoming a meme, and thus the start of the short squeeze. Elon Musk added fuel to the fire by tweeting (since it was still Twitter at that time) another meme that was popular at the time, “Gamestonk” on January 26th¹⁷, further intensifying the desire for users to be in on the joke. The growing demand for GameStop’s stock, along with the rocketship called the GameStop stock price, meant that trading platforms needed to have an equivalent amount of collateral in case people wanted to pull out and sell their part of the stock¹⁸. Thus, because of liquidity concerns and the rising demand for collateral the Depository Trust and Clearing Corporation (DTCC) and other clearinghouses¹⁹, which process stock trades, demanded increased collateral, to cover potential losses²⁰. As a result, Robinhood started restricting the purchasing of GME. This move, however, led to

¹² Ibid

¹³ “1 TESTIMONY OF KEITH PATRICK GILL BEFORE THE U.S. HOUSE COMMITTEE ON FINANCIAL SERVICES.” *congress.gov*, U.S. Congress, 2021, <https://www.congress.gov/117/meeting/house/111207/witnesses/HHRG-117-BA00-Wstate-GillK-20210218.pdf>.

¹⁴ “GameStop Short Squeeze.” *Wikipedia*, Wikipedia

¹⁵ Ibid

¹⁶ “Melvin Capital.” *Wikipedia*, https://en.wikipedia.org/wiki/Melvin_Capital. Accessed 4 February 2025.

¹⁷ “GameStop Short Squeeze.” *Wikipedia*, Wikipedia

¹⁸ Ibid

¹⁹ Flores, Analisa, and Zazil Martinez. “What is a Clearinghouse? Key Role in Trade and Payments.” *Paystand*, <https://www.paystand.com/blog/what-is-a-clearing-house>. Accessed 5 February 2025.

²⁰ “What is DTCC and How Did It Stop GameStop Mania.” *bloomberg.com*, Bloomberg, <https://www.bloomberg.com/news/articles/2021-01-29/what-s-the-dtcc-and-how-did-it-stop-gamestop-mania-quicktake>.

public outcry, the primary sentiment being Robinhood was protecting hedge funds at the expense of the retail investors²¹.

The GameStop short squeeze wasn't just an unusual market event, fueled by a meme. It highlighted some fundamental issues within the market systems, specifically weak risk controls within trading platforms. One of the biggest risk failures in the GameStop event was a failure in risk management by Robinhood and other trading platforms. "Robinhood struggled to handle large trading volumes"²² and "there are internal things that are starting to buckle under pressure"²³ are direct examples from the Wall Street Journal that highlight the back-end of Robinhood struggling to keep up with the large volume of trades. This led to delays because Robinhood was unable to complete its daily reports, highlighted by a senior executive: "Dealing with OCC file delay right now. This is going to cause liquidity issues,"²⁴. This led to issues because the OCC file was due to their clearinghouse by 9 PM that very night. This is done to reduce risks in trading and payments, as well as guarantee that both the trader and the platform will meet their obligations to each other. To add fuel to the fire, the clearinghouse increased the amount of collateral that they wanted from Robinhood because of how volatily GME was behaving²⁵. This is because Robinhood would be opened up to settlement risks, where the investor may lose money on a trade if the

²¹ "GameStop Short Squeeze." *Wikipedia*, Wikipedia

²² Forelle, Charles. "Employees Scrambled to Keep Robinhood Afloat in January 2021 Meme-Stock Frenzy, House Report Finds." *wsj.com*, The Wall Street Journal, 25 June 2022, <https://www.wsj.com/articles/employees-scrambled-to-keep-robinhood-afloat-in-january-2021-meme-stock-frenzy-house-report-finds-11656185206>.

²³ *Ibid*

²⁴ *Ibid*

²⁵ "GameStop Short Squeeze." *Wikipedia*, Wikipedia

price sharply falls during the settlement²⁶. Thus, the broker, Robinhood would have “the liability vis-à-vis the clearing house for stock price risk during the settlement”²⁷.

