PAGE ONE Economics®

November 2024

Who Buys Meme Stocks?

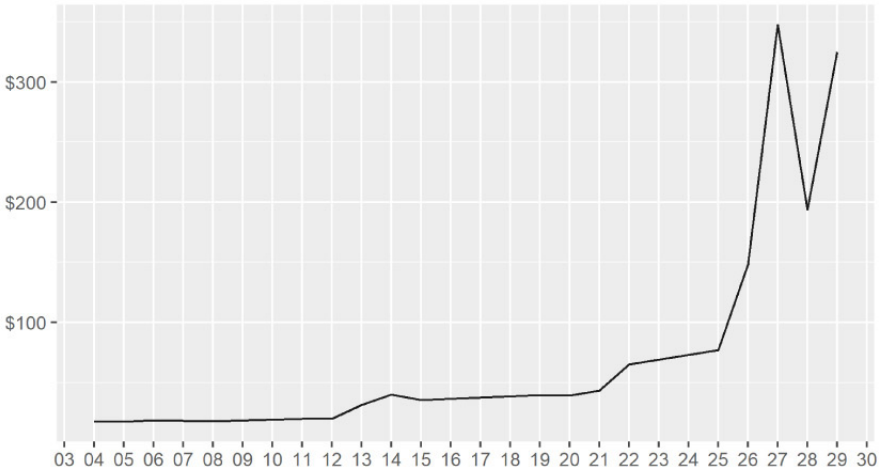
Mary Clare Peate, PhD, Research Information Services Consultant
Cameron Tucker, Economic Education Analyst

> "One of the funny things about the stock market is that every time one person buys, another sells, and both think they are astute."
> —William Feather

Introduction

GameStop is a video game retail company that is listed as GME on the New York **Stock Exchange**. In January 2021, its **stock** price, trade volume, and trade dollar value increased dramatically after receiving a great deal of social media attention. Given this unusual type of trading activity, GameStop was deemed the first "**meme stock**."

Figure 1: **GameStop Stock Closing Prices, Jan 2021**



SOURCE: MIDAS Vendor-Supplied Closing Prices via the Securities and Exchange Commission's Staff Report on Equity and Options Market Structure Conditions in Early 2021.

Figure 1 above shows the closing prices of GameStop shares throughout January 2021. Why did GameStop's stock price change so much over such a short time period? While a complete answer to this question is very complex and outside the scope of this discussion, the article will summarize common reasons why the price of a stock changes and how a meme stock seems to differ.

© 2024 Federal Reserve Bank of St. Louis. Permission is granted to reprint or photocopy this lesson in its entirety for educational purposes, provided the user credits the Federal Reserve Bank of St. Louis, https://www.federalreserveeducation.org.

Changes in the Price and Demand for Stocks

A stock is a share of ownership in a company. People often purchase stock shares that they believe will go up in price. In other words, they believe the long-term value of the company will increase over time. Purchasing stocks or bundles of stocks is a form of **investment** for many people.

Stock prices should change over time to reflect the value of the company, but ultimately the price of a company's stock is determined by the laws of **supply** and **demand**. If more people are trying to buy a company's stock, the price of that stock is going to increase. Vice versa, if fewer people are trying to purchase a company's stock, the price of that stock is going to decrease. The supply of a stock also affects the stock price, but this is not as large a factor because changes in the supply of a stock happen much less frequently.

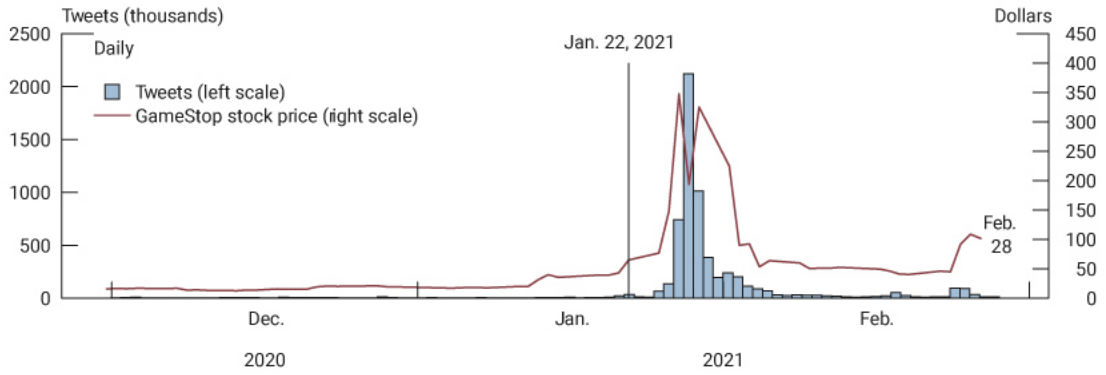
There are several different ways investors try to gauge the value of the company, but two main factors that affect demand for a company's stock are new information about a company and changes in underlying economic or market conditions. Some examples of new information include a company's quarterly earnings or an announcement of the company's change in leadership. Some examples of changes in general market conditions include changes in interest rates or news about a sector or the overall economy. Anticipated changes can also affect a stock's current demand.

