Rummaging the Effect of Social Media Interactions on Financial Decisions- A Critical Analysis

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[Abstract] This paper critically evaluates the impact of social media interaction on stock market participation (SMP), emphasizing demographic, socioeconomic, psychological, and social factors that influence participation. Through a systematic analysis of research articles, it identifies a noteworthy correlation between social media use and SMP, while also acknowledging other overlooked factors. The study's distinct focus solely on social media interactions, rather than broader social interaction, suggests potential avenues for future research. Practical implications include informing financial strategies, while theoretical implications contribute to a deeper understanding of social influence on SMP. The study's originality lies in its exclusive examination of external influences on participation rates spanning 23 years (2000-2023).

[Keywords] social media interaction, stock market participation (SMP), critical assessment, demographics, socioeconomic factors, psychological factors, social factors

Introduction

Knowing an investor's psychology about their financial decisions is what is behavioral finance, which combines the study of psychology and economics (Hirshleifer, 2015). Combining these two ideas explains why and how people make irrational financial decisions when they intend to participate in the market to borrow, spend, invest, and save money. To examine and highlight the factors influencing stock market participation, traditional finance theory is combined with ideas from personal and social psychology (Jin et al., 2017). The basis of behavioral finance theory is how perceptive thinking affects investor decision-making (Raut & Kumar, 2018) and stock market movements (Bustos & Pomares, 2020). Investors tend to make choices influenced by feelings and logic (Hirshleifer, 2015). Since every investor is unique and has distinct emotional biases when it comes to investing, their choices of investments are typically influenced by their experience, knowledge, or interests because they think they can generate higher returns and profits (Bauer & Smeets, 2015). Some investors often base their choices on how confident they feel about their ability to make money from their assets (Liang & Guo, 2015b). Thus, through available information arsenals, they tend to follow other people's opinions, particularly those who have benefitted (Jiao & Walther, 2020; Yang et al., 2021b).

Investor-media interaction measures social psychological influence on investors (Shanmugham & Ramya, 2012). As per espousal and usage rates, social media has achieved unmatched feats (Khadjeh et al., 2014). It has entailed a paradigm shift in how people interact and communicate with one another, express and share their opinions, and interact with products, processes, and organizations (Duffy, 2020). Social media has indisputably developed the database of societal behavior and has grown to be a significant network for information dissemination (Lam & Nie, 2020). Studies signify the role of social media in intensifying markets and highlight the penetration of social media in financial strategies, apart from marketing strategies (Antoci et al., 2014).

The media, with their less formal presentation, easily draws the attention of investors who share similar conventions and values (Mustafa & Hamzah, 2011). Investors like to get their news from the media, people they trust, or from neutral sources which will affect their investment decisions. Social media interaction(SMI) act as a natural forerunner to actual stock market participation(SMP) of investors with varying level of influence (Liang & Guo, 2015). However, research also reveals that most media-influenced investors' perceptions and behavior are biased and inflated (Grossman & Owens, 2012). As a result, procuring information from the media necessitates critical thought in intelligently screening the information and astutely making the pronouncement.

Thus, the current study intends to examine the function that SMI plays in increasing SMP. To identify significant factors that will help promote participation, the study also tries to pursue literature covering a longer period (2000–2023) that highlights the emergence of demographics, socioeconomic, psychological, and social factors, and their influence on SMP. To identify research gaps in evaluating the impact of social interaction on financial markets and to suggest future research directions, the study incorporates a systematic classification and critical analysis along with the identification of pertinent exogenous and endogenous factors.

Review of Literature

Social Media Interactions (SMI)
With the advent of technology, people are more fascinated by online platforms and applications and thus social media can be interpreted as a mode that contours the way people intermingle share information, work collectively, outline opinions, take collective actions and more importantly learn through virtual means without any physical presence (Rajeev & Jobilal, 2015). The usage of social media is no more an age group predilection rather it has occupied ubiquitous patency. It is believed and justified to a major extent in studies that the impact of social media in any developmental sector will have a long-term effect on enhancing the efficacy of the workforce (Liang & Guo, 2015b). Recent years have witnessed a humongous upsurge in the adoption of social networking platforms for managing personal finance (Zarnadze, 2020). Investors are potentially exploiting the contents and information on social media for their investment-related decisions and future predictions, rather at a more general level, society as a whole is using social media to obtain, share and exploit information (Reichmann, 2019).

