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# HERDING BEHAVIOR IN FINANCIAL MARKET – SYSTEMATIC LITERATURE REVIEW

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**ABSTRACT**

The aim of this research is to present a comprehensive theoretical analysis and provide concrete empirical support pertaining to the phenomenon of herding behavior within financial markets. The current paper can be classified as a literature review, which employed data collection techniques through an extensive survey of existing literature. The body of knowledge accumulated over a span of more than twenty years, consisting of both empirical investigations and theoretical inquiries, has yielded significant insights into the intricate nature of investor herding behavior. However, it is important to acknowledge that the author possesses relatively limited knowledge regarding markets other than capital markets, thereby presenting a constraint in terms of exploring the complexities associated with shifting behavior patterns. Furthermore, the available evidence concerning the existence of following behavior is not particularly compelling. Consequently, this paper advocates for the development and application of an empirical methodology that can effectively address these aforementioned limitations and offer a comprehensive evaluation of herding behavior. Additionally, this study critically examines recent empirical findings in order to identify areas that remain unexplored and require further investigation in future research endeavors.

## INTRODUCTION

Investors engage in investment activities predicated upon their expectations and psychological considerations, culminating in potentially irrational decisions. Limited rationality, characterized by investors opting for investments based on a manager's proposal, may lead to irrational choices. To illustrate, investors might expeditiously divest their shares subsequent to observing profits, and yet retain them over lengthy stretches during periods of declining stock prices. This illustrates the inclination of investors to evade any potential diminution in their investments. Textbooks on investment propound that stocks serve as a long-term investment, and empirical studies evince that retaining stocks over an extended duration garners comparable outcomes to those achieved by actively trading them within the same timeframe (Shefrin & Statman, 1985).

The field of behavioral finance, which integrates behavioral and cognitive psychological analyses, seeks to

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elucidate the reasons behind investors' potential deviation from rational behavior in financial markets. (Shefrin, 2001), and (Baker & Nofsinger, 2010) both define behavioral finance is the field of study that explores the impact of psychological phenomena on financial behavior, with a specific focus on stock players and financial markets. Both fields place considerable emphasis on comprehending the manner in which psychology shapes decisions, corporations, and markets within the financial domain. This approach serves to elucidate the manner in which individuals engage in investment activities and establish connections with the realm of finance.

Herding behavior in financial market involves investors following peers' investment decisions without making independent decisions. This phenomenon affects various aspects of human life, including stock market bubbles and daily decision-making. The impact of emotion and psychology on the decision-making process of investors in relation to investments is a significant aspect that provides alternative explanations for behavioral biases and market anomalies. The field of behavioral finance, which is rooted in the understanding of psychological biases and emotions, offers valuable insights into the decision-making processes of individuals. Recent studies have demonstrated that the trading behavior of investors in the stock market is influenced by their personality traits and psychological biases, as highlighted by the research conducted by (Jlassi et al., 2014). Furthermore, the investigation and documentation of herd behavior within financial markets holds immense importance for various reasons. Investors and financial managers are primarily concerned with how information is reflected in stock market prices, and this is particularly relevant as the efficient market hypothesis posits that market participants form rational expectations about future prices by discounting all relevant market information to derive expected prices. However, the presence of herd behavior can lead to an increase in volatility within profits and subsequently destabilize financial markets, as indicated by the research conducted by (Demirer et al., 2010).

While there has been much research on herding behavior, few researchers used systematic literature review. There is 30 previous studies (referenced in several journals, including: Sciencedirect, Emerald, Wiley, Ebsco, and Scolar) state different findings. Some state that herding occurs in the research objects, such as NASDAQ100 index, WTI crude oil index, VIX index (Houda & Mohamed, 2013), Pakistan Stock Exchange (Gul & Khan, 2019) Indonesia, Malaysia, Thailand, Vietnam, Philippines stock exchange (Arisanti, 2020), TATAmotors in India stock market (Tiwari, 2021), Shanghai Stock Exchange (SHSE) and Stock Exchange (SZSE) in China (Maquieira & Espinosa-Méndez, 2022), Saudi Arabia stock market (Awartani et al., 2016), Bitcoin futures market (S. Choi & Shin, 2022), Taiwan Futures Exchange (Hu et al., 2016). Meanwhile, the results of other studies state that there is no herding on these research objects, such as; ETF sector equity market (Gleason et al., 2004), United States equity market (Voukelatos & Verousis, 2019), Tunisian stock market during the 2011-2013 revolution period (Bouteska, 2020), Chinese stock market before and after the implementation of the SHKSC policy (W. Gong et al., 2022), cryptocurrencies, non-fungible tokens, and DeFi assets during the latest cryptocurrency bubble in 2021(Yousaf & Yarovaya, 2022). Based on these different research findings, the author is interested in summarizing these research results by means of a systematic literature review.

