



How recently emerged Reddit communities influenced our discourse on trading stocks

MA Thesis
Alireza Mamoer
255969
Digital Culture Studies
Department of Culture Studies
School of Humanities and Digital Sciences
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Supervisor: Prof. G. van de Sanden-Szabla, MSc
Second reader: Prof. dr. A. Backus

Abstract

In the beginning of 2021 Gamestop made headlines when its stock price started rising from \$17 in early January to \$470 per share by the end of the month. the increase of the Gamestop market value is connected to an online community on the social media platform Reddit, known as ‘Wallstreetbets’. This research aims to investigate how the how the online Reddit communities that participated in the Gamestop and AMC market turmoil have influenced our discourse on trading stocks. The majority of the data for this study is gathered from three subreddits over a course of six months, starting from January to July 2021. Analyses of the collected data for this study reveal representative elements that explain a certain phenomenon, behaviour, collective thought, typical communication and other elements that describe interactions in the communities.

After the sudden price spikes of various stocks as a result of group action by r/Wallstreetbets, similar subreddits started emerging on Reddit, each adopting and devoting themselves to a particular stock. Although these new communities show similarities with r/Wallstreetbets in the sense of written language, they have proven to differentiate themselves through dissimilar codes of conduct and group behaviour. Now there is a presence of a divergent set of stock-related communities that show strictly controlled discourse on particular stocks and relationships that go beyond discussing stocks. This phenomenon of new online communities has paved the way for a new online paradigm in the world of trading stocks, namely one that creates opportunities for retail investors to join a community that communicates internationally on a personal level and shows companionship beyond being fellow investors, but rather being part of a community that invests in a particular stock and shares similar beliefs.

Keywords: Reddit, communities, stock market, WallStreetBets, social, interaction, online

1 Contents

1	Introduction	3
2	Literature review	6
3	Research approach.....	8
4	Theoretical Background	10
5	Method and data	13
6	Results	16
6.1	The relevant Reddit communities.....	16
6.2	The infrastructures.....	23
6.3	Motives to join the community	26
6.4	Dissimilarities between the communities.....	31
6.5	Discourse that characterizes the online communities.....	35
6.6	Community leaders	44
6.7	Offline activities.....	52
7	Discussion	56
8	Conclusions and recommendations	59
9	Bibliography.....	60

2 Introduction

The revolution in information and technologies that the world has witnessed over the past few decades are changing almost every aspect of our daily lives. Like almost every other market, the fundamentals of the stock market are shifting as a result of the ever-growing impact of digitalization and globalization (Fox, et al., 2019). In particular, the introduction of social media platforms has been profoundly affecting human interaction. Therefore, studying online social interactions of the stock market creates significant social value.

During the outbreak of the COVID-19 pandemic, data revealed by the PubMed Central (PMC) presented a significant increase in trading activities by investors (Ortmann, Pelster, & Wengerek, 2020). Ortmann, et al. (2020) have shown that investors, on average, added funds to their accounts, opened more new accounts, and established more new positions as the number of COVID-19 cases doubled, with the largest increase in trading being between February 23 and March 22, 2020. As investing is responsible for changing many lives, and includes significant online interaction, it automatically becomes an important theme to study.

At the beginning of 2021 a store that sells games, gaming consoles, and other electronics, known as Gamestop, made headlines when its stock price started rising from around \$17 in early January to \$470 per share by the end of the month (NYSE, 2021). Converted to percentages, that is a rise of more than 2700%. Such a rise in the stock price is not what one would expect from a company that is having a hard time competing with online retailers and especially taking into consideration that this happened during a global pandemic when physical trips to the stores were limited. During the same period, the stock price of an American movie theatre known as AMC Entertainment Holdings showed similar price movements starting with a stock price of around \$2 in early January to almost \$20 at the end of the month (NYSE, 2021), showing an increase of 900%. During the writing of this study, the stock price surged to \$72, showing an increase of

3500% in comparison to early January. It is evident that the price action of AMC Entertainment should also be surprising given the fact that AMC Entertainment is a movie theatre business that was forced to close down many of its theatres during the pandemic due to a national lockdown. For a movie theatre, in most cases, this should be catastrophic for the business and stock price.

Early January when the stock price started surging, The Wall Street Journal reported ‘GameStop stock soars, and social media traders claim victory’ (McCabe, 2021). A day after the first significant peak, many international news outlets began to cover the events. *ABC News* claimed that the ‘Gamestop stock has surged thanks to enthusiastic *WallStreetBets* Reddit users’ (Donoughue & Chau, 2021), *Il Post* of Italy published an article on ‘the extraordinary success of Gamestop on the stock exchange, thanks to Reddit’ (Il Post, 2021), and in the Netherlands *RTL Nieuws* reported a GameStop stock price increase from 20 to 470 dollar, adding the claim that the ‘speculators outsmart the big guys’ (RTL Nieuws, 2021). As the titles of the articles suggest, the increase of the Gamestop market value is in some way connected to an online community. More particularly, one that operates on the social media platform Reddit, known as ‘r/Wallstreetbets’, ‘Wallstreetbets’ or ‘WSB’ in short.

Reddit is a social media platform founded in 2005 that offers the opportunity to create communities in which the members can share content, comment on the shared posts, and either upvote or downvote the posts and comments. Currently, Reddit contains more than 52 million daily active users, more than 100,000 communities, and more than 50 billion views (Reddit, 2021). An earlier study by Boylston, Palacios, and Tassev (2021) on WSB reported a usership of nearly 1.1 million subscribers on the WSB subreddit, while currently, the community counts a usership of more than 10.6 million – that is an increase of more than nine million users within a year. A closer look at the events that have taken place in January 2021 shows that the discourse

conducted in a number of the communities that dedicate their content to the stock market, differs from traditional stock market discourse, and WSB plays a major role in this.

Even though the impacts of social media on the stock market (Piñeiro-Chousa, Viscaíno-González, & Pérez-Pico, 2016; Gomez-Carrasco & Michelon, 2017) has been documented profoundly, currently a limited amount of studies have been conducted to investigate the specific discourse within the Reddit communities and what the effects could be on the future of stock market behaviour. Studies have shown that message boards play an important role in market activities and have repeatedly been subject to market manipulation by artificially inflated prices (Gu, et al., 2006; Leinweber & Ananth, 2001). With the presumption that the Reddit communities have an unprecedented impact on the stock market, this study will make an effort to broaden our understanding of the power that these online communities currently possess and could develop concerning the future of stock market behaviour. This research aims to investigate how the online Reddit communities that participated in the Gamestop and AMC market turmoil have influenced our discourse on trading stocks.

Readers of this study should be aware that a lot of interactions of the studied communities involve vulgar, untraditional language and behaviour, but investigating these interactions is vital for understanding the dynamics and relations of the communities.

For the reason that many aspects of this study may be related to the field of economics and finance and are possibly unfamiliar to average readers, a few basic notions will be explained – this includes financial terms and data. Furthermore, this study incorporates an analysis of stock market behaviour. Analysing basic concepts of the stock market requires a basic understanding of how the stock market functions. In the field of economics a profound knowledge of the stock market is mandatory to understand how the market behaves and what the processes are behind the buying and selling of shares, but for this study, merely a basic understanding of how the stock

market works is sufficient to recognize the discussed concepts. Naturally, the stock market, like any other market, is a place where shares of a company can be bought and sold, and where the price of each share is formed accordingly to the supply and demand of that share. Shares represent a part of ownership in a company, and someone who owns a share is referred to as a shareholder. The collection of shareholders of a particular company are the owners of that company (Hobson, 2012). In this study, shares will also be referred to as stocks, but the definition of the terms remains the same. Additionally, in many online discussions companies are referred to in the form of ‘ticker symbols’, ‘stock symbols’ or simply ‘tickers’. These are acronyms of company names that can be recognized by a series of capital letters beginning with the dollar symbol (\$), such as \$GME.

The remainder of this paper proceeds as follows. In section ‘literature review’, a collection of pre-existing literature on similar topics will be discussed. Section ‘research approach’ will propose an approach to this study. Section ‘theoretical background’ will provide the relevant theories for this study. In ‘method and data’, the methods of examination and the collection of data will be elaborated. Section ‘results’ provides the results of the study. In ‘discussion and conclusions’ the results will be interpreted and a final conclusion will be provided. In ‘recommendations’, future research recommendations will be proposed.

3 Literature review

The influence of Reddit communities on the stock market can be understood as an extension of the overarching influence of social media on the stock market. Multiple studies have examined the relationship between social media message volumes and stock trading volumes with dissimilar results. After analysing Yahoo! message boards, Wysocki (1998) has found that message volume predicts changes in next-day stock returns. Tumarkin and Whitelaw (2001) found that message board activity did not predict industry-adjusted returns or abnormal trading

volume, but instead market information influences message board activity. Sprenger, et al. (2014) found no evidence of an association between bullishness – a positive sentiment expecting higher stock prices – and abnormal returns, but instead the opposite as abnormal returns seemingly lead to an increased bullishness among microbloggers (Piñeiro-Chousa, Viscaino-González, & Pérez-Pico, 2016). An article more related to the topic of this study conducted by Umar, et al. (2021), has shown that there is a positive correlation between the Reddit investor sentiment and Gamestop returns during the recent events surrounding the Gamestop stock price surge. This is important because it shows the prominence of online activities concerning stock market behaviour. In general, the direct impact of social media and online communities on stock returns or the stock market is a phenomenon to be investigated more precisely. This study will focus on the discourse produced by the online communities and purposes an understanding of the context of this discourse.

Furthermore, a study by Chohan (2021b) describes the role of r/Wallstreetbets as a counter-hegemonic movement that goes against the conventional powers of the financial world in America. In his study, Chohan (2021b) argues that several factors stimulate the r/Wallstreetbets community to exert counter-hegemonic pressure and eliminate the idols established by the powers of hypercapitalism. Additionally, Chohan (2021b) stresses the ongoing process of the r/Wallstreetbets movement that is attracting new adherents, which in turn generates more reasons to examine this phenomenon.

The mentioned literature mainly covers aspects of the influence of social media on the stock market, the influence of Reddit communities on the stock market, and the role of r/Wallstreetbets as a counter-hegemonic movement. Hitherto, few to no digital ethnographic studies have been conducted to examine specifically the interactions within the Reddit communities which triggered the emergence of the so-called ‘meme stocks’ and the online

communities behind them. The majority of the community covers the ability of the Reddit communities to predict the stock market, but few focus on the actual conversations and social factors within these online communities. That is what this study intends to investigate.

The notion of online communities is widely investigated and needs some sort of explanation before being subjected to examination. This paper builds on the concepts of virtual communities by Koh, et al. (2003) and Koh, et al. (2007). In their article, Koh, et al. (2003) conceptualize and operationalize the sense of virtual community. The study finds ‘that the sense of virtual community is affected by the enthusiasm of the community’s leaders, off-line activities available to members, and enjoyability’. Leader involvement in a community tends to increase community membership and stimulate relationships among community members (Koh, et al., 2003). An online community leader can be understood as a participant who is recognized by other participants as influential in what the community does or how it does it (Johnson, et al., 2015). Furthermore, off-line meetings of virtual community members help to strengthen virtual community relationships by enhancing solidarity and cohesiveness, as off-line activities stimulate members to understand, trust and identify other members (Koh, et al., 2003). Finally, the enjoyability of a virtual community is an important factor for community members to feel a sense of belonging to the community as multiple studies have shown – it tends to increase immersion and membership for the community (Koh, et al., 2003).

4 Research approach

The topic of this study is very much related to two major fields of science, that is humanities and social sciences. Initially, examination of stock market behaviour is a commonly studied theme in the field of economics, including the examination of mainly quantitative data. In contrast, the approach of this study will be ethnographical, including the examination of discourse and human behaviour. Because the emergence of digital communities is a rapidly

evolving phenomenon, it is under constant scrutiny by researchers around the globe. More specifically, the emergence of message board activity concerning the stock market is a phenomenon of the previous decade and a half. The activities on these message boards contain a significant amount of data that is challenging and time-consuming to examine utilizing quantitative data. One could think of sentiment-driven action or phatic communication that leads to market activities. Also, the discourse that is conducted in these communities contains ‘unsaid’ meanings that need close ethnographic examination. Given the fact that there is a limited amount of ethnographic research available on the discourse of Reddit communities, this study will make an effort to broaden our knowledge on that matter.