Another glaring issue is the hedge funds and trading platforms' inability to react to market manipulation. Trading firms and hedge funds have advantages over retail investors due to their long-lasting relationships with lenders. On top of that, they are working with the best tools and information available, that retail investors may not have the funds to work with. This should have given them the ability to react to the retail investors' desire to purchase GameStop stock. I would also be remiss to mention the root cause of the entire short squeeze: the excessive shorting of GameStop stock. “Short positions became a widespread play in 2020, particularly following a fragile late 2020–early 2021 share price recovery. GME became among the most widely shorted U.S. companies, 140 percent as measured by the ratio of short interest to shares available for trading. GME was one of a number of stocks in which long-short hedge funds took heavy short positions”²⁸. This showed that hedge funds were establishing extremely short positions without enough oversight. However, this wasn't just an issue of the trading platforms or on the side of the hedge funds. People are an unpredictable part of the world as well. This short squeeze shows that the stock market doesn't exist in a vacuum of businesses and hedge funds. It shows that individuals have power as well, individuals can band together and externally influence the market.

²⁶ Malz, Allan M. “The GameStop Episode: What Happened and What Does It Mean?” *Cato Journal*, Cato Journal, Fall 2021, <https://www.cato.org/cato-journal/fall-2021/gamestop-episode-what-happened-what-does-it-mean#>.

²⁷ Ibid

²⁸ “The GameStop Episode: What Happened and What Does It Mean?” *Cato Journal*

This is the biggest example of the power of social media and the lack of oversight in manipulating stock prices that can occur through it. First things first, r/WallStreetBets had a major role in influencing the price of GME. There was an insane amount of traffic on the subreddit, about “73 million page views in 24 hours”²⁹. The traffic along with anonymous users choosing to use the subreddit for “organizing and synchronizing collective action”³⁰ showcased the dangers of social media and the complete lack of regulations for trading discussions on the internet. On a similar note, the SEC was slow in reacting to the meme-stock’s meteoric rise. There was a lack of clear policies on how to deal with social media-influenced trading. Meaning that the SEC was operating in new territory. There has been strict regulation on platforms like X and Facebook since 2012 for issues like insider trading³¹, but Reddit was not included in the regulations.

This case is interesting in itself because there wasn’t just one thing that could have prevented something like this short squeeze from happening. Instead, it felt as though it was a cacophony of issues—weak risk controls on the side of the trading platforms and hedge funds, regulatory gaps in the SEC, and the power of social media. The first key issue was the trading platforms that lacked liquid funds, which led to unexpected trading restrictions on individual investors. These restrictions led to public distrust and increased regulatory action. It also showed how hedge funds’ extreme short positions led to major vulnerabilities in the stock market³². These vulnerabilities were exploited by retail investors using social media platforms like Reddit and within

²⁹ “GameStop Short Squeeze.” *Wikipedia*, Wikipedia

³⁰ “GameStop Short Squeeze.” *Wikipedia*, Wikipedia

³¹ Cook, Dave. “How social media complicate SEC crackdown on insider trading.” *csmonitor.com*, The Christian Science Monitor, 22 Feb. 2012, https://www.csmonitor.com/USA/Politics/monitor_breakfast/2012/0222/How-social-media-complicate-SEC-crackdown-on-insider-trading.

³² “The GameStop Episode: What Happened and What Does It Mean?” *Cato Journal*

subreddits like r/WallStreetBets. This widespread collaboration by retail investors also highlighted the regulatory blind spots within the SEC. The biggest blind spot is the lack of a framework to deal with speculative trading fueled by a narrative. These failures were all instrumental in the GameStop Short Squeeze.

These issues have heavily reshaped the financial landscape, displaying the power that retail investors have when they come together and how they can challenge the traditional market traders. Retail Investors have more access to the stock market than ever before because of trading platforms, like Robinhood, which provide widespread access to financial markets as well as easy commission-free trading³³. Social media also made financial information readily available to everyone. Be it in a casual discussion thread on Reddit or a community discussion forum, like Discord³⁴. These factors have shifted power away from large powers and players, like hedge funds, and brought more into the open arms of independent investors. But, with a change like this, social media speculation has a larger impact on the stock market, leading to high stock volatility, momentum-based trading, liquidity issues, and surprising brokers and hedge funds into reacting to the public³⁵.

