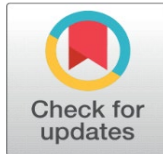
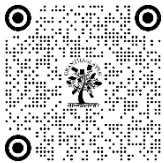


# HERDING BEHAVIOUR IN FINANCIAL MARKETS: A LITERATURE REVIEW

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## ABSTRACT

In financial markets, the expression "herding behaviour" portrays investors' affinity to mimic the exercises of others, which habitually brings about them venturing into risky investment decisions without cautiously gauging the important risk-reward ratio or relevant information. This phenomenon can make financial frameworks more unsound, enhance market volatility, and make the general economy more volatile. This review of the literature offers an exhaustive analysis of herding behaviour, underlining its monetary, social, and psychological causes as well as its effects on market outcomes. The review assesses the social components and psychological biases leading to herding affinities among institutional and individual investors by joining the empirical evidences from different studies. The models stowed away this idiosyncrasy are figured out in this review through the discussion of theoretical frameworks like informational cascades, social learning models, and behavioural finance theories. This review also attempts to unveil the unfavourable outcomes of herding behaviour, for instance, the distortion of market efficiency, the escalation of market volatility, and the formation of speculative bubbles. This article tries to give a comprehensive information on herding behaviour, its commitment in financial market disappointments, and reasonable methodology for mitigating its debilitating consequences on market efficiency through an analysis of empirical evidences and theoretical frameworks.

**Keywords:** Herding Behaviour, Behavioural Finance, Financial Markets, Investor Psychology, Market Efficiency.

## 1. INTRODUCTION

Herding behaviour in financial markets implies the affinity of investors to impersonate the exercises of others, habitually seeking after relative decisions without totally relying upon their independent judgment, information, or analysis. This tendency, wherein individuals follow the crowd instead of their informed decisions supported by sound financial reasoning, can have huge implications on market dynamics and economic stability. In that limit, understanding the frameworks behind herding behaviour is fundamental for investors, policymakers, and experts alike, as it influences market efficiency, asset price volatility, and the formation of speculative bubbles.

Herding behaviour, which can be traced back to early economic theories, has procured noteworthy prominence with the advent of behavioural finance. Unlike standard finance models that assume rational behaviour and efficient markets, behavioural finance investigates what psychological components and social factors shape investor choices. Herding behaviour challenges the notion of rationality in financial markets by showing the way that particular decisions can be influenced by the collective exercises of others, often provoking market anomalies and deviations from fundamental

values.

The fundamental groundworks of herding behaviour can be followed to the works by Adam Smith [29] and Charles Mackay [20], who focused on the influence of herding for exploration of economic patterns. In financial markets, herding happens when investors follow the decisions of others — a portion of the time with significant reasoning, for instance, the conviction that it can prompts further improved results. Notwithstanding, numerous instances of herding are driven by irrational inspirations, for instance, investors panic during stock price declines or preposterous positive reasoning during periods of speculative bubbles. Social standards and customs frequently enhance this herd mentality (Spyrou [30]). Bikhchandani and Sharma [3] further recognize "spurious" herding, which happens when investors settle on comparative choices in view of similar information set, and "intentional" herding, where investors purposely imitate others' activities. While spurious herding can result in an efficient outcome, intentional herding might add to failures, including systematic risk, bubbles and asymmetric market volatility (Bikhchandani, Hirshleifer, and Welch [4]; Kodres and Pritsker [15]; Park [24]).

This literature survey aims to provide an extensive analysis of herding behaviour in financial markets, combining existing exploration and theoretical models. It intends to distinguish the fundamental components driving herding, including social influence, information cascades, and market sentiment. The review will likewise assess the effect of herding behaviour on market outcome, for example, asset price volatility and liquidity. Through a point-by-point assessment of both theoretical contributions and empirical works, the survey tries to upgrade understanding of the intricacies of herding behaviour and its ramifications for financial dependability.

The review will address several key areas:

- Theoretical Frameworks: A conversation of psychological and social models that make sense of why herding happens in financial markets.
- Empirical Evidence: An assessment of practical situations where herding behaviour assumed a key part, including market bubbles and crashes.
- Implications for Market Efficiency: Investigating how herding influences market efficiency and proposing expected methodologies to relieve its adverse consequences on market stability.

By methodically surveying the extant literature, this paper aims to develop our understanding of herding behaviour in financial markets and add to ongoing discourse in behavioural finance. The insights acquired from this review will be significant for regulators looking to alleviate the risks related with herding behaviour and for investors striving to develop systems that record for its expected effect on investment choices.

## 1.1 BACKGROUND OF THE STUDY:

Herding behaviour in financial markets is portrayed by the propensity of investors to follow the activities of others, especially in circumstances of vulnerability or uncertainty. This behaviour can appear in different structures, like the formation of speculative bubbles, quick changes in market sentiment, and the propagation of financial crises. Its developing significance has been driven by the expanded intricacy and volatility in current financial markets, where market patterns and aggregate investor activities vigorously influence asset prices.

By and large, occasions of herding behaviour have been apparent in critical market occasions, for example, the Dotcom Bubble and the Global Financial Crisis of 2008. These crises represented how far-reaching investor panic and the impersonation of others' choices could prompt market distortions and add to economic instability. Such events highlight the significance of understanding herding behaviour to improve financial regulations and foster powerful investment systems and strategies.