Ethnography is a topic that has been widely discussed in the field of anthropology, but there is not a unified conception of the term (Blommaert & Jie, 2020; Hymes, 1996). Initially, ethnography could be understood as a scientific tool that sheds light on communities, instead of humankind, focusing on the complicated relationship between separate social units within a single system that usually is seen as in balance (Hymes, 1996). It is commonly understood as a technique and series of propositions to examine and interpret context, but it is far more complex than that (Blommaert & Jie, 2020). Ethnography aims to produce detailed and situated interpretations of people’s lived realities (Varis, 2014). Because there is no straightforward definition of what ethnography exactly is, the following will describe the relevant elements of ethnography that apply to this study. Hymes (1996) argues that early works of ethnography that are considered as important have ‘generally the quality of being systematic in the sense of being comprehensive’. Thus, ethnography is applied as a research approach, rather than a method of inquiry, though it requires to be conducted systematically.

Ethnographic research is conducted ‘in the field’, in the sense that the study of actions and accounts is conducted in everyday contexts (Hammersley & Atkinson, 2007). In the case of

studying online communities, such as the communities of Reddit, an online ethnographic approach is most appropriate to observe the target audience. The target audience for this study is the community members and leaders of r/Wallstreetbets, r/Superstonk and r/AMCstock. This research builds on the idea of digital ethnography as an approach to studying culture with specific epistemological claims, rather than a set of techniques, or a method (Varis, 2014). As the topic of this study mainly manifests itself online, it is logical to conduct online observation to study the online communities. By maintaining digital ethnography as an approach to this research rather than as a set of techniques, or method, this research makes an effort to catch up with changing realities of the online-offline nexus as described by Blommaert and Jie (2020).

5 Theoretical Background

This chapter of the study will provide an overview of the relevant theories that function as a guideline for interpreting the collected material. This overview provides an insight into the theories of discourse. The terms provided in this section guide as background knowledge for interpreting the data.

When dealing with digital ethnography, contextualization is crucial to interpreting material – analysing and understanding digital material becomes problematic when the collection of the digital gathered data is taken out of context (Varis, 2014; Murthy, 2008). The discourse conducted by the Reddit community seemingly differs from the traditional discourse of stock market investors, therefore it is crucial to analyse the context to understand the dynamics and implications of their discourse.

Analysing the discourse of the communities is a central point of attention for this study and the context in which discourse is conducted heavily influences the understanding of discourse because the context creates meaning (Blommaert, 2005). The notion of ‘contextualization’ explains much what the role of context is in this study. To not be confused about what

contextualization means, a general description of the term provided by John Gumperz will be considered for this study: contextualization ‘comprises all activities by participants which make relevant, maintain, revise, cancel... any aspect of context which, in turn, is responsible for the interpretation of an utterance in its particular locus of occurrence’ (Auer & Di Luzio, 1992). The importance of context is not self-evident and requires a diligent approach to understand, especially when dealing with non-traditional discourse such as in this study. To appropriately approach the examination of the discourse conducted by the Reddit communities, one should also be able to detect ‘unsaid’ meanings, or ‘indexical meanings’ – these are connections between language form and social and cultural patterns (Blommaert, 2005). Indexical meanings often create the fundamentals for social action. A great deal of the interaction of the studied communities requires close examination concerning ‘indexical meanings’ because unsaid meanings reveal crucial information that provides a better understanding of the interaction of the group members which results in group action. Unsaid meaning is an example of the notion of indexicality. As explained by Blommaert (2005), indexical meanings refer to a particular context in which an utterance occurs.

In the contemporary world, the online world has been intensely incorporated into our daily lives, and online infrastructures affect almost any daily activity; and many of the activities are fully dependent on the existence of the online dimensions (Blommaert & Jie, 2020). Social situations can be separated into two dimensions – firstly, a physical setting for interaction that affects the situation and outlines the affordances available to participants, described as the ‘infrastructural’, and secondly, the sociocultural conventions governing the interaction (Blommaert, et al., 2019). In the case of online interaction, we can consider the technology as what shapes the infrastructural dimension for participants. As online infrastructures create new public spaces that pave the way for social action, such as political critique and mobilization, that

has been unprecedented, it is crucial to scrutinise the new conditions that these online infrastructures produce (Blommaert, et al., 2019).

According to Blommaert, et al. (2019), these ‘new spaces are specific time-space configurations in which participant roles, behavioral scripts and appropriate resources for realizing the script are interactionally established as normative’. This can be considered ‘chronotopically circumscribed “formats” for social action requiring constant “congregational work” – understood as the coherent contribution of an assembly of persons – by those participating in the social actions’ (Blommaert, et al., 2019; Garfinkel, 2002)

A great deal of the social interactions by the Reddit communities consists out of the sharing of memes related to stocks, hence the media often describes these stocks as ‘meme stocks’. Since the sharing of memes plays a major role in the rising popularity of the Reddit communities gaining massive global attention, a study on ‘virality, meme’s and social structures’ by Varis and Blommaert (2014) will be considered to offer clarity on the discourse conducted by the Reddit communities. In their article, the authors highlight the importance of ‘empty’ messages on social media – messages that communicate no ‘relevant content’ – and compare it to phatic communication, in the sense that through online phatic communication people express a sense of ‘union’ with a community. Whereas the actual meaning of phatic communication is hugely diverse, it still can develop a sense of ‘groupness’ through recognizable form or shape by various individuals (Blommaert & Varis, 2014). Furthermore, Varis and Blommaert (2014) examine the phenomenon of memes as case studies for their research on the use of phatic communication. Memes, as described by the authors, are ‘signs the formal features of which have been changed by users’ and ‘often multimodal signs in which images and texts are combined’. There is not a definition of ‘memes’ that is widely accepted but to understand the issues related to

memes in this study, the definition as provided by Varis and Blommaert (2014) can be considered adequate.

This research builds on the premise of interaction as the point of departure for social action. Blommaert (2019) briefly describes this phenomenon by explaining that interaction between individuals leads to group action, in which language functions as a part of a larger behavioural arrangement – whereas the old assumption is that language is the product of an individual who is a member of a larger group.

When it comes to interpreting the results in light of the mentioned theories, it is essential to keep in mind that the discussed topic of this study is a recent phenomenon with little research history, which needs closer inspection and future research. The theories will therefore function as heuristic tools to produce approximations that give a clear indication for future studies that focus on this particular phenomenon.

6 Method and data

This section provides an overview of the methods that were utilized to conduct this research. More specifically, this section outlines the research strategy, the methods of data collection and its analysis, the sample selection, and finally ethical considerations.

This study has a digital ethnographic approach and therefore its approach is qualitative by nature. By observing the interactions of community members of three Reddit communities over the course of six months, the necessary data was collected for analysis. Because there is a lack of research done on the discourse of Reddit communities with a focus on the stock market, these communities require an exploratory type of research to investigate and allow for a comprehensive description.

The data used for this study contains a collection of 56 social media posts and comments retrieved from the Reddit communities r/Wallstreetbets, r/Superstonk, and r/AMCstock.

Additionally, data from third-party websites WeBull.com and <https://subredditstats.com> were used to gather the relevant quantitative data of stock quotations and Reddit community data – this will be explained in more detail at the end of this section. The qualitative data of this study heavily relies on the data gathered from three online forums within Reddit, also known as ‘subreddits’: r/Wallstreetbets, r/Superstonk, and r/AMCstock. It is important to acknowledge that other subreddits are practicing similar social behaviour as the mentioned subreddits of this study. However, to understand the dynamics of the online communities it is not necessary to include a large number of online communities, but rather a more detailed understanding of this limited set of communities that represent the general activities. Furthermore, it was necessary to consider multiple communities to be able to observe the contrasts and similarities between the communities and the development of the communities. Considering the limited amount of study that has been done on this topic, the mentioned subreddits provide sufficient data to analyse and interpret the interactions of the communities. No specific demographic characteristics were used to choose participants, but rather a selection of participants based on their activities in the communities. Focus on the interactions between participants outweighed the importance of participant characteristics.

The majority of the data for this study is gathered from the three subreddits over a course of six months, starting from January to July 2021. Analyses of the collected data for this study reveal representative elements that explain a certain phenomenon, behaviour, collective thought, typical communication, and other elements that describe interactions in the communities.

As the subreddits upload a large number of posts every day, it was necessary to categorize the posts and filter the data that is valuable for inquiry. To not exclude valuable data, the categorization of the data collection materialized after the data collection process. Nevertheless, Reddit allows users to arrange posts by popularity and the time of posting and each subreddit

provides its own ‘thread filters’ that categorize the topic of a post. A portion of the data was collected utilizing the third-party website redditsearch.io, for content within a defined period. Reddit has no available tools to search through content based on specific dates and times, whereas redditsearch.io offers this opportunity by providing search filters that result in Reddit content based on the input of content sort and period.

To recognize the popular themes discussed in the communities, a collection of examples of posts and comments are selected through filtering ‘Hot’ posts. ‘Hot’ posts represent the posts that gained the most upvotes, comments, and rewards over the set period. These posts give a general overview of the most discussed topics in the communities. Furthermore, to understand the specific categorization of posts by the communities themselves, thread filters are considered and used to gather data. Also, the thread filters offer the possibility to filter by popularity and time of posting, which is used to find the most popular discussed themes per filter. Thread filters are specific themes by which posts should be categorized before being posted.

Reddit allows posts to be archived by ‘saving’, but it requires signing up for an account to be able to utilize this feature. For this study, it was necessary to sign up for an account to save the posts, because the saved posts contain a lot of information that is subject to continuous change, such as votes, new comments, and adjustments.

The electronic trading platform Webull Financial LLC, or simply Webull, is used to gain access to financial data such as stock prices and charts of particular stocks. For this study, the data gathered from Webull is used to gain information concerning the stock prices of Gamestop and AMC Entertainment.

To retrieve quantitative data regarding the subreddits, <https://subredditstats.com> is used. Currently, there are not many tools available to the general public to analyse Reddit, but <https://subredditstats.com> provides useful general statistical information of subreddits, that

provide approximates of subscriber quantities. These numbers are used in this study to retrieve general information of statistical data regarding subscriber growth of subreddits.

For the process of data collection and analysis some ethical concerns were considered. All of the data has been collected through publicly available websites and social media platform Reddit. To uphold anonymity and prevent harm to individuals, in the examples of this study the usernames of members are concealed because these are not relevant to understand the content of the data. Furthermore, names of community leaders are disclosed for the sake of understanding the importance of their presence in the communities. These are disclosed because these names are either publicly disclosed by the persons themselves or because of their popularization in mainstream media.

7 Results

This section provides the results of this study. These results include various crucial discourse patterns that characterize the various communities. In this section, a collection of examples that have been found to form the essence of the communities will be provided and elaborated on. The results are divided over the following topics: the relevant Reddit communities, the infrastructures, motives to join the community, dissimilarities between the communities, community leaders, and offline activities.

7.1 The relevant Reddit communities

Since the events of January, which led to enormous price spikes of several stocks, which was a novel phenomenon stimulated by the rapid growth of global communication through the internet, only a limited amount of study is available on Wallstreetbets or similar Reddit communities. r/Wallstreetbets is a renowned Reddit community that has been around for almost a decade now, and after the events in early 2021 caught the attention of the general public, similar subreddits started emerging and growing significantly. Before analysing the developments and

discourse of the communities, it is crucial to identify the relevant communities and shed light on their emergence. This section will describe three Reddit communities that have played a role in the events of January. These communities will be the main focus of this study.

7.1.1 Wallstreetbets

Boylston, et al. (2021) made a respectable effort to describe the Wallstreetbets community and its features. The authors describe the community as a subreddit ‘devoted to irreverent memes and high-risk options trading’. In short, options are high-risk contracts where the buyer acquires the right to buy or sell a certain amount of securities in the future at a certain price that is previously agreed upon. The right to buy is known as a ‘call’ option, and the right to sell is known as a ‘put’ option. While some studies compare Wallstreetbets to gambling and the lottery (Boylston, et al., 2021; Hasso, et al., 2021), the findings of a study by Bradley, et al. (2021) suggest that the active users that share content on WSB are skilled, as average ‘buy’ recommendations result in increasing returns over time. WSB describes themselves as ‘like 4chan found a Bloomberg Terminal’, and the content of their posts includes a lot of slurs, questionable behaviour, and humour (Boylston, et al., 2021).