Aside from the purely commercial aspect, this short squeeze highlighted the need for better regulatory oversight. Specifically, in detecting and reacting to abnormal trading due to online influence. To reduce the risk of something like this happening again, regulatory bodies, like the SEC, need to develop preventative measures³⁶—such

³³ Fisch, Jill E. "GameStop and the Reemergence of the Retail Investor." *ecgi.global*, European Corporate Governance Institute and University of Pennsylvania, April 2022, https://www.ecgi.global/sites/default/files/working_papers/documents/final_9.pdf.

³⁴ "GameStop Short Squeeze." *Wikipedia*, Wikipedia

³⁵ Fisch, Jill E. "GameStop and the Reemergence of the Retail Investor." *ecgi.global*

³⁶ "The GameStop Episode: What Happened and What Does It Mean?" *Cato Journal*

as refining short-selling disclosures and identifying conflicts of interest in market-making practices. They must also develop reactionary measures—such as having some form of real-time monitoring of the market and having a measured process for if social media speculation leads to another meme stock³⁷. However, regulators are not the only ones who need to add to their repertoire of tools and risk management strategies, financial markets do as well. Financial markets need to start enhancing transparency in trades and strengthening liquidity management.

To highlight the need for regulatory action, the Carnegie Endowment advocates clearer regulation on social media driven trading. This is because “discourse on social media increasingly affects personal financial decisions,”³⁸ which can allow for malicious actors to disinform the public and start a coordinated effort to artificially inflate or deflate stock prices beyond their true worth. Currently this falls on the individual to detect and disclose. However, to reduce the risk of speculative trading booms, there should be regulations very similar to the regulations for insider trading implemented. This would warn bad actors of the punishments for their actions should they act, behaving as both a preventative measure as well as a reactionary measure.

Another major tool that could be used to prevent speculative trading and behave as a preventative measure is implementing AI-driven surveillance tools and some form of rapid response frameworks in the event of meme-stocks. The Financial Stability Board suggested the use of “AI and ML to analyse increasing volumes of regulatory

³⁷ “The Use of Supervisory and Regulatory Technology by Authorities and Regulated Institutions. Market developments and financial stability implications.” *fsb.org*, Financial Safety Board, 9 October 2020.

³⁸ Biancotti, Claudia, and Paolo Ciocca. “Financial Markets and Social Media: Lessons From Information Security.” *carnegieendowment.org*, Carnegie Endowment For International Peace, 02 November 2021,

data”³⁹ to handle large amounts of data at a fast pace. This would allow for government bodies to detect potential speculative trading before they occur, preventing incidents like the GME incident. Another thing that the tool would allow for is to have a quick reaction to any meme stocks being traded before they spiral out of control, thus, if any future incidents occur, they will be contained faster than waiting for trading platforms to have liquidity issues.

On the note of liquidity issues, Robinhood had big problems on that front, to the point that they had to impose restrictions on trading at the end of January⁴⁰. This was a major oversight on the risk management side of things. Places like r/WallStreetBets were getting an overwhelming amount of digital traffic days before the liquidity issues arose. There were also many different posts from people, like Stonksflyingup⁴¹, that showed a high level of popularity for the GME meme. This proves that Robinhood could have been better prepared for major liquidity issues, be it by implementing a temporary policy on their app or by filing their reports while adding more collateral, in preparation for something like the GME incident happening.

The GameStop short squeeze was not an unexpected market failure—it was a wake-up call for financial institutions, regulators, and investors alike. This short squeeze highlighted critical vulnerabilities within trading firms’ liquidity management, hedge funds’ excessive short-selling practice, regulatory blind spots for market manipulation, and revealed the underestimated power of social media was in driving stock volatility. Platforms like Robinhood struggled with liquidity, hedge funds like Melvin Capital

³⁹ “The Use of Supervisory and Regulatory Technology by Authorities and Regulated Institutions. Market developments and financial stability implications.” *fsb.org*,

⁴⁰ “The GameStop Episode: What Happened and What Does It Mean?” *Cato Journal*

⁴¹ “GameStop Short Squeeze.” *Wikipedia*, Wikipedia

underestimated retail investors, and regulatory bodies like the SEC struggled with monitoring speculative trading of GME. With stronger liquidity controls, increased short-selling transparency, and robust market surveillance, regulators will be able to prevent bad actors from influencing the stock market. However, they will need to strike a balance between oversight and free-market principles so that retail investors can continue to participate in the stock market without compromising investor privacy. Finally, GameStop was a market defining event. It showed the world that social media can and will influence investing. It showed that there is no doubt that outside factors can cause short squeezes. It also served as a warning: Get your financial systems ready, social media is here to stay.

