Review article / Pregledni rad

MEMES AS A LINGUISTIC PHENOMENON USED IN MARKETING ON SOCIAL NETWORKS AND THEIR IMPACT ON TRENDS IN FINANCIAL MARKETS

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ABSTRACT

Memes, an Internet-based phenomenon consisting of pieces of user-generated content in the form of pictures, GIFs, or videos, are no longer a marginal occurrence in the wider societal discourse. What was once considered only a "funny picture" forwarded by e-mail to colleagues and friends has in the past decade become an ever widening and growing linguistic phenomenon in its own right with such influence on societal narratives that it warranted serious scientific research. Numerous scientific papers have been written in the past 15 years documenting the rise of internet memes as a novel form of communication that arose in the age of the Internet. It is no accident that the rise of memes coincided with the rise in the use of smartphones and the constant rise in the number of people that use the Internet on a daily basis. In this paper we have decided to focus on one specific aspect of the use of memes that rose in prominence since 2020 and culminated in early 2021 with the events surrounding the Wall Street Bets phenomenon that captured the attention of the world; the use of memes for internet marketing and their impact on trends in financial markets. Due to the extreme financial and monetary measures enacted by most governments to combat the economic impact of lockdowns and the rise in commission-free stock trading platforms such as Robin Hood, the number of financially uneducated retail investors suddenly grew to such heights that they were together able to, with the power of memes, cause tectonic shifts and panic in financial markets. In this paper we outline memes as a linguistic phenomenon, their extensive use in marketing on the Internet, and, most importantly, their impact on the world of finance through the example of the Wall Street Bets phenomenon. While it may seem like a short-lived episode providing retail traders their 15 minutes of fame, we propose that the Wall Street Bets phenomenon proved the viability of the concept of viral meme marketing campaigns in the context of setting trends in financial markets and that it is only the first such case we have seen, even if the subsequent occurrences arise in a less spontaneous manner, perhaps even because of it.

KEYWORDS: financial markets, Wall Street Bets, marketing, memes, WBS, cryptocurrency

1. INTRODUCTION

Wall Street is known as the center of the world's finance, the place at the heart of capitalism. Even though most people do not truly understand what Wall Street does, they do benefit from it even if they themselves do not partake in investing. As Cohan puts it: "If you like the power and functionality of Facebook, Snapchat, and Twitter, you actually like Wall Street. None of these things would be even remotely possible to have, in the size and the scope that we have them, and as affordable and as easily accessible as they are, without the free flow of capital that Wall Street manages to provide nearly twenty-four hours a day, seven days a week to people who need it anywhere on the globe. The ability of Wall Street to provide capital when and where it is needed at a fair price isn´t a magic trick, or a strange form of alchemy, or something to be feared, or detested. It is an essential fact of modern-day life." (Cohan, 2018, p. 15) The stock markets exist to attract capital to where it is most needed, it is where investors can recognize what they believe to be the best ideas and invest their money with the hope that the business creates a return on their investment. Even though the world of finance may seem too complicated for the average person who does not work in finance, the core mechanism is rather simple: "For highly traded stocks, there are buyers and sellers on each side constantly bidding and asking for new prices. Institutions trying to build huge positions and even brokerages working for individual investors will bid for stocks. If there are more buyers than sellers, the price will get bid up. If there are more sellers than buyers, the opposite will happen. "(6) That is how the flow of capital is supposed to go in theory, however, there are many different examples in which capital, for one reason or another, can flow into securities despite fundamental data being objectively bad. These events range from stock market manias such as the internet boom of the 90s, where every company that claimed future success purely because it was on the Internet had the value of its stocks rise to extremely high valuations, to outright scams such as pump-and-dumps. In this paper we have decided to focus on a very new phenomenon which still cannot be as precisely categorized in this regard as either type, but is so influential and far-reaching in its financial scope that it, in our view, warrants thorough research; impact of social media meme campaigns on financial markets, and we have decided to focus on the example of WallStreetBets and its short squeeze event from early 2021 because it may just be the breaking of the ice, an event that causes a change in the way Wall Street does marketing.

