Social media influence on U.S retail investment decisions: evidence from reddit and X (Twitter)

Influencia de las redes sociales en las decisiones de inversión minorista en EE. UU.: Evidencia de Reddit y X (Twitter)

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ABSTRACT

This study analyzes the influence of social media platforms, specifically Reddit and Twitter, on minority investment decisions in the United States until February 2022.
Based on concepts of behavioral finance and theory of digital communication, it examines how sentiment, narratives and discursive trends on which platforms affect the behavior of individual investors and contribute to short-term volatility in financial markets. Using a mixed approach, the investigation combines the qualitative analysis of high-impact publications on r/WallStreetBets (Reddit) and Twitter, with quantitative data on price variations and trading volumes of certain assets. The study focuses on values that received considerable attention from minority investors across social networks before 2022, such as GameStop, AMC Entertainment, Bed Bath & Beyond and Dogecoin. The findings indicate that the sentiment expressed on social networks has a significant influence on minority investment decisions, especially among those with less market experience. Furthermore, abrupt fluctuations in valuation derived from viral content provoke internal responses from companies, including adjustments in earnings forecasts, changes in liquidity strategies and modifications in communication with investors. The study contributes to the understanding of the digitally mediated investment phenomenon, by demonstrating its impact on the ground in asset prices, as well as in financial management at corporate level.

Keywords: Behavioral finance. Minority inverters. Social networks. Investment decisions. Accounting.

JEL **codes :** G11, G14, M41, M10

ABSTRACT

This study investigates the influence of social media platforms, specifically Reddit and Twitter, on retail investment decisions in the United States up to February 2022. Based on concepts from behavioral finance and digital communication theory, the research examines how sentiment, narratives, and discussion trends on these platforms affected individual investor behavior and contributed to short-term volatility in financial markets.

Employing a mixed-methods approach, the study combines qualitative analysis of high-engagement posts from Reddit's r/WallStreetBets and Twitter with quantitative data on price movements and trading volumes of selected assets. The analysis focuses on securities that experienced notable attention from retail investors through social media activity prior to early 2022, including GameStop, AMC Entertainment, Bed Bath & Beyond, and Dogecoin.

The findings indicate that social media sentiment significantly influenced investment decisions among retail investors, particularly those with limited market experience. Furthermore, sudden valuation fluctuations associated with viral content led to internal corporate responses such as adjustments in earnings forecasts, changes in liquidity strategies, and shifts in investor communications. This study contributes to the understanding of digitally mediated investing by highlighting its impact not only on asset prices but also on firm-level financial management.

Keywords: Behavioral Finance, Retail Investors, Social Media, Investment Decisions, Accounting
JEL Codes: G11, G14, M41, M10

1. INTRODUCTION

In recent years, the participation of retail investors in financial markets has expanded rapidly, driven in part by the accessibility of trading platforms and the proliferation of financial content on social media. Traditional sources of financial advice and information such as brokers, analysts, and institutional reports are now complemented and in some cases replaced by decentralized online discussions. Platforms like Reddit and Twitter have become central spaces where investment narratives are formed, debated, and amplified in real time.

This phenomenon reached global visibility during events such as the GameStop (GME) short squeeze in early 2021, where thousands of individual investors mobilized via Reddit's r/WallStreetBets to generate unprecedented price volatility. Similar dynamics have been observed in other assets, including AMC Entertainment, Bed Bath & Beyond, and Dogecoin. These episodes illustrate how digitally mediated sentiment can rapidly influence asset prices, trading volumes, and market expectations.

While the external effects of social media on market behavior have been increasingly documented, less attention has been paid to how these retail-driven shocks affect internal

2

corporate processes. Abrupt changes in valuation may force companies to review earnings projections, adjust liquidity strategies, or respond publicly through investor relations. The intersection of market sentiment and firm-level financial response remains an underexplored area of research.

