CORNERSTONE
INVESTMENT PARTNERS, LLC

A Trader's Perspective: Short Selling, Reddit, Robinhood and Recent Volatility in the Market

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At this point you've likely seen lots of coverage on the Robinhood and Reddit WallStreetBets (r/WSB) effect on the stock market, specifically on a subset of "stonks" identified as "Rocket Ships" by "Diamond Hand" traders, most notably GameStop (GME).

I spent Saturday in my home town to visit my mother, and while there was able to have lunch with three of my friends from high school. Conversations quickly shifted to the markets, specifically what is going on with GameStop, Robinhood, and Reddit. My audience are all intelligent and successful people; they just work in other industries, so they wanted to hear my "expert" financial services professional opinion on what is happening. I made mental notes of all the questions asked so that I could try to provide some useful information to others that may be confused by the coverage of this market anomaly.

The following is a high level overview of short selling, the Robinhood platform, r/WSB and other associated topics related to recent market events. By the time this document is edited and passes compliance review, I have no doubt that these stocks may have moved by 50% or more in either direction and there will be a continuous flurry of news items that advance the story well beyond where it is as I type this on January 30th. My goal is not to predict how this works out, but to explain the market mechanisms that are involved.

Happy trading!

Chapter 1: Short Selling is a Normal Part of the Modern Stock Market

What is Short Selling?

To understand what is happening with GameStop, it's necessary to understand short selling and why so many hedge funds were shorting it.

A "long" stock position is where an investor purchases a stock with the expectation of selling it at a higher price in the future to realize a profit. This is the focus of most stock market investors, particularly retail investors. When buying a stock the worst case scenario is a stock trading to zero, with your maximum possible loss being 100 percent.

An investor that wants to sell a stock short believes that the stock price will decline. To sell a short a stock, the investor has to borrow shares of the stock from another investor. The investor then sells the borrowed shares on the market. To cover the short position the investor has to buy back the shares at a later date, hoping that they can buy at a lower price. The risk of loss on a short sale is theoretically unlimited since the price of the stock could increase to infinity.

For example, let's say GameStop is trading for $10, and you think the price will go down. You borrow a share and sell it to someone for $10, its current market price. Now say that the stock goes down to $5 a share. You then buy it at $5 at a later date and deliver it to the person who lent it to you. In this example you made $5 on your short position (minus borrow fees and other costs, which we will discuss later).

Who sells stocks short and why?

So why do investors short stocks? Some investors will use short selling to take advantage of a potential decline in a specific security, sector, or across the market as a whole. Hedgers also use short selling to protect gains, mitigate losses in a security or portfolio, or structure a trade to extract the potential return from a single risk or opportunity by balancing the other side.

Some funds will short a stock that they believe is overvalued compared to its earnings and fundamentals. These investors are using short selling as a way to profit from their fundamental research on stocks they view as overvalued, just as long investors buy stocks where their research shows the stock as undervalued.

Other investors, such as Citron Research (who identified fraudulent activity at Valeant Pharmaceuticals amongst others and has played a role in the GameStop story), short stocks where they believe the company may be committing fraud or may have debt repayment issues, etc. that will lead to sharp decreases in the stock price or possibly bankruptcy. Short selling is at the high end of the risk spectrum as there are liquidity risks, risk of large losses, leverage and margin considerations. Therefore, like option trading, shorting stocks is generally done only by hedge funds and other sophisticated investors.

What are the costs associated with short selling?

A borrow fee, or loan fee, is charged by a brokerage firm to a client for borrowing shares. This fee depends on the difficulty of borrowing the stock. Stocks with a high short interest are more difficult for the broker to borrow and are generally more expensive. The level of short interest is the number of shares sold short where the position has not been closed out.

To short, the investor must have a margin account with their broker. A margin account allows the investor to borrow stocks from their broker's inventory or from an outside custodian bank or broker-dealer, using the investors' cash and securities as collateral. A short sale requires margin because the transaction involves selling stock that is borrowed and not owned.

Margin accounts may be used to buy a long position as well. Using margin for a long transaction, the investor borrows money from the brokerage to buy stocks, allowing the investor to take on a larger position than their cash otherwise would allow. The investor is obligated to repay money borrowed for their long position plus interest at a later date.

The investor is required to provide initial margin - cash, securities or other collateral - at the time the short position is initiated. Maintenance margin is the collateral required in the account during the life of the short. Maintenance margin helps the broker ensure the investor maintains collateral in the account should the value of their securities fall when shorting. Some securities, especially volatile ones, will have higher margin requirements. If the value of the short position falls below maintenance margin requirements, due to a price increase in the underlying stock, the short investor will receive a margin call and either be required to close the short position or to contribute additional funds to the margin account. We will forego the math on margin calls as that lies outside the scope of this discussion.