2. MEMES AS A LINGUISTIC PHENOMENON IN THE AGE OF INTERNET

The term "meme" was invented by evolutionary biologist Richard Dawkins many years prior to the invention of the Internet as a cultural counterpart to what genes are in biology. He described memes as a "unit of *imitation*" in his book *The Selfish Gene* (Dawkins, 1976, p. 192) and even the word itself is derived from the Greek word *mimema,* meaning „imitated thing". Dawkins' idea was that, while they take many forms (such as catch-phrases, tunes, funny pictures etc.), all memes function in the same way: they "infect" the cultural "meme pool" where they are then subjected to natural selection.

In the age of Internet, however, memes and our understanding of them have somewhat changed as they entered into the mainstream culture. As Holm puts it: "With the technological advances made since Dawkins published his work, specifically the emergence of the Internet, the term has been appropriated into the Internet sphere shaping its meaning in a new direction (note that in this process, the term has been imitated, replicated, remixed; memetic behavior, in the

Dawkinsian sense, in a nut shell)" (Holm, C. H., 2021, p. 3) and subsequently adds that "Internet memes could arguably be considered a form of contemporary folklore". (Holm, p. 10) Today, memes have left the obscurity of messaging boards and common internet users nowadays share memes on a daily basis, even though many of them are not aware of what memes even are. To most people, they are just funny abstract pictures, GIFs, or short videos that we share among ourselves: internet jokes. To marketing specialists, however, they are much more important than that.

3. MEMES AND MARKETING

Memes have become so popular as a form of Internet communication that it was only natural for marketing companies to recognize their potential very early on, especially because of the potential for memes to "go viral", meaning to rise in popularity extremely quickly due to the way social media algorithms are constructed to promote trending content. According to Murray et al., (2013: p. 329) there are startup companies, such as Viral Spiral, that "employ teams of researchers who scour the Internet for suitable memes for corporate brands such as Nike, Nokia, and Lipton." He even added that, "occasionally, an advertising campaign will become so popular that it generates its own meme. A recent Old Spice multimedia campaign is another case that illustrates the potential power of advertising memes." (Murray, p. 329)

One can easily see the main advantage of such marketing strategies: they are much cheaper than traditional marketing campaigns that rely on TV, magazines, and other traditional media. In their research on viral marketing, Cruz and Fill (2008: p. 745) outlined the advantages of viral marketing as "lower levels of investment (costs) involved in developing campaigns and its ability to reach a large number of people, relatively quickly." Of course, there is a downside to this: lack of control over the message and how it is distributed. In other words, once released into the world, memes tend to take on a life of their own which may or may not have a negative impact on the campaign and the company itself. Lekhanya (2014: p. 227) concurs with that, noting that "it is not easy to control information obtained via viral marketing". There are many examples of this, notable one being McDonald's *McDStories* campaign: "The McDonald's campaign hoped to use the Twitter social media site to elicit heart-warming stories about Happy Meals. Hash-tag-named McDStories, the campaign ran awry immediately; within two hours of launch, the campaign was suspended." (Murray, p. 330) The campaign was a massive failure and, according to Twitter Sentiment, 68% of the tweets with #McDStories Hash-tag were negative. The campaign was cancelled in hours.

This example illustrates the need for what marketing experts call "meme management", or, as Murray et al. (2013: p. 337) describe it, "a memetic model based on a propositional network for predicting meme success in advertising." They draw on and extend Bjarneskans' lifecycle model of memes to create their own version that includes six basic stages:

- *Transmission*: Memetic engineers encode memes in an information-carrying media such as television commercials, print advertisements, or YouTube viral videos. *Knowledge is expressed.*
- *Decoding*: The host perceives the meme. A message-carrying medium exposes a host's brain to a meme. *Knowledge is received*.
- *Infection*: The meme takes up residence in the host's brain (mental structure). *Knowledge is processed*.
- *Storage*: The meme is stored in the host's brain's long-term memory. *Knowledge is saved.*