This study addresses that gap by analyzing how social media influences retail investors behavior and how companies react to the resulting market dynamics. It focuses on cases where online activity preceded sharp movements in price and volume, and it examines the operational and financial adjustments made by affected firms. The findings aim to contribute to a more integrated understanding of the dual impact of social media on both external markets performance and internal corporate decision-making.

2. LITERATURE REVIEW

The behavior of retail investors has been extensively examined through the lens of behavioral finance, a field that challenges the assumption of full rationality in traditional financial models. Key contributions emphasize that investor decisions are influenced by heuristics, cognitive biases, and emotional factors such as inherited behavior, overconfidence, and attention-driven anomalies.

With the increasing adoption of digital platforms, social media has emerged as a powerful vector for market sentiment. Reddit and Twitter allow users to share opinions, coordinate strategies, and disseminate viral narratives that influence asset prices in real time. Research has shown that online message boards contain predictive signals for stock returns and trading volume. Aggregate mood indicators derived from Twitter data have also been found to anticipate movements in broad market indices.

These findings are supported by studies showing that retail investor attention, measured through digital activity, can significantly influence market dynamics. Online sentiment, even when detached from company fundamentals, has been associated with short-term abnormality returns and elevated trading volumes. A prominent example is the coordinated activity observed on Reddit's r/WallStreetBets, where thousands of retail investors mobilized around specific

3

stocks, generating considerable volatility. The GameStop short squeeze in early 2021 is widely recognized as a milestone in the digital empowerment of retail investors, illustrating the capacity of decentralized communities to impact institutional financial structures.

Despite increasing awareness of the role of social media in investor behavior, few studies have explored how this externally driven volatility affects internal corporate processes. Sudden valuation swings may prompt companies to review earnings forecasts, adjust liquidity strategies, or issue public responses through investor relations channels. Corporate finance literature has yet to fully integrate the strategic and accounting implications of social media-driven market events.

This study contributes to bridging that gap by examining the relationship between social media-driven investor activity and corporate financial response. By linking market sentiment to firm-level decision-making, it seeks to expand the understanding of how digital narratives shape both external market behavior and internal business operations.

3. METHODOLOGY

This study adopts a mixed-methods approach to examine the influence of Reddit and Twitter on retail investor behavior in the United States and the subsequent financial and operational responses of publicly traded companies. The methodology combines qualitative content analysis of social media discussions with quantitative event study techniques based on market data and company reports, with all data and references restricted to publicly available sources as of February 2022.

3.1 Data Sources

The analysis focuses on four major case studies involving publicly traded assets that experienced substantial price volatility associated with social media activity: GameStop (GME), AMC Entertainment (AMC), Bed Bath & Beyond (BBBY), and Dogecoin (DOGE). Historical stock price and trading volume data were obtained from Yahoo Finance, Nasdaq, and

4

CoinMarketCap. Company responses and financial disclosures were sourced from official filings with the US Securities and Exchange Commission (SEC) and public press releases. Social media data was collected from Reddit's r/WallStreetBets subreddit and public tweets available via Twitter's advanced search tools. Posts were selected based on engagement levels, relevance to trading decisions, and temporal proximity to major price movements. Date collection focused on the period between January 2020 and February 2022.

3.2 Qualitative Analysis

The qualitative portion of the study involved a targeted review of high-engagement posts from Reddit's r/WallStreetBets and public tweets related to selected financial assets. Posts were selected based on their popularity metrics (such as upvotes, retweets, and comments) and their relevance to the timing of the observed market movements. Thematic trends such as collective calls to action, speculative sentiment, distrust toward institutional actors, and emotionally charged language were identified and qualitatively assessed to understand the social dynamics influencing investor behavior.

3.3 Quantitative Analysis

The quantitative portion of the study analyzed observed stock returns and trading volumes before and after social media-driven events. For each selected case, 1-day and 5-day raw returns were calculated, and changes in trading volume were examined relative to the pre-event period. Events were identified based on visible spikes in Reddit or Twitter activity and their temporal proximity to price or volume anomalies in the market.

