

The Influence of Social Media Sentiment on Stock Market Behaviour

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Abstract

The rapid growth of social media has fundamentally changed how financial information spreads and how investors make decisions. This paper examines the influence of online sentiment on stock market behaviour by analysing how digital platforms affect investor psychology, market volatility, and price movements. Through an extensive review of existing literature and comparative case studies of the 2021 GameStop short squeeze and the 2023 Adani Group controversy, the paper explores the role of fear of missing out (FOMO), herding behaviour, and information diffusion in shaping investment decisions. A key contribution of this study is highlighting an overlooked research gap: the impact of the "silent majority" of social media users, or lurkers, who consume financial information without actively posting but may still significantly influence market activity through their investment decisions. The findings suggest that while visible online discussions contribute to market sentiment, passive consumers of digital information may represent an equally important yet underexplored force in financial markets. The study concludes that understanding both active and passive social media participants is essential for improving market prediction models, behavioural finance research, and regulatory responses to information-driven market volatility.

Introduction:

The proliferation of social media platforms has transformed the landscape of information dissemination, enabling rapid and widespread communication that can significantly impact financial markets ([Rosa, 2022](#)). This phenomenon extends beyond traditional news sources, with social media sentiment now acting as a potent, independent variable influencing present and future stock returns, particularly for widely followed publications and companies with high retail investor engagement ([Kaya et al., 2023](#)). This rapid diffusion of individual investor perspectives on stock price fluctuations across diverse social media platforms, especially within markets dominated by individual investors, contributes substantially to the expedited dissemination of stock-related information ([Chen et al., 2023](#)). This integration of social media as a real-time information conduit necessitates a thorough investigation into how emergent sentiments from these platforms contribute to market dynamics and asset valuation ([Avila, 2024; Mora & Mendoza-Urdiales, 2023](#)). Specifically, the decentralized and real-time nature of retail investor sentiment disseminated via social media increasingly challenges traditional assumptions of market efficiency and introduces potential systemic risks within sectors such as technology ([Burhanuddin et al., 2025](#)). Recent studies, for instance, have demonstrated a pronounced impact of social media sentiment on stock returns, particularly within the United States market ([Nyakurukwa & Seetharam, 2024](#)). The shift from conventional news consumption to social media sharing fundamentally alters how investors process information, as individuals are more inclined to disseminate positive content, while their reading habits still prioritize negative news ([Martínez, 2024](#)). This dynamic interplay between information dissemination and emotional response, amplified by platforms like Twitter and StockTwits, has become a central focus

for researchers examining market behavior ([Ali, 2018](#); [Nyakurukwa & Seetharam, 2023](#)). This growing body of behavioral finance research highlights the significant role social media plays in disseminating investment information and influencing investor behavior, thereby affecting stock market trends ([Espeute & Preece, 2024](#)). The Securities and Exchange Commission officially recognized social media as a valid channel for information dissemination in 2015, highlighting its increasing role in financial markets ([Gan et al., 2019](#)).

Research Gap

Despite the growing body of literature examining the relationship between social media sentiment and stock price movements, several critical areas remain underexplored.

Firstly, existing studies tend to treat social media sentiment as a homogeneous factor, without differentiating between influential and non-influential sources. In reality, not all participants contribute equally to market movements, and the impact of credible or high-following individuals remains insufficiently analysed.

Secondly, most research does not adequately account for the role of passive participants, often referred to as the “silent majority.” While prior studies focus on users who actively post or generate content, limited attention has been given to investors who consume information without direct engagement, despite their potential influence on trading activity.

A second significant oversight in current literature is the disproportionate focus on active content creators and users who post, tweet, or share financial opinions while neglecting the “Silent Majority.” Current research methodologies, such as sentiment analysis and web-scraping, primarily capture data from the vocal 1% of the social media population. However, the 90-9-1 Rule of digital communities suggests that 90% of users are “lurkers” who consume information without contributing to the visible data stream (van Mierlo, 2014).