Stock Market Participation (SMP)
Investing in the stock market allows you to take advantage of the equity premium while also benefiting from risk diversification and there can be substantial welfare loss from not participating in the stock market (Rooij et al., 2011). SMP has now become an important economic outcome. It helps in measuring whether the investor invests in the stock market or not. Researchers have very aptly identified the need of examining various factors affecting SMP (Kalampokis et al., 2013). Strong recurrent predictors for facilitating SMP found in the literature can be categorized as demographic, socio-economic, psychological, social, cognitive, and financial factors which have been elaborated on later in the study (Park et al., 2014; Pelster et al., 2021; Raut & Kumar, 2018). Amongst various identified indicators, information quality of the market or stocks, past trends of stocks, market factors, behavioral factors, social factors and influence, social attitude, and personality traits have been studied meticulously (Akhtar & Das, 2019).

Persuasive Factors
Demographics and Socioeconomic factors. The SMP conundrum has perplexed researchers and policymakers all over the world (Sivaramakrishnan et al., 2017). Education, income, age, gender, financial knowledge, risk tolerance, and other characteristics have been found to have a substantial association with SMP in empirical investigations. The effect of SMI was found to be more prominent, useful, and helpful among the elderly (24-34 years) than among others (Hong et al., 2004). However, the pandemic has changed this supposition to a major extent as SMI became the only source of staying connected and informed during acute social distancing, thus making SMI a normal to-do event for adults too. Additionally, men (Khan et al., 2022; Yeh & Ling, 2022) had a higher level of achievement in SMP than women (Vaarmets et al.,

2019). Although studies reflect the lesser involvement of women in social interactions, young females had a higher level of achievement in SMI. Also, growing entrepreneurship ventures headed by women have embarked on the SMP too (Yeh & Ling, 2022). The marital status relationship with the level of SMP was found to be insignificant in many studies (Brown & Taylor, 2021).

However, few studies declared that single men and women are found to have a higher level of achievement in social interactions than married ones. SMP was found to exist majorly amongst graduates and post-graduates (Shantha, 2019). There exist a significant association between SMP and employment structure and a significant association also exists between years of trading experience and SMP. Studies have also highlighted the significant association between years of work experience and social interaction. Tham (2018) significantly contributed to identifying the correlation between various demographic and socioeconomic factors and the SMP rate. In terms of family background, individuals, with high parental socioeconomic status, were found to be more influenced and involved in interactions (Abreu & Mendes, 2012).

Distinctive psychological factors. SMP refers to purchasing stock on the stock exchange for promoting well-being, asset accumulation, and consumption smoothing. Various studies have looked into the psychology of stock market investment and have demonstrated that behavioral preferences and attitudes have a substantial impact on SMP (Cuong & Jian, 2014). According to studies, specific psychological characteristics, such as investor attitudes, preferences, and psychological biases, have an impact on SMP (Jaiyeoba et al., 2018). According to Hirshleifer (2001), the majority of well-known psychological biases can be seen as the results of self-deception, heuristic simplification, and judgments based on feelings. He also remarked that non-participation may also be influenced by familiarity or 'mere exposure' effects, such as the perception that what is familiar is more alluring and less risky.

It is pivotal for stock market participants and investors to understand the impact of psychological factors on their stock market decision-making (Bakar & Yi, 2016). With this information, they can apply it and take steps to prevent the factors from clouding their decision-making processes and deterring rational decisions from being made. Thus, psychological factors can have both positive and negative impacts on the investors' SMP.

As per studies, investors often exhibit overconfidence, loss aversion, framing, and status quo bias while choosing amongst stocks and making investment decisions (Duffy, 2020). Some studies have highlighted a weak negative association between biases and stock market performance (Park et al., 2014). Studies have also looked at the effects of behavioral factors such as framing and loss aversion on investors' decision-making processes and discovered that investors are frame-dependent and loss-averse (Bustos & Pomares, 2020). SMP clarifies the extent of investments and literature has demonstrated that differences in risk aversion and financial status do not satisfactorily account for investors' decisions regarding whether or not to invest (Reith et al., 2020).