3.4 Scope and Limitations

The study focuses on events and data available up to February 2022 to maintain historical consistency and avoid bias from retrospective interpretations. It does not incorporate private company disclosures or non-public communication records. While causal inference is limited, the combined use of price data and social media content supports the interpretation of

market effects for analyzing the relationship between social media activity, investor behavior, and firm-level responses.

4. RESULTS AND DISCUSSION

The results presented in Table 1 confirm the substantial impact that social media activity can have on the behavior of retail investors and on short-term asset volatility. Each of the selected cases shows a significant change in trading volume and asset returns following viral discussions on Reddit or Twitter, particularly in the period leading up to February 2022.

GameStop (GME), driven by coordinated activity on Reddit's r/WallStreetBets, experienced a one-day return of 134.84% and a five-day cumulative return of 788.96%. Trading volume increased from 262 million to 1.24 billion shares. AMC Entertainment and Bed Bath & Beyond followed a similar pattern, with trading volume multiplying several times over in response to viral posts. Dogecoin, while a cryptocurrency, also showed substantial variation, with daily trading volume rising to 10.5 billion USD-equivalent before falling back to 7.2 billion. These results demonstrate that emotionally charged and highly visible online narratives can generate significant price distortions and liquidity shifts in a short time frame.

Table 1 - Market Impact of Social Media Events (Volumes in Millions)

Ticker Event Date	1-Day Return (%)	5-Day Return (%)	Volume Before (M)	Volume After (M)	Main Platform
GME 2021-01-27 134.84		788.96	262	1240	Reddit (r/WallStreetBets)
AMC 2021-06-02 95.22		153.25	120	730	Reddit and Twitter
BBBY 2022-02-10 29.06		-45.74	50	440	Reddit
DOGE 2021-05-08 -22.87		-39.44	10500	7200	Twitter

Table 1. Market Impact of Social Media Events (Volumes in Millions) Summary of trading volume and return dynamics for selected assets influenced by social media up to February 2022.

From a corporate management perspective, these market dynamics imposed notable internal pressures on the affected firms. As shown in Table 2, GameStop responded by issuing new equity worth $1.1 billion, taking advantage of the elevated stock price to strengthen its capital structure. AMC implemented a similar strategy, combining equity issuance with debt restructuring measures. In both cases, firms made public statements and adjusted investor guidance. Bed Bath & Beyond, facing a rapid price reversal, undertook internal cost-cutting measures and revised its financial projections.

Table 2 - Corporate Financial Responses

Company	Event	Financial Action	Public Response	Forecast Revision
GameStop	Short squeeze	Issued new shares worth $1.1B	Investor statement and SEC filing	Yes
AMC Entertainment	Stock appears linked to retail trading	Equity issuance and debt restructuring	Press release and CEO public com-minds	Yes
Bed Bath & Beyond	Speculative surge and decline	Operating cost reductions	Investor communi-cation and earnings call	Yes

Table 2. Corporate Financial Responses Summary of key internal financial actions taken by companies in response to retail-driven volatility triggered by social media activity.

These corporate responses reflect how sudden, social media-driven valuation changes influence internal business functions, especially financial planning, investor relations, and accounting. Finance departments were required to reassess cash flow assumptions, reevaluate short-term liquidity buffers, and adapt capital allocation strategies. Accounting teams were also likely involved in updating financial forecasts and preparing revised disclosures to align with the new market context. The investor relations function took on a more reactive posture, issuing urgent communications in response to public sentiment shaped outside traditional financial channels.

The findings confirm that retail-driven volatility has both external and internal consequences. While the market effects are visible in price and volume fluctuations, the internal response highlights the managerial need to adapt quickly to unanticipated exposure generated through informal online mechanisms. Social media sentiment, although external to the firm, has become a factor that directly affects operational and financial decisions.

This dual impact suggests a paradigm shift in corporate risk management and financial governance. Monitoring social media trends is no longer optional for firms frequently targeted by retail investors. It becomes a necessary part of strategic planning, requiring coordination between finance, accounting, legal, and communications departments. For companies listed in volatile sectors or with low institutional ownership, understanding and anticipating digitally mediated investor behavior may represents a new form of financial resilience.