Although WSB initially was known as a Reddit community that dedicates its trading to high-risk options and various stocks, the market turmoil of January led to a significant amount of WSB content being devoted to conversations regarding Gamestop and AMC stock. According to Hasso, et al. (2020), the first accounts of a retail investor mentioning Gamestop on WSB dates back to July 28, 2020, when the investor posted a video mentioning Gamestop and its opportunity for a short squeeze. The phenomenon of a short squeeze can be understood as large inflows of funds into a stock price to make short positions on a stock unsustainable. The profit of a short position depends on a future fall in the stock price, as investors borrow and sell a share at the existing ask price to purchase the stock back at a lower price, profiting from the difference; if the

stock price rises, it could lead to an infinite loss for a short seller (Chohan, 2021a). In the case of Gamestop, it is believed that several hedge funds hold large short positions of Gamestop, making them a target for a potential short squeeze. The role of the hedge funds will be discussed later in this study. The trading of Gamestop stock gained popularity and became the main topic in a lot of interaction in the WSB community after activist investor and large shareholder Ryan Cohen gained a seat on the board of Gamestop (Hasso, et al., 2021).

As seen in Figure 1, r/Wallstreetbets rose from around 1,7 million subscribers to more than eight million in the period between December 31 2020, and February 14, 2021. This sudden rise of subscribers occurs around the same period of the rapid spike of \$GME and \$AMC from mid-January to mid-February as presented in Figure 1.

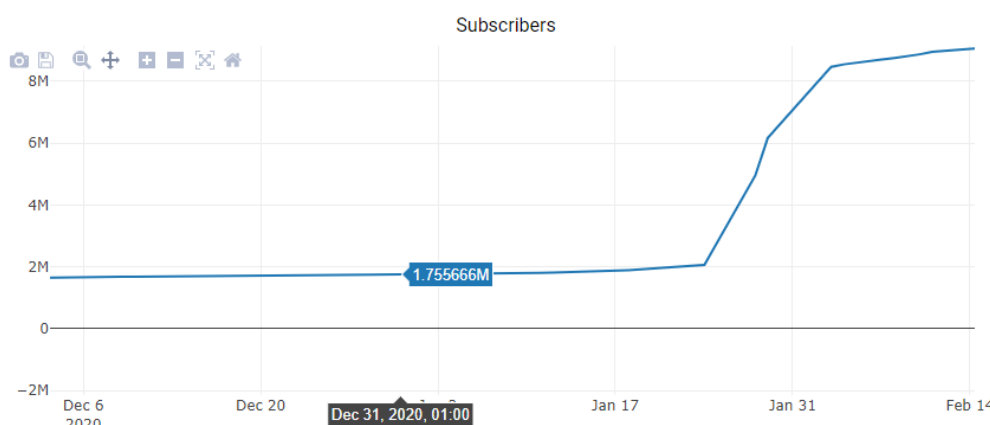


Figure 1 Statistics of r/Wallstreetbets subscriber growth from December 6th to February 14 (source: <https://subredditstats.com/>)

Shortly after the popularization of r/Wallstreetbets in January, similar subreddits materialised as a result of developments within r/Wallstreetbets and a growing community that focussed their trading behaviour on particular stocks, namely \$GME and \$AMC.

7.1.2 Superstonk

r/Superstonk is a community that was created on March 15, 2021, and as of July 1, 2021 consists of 503,000 members. The community describes itself as ‘a place for theoretical

discussions about business and stocks - specifically Gamestop stock (\$GME)'. In Figure 2, r/Superstonk shows a rather gradual growth of subscribers after a sudden surge at the beginning of April, revealing no direct correlation with the stock movement in the same period as shown in Figure 3. When the subscriber growth of r/Superstonk is compared to the growth of r/GME – another popular subreddit that devotes its discussions to Gamestop related content – it presents a sudden drop of subscribers from r/GME at the beginning of April, while the subscribers of r/Superstonk spikes at that same period, potentially indicating a migration of members from r/GME to r/Superstonk.

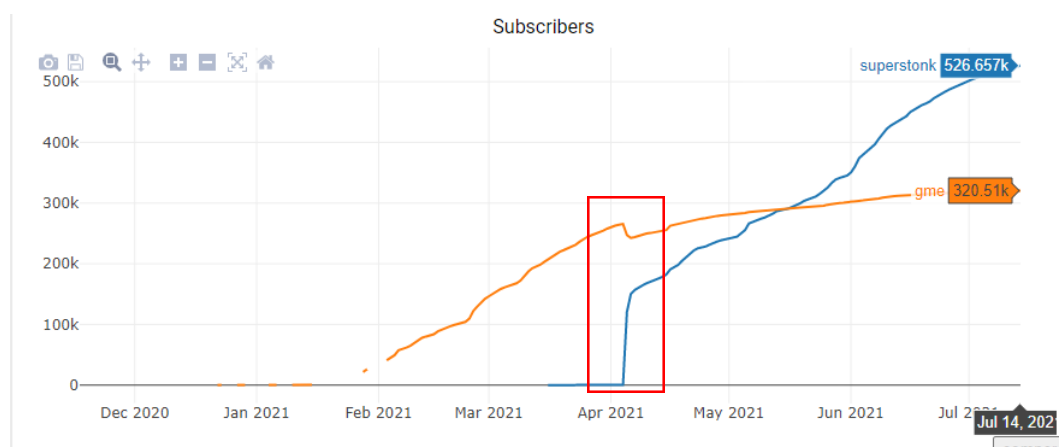


Figure 2 Subscriber growth of r/GME (orange) and r/Superstonk (blue) from December 2020 to July 2021 (source: <https://subredditstats.com/>)



Figure 3 \$GME stock prices from December 2020 to July 2021 (source: WeBull)

r/Superstonk shows a lot of similarities with r/Wallstreetbets concerning interaction, which will be discussed in the following sections of this study. Shortly after the January events, subscribers separated themselves from r/Wallstreetbets to move to other communities, among which r/Superstonk, to discuss \$GME related content (see Figure 4). Also, in the final discussion thread regarding \$GME on r/Wallstreetbets, a WSB moderator encouraged r/Wallstreetbets subscribers to move to r/Superstonk for GME related content (see Figure 5). Some particular events surrounding moderators of r/Wallstreetbets clarify much of this migration, which will be discussed in a later section.

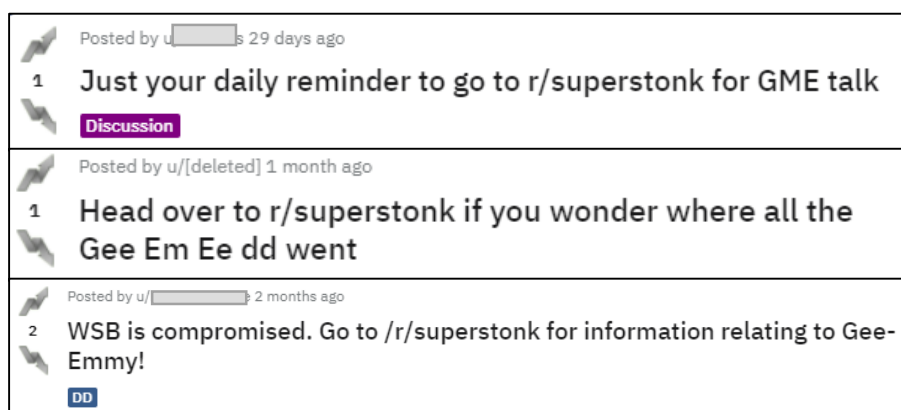


Figure 5 Examples of r/Wallstreetbets members encouraging others to join r/Superstonk (source: Reddit)

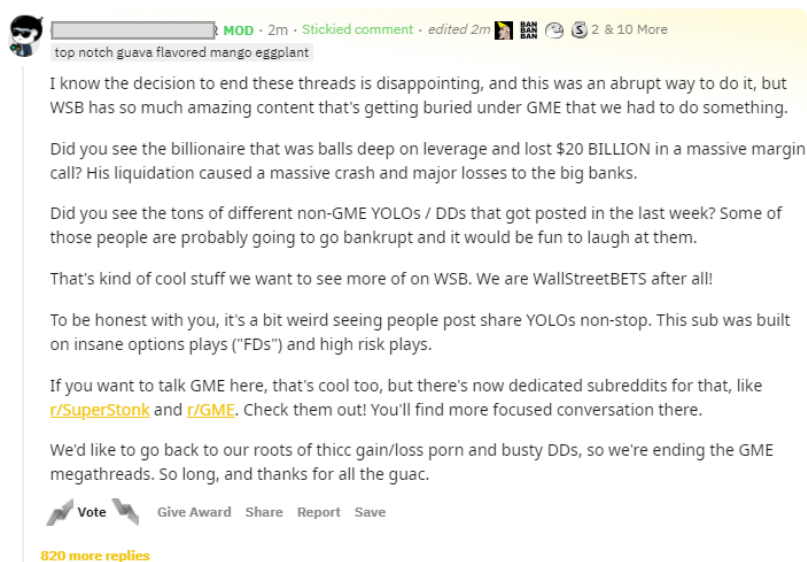


Figure 4 Post of r/Wallstreetbets moderator discussing a particular thread and hinting to other subreddits for \$GME related content (source: Reddit)

7.1.3 AMCstock

During the market turmoil, on January 27 r/AMCstock emerged on Reddit. As of July 1, 2021 r/AMCstock has a subscriber base of approximately 370,000 members. The price spike of \$AMC and \$GME (Figure 6) in January indicates an explanation for the growing subscriber base of r/AMCstock as shown in Figure 7. Figure 7 shows the growth of subscribers to the r/AMCstock over time, and in addition, it presents an acceleration during the end of May. Derived from the initial \$AMC price spike as presented in Figure 6, it indicates that the first spike of \$AMC in January initiated the emergence and growth of subscribers of r/AMCstock, and the second surge of \$AMC at the end of May accelerated the subscriber base in the same period. This shows a strong relationship between the AMC stock movement and subscribers growth of the AMC Reddit community. Subscribers to the AMC community mainly discuss \$AMC-related content, and the r/AMCstock subreddit describes itself as ‘the official AMC stock subreddit’. How AMC subscribers and investors distinguish themselves from WSB and \$GME investors, will be discussed in more detail in the following chapters of this study.



Figure 6 Stock charts of \$GME (left) and \$AMC (right) from December 2020 to July 2021. Both stocks show an initial price surge in January 2021, outlined in red. Outlined in blue is the second price surge of \$AMC. (source: WeBull)

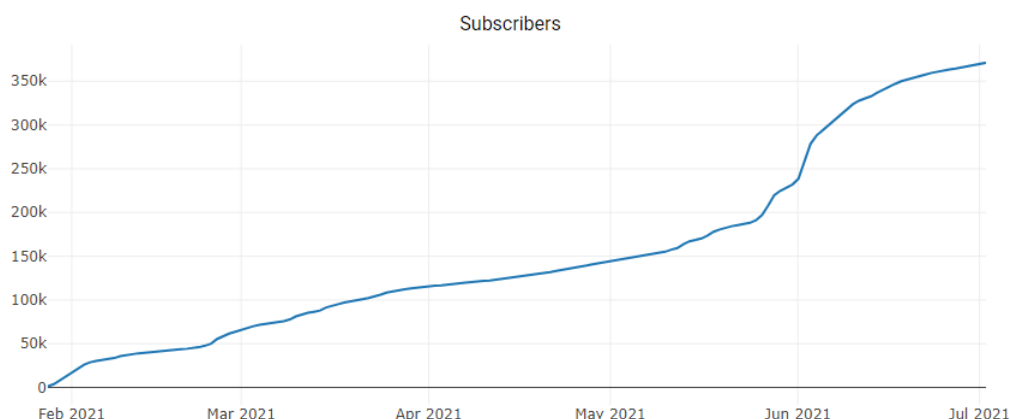


Figure 7 Subscriber growth of r/AMCstock from February 2021 to July 2021 (source: <https://subredditstats.com/>)

7.2 The infrastructures

The infrastructure of the subreddits plays a major role in what shapes the interaction of community members. The introduction offered a brief look into what the infrastructure of Reddit looks like. This section offers a general overview of how Reddit works and the remainder of the section will describe the infrastructures of the relevant subreddits.