Social Factors. The term "social influence" corresponds to the extent to which a person perceives how significant the people in his or her social circle consider the utility of a product or service (Zarnadze, 2020). The influence varies from person to person, group to group, community to community, network to network, and mode to mode. People's social networks, such as family members, peers, friends, and relatives, may influence them to use a service and develop investment intentions (Cho & Park, 2013). In this regard, the community also plays an important role. To exchange information about financial market securities, investors typically rely on word-of-mouth communication in their social networks. They claim that because not everyone wants to pay for expensive financial advice from experts, they mostly rely on word-of-mouth communication with friends, peers, family, and relatives (Zhou et al., 2021).

This process has been heightened more with the advent of modern technologies and user-friendly trading platforms and sites. Over time, socialization generates a stock of capital, known as social capital, which lowers the information cost barriers to SMP (Ghahtarani et al., 2020). Previous research indicates that social interaction measures are important predictors of SMP (Herrera et al., 2020). Social interaction and its influence as mentioned earlier exist in varied forms. One of the components that have been extensively studied is the religious-social interaction, which helps in informational dissemination during religious activities for example people going to church (Hong et al., 2004), could get to know more

opportunities for investment choices. To complement, the relationship between the individual and community-level SMP rates is also strengthened by social interaction (Brandt et al., 2020). Word-of-mouth interaction is another form of social influence, which is described as a clear information channel among endogenous interaction mechanisms. By speaking with friends and neighbors who have invested in the stock market before, it is convenient for people to learn about opening accounts, making deals, and obtaining related information.

Research Methodology

A systematic literature review approach is utilized in this critical review-based paper to investigate the correlation between social media interaction and stock market participation (SMP). The research methodology encompasses the process of carefully choosing and examining pertinent scholarly articles sourced from academic databases that pertain to the domains of social interaction and finance. An extensive search strategy is utilized to identify pivotal articles that examine the impact of social media on social media platforms (SMP). The methodological rigor, theoretical frameworks, and empirical findings of articles are subsequently subjected to critical evaluation. Methods of data extraction and synthesis are employed to ascertain prevalent themes, patterns, and deficiencies within the existing body of literature. The research methodology employed in this study aims to conduct a comprehensive analysis of prior research in order to gain a deeper understanding of the various factors that influence investors' decision-making processes in relation to social media platforms.

A Critical Review of the Findings

Social media is no more just an advertising platform for products and services; rather it has gained recognition in aiding financial services as well. The financial sector, especially the stock market has become more and more volatile and this volatility in prices can directly be attributed to improved technology and an increase in trading volume (Derakhshan & Beigy, 2019). Gone is the time when investors had to rely on brokerage firms and brokers to buy and sell stocks, gain information about market trends, and rely on them for maintaining their portfolios. But with the advent and aid of social media and technological advancements such as big data, stock trading is just at a hand distance from investors and not just the investors; social media has embarked on a wave amongst researchers too (Liu et al., 2014).

Many studies have found that investors in India exhibit herd behavior, with herding being persistent and relatively high when the market falls and low when the market rises, however, this sort of herd behavior is weak and unique (Sashikala & Chitramani, 2018). One may not primarily mimic others just for psychological reasons, but also for certainly reasonable grounds. These reasonable concerns might originate from a lack of knowledge or the belief that others are more educated and/or capable of understanding the facts at hand. These conditions compel investors to copy others because they feel the investors they are following are more educated and will result in an informational reward (Liang & Gao, 2015).

Numerous studies have taken into account a variety of factors connected to social media activity, including user experience, message mood, and several followers, as well as holding duration, stock trading applications, noteworthy events, price volatility, and many more (Flache et al., 2017; Kaur et al., 2018; Park et al., 2014). Exploiting social media data in addition to numeric data increases the quality of the input and gives improved predictions. SMI and SMP, when measured concurrently have been found to have positive relationships (Thomas & Spataro, 2018). Hong et al. (2004) present evidence for a positive relationship between social interaction and SMP in the United States, with 'social' investors having a higher likelihood of SMP after controlling for key demographic and socioeconomic characteristics like wealth and education.