## LITERATURE REVIEW

### Behavior Finance and Herding Behavior

Behavioral finance is an area of study that investigates the impact of psychology on the actions of investors and financial analysts, aiming to understand how their behaviors are influenced. It operates under the assumption that investors are not always rational and are susceptible to their own biases, including emotions, cognitive shortcuts, and societal norms. These psychological factors can lead to systematic errors in judgment, which in turn can have various effects on financial markets, such as causing mispricings, bubbles, and crashes. The primary objective of researchers in behavioral finance is to gain a comprehensive understanding of these psychological biases and utilize them to make investment decisions that are more logical and profitable.

It is crucial to differentiate between financial herding behavior and pseudo-herding behavior, even if the latter appears to imitate the actions of other investors. Pseudo-herding behavior refers to situations where investors facing the same problem make similar decisions based on the same set of data. It can also be described as unconscious herding behavior, as outlined by (Kapusuzoglu, 2011), In the context of unconscious (pseudo) herding behavior, the decisions made by investors are effective decisions, as this type of herding behavior is rooted in similar information, investment strategies, and risk approaches, as highlighted by (G. Chen et al., 2007). Therefore, understanding the distinction between financial herding behavior and pseudo-herding behavior is essential in order to accurately assess investor decision-making processes and their impact on financial markets.

### Herding Behavior Theory

Significant societal changes impact individuals and have an equal impact on the political landscape, the financial markets, and the economy. The rationale for herd behavior is that people follow others when they are unable to make the best decision for themselves because they lack information or think that others are more knowledgeable than they are. It is a characteristic unique to humans that has survived via evolution as a survival strategy that should raise the odds of surviving. Herd behavior might benefit an individual in certain situations, but the financial markets might not be one of them (Jr & Parker, 2007).

The literature has long addressed the question of how rational or irrational an investor's investing decisions are, as well as the factors that influence them. Research conducted in many locations and eras shows that investors display a variety of behavioral traits. Herding, originating from Kynes' 1936 theory, refers to the social instinct of humans to follow the same path as their friends, a concept derived from the animal instinct to follow the same path. Keynes viewed herding as a response to uncertainty and individual ignorance, with rational herding in financial markets influenced by imperfect information, reputation concerns, and compensation structures, leading to rational decision-making. (Devenow & Welch, 1996), herding occurs when investors disregard their personal beliefs. Economic crises in 1997 and the dotcom bubble are frequently caused by herding, self-organizing infection process between traders that results in equilibrium prices (Guedj & Bouchaud, 2005). Investor bullishness creates herd behavior in the market that overtakes other bullish beliefs. (Bowe & Domuta, 2004),esearch shows that foreigners herd more than domestic investors and that herds increase after the crisis. Collective action was particularly evident in his early 1990s, and most evident during the Internet bubble crisis. Baro's study (1990) showed strong signs of herding during and after the 1987 Black Monday crisis, with the DJIA falling 508 points, but recovering to its closing high nearly two years later .

(Y.-M. Chen, 2002) refer to (Banerjee, 1992), defines herding as everyone following others' actions, even if their private information suggests otherwise. (Sharma & Bikhchandani, 2000) argue that market participants make buying and selling decisions based on others' actions, often due to the presence of uniformed investors in stock markets, which can influence others to make foolish decisions. (Bikhchandani & Sharma, 2000), Herd behavior refers to investors copying the behavior of others, with "spurious herding" being an efficient outcome where similar decision-making occurs among groups with similar information sets. However, distinguishing between these two is challenging due to the numerous factors that can influence investment decisions, making it difficult to empirically differentiate. For example, a fundamentals-based takeover of stocks could occur Interest rates suddenly rise, making investing in stocks less attractive. Misleading herd behavior can also arise if the opportunities offered by different investors are different. Other causes of intentional procreation include behavior that is not entirely rational, but to use of momentum-investment strategies, (Grinblatt et al., 2012); (Choe et al., 1999); (Kim & Wei, 2002) A momentum investing strategy is an investor's tendency to buy and sell stocks based on past stock returns. Example buy recent winners and sell recent losers.