Demand for Meme Stocks

A meme stock is like any other stock in that it, too, is governed by the laws of supply and demand. However, unlike traditional stocks, demand for a meme stock, and therefore its share price, does not seem to be primarily driven by new information about the company or general economic or market conditions.

In the case of GameStop, the strongest indicator of demand for its stock in January 2021 was social media posts about GameStop. Figure 2 below, from The Federal Reserve's Financial Stability Report from 2021, indicates a strong positive relationship between the price of GameStop stock and social media posts about GameStop from December 2020 to February 2021. The report also notes that there was a higher number of social media posts regarding GameStop on days with higher trading volume and on days with higher volatility in price.

Figure 2: **GameStop Stock Price and Twitter Mentions of GameStop, Dec 2020-Feb 2021**



SOURCE: Twitter, Inc. and Bloomberg via the November 2021 Financial Stability Report by the Board of Governors of the Federal Reserve System.

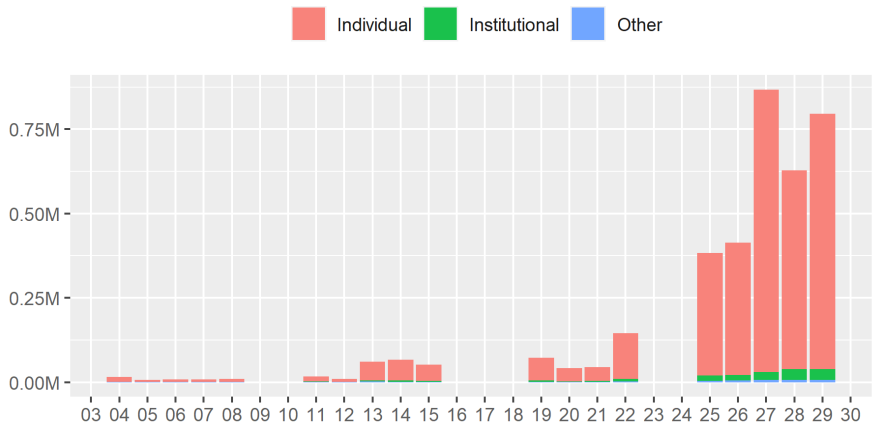
© 2024 Federal Reserve Bank of St. Louis. Permission is granted to reprint or photocopy this lesson in its entirety for educational purposes, provided the user credits the Federal Reserve Bank of St. Louis, https://www.federalreserveeducation.org.

Who Demands Meme Stocks?

The correlation between social media posts and GameStop's stock price can in part be explained by the fact that a different set of individual investors were interested in this meme stock. Social media has changed the way investors communicate about meme stocks, and new financial technologies have decreased the barriers for people to invest in the stock market.

Figure 3 below, from the Securities and Exchange Commission's October 2021 report examining the GameStop events, notes that the number of unique individual investors trading GameStop stock dramatically increased in January 2021. Marie Briere of the Amundi Investment Institute estimated that, during this same time period, roughly 22% of stock market trading volume in the U.S. was by individuals, also called "retail" investors, up from 10% in 2010.

Figure 3: **Daily Count of Unique Individual, Institutional, and Other Traders of GameStop Stock, Jan 2021**



SOURCE: Consolidated Audit Trail via the Securities and Exchange Commission's Staff Report on Equity and Options Market Structure Conditions in Early 2021.

Hasso et al. (2022) compared traders at one brokerage firm and found that those who bought GameStop stock in January 2021 were more likely to be male, younger, and willing to place more lottery-like trades than those who did not purchase this stock. During this same time, many first-time, young traders were investing via relatively new mobile trading apps that have lowered some of the traditional barriers to investing. Investing is easier to do when it can be done from a phone. Many of these trading apps also eliminated **commissions** charged to the individual trader when executing a trade, and they lowered or eliminated the minimum account balance usually required by traditional brokerage firms. Additionally, many began to allow fractional stock purchases, which means that individual investors no longer needed to buy an entire share of a company's stock.

These changes lowered **transaction costs** of and increased access to investing in the stock market. Not surprisingly, younger and first-time investors make up a large share of traders on these mobile trading apps. For example, in 2021, one of the prominent mobile trading apps reported that the average age of their customer was 31 and the median account balance was $240. This is in stark contrast with previous research on the typical profile of a retail investor. For example, in a 2022 S&P Global report,

© 2024 Federal Reserve Bank of St. Louis. Permission is granted to reprint or photocopy this lesson in its entirety for educational purposes, provided the user credits the Federal Reserve Bank of St. Louis, https://www.federalreserveeducation.org.