Works Cited

AuroraltsNotTheTime. *CMV: If the people at r/wallstreetbets can manipulate the GameStop stock for a meme, then hedge funds that control portfolios worth billions of dollars have been doing it for decades.* Discussion of how GameStop stock was manipulated by retail investors and conjecture about Wall Street.

2021. *Reddit*,

https://www.reddit.com/r/changemyview/comments/l5ub37/cmv_if_the_people_at_rwallstreetbets_can/.

“Avoid Fraud Following the Crowd: Investing and Social Media.” *finra.org*, FINRA, 13 March 2023, <https://www.finra.org/investors/insights/following-crowd-investing-and-social-media>.

Beers, Brian. “Short Selling: How It Works.” *Investopedia.com*, Investopedia, 20 November 2024, <https://www.investopedia.com/articles/investing/100913/basics-short-selling.asp>.

Biancotti, Claudia, and Paolo Ciocca. “Financial Markets and Social Media: Lessons From Information Security.” *carnegieendowment.org*, Carnegie Endowment For International Peace, 02 November 2021, <https://carnegieendowment.org/research/2021/11/financial-markets-and-social-media-lessons-from-information-security?lang=en>.

Borlovan, Patricia. “The Rise of the Digital Retail Investors and Their Revolution.” *SeedBlink Blog*, 27 May 2022, <https://seedblink.com/2022-05-27-the-rise-of-the-digital-retail-investors-and-their-revolution>.

Cook, Dave. "How social media complicate SEC crackdown on insider trading."

csmonitor.com, The Christian Science Monitor, 22 Feb. 2012,

https://www.csmonitor.com/USA/Politics/monitor_breakfast/2012/0222/How-social-media-complicate-SEC-crackdown-on-insider-trading.

Doren, Peter Van. "GameStop, Payments for Order Flow, and High Frequency

Trading." *cato.org*, Cato, 01 02 2021, <https://www.cato.org/blog/gamestop-payments-order-flow-high-frequency-trading>.

"Economic Impact Payments." *treasury.gov*, U.S. Department of the Treasury,

<https://home.treasury.gov/policy-issues/coronavirus/assistance-for-american-families-and-workers/economic-impact-payments>.

Fisch, Jill E. "GameStop and the Reemergence of the Retail Investor."

ecgi.global, European Corporate Governance Institute and University of Pennsylvania, April 2022,

https://www.ecgi.global/sites/default/files/working_papers/documents/final_9.pdf.

Flores, Analisa, and Zazil Martinez. "What is a Clearinghouse? Key Role in Trade and Payments." *Paystand*, <https://www.paystand.com/blog/what-is-a-clearing-house>. Accessed 5 February 2025.

Forelle, Charles. "Employees Scrambled to Keep Robinhood Afloat in January 2021 Meme-Stock Frenzy, House Report Finds." *wsj.com*, The Wall Street

Journal, 25 June 2022, <https://www.wsj.com/articles/employees-scrambled-to-keep-robinhood-afloat-in-january-2021-meme-stock-frenzy-house-report-finds-11656185206>.

“GameStop Short Squeeze.” *Wikipedia*, Wikipedia,
https://en.wikipedia.org/wiki/GameStop_short_squeeze.

“How Did Hedge Funds Lose Money On GameStop.” *Hedge Fund Alpha*, 3
August 2024, [https://hedgefundalpha.com/how-did-hedge-funds-lose-money-on-](https://hedgefundalpha.com/how-did-hedge-funds-lose-money-on-gamestop/)
[gamestop/](https://hedgefundalpha.com/how-did-hedge-funds-lose-money-on-gamestop/). Accessed 4 February 2025.