5. CONCLUSION AND IMPLICATIONS

This study examined the influence of social media on retail investor behavior in the United States up to February 2022, and its subsequent impact on corporate financial management. Through a mixed-methods approach combining social media content analysis and market data, the findings demonstrate that social media platforms serve not only as communication tools, but also as active drivers of asset price movements and market sentiment.

The analysis of selected cases—GameStop, AMC Entertainment, Bed Bath & Beyond, and Dogecoin—confirms that retail-driven trading activity initiated through viral online discussions resulted in substantial price fluctuations and abnormal trading volumes. These events were not merely speculative anomalies; they produced measurable consequences within the companies involved. Firms responded with actions such as issuing new equity, adjusting liquidity positions, modifying financial forecasts, and releasing targeted investors communications.

From a managerial perspective, these findings underscore the need for companies to recognize social media as a variable in financial planning and operational strategy.

8

Controllership and accounting teams must be prepared to update forward-looking statements and reporting estimates in response to rapidly changing market expectations. Treasury and investor relations departments may need to adopt a more agile posture, integrating real-time monitoring of digital sentiment into their routines.

The implications of this study extend to corporate governance, risk management, and regulatory oversight. For firms with high exposure to retail trading behavior, especially in sectors prone to speculative interest, social media activity must be treated as a material market influence. Incorporating digital sentiment analysis into enterprise risk frameworks may enhance organizational preparedness and resilience in volatile conditions.

By bridging the gap between behavioral investor research and internal corporate dynamics, this paper contributes to a deeper understanding of the dual nature of modern financial influence—where market perception and managerial response are increasingly shaped in real time by decentralized digital narratives.

REFERENCES

Antweiler, W., & Frank, M. Z. (2004). Is all that talk just noise? The information content of internet stock message boards. *The Journal of Finance,* 59(3), 1259–1294. https://doi.org/10.1111/j.1540-6261.2004.00662.x

Barberis, N., & Thaler, R.H. (2003). A survey of behavioral finance. In GM Constantinides, M. Harris, & R. M. Stulz (Eds.), *Handbook of the Economics of Finance* (Vol. 1, pp. 1053–1128). Elsevier. https://doi.org/10.1016/S1574-0102(03)01027-6

Bollen, J., Mao, H., & Zeng, X. (2011). Twitter mood predicts the stock market. *Journal of Computational Science,* 2(1), 1–8. https://doi.org/10.1016/j.jocs.2010.12.007

Chen, H., De, P., Hu, Y.J., & Hwang, B.-H. (2014). Wisdom of crowds: The value of stock opinions transmitted through social media. *The Review of Financial Studies,* 27(5), 1367–1403. https://doi.org/10.1093/rfs/hhu001

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decisions under risk. *Econometrica,* 47(2), 263–291. https://doi.org/10.2307/1914185

Tumarkin, R., & Whitelaw, R. F. (2001). News or noise? Internet postings and stock prices. *Financial Analysts Journal,* 57(3), 41–51. https://doi.org/10.2469/faj.v57.n3.2446

Yahoo Finance. (2021–2022). Historical stock data for GME, AMC, BBBY. Retrieved February 2022, from https://finance.yahoo.com

Nasdaq. (2021). AMC and GME trading volume history. Retrieved February 2022, from https://www.nasdaq.com

CoinMarketCap. (2021). Dogecoin historical data. Retrieved February 2022, from https://coinmarketcap.com

MarketWatch. (2021). Price movements and trading activity reports. Retrieved February 2022, from https://www.marketwatch.com

US Securities and Exchange Commission (SEC). (2021). Corporate filings: GameStop, AMC, Bed Bath & Beyond. Retrieved February 2022, from https://www.sec.gov

Reddit. (nd). *r/WallStreetBets.* https:// Retrieved February 2022, from www.reddit.com/r/wallstreetbets/

Twitter. (nd). Public tweets and trending topics. Retrieved February 2022, from https://twitter.com

10