Essentially, Reddit is a message board on which users discuss topics of choice. The message board consists of more than 100,000 communities on which millions of people around the globe interact daily, each discussing their particular interests. Becoming a user of Reddit is as simple as signing up for an account freely as any other popular social media platform. After creating an account, users can choose to join subreddits, and start their own subreddits. Becoming a member of a subreddit depends on the openness of that subreddit. Subreddits can choose to be either public or private – becoming part of a public subreddit is a simple click on a button. However, when it comes to being an active member, things get a little more intricate, which will be discussed in this section.

As Reddit has a comprehensive list of rules, general terms, and regulations, but only the most relevant for the communities of this study will be discussed. Initially, Reddit has its list of

rules and regulations that every subreddit is subjected to, additionally, all subreddits are free to construct specific rules that apply to their community. These rules function as the underpinning on which members can interact. These rules are usually enforced by moderators who volunteer to guide members of the communities. Each subreddit has at least one moderator, who initially is the creator of the subreddit. Moderators have more power than regular members, as they can distinguish their posts and comments, remove posts and comments of the subreddit, ban users of the community and assign other members as moderators. In a way, moderators thus shape the general discourse conducted by the community. r/Wallstreetbets, r/Superstonk, and r/AMCstock currently have a list of 10 moderators each, but this list can fluctuate over short periods. How this exactly happens will be explained later.

For members of the communities, it is possible to either be an active member who takes part in posting messages, comments, giving the so-called awards and votes, or be a passive member by not participating in any active interaction. To be an active member who posts comments, and gives out awards, for all three communities there are certain ‘karma’ requirements – for one to be able to post and comment, it requires a minimum amount of karma points. Karma points can be acquired by gaining upvotes from posts and comments and they can be earned by receiving or giving awards. There are cases of Reddit communities being ‘infiltrated’ by members whose goal is to disrupt the discourse of communities, and implementing a karma requirement is one way to tackle such practices from outsiders of the community.

Additionally, users can buy and hand out awards to other’s contributions, which are visible to other users. Figure 9 shows a user of r/Wallstreetbets who shared his \$GME positions with the community and received many awards. These awards generate attention from other members and the more awards a post or comment receives, the more attention it will likely receive.

There are 4 kinds of awards that serve different purposes:

- *Community* awards are custom awards that are created by moderators of a community.
- *Reactions* are comparable with emojis – these are awards that represent a sort of expression.
- There are five kind of *Medals*, that increase in costs: Silver, Gold, Platinum, Argentium, and Ternion All-Powerful
- Finally, *Premium* awards are reserved awards for Reddit Premium members – a paid subscription service of Reddit.

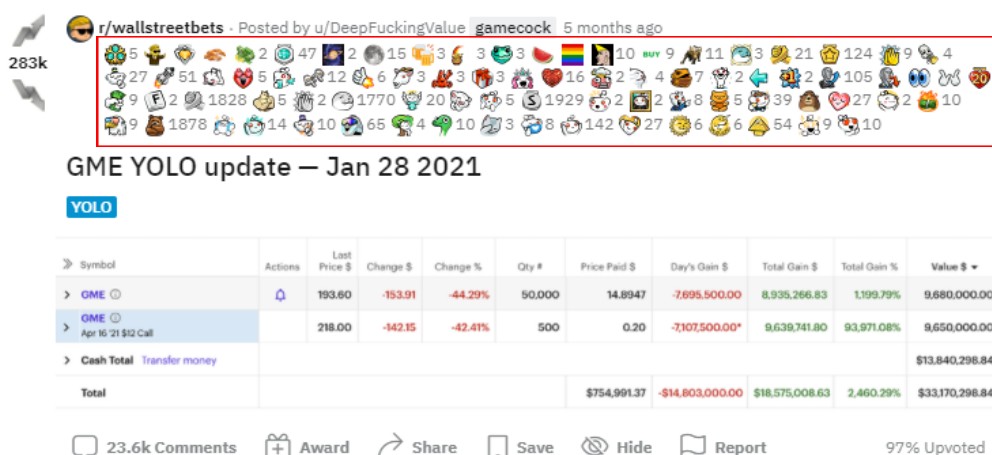


Figure 8 An example of a post by that received many awards on r/Wallstreetbets (source: Reddit)

In this respect, the infrastructural aspects of the communities, such as the karma requirements and the awards, determines who and what kind of discourse gains the most attention in the communities – to a great extent this phenomenon goes in line with Blommaert's (2019) notion of infrastructural aspects of situations that determine the actions online.

7.3 Motives to join the community

Traditionally, people participate in the stock market for financial reasons, but it seems that this practice has found new paradigms with the arrival of online communities, where people participate for reasons that go beyond financial achievements. The members of the communities often provide their motives for participating in the financial market varying from conventional financial reasons to rather unconventional ethical and social reasons.

Initially, forming a group of people to coordinate the trading of stocks to manipulate the stock price is illegal. However, the line between what is illegal and what is not can be unclear sometimes. In the case of the Reddit communities who form group formations to discuss particular stocks, although certain individuals have been questioned by the U.S. government, the practices of the Reddit communities have not been found guilty of market manipulation. The motives behind organizing and joining an investors community are under constant supervision by various parties that are involved in the stock market and need to be examined carefully. This section provides various recurring examples of motives behind the organization and assembly of the Reddit communities.

7.3.1 Moral factors

A vast amount of the communities consider the events surrounding the trading of the stocks as a sort of 'transfer of wealth'. Also, many of the retail investors who join the community, have the strong belief that they partake in a movement against the 'corrupt financial system' to crackdown on big financial institutions who in their belief manipulate the market. Many posts of the communities express their thoughts on this matter, with some gaining a lot of upvotes and attention, as seen in Figure 10.

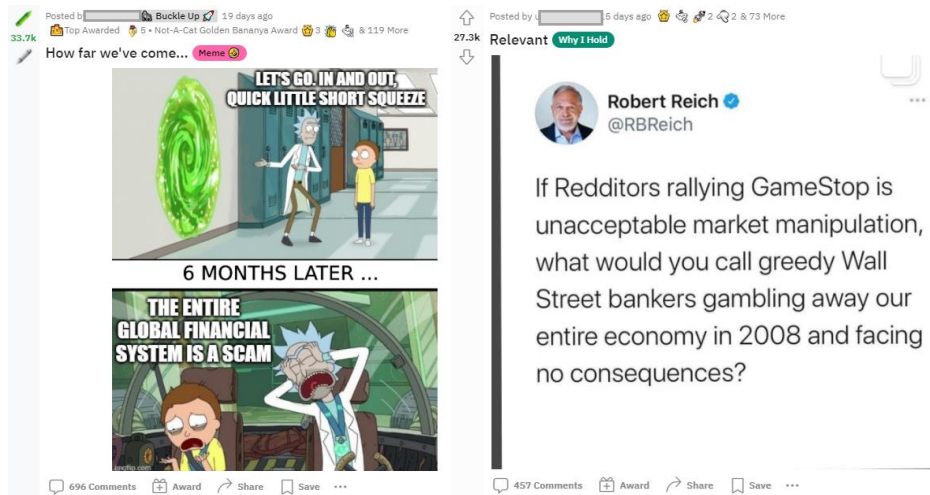


Figure 10 Posts on r/Superstonk (left) and r/AMCstock (right) associating the Reddit movement with a standpoint against a corrupt financial system. (source: Reddit)

A commenter on r/AMCstock (see Figure 11) claims that the person's husband began investing in stocks in January, while the comment is posted on May 11, 2021. This means that it is approximately four months that the commenter and husband have experience in investing stocks. Additionally, the commenter expresses astonishment at the information that he or she reads on the events surrounding the AMC stock and claims the market to be corrupted. Furthermore, the commenter proclaims to be a 'part of the AMC army'.

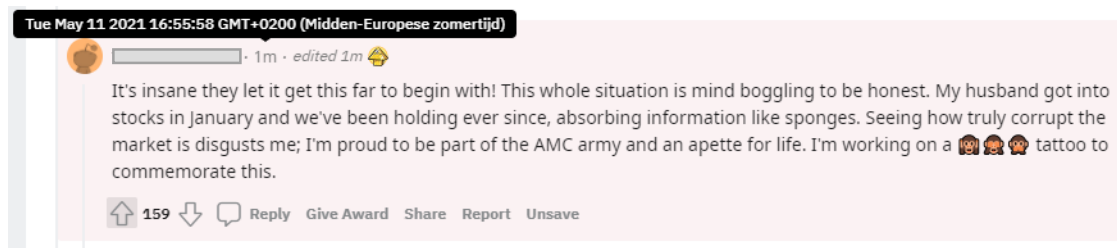


Figure 9 A commenter on r/AMCstock describes a personal story on participation in the community (source: Reddit)

This is an example of individuals who join the community to essentially 'join a cause' and be part of a larger group that takes action against what they believe is corruption in the financial system by trading a particular stock.

Some participants join the community in the hope for better rules and regulations in the future that protect the retail investors:

r/AMCstock commenter: *I hope the best for all of you who need life changing money. My HODL story is a bit different. I'm 40 [...] Ive been investing since I was 18 - and I hodl mostly for fun of the game (market is a game) and to see what a community can do. I am afraid for my children's future despite having a head start, I see the manipulation in the market and feel a lot of heavy changes are needed before we get into an unrecoverable short term crash because of all the leveraged positions. I feel these squeezes will help introduce new regulations and modify existing oversight. Billionaires crashing is what it takes, but I'm also skeptical because billionaires rarely crash as the system is set up for everyone else to take the fall. So I HODL for a correction and to help out the community.*

r/Superstonk commenter: *I just wanted a quick buck. Then I wanted to average down when it hit \$50 so i didn't feel too retarded for losing so much money. Now I hold because I hate the aristocracy. I've increased my position by like x30 since then purely out of spite. Who knew all it took for me to be comfortable being poor was to know my suffering would eventually lead to mass suffering of the elite*

r/Wallstreetbets commenter: *I love AMC...I will HOLD it forever if I have to and I don't care what anybody says. Everyday, week, month and year that I HOLD makes me feel like I'm giving the middle finger to a corrupt financial system that is rigged to exclude folks like me and damages struggling companies without regard to the impact on real people. I hope it goes to the moon but I will hold regardless of what it does because fuck KeN and Fuck the HFs. I'd rather lose buying and holding for dear life than to sell out. I'm already poor what else can you do to me?? Can't kill what's already dead.*

A substantial amount of members start trading the same stocks as the community and join the subreddits to take a stance against what they believe is an unfair system in place. One could argue that the community members are concerned with what they believe is good and bad behaviour in the financial system, and consequently partake in trading particular stocks to take a stance.

Considering these examples of stimuli to join the community, we can understand the notion of interaction as a departure for social action, as explained by Blommaert (2019), in the sense that conversing about particular stocks by individual investors who share common interests, consequently leads to forming groups that take social action – that is buying and holding stocks with social change in mind.

7.3.2 Trading as a social practice

Apart from financial reasons and social action to participate in the communities, results have shown that the participation of a significant amount of community members can be explained by the social relationships that these members uphold within the communities. Members frequently express their appreciation of the social factors of the community:

r/Superstonk commenter: *So proud of the post and the feedback... This is an amazing work and a remarkable community providing support and encouragement*

r/Superstonk commenter: *Honestly I have no friends as an adult. Broke my leg and found this community. Bought some shares. Bullshitting with my Ape family helped me make it. Back working now and wishing I was back home.*

These relationships are not limited to the online world. A post by a member of the r/AMCstock community (see Figure 12) presents a family and their \$AMC positions in the caption of the post. Also, the member describes the family by multiple gorilla emoticons, evidently referring to the popular self-identification with apes and gorillas that the Reddit

communities often do. The member then states that this is ‘something to bond over’, signifying the belief that trading this stock creates a bond between people.



Figure 11 A post of a member of r/AMCstock sharing a family picture and revealing personal information and their positions of \$AMC. (source: Reddit)

The comments under the post extend this idea of the stock as something to bond over by describing the community as a ‘family’:

Commenter A: *The great thing? I truly know this community is one big extended family.*

Commenter B: *Stocks and [family] bonds*

Commenter C: *My family will hold for your family and all our family's brother*

This shows that the interactions within the community have led to something more than merely discussing stocks and the market, but rather constructing a comprehensive relationship with members of the community. This phenomenon is not limited to the r/AMCstock community but also significantly present at r/Superstonk.