Schwab reported that the average age of the pre-pandemic investor was 48 years old, and other research has estimated significantly higher average account balances for the more-traditional retail investor.

Conclusion

In summary, people base their investment decisions on various factors, including what they believe the future value of a company will be. Meme stocks are a relatively new concept and are popular with younger investors. Demand for meme stocks seems to be driven in part by factors beyond new information about a company's performance or general market conditions, such as social media interest in the stock. Social media provided a platform for investors to discuss their investments, and more people have been able to invest due to the introduction of low-fee and no-fee mobile trading apps and other financial technology innovations. This has allowed more individual and younger investors to enter the market, and some of these new investors are showing interest in meme stocks.

Glossary

Commission: Monetary compensation earned for selling a particular good or service. The amount of compensation is usually related to the size of the sale.

Demand: The quantity of a good or service that buyers are willing and able to buy at all possible prices during a certain time period.

Investment: An asset purchased with the hope that it will gain value and provide a financial return.

Meme stock: A stock that gains popularity on social media and experiences volatility in its price that cannot be well explained by the more-traditional effects on a stock's price, such as a business's performance or its long-term value.

Stock: A share of ownership in a company. Stocks are often traded publicly.

Stock exchange: A market in which stocks are bought and sold.

Supply: The quantity of a good or service that producers are willing and able to sell at all possible prices during a certain time period.

Transaction costs: The costs associated with buying or selling a good, service, or financial asset.

Notes

Briere, M. "Retail Investors' Behaviour in the Digital Age: How Digitalisation Is Impacting Investment Decisions." Amundi Investment Institute, June 2023.

Hasso, T.; Müller, D.; Pelster, M. and Warkulat, S. "Who Participated in the GameStop Frenzy? Evidence from Brokerage Accounts." *Finance Research Letters*, 2022, Vol. 45.

S&P Global Market Intelligence and Stockperks. "Retail Investors: A Changing Landscape." S&P Global, Inc., 2022.

© 2024 Federal Reserve Bank of St. Louis. Permission is granted to reprint or photocopy this lesson in its entirety for educational purposes, provided the user credits the Federal Reserve Bank of St. Louis, https://www.federalreserveeducation.org.

Name_____ **Period**_____

Reading Q&A
Who Buys Meme Stocks?

After reading the article, complete the following:

1. True or false: A meme stock is unlike a traditional stock in that the price of a meme stock is not determined by the laws of supply and demand.
   a. True
   b. False

2. True or false. The advent of the internet and the ability to buy stocks online is an example of a change in technology that increased access to stock market trading.
   a. True
   b. False

3. The main reason individuals buy stocks in the stock market is as
   a. collateral.
   b. an investment.
   c. an interest.
   d. a hobby.

4. The value of GameStop stocks rose in correlation with
   a. an increase in social media posts about the company and stock.
   b. an increase in games sold at brick-and-mortar GameStop locations.
   c. a decrease in online purchases of games from GameStop.
   d. a decrease in interest rates.

5. A meme stock
   a. includes an internet post about the stock market.
   b. is a stock that has gained popularity on social media.
   c. is an internet trend for participants to post memes about the stock market.
   d. is the stock for social media companies being traded on the New York Stock Exchange.

6. If everyone believes that a company will increase in value if a new law is passed, and most people believe that the new law will be passed in 6 months, what is the most likely activity that will occur now? Demand for its stock will
   a. likely increase.
   b. likely decrease.
   c. likely remain the same.
   d. only be from institutional investors.

© 2024 Federal Reserve Bank of St. Louis. Permission is granted to reprint or photocopy this lesson in its entirety for educational purposes, provided the user credits the Federal Reserve Bank of St. Louis, https://www.federalreserveeducation.org.

7. Mobile trading apps differ from traditional brokerage firms in that many
   a. increased the fees associated with purchasing stocks.
   b. cannot be used by individuals, only firms.
   c. lowered the minimum account balance for investors to utilize their services.
   d. increase the minimum account balance for investors to utilize their services.

8. How have mobile trading apps changed the demographics of individual retail investors?
   a. They have increased the average age of the retail investor due to higher barriers to investing.
   b. They have not affected the demographics of retail investors.
   c. There is no information about the change in the demographics of retail investors due to the introduction of mobile trading apps.
   d. They have allowed for younger and first-time investors with a smaller account balance to participate in the stock market.

© 2024 Federal Reserve Bank of St. Louis. Permission is granted to reprint or photocopy this lesson in its entirety for educational purposes, provided the user credits the Federal Reserve Bank of St. Louis, https://www.federalreserveeducation.org.