CASE STUDY RESEARCH

A short squeeze occurs with “rapidly rising prices in a stock or other tradable [security, when] many short sellers [hold] positions in it. The short squeeze begins when the price jumps higher unexpectedly. The condition plays out as a significant measure of the short sellers coincidentally decide to cut losses and exit their positions”

More buying → price goes up → short sellers panic → they buy → price goes up even more

The influence of social media on investor decision-making extends to how individuals perceive and act upon financial advice. Closed investment advice channels, such as those popular on Telegram in the Russian-speaking segment, offer curated information for a fee, attracting private investors seeking to capitalize on market opportunities ³. Similarly, the presence of financial experts and peer insights on social media platforms significantly influences investment choices ⁴. This environment can create a dependency on social media trends and discussions, potentially leading investors to overlook traditional financial metrics and fundamental analysis

Pelikh, E. A. (2024). SECURITIES MARKET MANIPULATION USING CLOSED INFORMATION CHANNELS. Research Result Economic Research, 10(3). <https://doi.org/10.18413/2409-1634-2024-10-3-1-2>

Li, T., Chen, H., Liu, W., Yu, G., & Yu, Y. (2023). Understanding the role of social media sentiment in identifying irrational herding behavior in the stock market. International Review of Economics &

Finance, 87, 163–179. <https://doi.org/10.1016/j.iref.2023.04.016>

A crucial aspect of altered investor behavior driven by social media is the phenomenon of herding behavior. Herding occurs when individuals mimic the actions of a larger group, often ignoring their own private information or analysis⁷. Social media platforms are particularly conducive to herding because they provide visible signals of what many others are doing or thinking. In markets with a high proportion of retail investors, such as the Chinese stock market, social media sentiment has been found to have a significant impact on irrational herding behavior⁸. The collective sentiment expressed online can create a powerful bandwagon effect, where investors buy or sell simply because they observe a widespread trend or strong sentiment within their online communities⁹.

Case study 1

The GameStop (GME) short squeeze in early 2021 represents a pivotal event demonstrating the profound influence of social media on financial markets, particularly through coordinated retail investor activity¹². This phenomenon involved individual investors stimulating the stock market via Reddit social posts, directly challenging institutional investors who had bet against GME's success through short selling¹. The underlying dynamics of this event involved complex interactions between social informedness, investor sentiment, and trading patterns, largely orchestrated through platforms like Reddit's r/WallStreetBets subreddit.

Institutional investors had established significant short positions, anticipating a decline in the company's stock price. However, a large number of retail investors, primarily mobilised through social media platforms, began purchasing shares in large volumes.

This collective buying pressure led to a rapid increase in the stock's price. As the price rose, institutional investors holding short positions incurred mounting losses. To limit these losses, they were compelled to repurchase shares to close their positions. This additional buying further accelerated the upward movement of the stock price, creating a self-reinforcing cycle.

https://www.researchgate.net/publication/385392144_The_Effects_of_FOMO_on_Investment_Behavior_in_the_Stock_Market

INFERENCE:

GME's stock price surged dramatically, from approximately

- \$21 to \$483 within a short period in January 2021, before a subsequent decline¹⁰. This caused billions in losses for some hedge funds and significant gains for some retail investors¹¹. The CBOE Volatility Index (VIX) also surged, indicating extreme market volatility¹².

Research utilizing text analysis and econometric models confirms that social media sentiment had predictive power over GME's intraday returns and volatility⁶⁹. The intent dimension of social media postings, such as explicit calls to "buy" or "hold," was directly correlated with stock metrics like trading volume and returns during this period⁷⁰.

When it comes to investing, FOMO leads to impulsively buying into the latest trend, often based on chatter on Reddit or TikTok. Seeing people rave about how much money they made from a certain stock can spark a fear of missing out on a great opportunity, and many people act on that fear.

Why is acting on this temptation bad? First, even rational individual investors underperform the S&P 500 because of [poor decisions regarding market timing](#).³ Those returns will only get worse if you start

following the herd instead of making informed, independent decisions. FOMO leads to irrational decision-making as investors prioritize the chance of short-term gains over long-term planning.

Case study 2: Adani

One relevant example illustrating the broader impact of social media, coupled with market anomalies and regulatory scrutiny in India, pertains to the Adani Group controversy in early 2023. While not a direct social media-driven pump-and-dump in the traditional sense, this case study demonstrates how information dissemination, public sentiment, and allegations disseminated partly through social media can trigger significant market turmoil and draw regulatory attention.