Similarly, Liu et al. (2014) using Chinese investor behavior, demonstrates how social engagement and trust increase stock market involvement, as well as how social interaction encourages citizens with lower levels of education to participate in the stock market. Brown and Taylor's (2021) findings show a positive association between social contact and SMP in the United Kingdom when both are examined simultaneously, which is consistent with the previous literature, which mostly focuses on the United States.

Table 1

Insights into the Interplay of Social Media Interaction and Psychological Factors on Stock Market Participation

Aspect	Critical Insights
Social Media Interaction (SMI)	- Social media serves as a pervasive platform shaping various aspects of human interaction, including information sharing, collective action, and virtual learning (Rajeev MM & Jobilal, 2015b). - Increasing adoption of social networking platforms for managing personal finance indicates a shift towards digital platforms for investment-related decisions (Zarnadze, 2020).
Stock Market Participation (SMP)	- SMP plays a significant economic role, offering benefits such as equity premium, risk diversification, and welfare enhancement (van Rooij et al., 2011). - Diverse factors including demographic, socioeconomic, psychological, and social factors influence SMP decisions (Kalampokis et al., 2013; Pascarella et al., 2020).
Psychological Factors	- Psychological biases, attitudes, and preferences impact SMP decisions, highlighting the importance of understanding and mitigating behavioral biases (Bakar & Yi, 2016; Cuong & Jian, 2014). - Overconfidence, loss aversion, and framing are among the psychological biases influencing investors' decision-making processes (Duffy, 2021).
Social Factors	- Social influence and interaction significantly influence SMP, with word-of-mouth communication, community engagement, and social capital accumulation facilitating participation (Cho & Park, 2013; Ghahtarani et al., 2020). - Religious-social interaction and community engagement play a crucial role in disseminating investment information and shaping investment intentions (H. Hong et al., 2004b).

Implications of the Study

Practical Implications

This research will assist financial experts, economic institutions, and policymakers in developing better stock market strategies and making financial judgments. This study demonstrated the significance of investor relationships in their financial decisions regarding stock market involvement. This research can help governments and stock market experts understand the importance of such interactions among investors in their investing decisions. More emphasis might be placed on the variables that shape social impact. It can assist in better understanding stock market involvement and the factors that influence an individual's decision to engage or not participate in the stock market. Additionally, this study has briefly discussed the significance of social interactional variables like herd behavior, contagion effect, overconfidence bias, social transmission bias, and many other such elements that can also be focused on by financial experts when analyzing investor investment behavior.

Theoretical Implications

Social influence has previously been studied from a broader perspective, and there has been little research on the subsets of social interaction such as SMI, peer effect, observational learning, and electronic word of mouth, particularly about SMP. This study will add to the body of knowledge about the relationship between social influence and behavior. This study has highlighted the significance of investors' social

behavior as well as how strongly it influences their choices regarding SMP. The extent of investments via SMP is clarified by a broad range of characteristics; social media impact can play a significant role. Furthermore, by examining the extent to which investors rely on SMI to "frame" the effects of the stock market, this research specifically broadens the concept of financial intelligence and can significantly contribute to the mounting financial attitude of investors.

Conclusion and Suggestions

This study aims to clarify the factors that influence investors' SMP decisions, including when, why, and whether social contact affects those decisions differently. It has been demonstrated that a variety of psychological elements, such as attitudes, risk perceptions, and financial awareness, also impact investors' decisions to participate in the stock market. This study has added a new paradigm to the literature by demonstrating a significant correlation between social media use and stock market engagement and by elucidating the role of other typically ignored factors.

Social media contact is considered to initiate a new upheaval in financial markets where individuals are no longer hesitant to express their ideas, experiences, and predictions regarding market movements. Innovation and technology are rapidly changing, and the impact of SMI on financial markets cannot be ignored, as they motivate people to eagerly participate rather than merely act as passive speculators. Using social media data in addition to numerical data enhances input quality and produces better forecasts; this quality has directly led to a significant increase in stock market investor involvement.

Although this study contributes to existing knowledge, it does have significant drawbacks. It focuses solely on SMI, unlike prior studies that widely explored social interaction, of which social media is a subset, highlighting a research void. Consequently, various types of social interaction, such as peer effects, observational learning, neighborhood effects, word-of-mouth, and so on, can be studied in the future. Other suggestions include conducting a comparison study to explain the differences in social contact between nations and including other moderating and mediating variables to improve the predictive value of the association.

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