Irvine, Dan. “Market Psychology: Capitalizing On Emotional Drivers Of Market
Trends.” *Forbes.com*, Forbes, 30 June 2024,
[https://www.forbes.com/sites/danirvine/2024/06/30/market-psychology-](https://www.forbes.com/sites/danirvine/2024/06/30/market-psychology-understanding-emotional-drivers-of-market-trends/)
[understanding-emotional-drivers-of-market-trends/](https://www.forbes.com/sites/danirvine/2024/06/30/market-psychology-understanding-emotional-drivers-of-market-trends/).

“Keith Gill.” *Wikipedia*, https://en.wikipedia.org/wiki/Keith_Gill. Accessed 4
February 2025.

Liberto, Daniel. “The SEC’s Rules and Regulations on Social Media Use.”
investopedia.com, investopedia, 31 August 2022,
[https://www.investopedia.com/sec-rules-and-regulations-on-social-media-use-](https://www.investopedia.com/sec-rules-and-regulations-on-social-media-use-5270738)
[5270738](https://www.investopedia.com/sec-rules-and-regulations-on-social-media-use-5270738).

Malz, Allan M. “The GameStop Episode: What Happened and What Does It
Mean?” *Cato Journal*, Cato Journal, Fall 2021, [https://www.cato.org/cato-](https://www.cato.org/cato-journal/fall-2021/gamestop-episode-what-happened-what-does-it-mean#)
[journal/fall-2021/gamestop-episode-what-happened-what-does-it-mean#](https://www.cato.org/cato-journal/fall-2021/gamestop-episode-what-happened-what-does-it-mean#).

“Melvin Capital.” *Wikipedia*, https://en.wikipedia.org/wiki/Melvin_Capital.
Accessed 4 February 2025.

Newman, Neal. “GameStopped: How Robinhood’s GameStop Trading Halt
Reveals the Complexities of Retail Investor Protection.” *Texas A&M Law*
Scholarship, 2023, <https://scholarship.law.tamu.edu/facscholar/1795/>.

“1 TESTIMONY OF KEITH PATRICK GILL BEFORE THE U.S. HOUSE COMMITTEE ON FINANCIAL SERVICES.” *congress.gov*, U.S. Congress, 2021, <https://www.congress.gov/117/meeting/house/111207/witnesses/HHRG-117-BA00-Wstate-GillK-20210218.pdf>.

“r/wallstreetbets.” *Wikipedia*, <https://en.wikipedia.org/wiki/R/wallstreetbets>. Accessed 4 February 2025.

“short squeeze.” *wikipedia*, https://en.wikipedia.org/wiki/Short_squeeze.

“Social Media.” *finra.org*, FINRA, <https://www.finra.org/rules-guidance/key-topics/social-media>.

Stewart, Emily. “The GameStop stock frenzy, explained.” *Vox.com*, Vox, 13 May 2024, <https://www.vox.com/the-goods/22249458/gamestop-stock-wallstreetbets-reddit-citron>.

Tengulov, Angel. “How Prevalent Are Short Squeezes? Evidence From the US and Europe.” *Harvard Law School Forum on Corporate Governance*, University of Kansas School of Business, 28 September 2023, <https://corpgov.law.harvard.edu/2023/09/28/how-prevalent-are-short-squeezes-evidence-from-the-us-and-europe/>.

“The Use of Supervisory and Regulatory Technology by Authorities and Regulated Institutions. Market developments and financial stability implications.” *fsb.org*, Financial Safety Board, 9 October 2020.

“What is DTCC and How Did It Stop GameStop Mania.” *bloomberg.com*, Bloomberg, <https://www.bloomberg.com/news/articles/2021-01-29/what-s-the-dtcc-and-how-did-it-stop-gamestop-mania-quicktake>.

“What is the story of Gamestop's near bankruptcy in 2020?” *youexec.com*,
<https://youexec.com/questions/what-is-the-story-of-gamestop-s-near-bankruptcy-in-2020>.

Williamson, Matti. “Robinhood Faced Deeper Liquidity Woes Following GameStop's Rally.” *FinanceMagnates.com*, Finance Magnates, 26 06 2022,
<https://www.financemagnates.com/forex/robinhood-faced-deeper-liquidity-woes-following-gamestops-rally/>.