The Adani Group controversy unfolded following the publication of a report by a U.S.-based short seller alleging stock manipulation and accounting fraud within the Adani conglomerate. Although the report was not a social media-originating rumor, its widespread dissemination and discussion across social media platforms amplified its impact significantly. This amplification, combined with underlying market conditions, led to a substantial decline in the market capitalization of Adani Group companies.

While the initial report was released by a research firm, its findings were rapidly shared, debated, and commented upon across various social media platforms, amplifying public awareness and investor concern. This digital virality ensured the allegations reached a vast audience of retail and institutional investors, fueling discussions and influencing sentiment. The proliferation of financial information through social media has been shown to enhance stock market participation and can influence investor decision-making.

The allegations, widely discussed online, triggered a significant shift in investor sentiment. Negative information, especially concerning corporate governance and financial integrity, can lead to panic selling and heightened market volatility. Studies have consistently shown that social media sentiment can influence stock price movements, with negative sentiment often correlated with lower returns⁷⁸. The "black mouth" phenomenon, a form of manipulation based on disinformation in the Chinese stock market, demonstrates how "credible signals" even if based on disinformation, can temporarily lead to abnormal investor attention and abnormal stock returns.

Inference:

The event exposed a significant gap in India's regulatory oversight framework. The sheer speed and scale of the market reaction, fueled by social media, highlighted the inadequacy of existing mechanisms to manage information-driven crises in real-time. Regulators were forced into a reactive posture, scrambling to assess the veracity of the claims while simultaneously trying to contain the market fallout. This situation aligns with findings that show how public opinion crises, particularly those amplified online, can lead to abnormal stock price movements and immense economic losses for listed companies, creating an urgent need for predictive tools and robust regulatory responses.

Ma, Y., Wu, P., Ling, C., & Ding, S. (2024). Research on public opinion effecting on stock price during crises based on model checking. *Expert Systems with Applications*, 249, 123442. <https://doi.org/10.1016/j.eswa.2024.123442>

“Lurker Dynamics”-

A deeper behavioural mechanism explaining the market impact of digitally amplified financial narratives is lurker dynamics, which refers to the influence of the *silent majority* of users who consume information without actively posting, commenting, or visibly engaging. In social network literature, these users are classified as lurkers, whose large scale passive presence significantly shapes information diffusion and

collective perception. Foundational research in network science formally establishes lurkers as a structurally important yet hidden audience within online ecosystems.

1% create original content

9% engage/comment/share

90% only read silently

The Adani episode shows that silent investors, rather than visible online participants alone, may constitute the primary transmission channel through which digital narratives influence market volatility.

Feature	Case Study 1: GameStop (GME)	Case Study 2: Adani Group
Primary Driver	Retail Investors (Reddit)	Institutional Report (Hindenburg)
Sentiment Direction	Extremely Positive (Bullish)	Extremely Negative (Bearish)
Market Impact	Short Squeeze / Liquidity Crisis	Market Cap Erosion / Regulatory Scrutiny
Psychological Factor	FOMO & Community Belonging	Panic & Loss Aversion
Regulatory Outcome	Discussions on T+0 settlement	Review of SEBI oversight / Disclosure norms

Conclusion

The swift growth of social media has fundamentally altered the manner in which financial information is generated, shared, and processed. This paper explored the impact of online sentiment on stock market activity by influencing investor psychology, the spread of information, and group decision-making. A review of existing research and a comparative analysis of the GameStop short squeeze and the Adani Group controversy demonstrate that social media can greatly magnify both positive and negative market fluctuations by promoting herding behavior, fear of missing out (FOMO), panic selling, and emotionally-driven investing.

In addition to these well-established conclusions, this study draws attention to an understudied facet of behavioral finance: the impact of the "silent majority" of social media users. The great majority of investors absorb online information without actively participating, whereas prior research has mostly concentrated on conspicuous participants who actively offer financial opinions. This study makes the case that these passive players could, taken as a whole, represent a potent yet unseen force influencing market behavior, making them a crucial subject for further investigation.

The results also imply that social media dynamics should be more thoroughly considered by investors, financial institutions, and regulators when evaluating risks and monitoring markets. Understanding both active and passive information diffusion will become crucial for enhancing market transparency, anticipating times of increased volatility, and creating more efficient regulatory frameworks as digital communication continues to influence financial markets. In order to better comprehend the role of passive information consumers in contemporary financial markets, future research should aim to quantify their influence utilizing large-scale behavioral data and machine learning approaches.