A short investor is also responsible for paying the dividends owed to the lender of the shorted stock that they borrowed.

How is a short position closed?

Regulations do not limit the time a short seller can stay short a stock, but there are several reasons a short position may be closed:

- Shares are no longer available to borrow - the stock lender retains the right to recall the securities at any time without notice. Generally, the broker will try to re-borrow the securities but if shares are not available the broker is forced to close out the investor's short position at the current market price.
- As discussed above, an investor may also have to close the short position due to a margin call.
- The investor may have shorted a stock that has decreased in price and cover their short at the lower price to take a gain and close the position.
- The investor may have shorted a stock and choose to close the position because the trade has moved against them and the risk/return or investment thesis has changed.

What is a short squeeze?

If the short interest of a stock is high, as it was with GameStop and other r/WSB targets (see below for full description of r/WSB), any event that causes the stock to increase like a positive earnings report (or a group of retail investors piling into the stock based on Reddit posts) may force short sellers to buy back the shares to cut their losses or because they received a margin call. As more shorts cover, the supply of available shares to buy in the market is overwhelmed by a sudden demand due to the shorts buying to cover their positions, driving the price even higher.

Any level of short interest means there more shares "owned" than there is stock available (since both the stock lender and buyer of the short sell own the share). In a squeeze, this supply/demand imbalance can be exacerbated even in non-extreme short interest situations.

Price movements related to shorts buying to cover can also be accentuated by speculators who understand the situation the short sellers are facing and actively try to pressure those short positions by buying the stock to push the share price up.

The swift movement in the stock is not related to the underlying fundamentals of the company and often there is a correction, or marked decrease in the price of the stock after the short squeeze, but the timing of those corrections can depend on a number of variables and no one can predict exactly how long the correction may take.

Short squeezes are generally more common in stocks that have expensive borrow rates (are more difficult to borrow and/or have high short interest) or low trading volume, as the potential costs can increase the pressure on short sellers to cover their positions and it is more difficult to acquire the shares to do so.

The average short interest for stocks in the S&P 500, a large-capitalization index, was approximately 3.4% in mid-December, while the average short interest for stocks in the Russell 2000, a small-capitalization stock index, is approximately 6%. GameStop had a short interest nearly 140% in mid-January according to Forbes.

How can a stock have over 100% short interest?

SEC regulations are designed to prevent what's known as naked short selling. A naked short sale is where a broker allows the investor to short a stock without arranging to borrow the shares. It is possible for short interest to exceed 100% without naked short sales however.

For example, let’s assume Investor A owns shares of GME (GameStop). This investor allows their broker to lend their shares to short-sellers. The broker lends the shares to Investor B who immediately sells the borrowed shares short. Investor C buys the borrowed shares from Investor B. If Investor C allows their broker to lend their shares, then that broker can lend out Investor C’s shares to Investor D who sells them short. The same shares end up getting borrowed and sold twice in this example, therefore the short interest could eventually exceed the number of shares outstanding.

Chapter 2: Reddit Provided A Forum for Investors to Connect and Build a Community

What is Reddit?

Reddit is a social platform where users submit posts in the form of text, pictures or links that other users vote on based on if they like the post or not. Posts are organized by subject into user-created boards called "subreddits", which cover a variety of topics. As of October 2020, Reddit ranks as the 17th-most-visited website in the world and 7th most-visited website in the US, according to Alexa Internet.

What is WallStreetBets?

The subreddit wallstreetbets, r/WSB, describes itself as “Like 4chan found a bloomberg terminal”. It’s simply a message board where users discuss stock and option trading. The members of this platform are typically younger retail traders that forego traditional fundamental analysis for aggressive trading strategies. Many members show off their brokerage account statements to demonstrate just how much money they have made (or lost), and commonly roll the dice on “YOLO (You Only Live Once)” trades that often represent a significant portion of their net worth. The recent move in high short interest stocks, like GameStop, has been credited to members of this group.

r/WSB is also known for its profane language, with members referring to themselves as autists, degenerates, or worse. Often times, they use emojis and other inside jargon, such as “Diamond Hands” 💎 🤲 (someone willing to hold onto positions for a long time), “Rocket Ships” 🚀 (stocks that are expected to go up in value), or "Tendies" (Chicken tenders or trading profits). Below is a link to a glossary of terminology used on r/WSB. I must provide a warning that some of the terms used may be offensive and/or include profanity.

https://www.wallstreet% bets.shop/blogs/news/dissecting-the-unique-lingo-and-terminology-used-in-the-subreddit-r-wallstreetbets

Chapter 3: Robinhood and Cheap, Easy Trading Amplified The r/WSB Message

What is Robinhood?

Robinhood is a retail trading platform/app founded in 2013 with the mission to "democratize finance for all." Their original concept was to provide clients with commission-free trades of stocks and exchange-traded funds (ETFs) with no account minimums. Since Robinhood's founding, most large retail brokers (e.g., Schwab, Fidelity) have moved to commission-free trading on stocks and ETFs as well.