(Mand et al., 2023), stated, herding behavior is a behavioral phenomenon in financial markets, affecting investors across all asset classes. It was influenced by the 1990s financial crisis. Retrieved from Devenow and Welch's (1996) study confirmed herding behavior's origin, stating that investors feel more secure following others. However, during market stress, investors become more focused on their individual and confidential aspects, leading to more widespread herding. This can cause security prices to deviate from their original values, reflecting both rational and irrational expectations of investors, creating market imbalances.(Kataria & Choudhary, 2015).

## RESEARCH AND METHODOLOGY

This qualitative research explores herding behavior in the financial market, utilizing a literature review and research library development for data collection, for visualization of publication data using VOSviewer. Material from a variety of sources, including Emerald insight, Elsevier, EBSCOhost, Google scholar, and SSRN, the study focuses on the relationship between behavioral biases and investing decisions. Papers with a variety of biases were included in the search, which was segmented according to these biases. The research encompassed mutual funds, individual investors, and institutional investors.

## RESULT AND DISCUSSION

### Herding Behavior Research Developments

This paper outlines some of the previous researchers reference findings and explorations with grounded theory on herding behavior in financial market, and its factors that influence herding either directly or indirectly. The most cited research over the past 5 years (2019-2023) filtered out the top 10 are as follows:

**Table 1.** List of Highly Top Ten Cited Articles

| No | Author | Title | Cite | Year | Publication | Publisher |
|---|---|---|---|---|---|---|
| 1. | GL Kamins, CM Reinhart | The Twins cries: the causes of banking and balance-of-payments problem | 7539 | 1999 | American economic review | Aeaweb.org |
| 2. | N Barberis, R Thaler | A survey of behavioral finance | 5776 | 2003 | Handbook of the Economics of France | Elsevier |

| | | | | | | |
|---|---|---|---|---|---|---|
| 3. | J Lakonishok, A Shleifer, RW Vishny | The impact of institutional trading on stock prices | 3029 | 1992 | Journal of Financial econmics | Elsevier |
| 4. | S Mornis, HS Shin | Social value of public information | 2686 | 2002 | American economic review | Aeaweb.org |
| 5. | GL Kamins, CM Reinhart | On cries, contagion, and confusion | 1854 | 2000 | Journal of International Economics | Elsevier |
| 6. | KA Froot, DS Scarfstein, JC Stein | Herd on the street: Informational inefficiencies in a market with short-term speculation | 1749 | 1992 | The Journal of financial | Wiley Online Library |
| 7. | B Trueman | Analyst forecast and herding behavior | 1448 | 1994 | The review of financial studies | Academic.oup.com |
| 8. | GA Calvo, EG Mendoza | Ratinal contagion and the globalization of securities markets | 1417 | 2000 | Journal of International Economics | Elsevier |
| 9. | C Avery, P Zemsky | Multidimensional uncertainty and herd behavior in financial market | 1416 | 1998 | American economic review | JSTOR |
| 10. | D Hirshleifer, S Hong Teoh | Herd behaviour and cascading in capital markets: A review and sythesis | 1390 | 2003 | European Financial Management | Wiley Online Library |

**Source:** Authors (2023)

The analysis reveals that environmental factors like economic and health crises can significantly influence herding behavior and investor decision-making. Understanding these environmental factors can help researchers develop strategies to mitigate herding behavior and improve investment decisions. This is due to the growing recognition of psychological biases and their impact on financial decision-making. The study of behavioral finance and herding behavior is an ongoing and relevant field of research.

**Topics Are Related to Herding Behavior**

In several studies, the herding variable is used as a independent, which affects the investment decision (Literacy et al., 2021), (Kuasa & Tjahjono, 2023), (Coskun et al., 2020), (Fitriyani & Anwar, 2022) . Meanwhile, herding affects investment performance (Anissa; 2019). While herding as a dependent variable is influenced by the media (Tiwari, 2021), trading volume, (Syamni, 2009), and social factors, (Loang & Ahmad, 2020), loss avertion (Firdaus et al., 2022), Financial Literature and Income (Firdaus et al., 2022). And herding as a mediating variable is found at the research of(Sari et al., 2019).