- *Survival*: The meme successfully fights off counter-memes. *Knowledge is retained*.
- *Retransmission*: The meme is retransmitted from the host's brain to the brains of other hosts. *Knowledge is spread*. (Murray, 2013: p. 337)

Murray et al. go much deeper into the contents of the list in their paper and, while we do not have enough space to go into it more deeply here, even a superficial glance at the list makes it clear they created it by building upon Dawkins' idea that memes work by "infecting" the culture hoping that the memes will naturally spread between hosts and even evolve in a predictable way that the marketing team considers desirable. However, it is not yet clear whether such managed meme marketing campaigns are as viral as organic ones.

It is debatable whether viral meme campaigns have more impact on the wider society depending on the nature of their origin; meaning whether it was organic or corporate. While this is still an open question, especially in terms of contemporary internet memes, an even more important one, in our opinion, is what are the implications of a corporate meme campaign masquerading as organic user-created content on social networks, a practice often called *shilling*. While it is undoubtable this practice exists, it is at the same time extremely difficult, if not downright impossible to prove it, but, in our opinion, the subject should be discussed nevertheless. This brings us to the main point of this paper; an exploration of the WallStreetBets phenomenon.

4. THE WALLSTREETBETS PHENOMENON OF 2021

As the name suggests, WallStreetBets is a subreddit focused on financial markets and stock trading, known best by the tagline "like 4chan found a Bloomberg terminal". As Rogozinski (2020: p. 5) explains in his book on WallStreetBets, to those familiar with "4chan and Bloomberg, the slogan paints a picture of a mischievous gathering in total pandemonium with money being tossed around for careless or sometimes intentional reasons, all for the purpose of juvenile entertainment". This, of course, is a superficial description, which, while not completely inaccurate, is also an underestimation of its potential. WSB, as it is commonly referred to, was created back in 2012, but came into the spotlight in January of 2021 due to a viral campaign by members of the subreddit who tried to short-squeeze the stock prices of several highly shorted companies, such as Nokia, AMC theaters, and, most notably, GameStop. It is, simply put, a large forum filled with memes, where "members share their massive monetary wins and losses (both are equally celebrated), trade ideas, arbitrage opportunities, and otherwise creative observations." (Rogozinski, 2020: p. 5)

For those unfamiliar with the term, a short squeeze "is an unusual condition that triggers rapidly rising prices in a stock or other tradable security". (5) It happens when a stock, which is shorted in large quantities, rises in price thereby forcing those who shorted it to cover their shorts at ever larger prices in order to minimize their losses. The short squeeze itself was not something unusual, hedge funds do them quite often, some companies are even almost exclusively focused on them. What was unusual is that this was the first time that such a large group of millions of retail investors acted in the markets in concert while organizing on social networks with the "movement" being popularized and carried almost entirely by memes. The Wall Street Journal points out in an article focused on WSB just how viral and effective the meme campaign was: "WallStreetBets members ballooned from fewer than two million at the start of January 2021, just before GameStop shares went flying, to more than 11 million today." (2) The subreddit grew in numbers by millions in just a couple of days and most of the large financial news covered the story contributing to the virality.

What made the story all the more interesting was the way that the movement was being portrayed; the Esquire called it: “a populist uprising against the financial establishment that took the stock market and media by storm”. (4) This narrative was no accident. Many of the memes on WSB painted the “movement” as a fight of David against Goliath, the little guy against the large Wall Street companies. Even the smartphone trading application that many of the retail traders on WSB used is called Robinhood, who’s main motto is “democratizing finance”. Many posts were written on WSB by people who claimed to have been badly hurt in the Great Recession of 2008/09 and who wanted revenge against Wall Street. Posters “encouraged” each other to hold their stocks in the hopes of the short squeeze causing the prices of the “meme stocks”, or “stonks” to, as many on WSB put it, “go to the moon”, meaning to exponentially rise in value due to the large hedge funds having to purchase the stocks at any price. Those who held the stocks without selling were said to have “diamond hands”, and those who would sell had “paper hands”. (4) Shanties were even sung with the lyrics changed to relate to the movement and members proclaimed that “stocks only go up”. The memes were never ending, those are only some of the ones that arose at the time of the short squeeze, but the point of all of them was the same: to make the movement more viral, attract more people, mostly unsophisticated small retail investors, and encourage them to join the “fight”, and they were quite successful at that. While this narrative makes for a good story for a newspaper and a quite effective marketing campaign, it opens many questions and, by proving the efficacy of viral meme campaigns like this one, brings about inevitable changes to the markets.