Robinhood does not provide services related to retirement accounts, mutual funds or bonds. They do provide cryptocurrency trading, margin and option trading in addition to stocks/ETFs. They also offer checking and savings accounts as well as debit cards. The average account size at Robinhood is thought to be in the $1,000-$5,000 range compared to over $100,000 at Schwab or similar competitors. As of 2020, Robinhood had 13 million users as of October 2020, according to CNBC.

How does Robinhood make money given zero commissions and free platform?

Robinhood has several revenue streams including premium services that provide the user with research reports, market data, bigger instant deposits, and margin investing. They also generate income on uninvested client cash, by investing it in interest-bearing accounts, as well as fees from their debit card platform. The two revenue streams that are most interesting though are rebates from market makers and stock loan fees.

According to the Wall Street Journal in 2018, "If a customer buys 100 shares of Apple for $200 each - a $20,000 purchase - Robinhood could get up to $5.20 for routing that order to electronic-trading giant Citadel Securities LLC, according to calculations based on a recent Securities and Exchange Commission filing. Schwab would be paid around 9 cents for sending the same order to Citadel, while TD Ameritrade would get 16 cents on average, according to these companies' SEC filings."

Bloomberg also reported in 2018 that Robinhood makes nearly half of its revenue from high-frequency trading and payment for order flow (PFOF). Robinhood states that it sends "your orders to market makers that allow you to receive better execution quality and better prices. Additionally, the revenue we receive from these rebates helps us cover the costs of operating our business and allows us to offer you commission-free trading." Instead of Robinhood trades being sent to a public exchange, Robinhood makes money from directing trades through parties that provide the other end to the trade. Robinhood routes more than half of its customer orders to Citadel, by far its largest market-making partner by volume. They also route trades to Virtu, G1 Execution Services, Wolverine and Two Sigma.

It should be noted that other retail platforms utilize PFOF as well. Payment for order flow is a practice pioneered by Bernard Madoff, the same Madoff known for a massive Ponzi scheme, and has been a controversial topic amongst traders and regulators ever since.

When you buy securities through a brokerage firm, like Robinhood, the broker will automatically put your securities into "street name". Street name is slang for when a brokerage account holds a customer's securities and assets under the name of the brokerage firm, rather than the name of the individuals who own the stock. This makes transactions cheaper and increases the efficiency of recording trades for the broker, but it also allows Robinhood to earn income from lending its users' securities to counterparties for short selling.

Chapter 4: But It's All Inextricably Linked Anyway

How does this all come together?

This is where the Robinhood story gets really interesting. Robinhood traders, those that are attempting to punish the "Wall Street elites" by coordinated efforts organized on Reddit to short squeeze hedge funds, are trading through a platform that is paid for their users' retail order flow by High-frequency trading firms (HFT) who front run their trades. They also make revenue by lending their clients' shares to hedge funds to short. One of these HFTs, and Robinhood's largest PFOF "market maker" Citadel, was also one of the firms that invested $2.75 billion in Melvin Capital. Melvin was one of the biggest short-sellers of GameStop and has reportedly lost billions on the price movement caused by the r/WSB army.

In effect, you have an army of small retail investors using a free platform that loans out their shares to shorts and sells their order flow to hedge funds that front runs the trades, making money off of those trades, who then financially backs one of the major short sellers that the small investor army is trying to bankrupt. Andrew Ross Sorkin will make a lot of money off of this book and subsequent movie

Why did Robinhood restrict trades on certain stocks?

Given the propensity for a good internet conspiracy theory these days, when Robinhood suspended trading in a few volatile stocks last week, including GameStop, there were rumors that their trading counterparts, Citadel and the like, had put pressure on Robinhood to halt retail trading so that the HFTs and their hedge fund friends could cover their shorts. Twitter exploded with these theories, while Alexandria Ocasio-Cortez and Ted Cruz jumped into the fray calling for congressional hearings on the matter. Somehow, this is the singular issue that has unified Washington to this point.

The actual reason for the suspension of trading is far less interesting. The Depository Trust & Clearing Corp. (DTCC), the main clearinghouse (an intermediary between buyers and sellers that ensures participants have funds available for their trades to settle) for U.S. stocks, required additional collateral from brokerages, including Robinhood, which is a common occurrence in volatile markets. In response, Robinhood, and several other trading platforms, raised large sums of money to post with the DTCC and reined in their risk to by suspending certain trades. Robinhood also moved to unwind some client bets, which may have been the result of margin calls on users' long positions triggered when the stock price temporarily plummeted from a high of $483.00 to a low of $113 per share in a matter of an hour and a half between 10AM and 11:24AM on Thursday, January 28th.