Research with the theme of herding is not only studied in the equity market with stock objects, but there are objects with conventional cryptocurrencies market, non-fungible tokens, Defi assets (Yousaf & Yarovaya, 2022), crude oil during financial stress (BenMabrouk, 2018), Health sector growth in China (Lulin et al., 2016), ETF sector at American Stock Exchang (Gleason et al., 2004), energy stock markets during the Global Financial (Chang et al., 2020), pension fund investment behavior (Raddatz & Schmukler, 2013). Based on the PoP application, we obtained 155 articles that were published from 2018-2023, then process the data through the VOSviewer application. The result of VOSviewer application show that herding behavior network with financial crisi, contagion, stock market return, stock prices, stock market crash, crowdfunding, etc. In line with the results of VOSviewer, many researchers focus on researching herding related to stock prices, stock returns, stock market crises in various countries, ETFs, including Crypto. Below is network visualization of herding behavior in financial market.

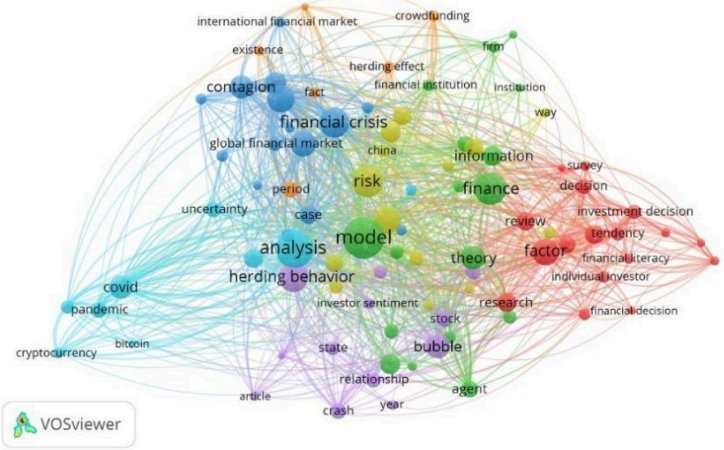


**Figure 1.** Network Visualization of Herding Behavior in Financial Market
**Source**: Result from VOSviewer

The review reveals that environmental factors like financial crisis, contagion, buble and Pandemic Covid can significantly influence herding behavior and impacting investor decisions. Understanding these factors can help develop strategies to mitigate herding behavior and improve investment decision-making. The growing recognition of psychological biases and behavioral factors in financial decision-making highlights the importance of understanding and mitigating their impact on investment outcomes. This highlights the growing relevance of behavioral finance and herding behavior in finance. Density visualization by VOSviewer as follow;