7.4 Dissimilarities between the communities

Even though r/Superstonk and r/AMCstonk emerged from the popularity of r/Wallstreetbets, the communities show remarkable differences when it comes to interaction between members. Both r/Superstonk and r/AMCstock emphasized respectful interaction, while this plays a less important role in r/Wallstreetbets. Table 1 presents the rules of each subreddit. It shows that r/Wallstreetbets, in contrast to r/Superstonk and r/AMCstock, does not particularly regulate the use of vulgar language.

Table 1 Subreddit rules of r/Wallstreetbets, r/Superstonk and r/AMCstock on 15 July 2021 (Source: Reddit)

r/Wallstreetbets	r/Superstonk	r/AMCstock
r/wallstreetbets Rules 1. Content Guidelines 2. Submission should've been a Comment in the Daily Thread 3. No Market Manipulation 4. No Pump & Dump, Crypto Discussions, Schemes or Scams 5. Political Bullshit 6. No Advertisement, Self-Promotion, Fundraising, or Begging 7. No Bullshitting 8. Bad Positions Screenshot 9. No SPACs 10. No Brigading	2. No Harassment, Bullying, Doxing, or Threats Is this even necessary to spell out? Don't harass. Don't use hateful language. No discrimination or insulting language. Be respectful of other members. Threats and Doxing are strictly forbidden. There is absolutely no reason for anyone to be threatening or doxing another ape. It is not your "right" to be here. This is a sub where stonk-lovers can post <i>fairly</i> uncensored to discuss the stonk(s) we love.	2. Insults For Finance Decisions Insulting and/or harassing another member of the subreddit for their finance decision will result in a ban and depending on severity may result in Reddit's Anti-Evil Operations suspending your account.

In the following example, it becomes clear what kind of interaction some WSB members appreciate from r/Wallstreetbets, in comparison to other Reddit communities. Readers should be aware of the rather offensive language, but it is necessary to include this, to understand the interaction at practice. After a user on r/Wallstreetbets was frustrated with the amount of content that included the term ‘short squeeze’, the user posted a long text disregarding other posts including the term ‘short squeeze’ and later edited the post, adding some personal thought – the post received more than 11,000 upvotes and became a hot topic of discussion for the WSB community. In the adjustment (see Figure 13), the user expresses appreciation for not getting banned from r/Wallstreetbets for posting certain content that may stand in contrast to many other members of the community. This kind of discourse would not be tolerated in r/Superstonk and r/AMCstock, because it includes a lot of vulgar language use to insult others, it disregards ‘short squeeze’ discussions, and it attacks other’s beliefs in financial decisions. Additionally, this would be a gross violation of the community rules of r/Superstonk and r/Wallstreetbets.

EDIT MOTHERFUCKERS-

Somehow my rant, which I thought would get me banned or downvoted to hell, has made it to the top in just a few hours.

Sure, the comments are trying to wreck me. I also got a Reddit admin notice asking if I need mental health help lmao. Got a good chuckle out of that one. Fucking trolls.

But you can see this is a place where we can still say fuck this short interest bullshit. And we can still find others who agree. I'm ok with conflict as long as nobody gets banned or their comments deleted.

When you try to have a counter opinion on most subreddits you get insta-banned. So I'm just happy we have some freedom to talk shit here and disagree openly. It's fun. Appreciate it you cunts.

I know it won't stop the shilling but 🤡. Let's get some real fucking DD in here. Fuck short squeezes. It's too easy for people to come in and manipulate this crowd on SI news.

FINAL EDIT- mods flair me. What's it take? Who's dick I gotta suck?

🗨 2601 Comments 🏆 Award ➡ Share 📌 Unsave 🙏 Hide 📢 Report 70% Upvoted

Figure 12 A part of a post by a r/Wallstreetbets member who shares thoughts on certain discourse in the community (source: Reddit)

The emergence of r/AMCstock and r/Superstonk came as a result of the fast-growing popularity of WSB, but there was an apparent reason that a vast amount of users separated themselves from Wallstreetbets and started their separate communities. At first, the Reddit communities that emerged after WSB who shared similar discourse practices seemed as branches of WSB, but soon started to distance themselves from WSB, both directly and indirectly for various reasons.

One popular Figure that is active on Twitter, who receives significant attention from the \$AMC shareholders, known as ‘Josh’, shares his thought (see Figure 14) on Jim Cramer – the host of finance television program Mad Money – who allegedly claimed that WSB saved \$AMC. In his Tweet, Josh counters this argument and represents the role of WSB in the \$AMC surge as less significant to non-existent, and additionally refers to the AMC community as a ‘totally different community of people who love \$AMC’. This Tweet is shared on r/AMCstock and received 4,400 upvotes, making it a hot topic in the subreddit.

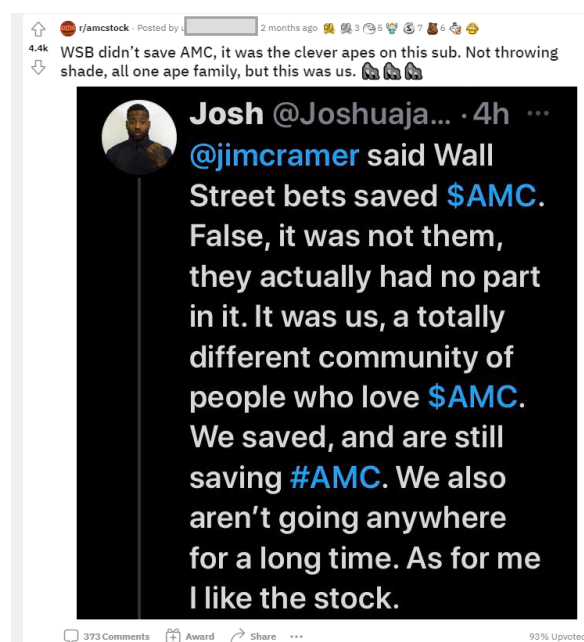


Figure 13 A post by a r/AMCstock member who shared a tweet of a popular Figure among the r/AMCstock community. (source: Reddit)

Furthermore, sharing negative news about stocks is treated differently among the various subreddits. On r/AMCstock, negative news about the community, or \$AMC is often met with downvotes or even removal by moderators. In Figure 15 a commenter on r/AMCstock mentions the -14,6% stock fall for the week and gets downvoted by 15 users.

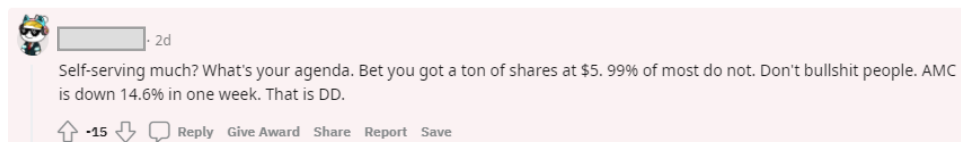


Figure 14 A commenter on r/AMCstock receives 15 downvotes after mentioning AMC in a negative daylight. (source: Reddit)

Negative news is often associated with the spread of so-called ‘FUD’, possibly spread by a ‘shill’ according to the community members:

OP: [...] *So everybody knows Lou the self proclaimed "king" of AMC according to his latest video. I don't care about that, we know he's FUD. But, but, but the thing that gets me is the comments on his videos. 95% of apparently non-apes are saying they are selling at 5k. It's pretty crazy he has these people convinced that's the number.*

Commenter: *Facts. He was called and FUD and a shill. He will continue to get called that.*

In this example, a community member asks a question regarding the claim of ‘Lou’, a well-known Figure to the r/AMCstock community. In the post, the member refers to Lou as FUD, which is short for ‘fear, uncertainty, and doubt’. Also, he refers to the commenters of Lou’s videos as ‘non-apes’, dissociating them from the community. Additionally, a commenter states that Lou is not only FUD but also a ‘shill’, known as a person that operates within the community to discourage other members from realising the collective goal. What becomes clear is that the community dislikes a narrative that is not in line with the common interests of the community.

The spread of negative news is often quickly associated with FUD, being a shill, and not being part of the community. To no surprise, this practice is shared among the r/Superstonk community.

On r/Wallstreetbets however, negative news towards \$AMC, \$GME, or mentioning a sell of the stocks is not always disliked. Figure 16 shows a commenter on r/Wallstreetbets who associates ‘AMC’ with the infamous ‘pyramid scheme’, and reveals that he or she sold \$AMC, which would be very uncommon and disliked by the r/AMCstock and r/Superstonk community. Nevertheless, the comment receives 29 likes on r/Wallstreetbets.

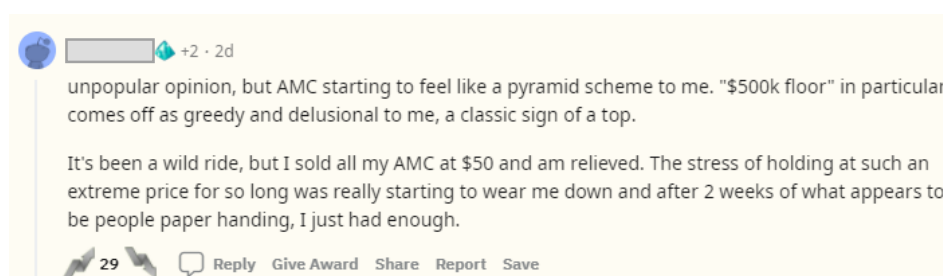


Figure 15 A member of r/Wallstreetbets mentions AMC in a negative daylight in various ways, and receives 29 upvotes. (source: Reddit)

7.5 Discourse that characterizes the online communities

As the popularity of r/Wallstreetbets initiated the emergence of r/Superstonk and r/AMCstock, the subreddits have a lot of similarities. All of the subreddits share memes to enhance the enjoyability of the subreddits and the categorizations of the other posts are also comparable. Posts are required to be categorized by ‘flairs’. These filters allow readers to organize information. Essentially, the communities have two kinds of flairs; either sharing knowledge, or flairs for entertainment purposes. From the existing flairs of the communities (see table 2), it immediately is noticeable that r/Superstonk and r/AMCstock have a more extensive list of flairs than r/Wallstreetbets, which means that the discourse conducted in these communities is far more categorized. The flairs are created by moderators of the community and are a result of various discussion topics conducted by community members. In this respect, this phenomenon is an example of what Garfinkel (2002) refers to as “congregational work”.

Table 2 Post flairs of r/Wallstreetbets, r/Superstonk and r/AMCstock

r/Wallstreetbets	r/Superstonk	r/AMCstock
- YOLO - DD - Discussion - Gain - Loss - Meme - News - Technical Analysis	- Discussion - Question - Possible DD - DD - Education Data - News Media - Social Media - HODL - Fluff - Opinion - Shitpost - Meme - Art & Writing - Stonky Pets	- DD - Meme - Gain/Loss Data - Shit DD - Youtube - Art - Upcoming vote - Why I Hold - TINFOIL HAT - Twitter DD - Instagram DD - Facebook DD - Deep DD - Discussion

Furthermore, as earlier mentioned, a lot of discourse includes language that would be considered vulgar and bad-mannered if conducted in conventional interactions in the ‘physical’ world. Members often label one another or themselves as ‘degenerates’, ‘retards’, ‘autists’, and ‘apes’. These utterances can be both negative or positive, but it is the indexical meaning that matters here. The context of interaction influences the interpretation of the person who reads the discourse conducted in the communities. For instance, at r/Wallstreetbets, r/Superstonk, and r/AMCstock, the meaning of ‘retard’ or ‘autist’ has other implications than when the words are used in interactions on different subreddits.

r/AMCstock commenter: *You Sir are an ARTIST....errrr I mean Autist :) (30 upvotes)*

r/Wallstreetbets commenter: *Explain fellow retard*

r/investing commenter: *Hey retard take a look at what’s happening in Italy*

r/aspergers commenter: *I think the cause for the blunted response is a key difference here- the narcissist is unconcerned with the emotional state of others whereas the autist is simply oblivious*

These examples above are typical applications of the words ‘autist’ and ‘retard’ used in several subreddits. The commenter from r/AMCstock shows a user referring another member as an ‘artist’ and correcting it to ‘autist’, which most likely is meant as a compliment, hence receiving 30 upvotes. Also on r/Wallstreetbets, a commenter requests another commenter to elaborate and refers to the other as ‘fellow retard’, expressing companionship. Whereas members of other subreddits use the words as a reference to the actual meaning of ‘retards’ and ‘autism’ as it is defined in the dictionary or as insults. At first, the comment of the r/investing member seems not far different from the r/Wallstreetbets commenter – but an explanation of the context here clarifies the difference. At r/investing it is not common practice to call other members ‘retards’ or the like, so it is usually used to insult. Whereas the WSB community commonly uses these terms in a ludic manner as some sort of mockery.