One of those questions is the nature of origin of the movement to short-squeeze the stocks, as well as its development. Early in the WSB Gamestop short squeeze when millions of new users flooded the subreddit, WSB moderators complained to CBS news that “bots are responsible for a "large amount" of the stock-recommendation content being posted in its popular Reddit group”. (3) As we learn from CBS, it is not “exactly clear what information the bots are posting on WallStreetBets. But on Twitter and elsewhere, bot-programmers have been known to post the same message numerous times from multiple fake accounts in order to amplify their message.” (3) In fact, Ben Hunt, “a former hedge fund manager and co-founder of Wall Street research firm Epsilon Theory, tweeted on Saturday that his firm had analyzed 30,000 posts published on WallStreetBets in the previous 24 hours — it found that 97% of those appeared to be generated by bots”. (3) Even if the memes and the movement originated organically, it is quite possible it was, at least to some degree, overtaken by artificial accounts in order to sway the masses of investors into certain investments under the cover of the established narrative. As we have said previously, it is very difficult, if not completely impossible, to control a meme campaign, regardless of the way it originated, which provides an opportunity for different actors to use the movement in order to turn a profit.

These actors come in many forms. For example, in absence of inside information, data scientists will “generally result to their google search engine, often relying on headlines and media narratives to gain understanding of an unusual market movement.” (1) Data scientists can use the same principles to collect data from the WSB subreddit, as well as other social media to, hopefully, gain insight into the minds of retail investors and front-run possibly profitable trades, and in the case of WSB they did not waste any time. This data can be used by brokerage firms, hedge funds, or even the companies whose applications the retail traders often use to trade for many different purposes, from simple data mining to outright manipulation of trends in the markets. Regardless of whether the WSB Gamestop short squeeze was completely organic or not, it did bring about inevitable changes in the way large companies and data scientists view social media groups like WSB.

5. CONCLUSION

It is safe to say that, as far as marketing on the internet is concerned, memes are here to stay, and movements like the WSB short squeeze, which only set a precedent, are likely to occur again, though perhaps not on the same scale. Zero-commission trading applications like RobinHood have opened the door to the markets to mostly millennial or even younger beginner retail investors who, in search of tradable information, look towards social networks for trading ideas. While widening access to the markets is in itself a good thing, combined with other factors it also causes a number of concerns such as market manipulation, ethically questionable marketing practices etc. The success of the WSB short squeeze campaign did not go unnoticed among large hedge funds and other Wall Street companies, as well as those who might try to replicate this campaign for classic “pump-and-dump” schemes. Millions of financially uneducated retail investors were together able to, with the power of memes, cause tectonic shifts and panic in financial markets and it was an important lesson for Wall Street, as well as for retail investors. Investors should take one important lesson from the Gamestop short squeeze: most of those who bought into it and held their stock with “diamond hands” waiting until GME goes “to the moon” have lost their money. Some, on the other hand, made quite large profits, but only because they sold into the hysteria as it was developing. Memes may be a good marketing tool, but should not be viewed as trading guidance. All of this, however, was done through memes, and the entire event proves the staggering efficacy of viral meme campaigns on the internet, ensuring that companies will pay ever more attention to memes that circulate social networks and even hire their own “meme experts” to create their own campaigns trying to emulate the success of WSB. We propose that the Wall Street Bets phenomenon proved the viability of the concept of viral meme marketing campaigns in the context of setting trends in financial markets and that it is only the first such case we have seen, even if the subsequent occurrences arise in a less spontaneous manner, perhaps even because of it.

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