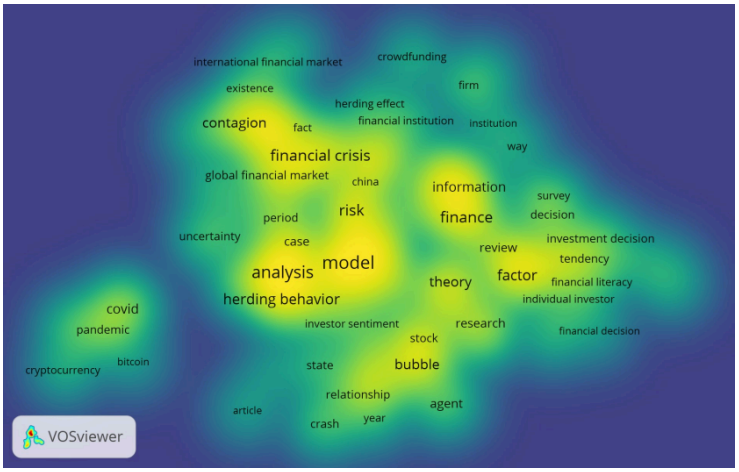


**Figure 2.** Density of Herding Behavior in Financial Market
**Source**: Result from VOSviewer (2023)

**Methods Used by Researchers**

(Lakonishok et al., 1992), were pioneers in measuring herding behavior in financial market, by using data from 769 tax-exempt stoks. (Vo & Phan, 2019), investigated herding bahavior in US stock market using cross-sectional standard deviation (CSSD) of returns. (Grinblatt et al., 2012), studied herding behavior among fund managers, examining 274 stocks. (Gleason et al., 2004), highlighted herding behavior, highlighting a decrease in the CSSD and a small or disproportionate increase in the cross-sectional mean deviation. (Houda & Mohamed, 2013), introduced investor sentiment and financial crisis into the analysis, using modified versions of CSSD and cross-sectional absolute deviation (CSAD). (Voukelatos & Verousis, 2019), focused on detecting herding behavior in US stock market investors, while (Arisanti, 2020), expanded the scope of investigation by including companies listed on stock exchanges in Indonesia, Malaysia, Thailand, Vietnam, and the Philippines. (Bouteska, 2020), used Tunindex daily returns as a proxy for the Tunisia stock exchange index. (X. Gong et al., 2021), examined herding behavior in the Chinese stock market before and after the SHKSC policy implementation. (Maquieira & Espinosa-Méndez, 2022) and (Yao et al., 2014), measured herding behavior in China's A and B-share markets. (Nouri-Goushki & Hojaji, 2023), investigated the potential impact of government responses to the COVID-19 pandemic on investor herding behavior using CSAD as a measure of security dispersion.

**Finding**

Gul & Khan (2019), a Pakistani study found that decision suitability, sentiment, and accuracy significantly influence investors' tendency to engage in herd behavior. Hasty decisions and overconfidence were found to be

insignificant predictors of herd behavior. Investor sentiment and decision accuracy are important predictors of herd behavior, with higher decision accuracy increasing the likelihood of following the herd even under uncertain conditions. Overconfidence is not statistically significant, as overconfident investors do not follow the herd. The study also reveals that herd behavior is not consistently considered in investment decisions, with different attitudinal factors dominating during market booms and crises.

(Voukelatos & Verousis, 2019), found there is no evidence that herding is a general trend among US stock market investors. Importantly, however, our results reveal significant herd effects over a period of several days. Kyriazis (2020), the study examines the phenomenon of herding in digital financial markets, focusing on 240 financial markets. Results show that herding is more effective in short-term financial situations, and its effects are more noticeable in bullish markets. The study also highlights the importance of contemporary liquidity and provides insights for investment decisions.

Moving forward, (Voukelatos & Verousis, 2019), directed their attention towards the detection of herding behavior in US stock market investors, primarily employing the CSAD method as their robust and reliable detection tool. Moreover, (Arisanti, 2020), ambitiously expanded the scope of investigation by meticulously including companies listed on the stock exchanges of Indonesia, Malaysia, Thailand, Vietnam, and the Philippines, employing a meticulous and methodical purposive sampling method to meticulously select the appropriate sample. The method utilized for the detection of flock behavior was meticulously based on CSAD, which proved to be an invaluable and indispensable tool in unraveling the complex dynamics of herding behavior.

Another noteworthy study conducted by (Bouteska, 2020), sought to employ the sample Tunindex daily returns as an accurate proxy for the Tunisia stock exchange index over the extensive period of 2007-2018, employing the meticulously tried and tested CSAD method as the primary mechanism to detect and analyze herding behavior. (X. Gong et al., 2021), directed their focused and meticulous attention towards examining the existence and nature of herding behavior in the dynamic and ever-evolving Chinese stock market, both before and after the implementation of the SHKSC policy, utilizing an innovative and cutting-edge absolute error model for cross sections. It is worth noting that within the vast realm of cross-sectional absolute error models, the LSV method, CSAD method, and CSSD method have emerged as the most commonly employed techniques to study and analyze the intricate dynamics of stock market herding behavior.

(Arisanti, 2020), empirical study provides evidence of the manifestation of herd behavior among firms venturing into the financial sector within the capital markets of developing countries in Southeast Asia. The impact of the Federal Reserve's decision to raise interest rates reverberates across developing nations, leading to a rise in interest rates within these countries and an influx of funds into banks. Consequently, bank interest rates and savings experience a surge, rendering investment in savings a more enticing option than investing in the composite stock index. As a result of this phenomenon, investors find themselves preoccupied with selling stocks and converting their assets into investment savings.

(Zhang & Wang, 2020), herding behavior and overconfidence behavior are irrational behaviors in behavioral finance that have gained attention. People tend to imitate others, believing they have information that can justify their actions. (Ah Mand et al., 2023), drawing from (Chiang et al., 2013), investigation, delves into the examination of investor herding behavior in stock markets spanning the Pacific Rim, including Malaysia. The study uncovers the temporal evolution of this behavior, which manifests itself during both market upswings and downturns alike.