Furthermore, many of the Redditors also accuse large organisations of implementing scaring tactics and consider the stock price to be ‘psychological’. A message posted by a user of r/AMCstock contains language that characterizes the r/AMCstock subreddit. In the text, the user provides readers with information about possible future stock movements and accuses ‘the HF’s’ (hedge funds) of a possible attack on the spirits of the community. This shows a presence of conspiracy theories among the community members. As a result of this, r/AMCstock has dedicated a post flair to conspiracy theories, names ‘tin foil hat’, stemming from the popular allusion that wearing a tin foil hat will protect against government surveillance. Also, the user characteristically mentions ‘smooth brains’, ‘how retarded we are’, ‘to the moon’, and ‘your wife's boyfriend’, which are common discourse characteristics for the community and in turn add on to the authenticity of the message. Many of these expressions are adopted from the discourse conducted by members of r/Wallstreetbets.

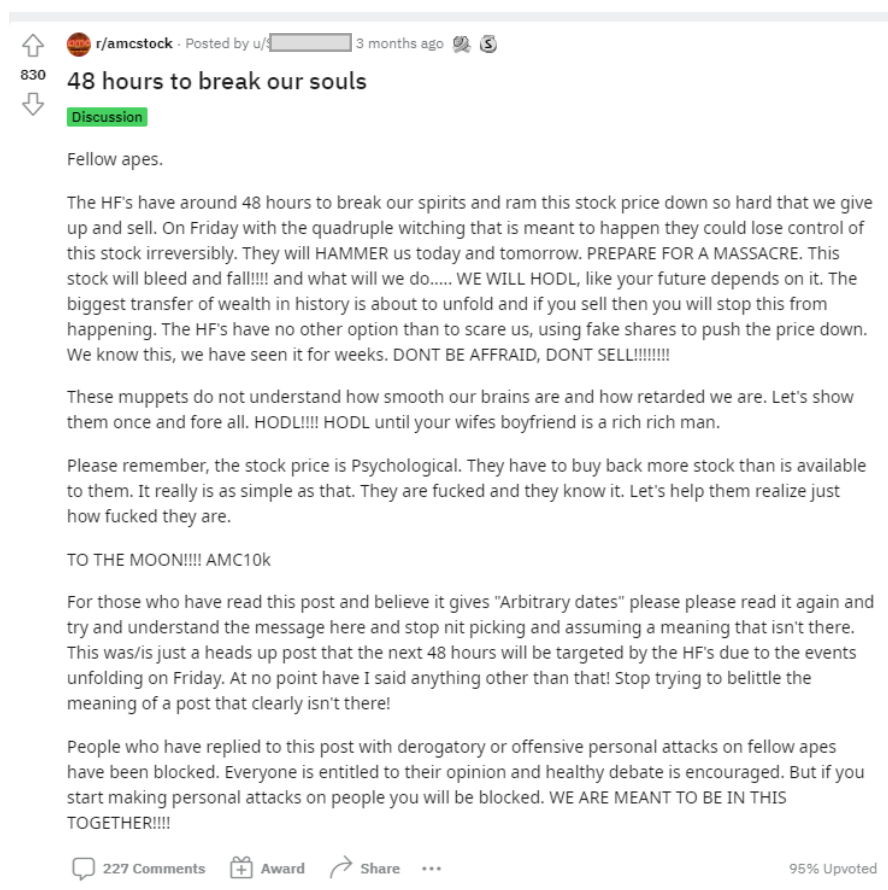


Figure 16 A r/AMCstock member shares knowledge on future \$AMC predictions (source: Reddit)

7.5.1 Memes

When WSB reached many headlines across the globe it was often in relation to WSB members participating in the trading of 'meme stocks'. There is an apparent reason media companies use this term to define the traded stocks by the WSB community. A quick look on r/Wallstreetbets shows that the community dedicates a significant amount of their content to sharing memes about trading which is mostly met with appreciation by the community.

A meme that has gained significant, and arguably the most, attention of all memes on r/Wallstreetbets classically highlights the importance of sharing memes within the community. In Figure 18 a meme shared by a r/Wallstreetbets subscriber shows two pictures originated from the famous crime drama television series Breaking Bad, with additional text. The post has received

228,000 upvotes, more than 400 awards, and is currently the fifth most upvoted post on r/Wallstreetbets. In the first picture, a woman purportedly being a mother asks: “Have you heard about the Reddit movement?” On which the second picture shows a statement, being that the person is ‘holding one share’ and answers the mother by replying “I am the movement”. Apart from the remarkable fact that this meme is the fifth most upvoted post on the subreddit, it also shows how trading a ‘single share’ – assuming as being WSB related stock – makes members of the community feel a sense of belonging to the community. This, then, is expressed by upvoting the meme and showing appreciation in the comments of the post. The top comment under the post (see Figure 19) also emphasizes this development of unity among the members by stating that the ‘real stonks’ – a deliberate and humorous misspelling of stocks – are ‘the friends’ that the members make by trading the stocks and participating in the community.



Figure 17 A meme shared on r/Wallstreetbets expressing thoughts on participation in the stock trade movement (source: Reddit)

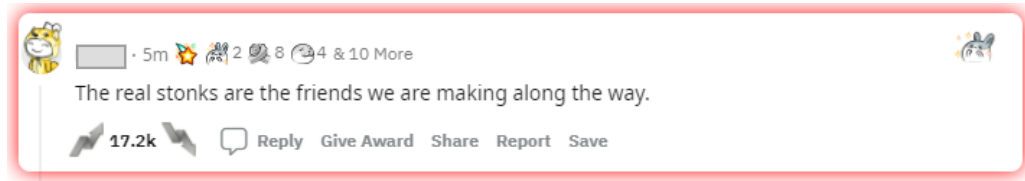


Figure 18 A comment by a r/Wallstreetbets user emphasizing on the development of relationships by participation in the community (source: Reddit)

7.5.2 Sharing knowledge

Apart from the interaction of phatic communication between members, there is an enormous amount of knowledge-sharing activities that are conducted by members of the community and carefully monitored by the moderators. The moderators of the communities consider the production of knowledge so important that specific flairs are designated for the various types of knowledge produced by the community members. Members show their appreciation of the knowledge that is communicated in the communities by actively engaging in informational communication rather than phatic communication and referring to the knowledge production repeatedly in various posts. In an illustrative example that received 2,300 upvotes, one member of r/Superstonk explicitly shows this appreciation in a comment:

“I hope people check the comments on these posts and participate in conversations. The comments are so important on this subreddit as it allows individuals to look through posted materials and provide feedback and information. Information is so important, real information. Constructive criticism is the name of the game when it comes to study.”

The discussion under the posts of these knowledge interactions is then also apparently different from the other flairs.

In the following conversations conducted by three members in r/AMCstock, some key elements of knowledge production of the community will be highlighted that characterizes the

interaction between members. Recently, a member of the community shared a message of a supposed financial analyst from another social media platform, Linked In, on r/AMCstock (see Figure 20).

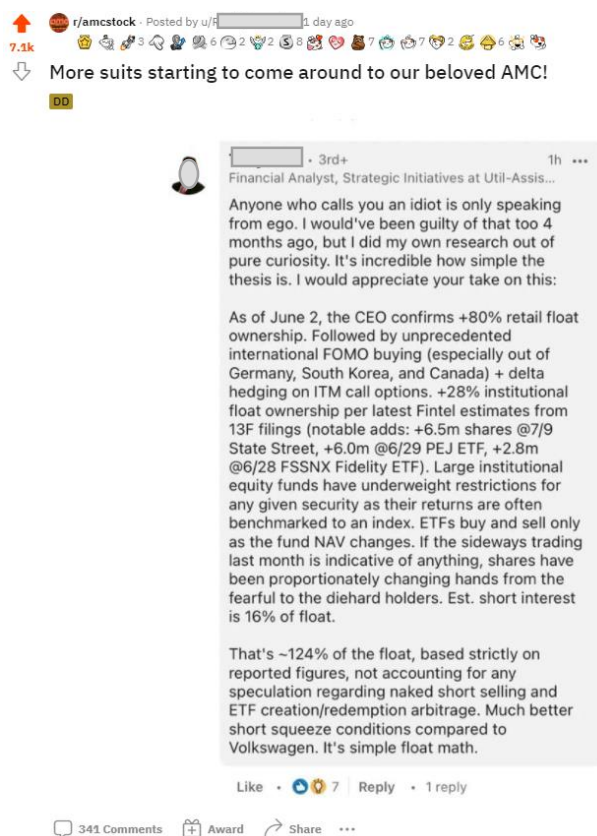


Figure 19 A post on r/AMCstock sharing content from Linked In with the community (source: Reddit)

Some commenters provided their thought on the matter:

- **Commenter A:** *"Its good for them to come around. But why now? I just think they're are making a case so that when we start to squeeze to the \$100-\$500 they can gain trust from us and then start saying that the squeeze is over. But that just me. .not trying to make any fud its just my opinion with out any evidence"*

- **Commentor B:** *What DD can you point me to that will have me as convicted as you?*

I am holding and believe in this but would love to be able to send my circle a definitive, yet simple enough link that they can follow. Thoughts?

- o **Commentor C** (response to **B**): *Sure. Obligatory links and disclaimer:*

1. Here is the link to DD in AMC. I'll be honest. I haven't read any of it on this subreddit. But I'm sure there will be some good DD. [...] I get all my DD wrinkles from another subreddit about the other Stonk. Why, you may ask? Well, it's been peer reviewed. It's as solid as diamonds. And, it was the original and still continues to be the original bet. [...]

Commenter A preserves a critical stance on the matter and expresses his expectations, but does so carefully by stating ‘not trying to make any fud’ – basically trying to distance himself from a practice that is frowned upon by the majority of the three communities, especially r/Superstonk and r/AMCstock. Commenter B asks the original poster (OP) for additional due diligence (‘DD’) to spread it among his or her own ‘circle’. Commenter C replies to commenter B by claiming that commenter C acquires knowledge from another subreddit. Knowledge is typically referred to as ‘wrinkles’, which originates from the popular belief that ‘more wrinkles in the brain is associated with greater intelligence’. This example of knowledge production presents in what way and how fast knowledge spreads among the communities and also to outsiders. It becomes clear that the members remain vigilant for any communication that could harm the cause, while actively searching for answers to their questions. Also, members acquire answers from other subreddit communities, thus there is a presence of cross-community interaction. Although the communities uphold their differences, from the viewpoint of knowledge production, the members of the communities cautiously exchange information.

7.5.3 Non-stock related social content

A portion of the content shared within these online communities is social content that is not stock-related, which also frequently become hot topics of discussion. Figure 21 shows a post of a user who provided the community with an update of a previous post. The post has nothing to do with trading stocks or discussing market developments, other than the post being labeled with the ‘why I hold’ post flair. In the post, the OP explains to fellow community members that the OP’s mother has passed away of cancer and thanks the ‘apes’, that is to say, the community, for their support. The majority of the comments under the post express their sympathy, condolences, and related narratives.

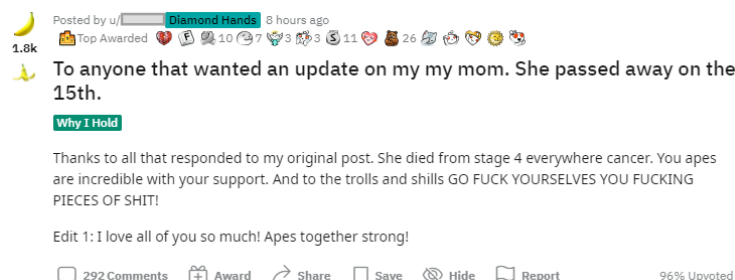


Figure 20 An update of a personal story by a r/AMCstock member. (source: Reddit)

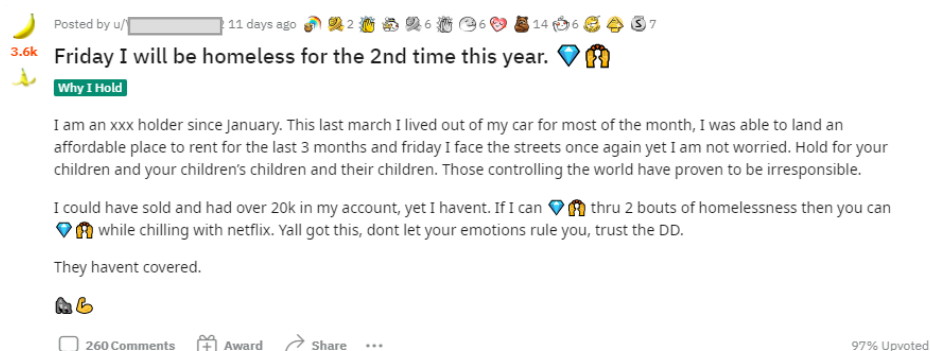


Figure 21 In a post by a r/AMCstock member announces that the member is going to be homeless. (source: Reddit)

In another post on r/AMCstocks that also became a hot topic, a community member announces that the member is going to be homeless for a second time (see Figure 22).