The reason for the collateral call is that some of the retail investors are trading on margin through brokers like Robinhood, putting up between 50% and 90% of the amount needed to purchase the shares, with the rest coming from the broker. Brokers in turn have to put up money with the DTCC to back those trades during the two days between execution and settlement of the trades. That two day settlement period becomes risky with the volatility and volume seen in GameStop and other stocks in recent days.

On Friday, Robinhood raised more than $1 billion in capital to help meet the current and possible future increases in demand for deposit requirements from the clearinghouse. They allowed purchases in the formerly restricted securities on Friday, but altered the trading limits throughout the day creating additional outcry from their user base.

Conclusion: So when does this "Game Stop"?

Honestly I have no idea. Speculative bubbles and irrational exuberance (unfounded market optimism that lacks a real foundation of fundamental valuation) are simply a part of investing and have been since the Dutch tulip mania in the 1600s. The Robinhood democratization of the markets and short seller punishment may last for a month, or years, or it may come crashing down next week. This process has caused Citron Research, and its founder Andrew Left, to cover their GameStop short and announce that "As of today, Citron Research will no longer be publishing what can be considered as short-selling reports."

Clearly there is no fundamental basis for the outsized stock price movements. For example, BLIAQ is the stock that represents the liquidation holding company of Blockbuster video. This stock was up over 2300% year to date as of 01/30/2021 (BLIAQ closed on 12/31/2020 at $.0033/share and on 01/29/2021 at $.08/share), likely inspired by the r/WSB driven GME surge. Heck, there were companies that were up solely because their tickers were similar to others involved. This is not a new phenomenon - In March 2020 investors thought they were buying Zoom Video Communications, the web conferencing platform that has become ubiquitous during the COVID-19 quarantine, whose ticker is ZM. They instead bought the ticker ZOOM, or Zoom technologies, a penny stock whose price increased approximately 900% on the investor confusion.

GameStop has negative sales growth in three out of the last four years, with negative earnings in five of the last ten quarters. Sales are declining across all product categories in the most recent quarter and management no longer provides financial guidance. Same store sales were -19.4% in 2020. Even with the launch of new gaming consoles, cost saving measures, and portfolio management, the company is expected to lose money for the next two years. They have closed over 800 stores since 2019, and paid loyalty members are down 30% over the last 5 years. The company's high margin used game resale business is no longer reported separately, as the video game consoles have moved towards digital downloads rather than physical games destroying GME's most profitable business, yet the stock is up over 1600% year to date (GME closed on 12/31/2020 at $18.84/share and on 01/29/2021 at $325/share). That price implies $24bn of enterprise value, which is 150 times GameStop's expected 2021 EBITDA

(Earnings Before Interest, Taxes, Depreciation, and Amortization - a metric used to evaluate a company's operating performance). At some point the urge to punish shorts subsides and the stock price once again reflects the fundamentals. It may alter the hedge funds use of shorts, at least temporarily, but it will not alter the fate of GameStop.

Epilogue: How does this affect Cornerstone?

Could we have owned GameStop?

Cornerstone's investment philosophy is based upon the observation that stock prices are more volatile than the fundamentals that determine value (a fact only amplified by the events of the past week). For large companies, the best indicator of a company's future performance is what the company has proven it can do in the past. Even if a stock price seems cheap, if a company's fundamentals are unlikely to repeat and its track record is not relevant and repeatable, then fundamentals are a poor indicator of value. While there were smart, fundamentally-driven, value-oriented, investors on both sides of the trade in advance of the short squeeze, GameStop was considered a consensus short for a reason. GameStop was theoretically inexpensive in our fair value model before the recent run, but the underlying fundamentals disqualified it from consideration. Even without the impact of COVID (Good for games, bad for GameStop), GameStop is a company in significant business model flux as game distribution shifts from physical media to digital downloads, impacting its position in the value chain. Fundamental performance for the company may be positioned to repeat, but not the way you would want – instead, they appear to be deteriorating, as described above. It shouldn't be surprising that our valuation model shows it as extremely overvalued today at current prices, ranking 783 out of the 800 stocks in our investible universe.

Is Cornerstone impacted?

Beyond distractions in the market, the short answer is that this does not affect Cornerstone in the least. We do not own GameStop, and own very few of the Robinhood-squeeze impacted securities in client accounts outside of non-discretionary strategies. They are generally smaller companies with severe fundamental concerns impacting their underlying embedded characteristics. Cornerstone is a long only, fundamental research based investment firm, meaning we have no short positions to be squeezed and we base our investments on fundamental research, not short term market fluctuations or investment fads.

As we have written before, mania like we've seen in the last few weeks is yet another example of euphoria in the markets, and it remains increasingly important to take an active approach and focus on identifying attractively valued securities.

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Disclosure: The opinions expressed are those of Cornerstone Investment Partners, LLC.