In an enlightening report by (Tiwari, 2021), the significance of the media's influence on investor and stock behavior is elucidated through an analysis of stock recommendations and their impact on the price and volume of TATA motors' stocks. The researcher highlights the allure of media in attracting investors, thereby prompting them to make crucial decisions regarding the purchase or sale of stocks. Ultimately, these decisions trigger fluctuations in stock prices and trading volumes, thereby establishing a chain reaction. The media's influence on investor behavior, coupled with the subsequent investment decisions made by these investors, consequently leads to changes in stock behavior.

(Rahim et al., 2020), recent study investigates the ramifications of the herding tendency on investment decisions made by investors in the Pakistani stock market in the post-Covid-19 era. To conduct this analysis, the researchers adopt a stratified random sampling technique, dividing the Pakistan Stock Exchange (PSX) into three distinct strata: the Karachi Stock Exchange (KSE), the Lahore Stock Exchange (LSE), and the Islamabad Stock Exchange (ISE). Notably, the study also encompasses the Ho Chi Minh City Stock Exchange (LSE) within its classification. Given the quantitative nature of the study, a survey method is employed to gather data from retail investors operating in the KSE, LSE, and ISE. (Bouteska, 2020), in contrast, employs various statistical techniques, including descriptive statistics, rank correlation, related methods, and a logistic regression model, to analyze the collected data. The findings of this investigation unequivocally demonstrate the positive impact of herding bias on the decision-making processes of individual investors within the PSX following the outbreak of the Covid-19 pandemic.

In a distinct study conducted by (X. Gong et al., 2021), it is discovered that the implementation of the SHKSC (Stock Herding Knowledge Sharing Community) policy does not yield any significant changes in herd

behavior among investors. On the contrary, the herding effect becomes even more pronounced, thus indicating that investors lack a clear preference for stocks belonging to a particular sector. Instead, their investment activities follow a pattern characterized by a gradual increase followed by a sudden decline, aptly referred to as "slow increase and sharp decrease." Interestingly, as stock prices plummet, the herding effect within the Chinese stock market becomes increasingly evident.

In summary, the two aforementioned studies conducted by (Rahim et al., 2020), and (X. Gong et al., 2021), shed light on the influential role of herding bias and its profound impact on investment decisions in different stock markets. While (Rahim et al., 2020), focused their investigation on the post-Covid-19 scenario specifically within the Pakistani stock market, (X. Gong et al., 2021), directed their attention towards the Chinese stock market. In both instances, these studies implemented rigorous methodologies and employed statistical analysis as a means to thoroughly explore the phenomenon of herding behavior among investors. Consequently, the findings derived from these studies have significantly contributed to the enhancement of our comprehension regarding the intricate decision-making processes of investors, thereby emphasizing the utmost importance of acknowledging and comprehending the implications of herding bias in shaping the outcomes of investments.

In light of the aforementioned studies, it has been discovered by (Maquieira & Espinosa-Méndez, 2022), that the propensity for herd behavior tends to become increasingly prevalent when market returns are higher and volatility is lower. Remarkably, these results remained consistent regardless of the utilization of different time frames. Moreover, even after employing rolling regression techniques in order to account for the presence of time-varying coefficients, the findings remained unchanged. Additionally, the inclusion of other control variables that could potentially offer relevant explanations for Conditional Skewness and Asymmetric Dependence (CSAD) did not yield any alterations in the results obtained from the estimations.

Furthermore, the research conducted by (Ghufran et al., 2016), successfully demonstrated that investor psychology plays a significant role in the occurrence of crowding behavior within the market during Islamic festivals such as Eid al-Fitr, Eid al-Adha, and Ashura. On a similar note, the investigation conducted by (Yousaf & Yarovaya, 2022), revealed that while static herding analysis failed to provide evidence of herding, there was a notable presence of time-varying herding within short-term investment horizons in both conventional cryptocurrencies and decentralized assets central. Moreover, the analysis pertaining to livestock asymmetry further accentuated the similarities between livestock farming and the aforementioned phenomena.