In the comments, many fellow community members show their sympathy, and a few even try to find solutions for the issue:

Commenter A: *Self Preservation is the first law of nature. Sorry, but if it's between being homeless and having shares, you need to cash in some shares to pay for your rent. Or, since everyone claims "we are in this together" , "leave no ape behind" and other such slogans, can you please comment what CITY you're in, and maybe, just maybe some ape living in that city has a house with an extra bedroom you could live in for awhile. Not free, get a job and promise to pay some rent.*

Commenter B: *Any ape in Charlotte, NC can help this ape out? Have a house with a guest room?*

What this shows, is that the interactions between the community members go far beyond discussions regarding stocks or the stock market. Where initially the subreddits were created to discuss stocks, it now has grown into communities that have built complicated global relationships between individuals that go beyond finance-related content.

7.6 Community leaders

As described in the literature review section, this study maintains the idea of a community leader as a participant who is recognized by other participants as influential in what the community does or how it does it (Johnson, et al., 2015). The interactions between the communities and their members are highly influenced by multiple community leaders. Most of these community leaders are the moderators who monitor and guide the members through functions assigned for this purpose within the communities, but the explanation for some other community leaders is not as straightforward. Additionally, as the lines between the communities

are rather blurred, individuals who seemingly have a great impact on the communities are also not precisely appointed for a single community. This section provides an overview of the most prominent community leaders and their role within the communities.

7.6.1 Community leaders through direct influence

For all Reddit communities, the infrastructure of Reddit allows the moderators of subreddits to directly influence discourse within the subreddits by providing them with the ability to prohibit or limit certain discourse, sanction members, and post and comment. Also, the fact that moderators have a tag that distinguishes them from regular members of the community, draws attention to what they post or comment, increasing their visibility in the community. The policing function of moderators does not make them automatically community leaders, but it does allow for moderators to more easily become community leaders by influencing other members and guiding the discourse of community members rather directly. Moderators have been discussed heavily in the Wallstreetbets community and later also in the r/Superstonk community. Because moderators have the ability to influence the discourse of the communities, they also become subject to a lot of criticism by members of the community in times of crisis.

Shortly after the January events, many members of r/Wallstreetbets suspected the team of moderators to be corrupted by the influence of outside parties and it became a comprehensively discussed topic within the community. The events eventually lead to the migration of many members to other subreddits such as r/AMCstock and r/Superstonk. Figure 23 shows a post from early February of a member in r/Wallstreetbets questioning the behaviour of the moderators. After complaining about a series of deleted posts, the member expresses his distrust in the team of moderators by stating that ‘it’s beginning to look pretty convincingly like the mods are still compromised’. One moderator then responded to this post with the following message:

Posts/Threads are being automatically removed due to account age, karma requirements or banned tickers. The current group of mods is the most solid we've had in a long time (-zjz) [a former moderator]. No shills, no sellouts. Only degenerates.*

With this response, the moderator makes an effort to provide some kind of clarification on the reasons why several posts have been deleted and concludes the message by identifying with the community through describing the moderators as ‘only degenerates’ – a popular self-identification within the r/Wallstreetbets community – to offer the members a feeling of authenticity of their presence.

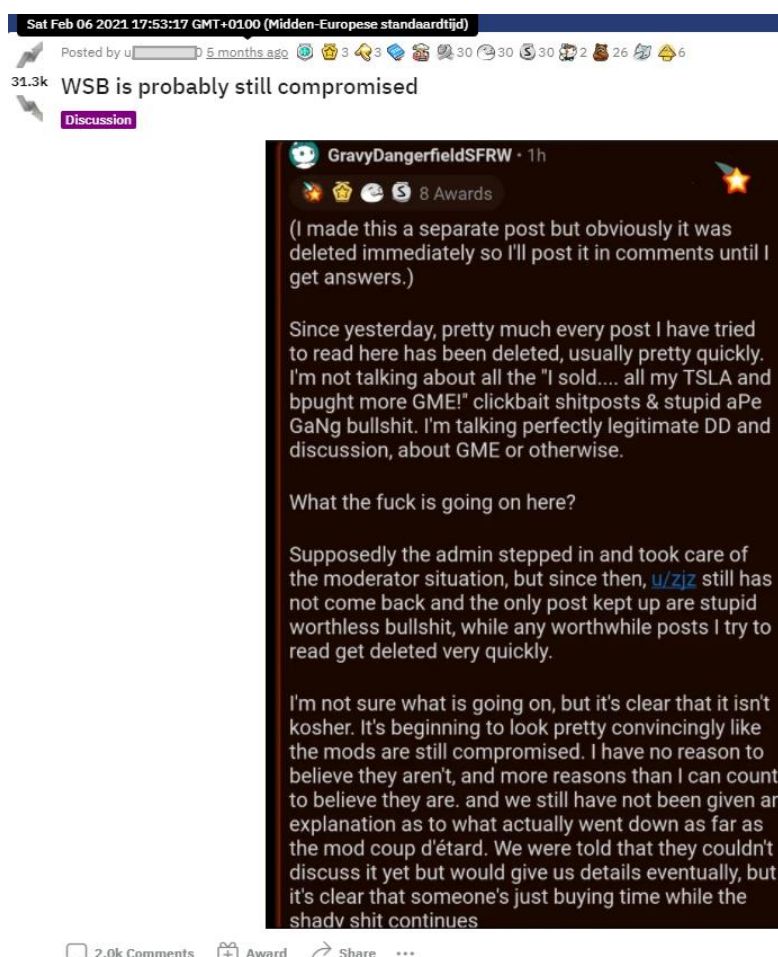


Figure 22 A post in r/Wallstreetbets in which a member claims that the community has been compromised. (source: Reddit)

Nevertheless, not all members of the WSB community were confident in trusting the moderators and expressed their suspicions:

Commenter A: *No shit, they are deleting GME posts that expose the fact that hfs [hedge funds] didn't cover, are pushing sell mentality. The sub has been sold to the enemy*

Commenter B: *Are the mods actually deleting posts about GME now? Did something happen between them and capital? It feels like they got bribed or something around the millions and they are deleting posts left and right. They just recently deleted my post about the reason I don't sell but they're deleting everything related to GME or AMC.*

Commenter C: *Yep, my posts are being deleted. This sub has definitely been compromised*

These examples show the significance of moderator authenticity and loyalty to the community in a place where identities are concealed unless revealed so by the users themselves. After the uncertainties regarding the r/Wallstreetbets moderators among the WSB community, many members migrated to r/Superstonk to discuss \$GME related content. However, this exodus to r/Superstonk did not lead to a permanent solution to the relationship between moderators and the community since a similar event reoccurred in mid-July. In July an alleged disagreement among the moderators of r/Superstonk lead to widespread discussions on the subreddit regarding the reliability of the moderators. The discussions eventually caused an appeal from the community members to remove two well-established moderators from the moderators' list (see Figure 24). In the post, a community member speculates on the complications among the moderators in which the discussion has little to do with \$GME or the market. Nevertheless, the posts received a lot of attention from the members and became a hot topic of discussion. Near the end of the post, it becomes clear that as a result of a previous moderator ('pink') getting banned, that moderator created another subreddit that concentrates on \$GME related content known as r/GMEjungle.

These events show how difficulties among moderators can lead to wide-ranging speculation among members and also possibly distribution of members to other communities. For the community to function properly and remain resilient, it seems that members necessitate trustworthy moderators that communicate transparently with the community. Evidently, this remains to be a difficult task when identities are concealed to the general public.

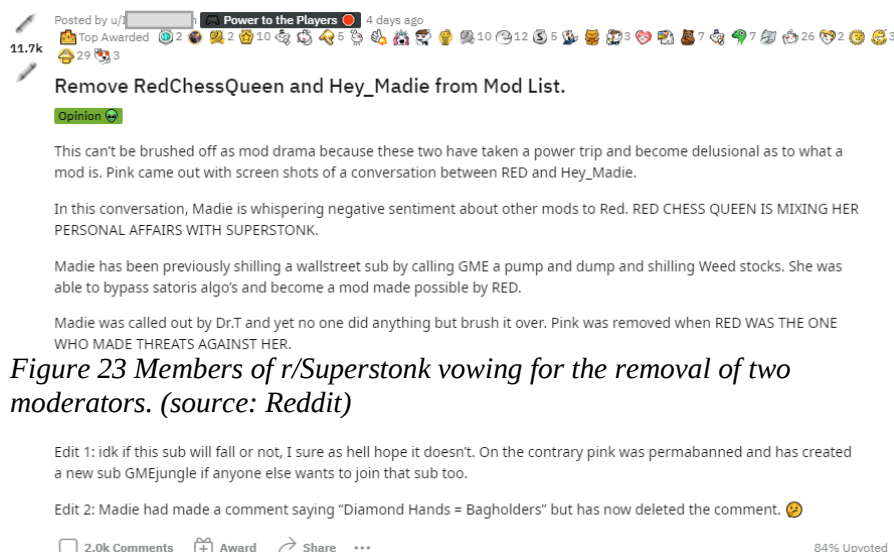


Figure 23 Members of r/Superstonk vowing for the removal of two moderators. (source: Reddit)

Although the moderators of r/Wallstreetbets and r/Superstonk have been subject to much criticism and suspicions, their existence is of significant importance for the survival of the communities. The rules that moderators enforce and how they monitor activities on the subreddits determines the discourse within the communities.

In the following example, the moderators inform community members on behaviour that is at odds with the community guidelines when a member posts a claim about market predictions, which received significant attention from the community:

OP: *20 Million Shares of Gamestop are going to be bought b/c of 1/29 calls on Friday. Don't Even Think About Selling Until Then.*

Moderator comment: *Well, hold on. Those are your options. There isn't some mystical*

Figure that is required to buy 20m shares at 3pm on Friday. Those ITM options are

owned by you and so that stock isn't really going to be bought by anyone else.. except.. you. Additionally, those shares dont need to be purchased, unless you're exercising options that otherwise shouldn't be exercised (doubt). [...]

Moderator comment: *[...] I wasn't sure if it was better to remove, or keep it up and include the correct explanation. I ended up locking the post removing it.*

As can be observed in this case, first the moderator discusses the content of the post with the community member, then decides on the continuation of the post. The moderator ends up removing the content of the post and locking the post – which means no votes or comments can be applied anymore – while the title and comments remain available to read. This limits the post from being spread further, while much of the shared knowledge remains accessible. This example elucidates how moderator participation in the community and their decision-making on posts and comments could determine the behaviour of community members.

7.6.2 Community leaders through indirect influence

There is also a presence of community leaders whose influential roles are not as direct as the moderators'. Nevertheless, their involvement in the communities has had a great impact on the communities and continues to do so. It is crucial to examine their presence to understand what it means to the community and what their impact is. Some names that are commonly mentioned are 'Trey's Trades', 'Matt Kohrs' and 'r/deepfuckingvalue'. The latter, whose real name is Keith Gill, has a history in r/Wallstreetbets that goes back to September 8, 2019, when he disclosed his approximately \$53,000 worth of \$GME call options, as seen in Figure 25. These positions show that Gill expects the \$GME price to significantly rise in the near future.

that Wallstreetbets has ever seen'. Many of the posts that have received the most upvotes in r/Wallstreetbets, present similar idolization of Keith Gill. After the frenzy in January and his appearance on the hearing, Keith Gill has refrained himself significantly from posting on social media.