It is important to acknowledge the groundbreaking contributions made by (Lakonishok et al., 1992), in the field of empirically measuring herding behavior within financial markets. Their pioneering work significantly advanced our understanding of this intricate phenomenon. Specifically, their study incorporated data from 769 tax-exempt stocks, laying the foundation for future investigations. Subsequently, Christie and Huang (1995) further enriched the existing literature by examining the existence of herding behavior within the US stock markets. They employed a methodology that relied on the cross-sectional standard deviation of returns. Building upon these valuable insights, (Grinblatt et al., 2012), embarked on a comprehensive exploration of herding behavior among fund managers. Their study encompassed an extensive analysis of 274 stocks over a timeframe spanning from 1974 to 1984, thereby providing a more holistic perspective on this subject matter.

In their extensive and comprehensive research, (Gleason et al., 2004), shed profound and illuminating insights on the various manifestations of herding behavior, with a particular emphasis on the significant decrease observed in the cross-sectional standard deviation (CSSD) and the subsequent small or disproportionate increase in the cross-sectional mean deviation. Expanding upon this pivotal foundation, Weiner (2006) conducted a meticulous and rigorous analysis of herding behavior in the crude oil futures market, employing a combination of both parametric and nonparametric methods. In a relentless pursuit to further enrich our understanding and delve deeper into the intricacies of this intriguing phenomenon, (Houda & Mohamed, 2013), introduced the groundbreaking incorporation of investor sentiment and financial crisis into the analysis, utilizing modified versions of CSSD and cross-sectional absolute deviation (CSAD).

(Maquieira & Espinosa-Méndez, 2022), embarked upon their pioneering and groundbreaking research on the Shanghai Stock Exchange (SHSE) and Shenzhen, utilizing the meticulously designed and meticulously calibrated CSAD model as their primary and indispensable tool. Similarly, (Yao et al., 2014), undertook a comprehensive and meticulous measurement of herding behavior in China's A and B-share markets, employing the tried and tested CSAD model to meticulously analyze and decipher the underlying mechanisms driving this intriguing phenomenon. Lastly, (Ghufran et al., 2016), made a valuable and significant contribution to the ever-expanding literature on herding behavior by meticulously investigating the profound and far-reaching impact of Islamic events in the strictly religious society of Saudi Arabia on the dynamics and manifestations of herding behavior. Their meticulous and comprehensive research shed light on the intricate interplay between religion and financial decision-making, providing valuable insights into the complex and multifaceted nature of herding behavior.

## CONCLUSION

### Conclusion

This study explores herd behavior in financial markets, a psychological bias influenced by emotions, heuristics, and social norms. Behavioral finance, a branch of psychology, aims to address faulty investment decisions made by investors. Herd psychology, a category of behavioral finance, involves a group of investors making similar decisions simultaneously. Factors like social influence, information cascades, and conforming to group norms contribute to herding behavior, which can lead to irrational decisions, overvaluation, and significant losses during bubble bursts.

Some research results provide different findings, some find that herding behavior has an impact on financial markets, (Houda & Mohamed, 2013), (Gul & Khan, 2019), (Tiwari, 2021), (Rahim et al., 2020), (Maquieira & Espinosa-Méndez, 2022), (K. H. Choi & Yoon, 2020), (Nouri-Goushki & Hojaji, 2023), but some have no impact, (Bouteska, 2020), (X. Gong et al., 2021), (Yousaf & Yarovaya, 2022). Research on herding behavior in investing faces limitations due to data availability, measuring psychological biases, financial market complexity, and generalization. Future research could explore the impact of different types of information, institutional investors' role, and strategies to mitigate herding behavior. Social media platforms could also be examined for their influence on herding behavior. Analyzing herding behavior in different market environments, such as bull markets, bear markets, could help understand the complexities of investment decision-making. However, the limitations of current research remain.

Herding behavior is a complex phenomenon influenced by psychological biases, environmental conditions, and market conditions. It's studied in behavioral finance, investor behavior, market efficiency, and capital markets. The topic has gained attention in recent years, with future research focusing on specific psychological biases and strategies to mitigate its effects.

### Recommendation and Managerial Implication

Based on the research conducted, the intention of the researchers is to present relevant information to investors regarding the phenomenon of herding behavior that occurs in financial markets. It is anticipated that investors will exercise a high degree of caution and prudence in their decision-making process, aiming to select the most suitable course of action, in order to achieve the desired returns. This is mainly due to the fact that investors have a tendency to behave irrationally when making decisions relating to the purchase or sale of shares, showing an unwillingness to conform to the prevailing market consensus observed in financial market trading activities. As a result, investors are expected to have robust information that will enable them to make informed decisions regarding the purchase or sale of investments.

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