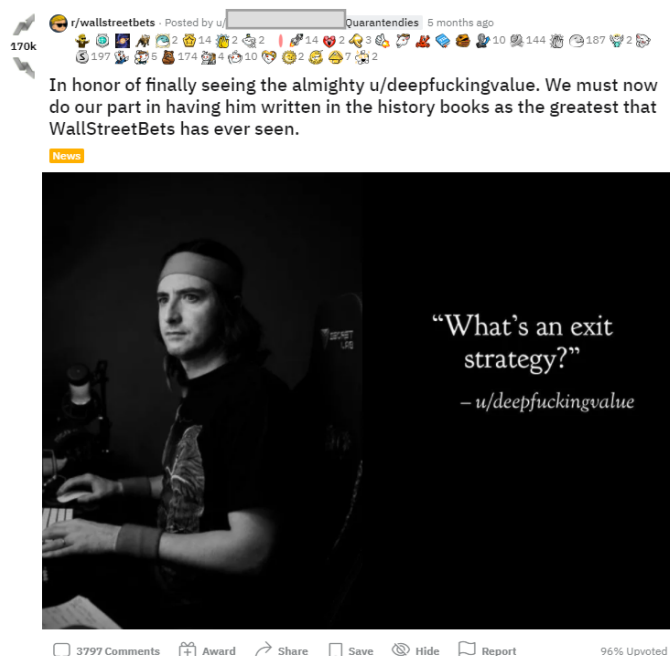


Figure 25 A post by a r/Wallstreetbets member honoring u/DeepFuckingValue. (source: Reddit)

Since Keith Gill predominantly focused his efforts on trading \$GME and remained a main point of attention for the investors of \$GME, the growing community of \$AMC investors, seemed to be in search of a similar figure that could represent and address their community. For investors of \$AMC, YouTubers Trey's Trades and Matt Kohrs were two figures that frequently showed up in the posts that received attention. Trey's Trades and Matt Kohrs are both popular figures in the AMC community for their frequent audio-visual publications on YouTube, providing the audience with information concerning the stock prices of \$AMC and \$GME.

Due to their increasing popularity in the community, Trey's Trades and Matt Kohrs appeared on Fox News to talk with contributor and host Charles Payne to talk about \$AMC, \$GME and similar popular stocks, which consequently was recognized and spread on the subreddit r/AMCstock as shown in Figure 27.



Figure 26 Two posts on r/AMCstock showing the interviews of Trey's Trades (left) and Matt Kohrs (right) on fox news. (source: Reddit)

The presence of community leaders whose identities are disclosed to the communities seem to create more trust among members of the communities, hence there is few to none speculations about their behaviours.

7.7 Offline activities

There are several instances of members of the communities commenting on 'offline' activities that affect the community in various ways. These offline activities differ among the various communities, presenting different social interactions between the communities. For this section, it is crucial to describe what is considered offline activities, as the 'online' and 'offline' are currently often overlapped. The examples presented in this section show activities that have taken place in the 'physical' world, in the general sense that these activities are not directly connected to the internet. It is almost impossible to discern whether these activities are truly

carried out by the community or a third party, but it is certain that these offline activities have gained the attention of the online communities and sparked discussions among them in the subreddits. To understand what the effects of these offline activities are on the interactions among the online communities, some key examples will be analysed and discussed in this section.

Much of the offline activities are practices initiated by individuals rather than offline interaction between community members. Many of these offline activities later gained much attention from the online subreddits utilizing popular posts and comments. The offline activities are sometimes opposed by the communities and other times supported. In the following, some examples of these offline activities are taken as case studies.

7.7.1 Social action

On January 30th, a member of r/Wallstreetbets shared a tweet in which someone supposedly ordered a pilot to fly a banner above the headquarters of the American financial services company Robinhood (see Figure 28).



Figure 27 In this post by a r/Wallstreetbets member a picture of a plane with a flying banner is posted. The banner behind the plane says: "suck my nuts Robinhood - Nowadaysmedia". (source: Reddit)

The banner is meant as an insult to the company, which has most likely to do with the trading halts that Robinhood put in place during the stock price volatility in late January (Robinhood [@Robinhoodapp], 2021; Robinhood, 2021). Many stockholders expressed their anger on the halts which later led to many Redditors urging people to abandon the use of Robinhood (see Figure 29).

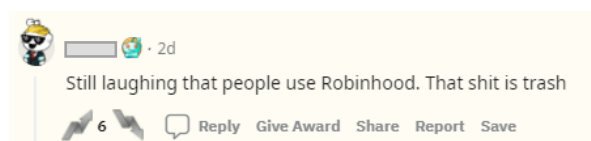


Figure 28 A user on r/Wallstreetbets shares thoughts on the use of Robinhood. (source: Reddit)

This kind of social action seems to gain significant attention from the community more often than not. Another individual social action that triggered substantial interaction in the r/Superstonk community, was one of a person dressed up as a gorilla carrying a sign that stated ‘the end is near’ in front of the Citadel LLC headquarters in Chicago (see Figure 30). The act was then caught on camera and posted, and many times reposted, on the various Reddit communities. For one to understand this action that takes place in the ‘physical world’, one should also understand the context of the issue. Citadel LLC is one of the largest multinational hedge funds and financial services companies that is being targeted by the Reddit communities. Many of the subscribers are convinced that Citadel heavily shorted \$AMC and \$GME – meaning Citadel allegedly expected and put money on the stock price to fall – a practice that could be considered the opposite of acquiring a long position or buying call options on a stock. Also, the person who stood in front of the Citadel headquarters, as presented in the post of Figure 30, wears a gorilla costume to show affiliation with the Reddit communities who identify themselves as ‘apes’, ‘gorilla’s’ or the like.



Figure 29 An r/Superstonk user posts an audiovisual of a person standing in front on the Citadel LLC headquarters in Chicago, dressed in a gorilla suit and holding a sign that says "the end is near". (source: Reddit)

7.7.2 Offline gatherings

On the contrary, not all offline activities in support of the community are met with backing from the community. In July 2021, an organized festival, known as ‘Apefest’, for the shareholders received a significant amount of criticism from the Reddit communities. In a post that received a lot of attention from the r/AMCstock community, numerous members of the community share their thoughts on the matter:

OP: [...] Don't get me wrong retards I like having fun as much as you all, but this "ApeFestival" thing has blown up far too quickly with too many prominent \$amc Figures or "influencers" taking part, and putting well earned criticism to the stonk. [...] This seems like a blatant cash grab to me but then again I am a complete retard with absolutely no wrinkles whatsoever. [...] The squeeze has not squoze there is no reason to start organizing (I won't even get into the privacy concerns) for parties. [...]

Commenter A: *I haven't seen one person speaking positively about this, everyone is saying it's stupid bullshit.* – 3,300 upvotes

Commenter B: *Any "influencer" talking about this ridiculous, obvious scam shit needs to be unfollowed or unsubscribed, and people should leave a message to them explaining why. [...] Fuck these social media dipshits looking to take scammer money to promote this obvious bullshit "festival."* [...] – 1,400 upvotes

These examples are just a glimpse of the overwhelming criticism that the festival has received from the communities. The OP of the post first criticizes the festival and claims it to be a 'cash grab', however lacking any evidence to support the claim. Additionally, the OP states that there is 'no reason to organize for parties', adding privacy concerns. Commenter A amplifies the statement of the OP by stating that 'everyone is saying it's stupid bullshit', receiving 3,300 upvotes for this statement. Lastly, commenter B criticises 'influencers' that talk about the festival and labels the festival as an 'obvious scam', again lacking evidence to support the claim. Furthermore, the commenter calls for an unfollowing and unsubscribing of those 'influencers'. This shows that even though the claims about the festival lack any conclusive evidence, the subreddit overwhelmingly supports any criticism of the festival for various reasons.

These mentioned examples of offline activities indicate that the communities show support for offline activities that promote the 'cause' of the communities, but at the same time, community members are very cautious and reluctant when it comes to offline gatherings of community members in great numbers. In this sense, the concept of distance and individuality of online interaction remains intact in the offline sphere.

8 Discussion

This paper provides a first exploration of the discourse conducted by Reddit communities that dedicate their content to the stock market. Reddit communities discussing the stock market is

essentially an extension to the overarching message board activities, which have been exhaustively scrutinised. However, this study has approached the examination of the topic different from the pre-existing studies and found dissimilar results.

The data of this study focussed primarily on the discourse of three Reddit communities: r/Wallstreetbets, r/Superstonk, and r/AMCstock. Although currently there is a presence of many Reddit communities who dedicate their content to discussions surrounding the stock market, the rise of their popularity seems to be a result of the price spikes of several stocks initiated by r/Wallstreetbets. Shortly after the sudden popularization of r/Wallstreetbets, other subreddits who have devoted their discussions to a particular stock started emerging, with r/Superstonk focussing on \$GME and r/AMCstock focussing on \$AMC. These new subreddits separated themselves from r/Wallstreetbets with different rules of conduct and behaviours. For instance, whereas discussing \$GME and \$AMC in positive as well as negative daylight appears to be commonly accepted in the r/Wallstreetbets community, it is a different story in r/Superstonk and r/AMCstock. In r/Superstonk and r/AMCstock discussions that go against the commonly accepted positive attitude towards \$GME and \$AMC are often met with downvotes, accusations of spreading ‘FUD’ (Fear, Uncertainty, and Doubt) and being a ‘shill’, or even removal by moderators. Furthermore, the various subreddits that have emerged after r/Wallstreetbets have shown a presence of relationships between community members that goes beyond discussing stocks, namely one that is on a more personal level of communication that is not per se stock related.

In the theoretical background section, it is explained that unsaid meanings reveal crucial information that provides a better understanding of the interaction of group members which results in group action. The results have shown examples of how these indexical meanings have led to group action. One prominent example of this phenomenon is that there is a common

acceptance among the various subreddits that the people who have a long position on \$AMC or \$GME are considered ‘fellow apes’ and this not only forms a bond within the communities, but it additionally creates a relationship between the various communities. Consequently, as explained by Blommaert (2005), the use of these indexical meanings by these various communities has led to social action by acquiring long positions on particular stocks and the communities taking a stance against the big corporations. Much of the discourse that is conducted by the various subreddits, only maintains its meaning as understood by the community when it is used in interactions between the community members. This phenomenon is in line with Gumperz’s notion of contextualization.

As projected by the concepts of virtual communities explained by Koh, et al. (2003) and Koh, et al. (2007), the results have presented a clear presence of various community leaders that enhance the community relationships by their active participation and enthusiasm. Furthermore, memes and a major presence of phatic communication appear to enrich the enjoyability for community members, which in turn attract new members and increase the devotion of existing members. Finally, in addition to the concept of Koh, et al (2003), whereas initially offline meetings of virtual community members improve relationships by enhancing solidarity and cohesiveness, in the case of these online subreddits, the results show a majority of the community members indicating an averseness to large offline gatherings.

Some limitations to this study should be noted. As the results of this study are mainly examples of greater patterns rather than a large collection of data, one should not consider the results are generalizable, but rather as clear indications that can be used for further study into this topic. Furthermore, as this research has an online approach, it is subject to potential deceitful information as the internet is widely affected by this issue. Furthermore, limited access to data analysing tools for Reddit currently restricts studies from obtaining large quantities of data to

confirm the results of this study. Therefore, it may be thought-provoking to think of a solution for this issue.

9 Conclusion and recommendations

This study made an effort to answer the question of ‘how the online Reddit communities that participated in the Gamestop and AMC market turmoil have influenced our discourse concerning trading stocks? After the sudden price spikes of various stocks as a result of group action by r/Wallstreetbets, similar subreddits started emerging on Reddit, each adopting and devoting themselves to a particular stock. Although these new communities show similarities with r/Wallstreetbets in the sense of written language, they have proven to differentiate themselves through dissimilar codes of conduct and group behaviour. Now there is a presence of a divergent set of stock-related communities that show strictly controlled discourse on particular stocks and relationships that go beyond discussing stocks. This phenomenon of new online communities has paved the way for a new online paradigm in the world of trading stocks, namely one that creates opportunities for retail investors to join a community that communicates internationally on a personal level and shows companionship beyond being fellow investors, but rather being part of a community that invests in a particular stock and shares similar beliefs.

As this new phenomenon could potentially restructure the online trading discourse and the market as a whole, it is recommended to conduct not only research on the effectiveness of these communities on the market, in the sense of predictability, but also examine the relevant communities as a whole. This new form of communication in the stock market has the great potential of generating a new generation of investors, but yet requires close examination to efficiently bear all its fruit.

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