Theoretical starting points for herding behaviour can be traced to early works in the arena of finance and psychology, including Keynes' idea of "animal spirits" and more contemporary examination in behavioural finance, which investigates what cognitive biases and social factors influence investors decision choices (Akerlof et al. [1]). Empirical studies have utilized different methodologies to look at the effect of herding on asset prices and market efficiency, adding to the continuous discussion on the work of behavioural components in financial markets.

Regardless of broad exploration on herding behaviour, numerous perspectives remain ineffectively grasped, particularly

its broad implications for financial stability. This literature survey aims to combine the extant collection of information on the causes, signs, and results of herding behaviour in financial markets, giving a complete outline and distinguishing ways for future exploration.

## 1.2 JUSTIFICATIONS

Understanding herding behaviour is pivotal for fathoming the formation of market patterns, bubbles, and crashes. The paper legitimizes its emphasis on herding behaviour because of its significant effect on market volatility and investors' decision-making. By assessing the existing studies, the paper expects to explain the systems through which herding influences asset prices, market sentiment, and generally market stability.

The review likewise addresses existing gaps in the literature, featuring the requirement for more nuanced models of herding that record for various market conditions and investor profiles. By zeroing in on these gaps, this paper expects to offer valuable insights and recommendations for further developing market regulations and investor systems.

Moreover, the paper analyses the implications of herding behaviour for financial market regulation and gives proposals for alleviating its antagonistic effects. By drawing on both theoretical models and empirical results, the paper gives a robust analysis of how herding influences financial markets and offers a basis for theoretical development and empirical investigation.

## 1.3 OBJECTIVES OF THE STUDY

- To characterize herding behaviour in financial markets.
- To review theoretical models of herding behaviour.
- To examine empirical evidence of herding behaviour in financial markets.
- To identify key variables affecting herding behaviour.
- To assess the effect of herding behaviour on financial market outcomes.

## 2. LITERATURE REVIEW

Herding behaviour in financial markets has its roots in behavioural finance, which challenges traditional financial theories that assume rational decision-making. Early studies, such as those by Bikhchandani, Hirshleifer, and Welch [4], establish the concept of informational herding, where investors follow others because they believe others possess superior information. This foundational work highlights how herding could lead to market inefficiencies and deviations from fundamental values. The work of Shiller [27] on market bubbles and investor sentiment illustrates how psychological factors, such as overconfidence and fear of missing out (FOMO), contribute to herding.

Chiang and Zheng [8] explore how cultural factors and market structures influence herding behaviour in different countries. They obtain evidences suggesting that while herding is a common phenomenon across global financial markets, its intensity and manifestations can vary based on regional and cultural contexts.

Schmitt et al. [25] propose a financial market model where traders follow a blend of fundamental and technical trading rules to decide their trades. They find volatility clustering due to presence of herding behaviour. In the event of high uncertainty in market, speculators become more homogenous and market makers face more unbalanced excess demand and consequently they adjust asset prices more unequivocally. The model, assessed utilizing simulated moments, actually was able to well explain different financial market.

Lakonishok et al. [18] explore the potential impact of trading behaviour of 769 tax-exempt funds on stock prices addressing two aspects of trading by the fund managers: herding and positive feedback trading. They conclude that institutional investors do not destabilize individual stock prices, instead they pursue a wide range of investment strategies offsetting the large impact on prices.

Chang et al. [7] examine herding in renewable and fossil fuel stock returns using daily closing prices in the USA, Europe, and Asia from March 24, 2000, to May 29, 2020. The examination shows that investors tend to show herding in the stock market for extremely low oil returns, particularly after the Global Financial Crisis (GFC), during very high oil returns

after the GFC, and during times of very low oil returns during the Covid emergencies. The study finds evidences of cross-sector spillover of herding from US fossil fuel to renewable energy, particularly before the GFC, and a significant influence of US fossil energy stock returns on Europe and Asia renewable energy returns during Coronavirus.

Komalasari et al. [16] conducted a systematic survey and bibliometric analysis of 279 articles from the Scopus database to give an outline of findings, research profile and influence of herding behaviour in the capital market. The review expected to construct a framework of knowledge in relation to herding behaviour in the capital market, elaborate and group empirical studies into significant dimensions and provide a reference for future exploration on herding behaviour. The survey aims to give a thorough theoretical knowledge of herding behaviour and to offer insights into future research on herding behaviour.

Filip et al. [12], in their study, look at herding behaviour among investors in developing markets, which may be treated as a major cause for speculative bubbles. They utilize firm-level information to analyse this behaviour on the Central and Eastern European (CEE) capital markets. They use the cross-sectional absolute deviations (CSAD) as proposed by Chang et al. [7] to analyse the effect of various market conditions on herding behaviour. The findings of the study highlight the existence of investors' herding behaviour specially during market crash and the differences in investors' behaviour during the pre- and post-crisis period and period of crisis. They conclude that investors in CEE stock markets manifest herding behaviour both during uptrends and downtrends.

Wray et al. [35] examine crowd behaviour in financial markets, which can fuel asset price volatility and contribute to market instability. They utilize a trader interaction model in view of informational cascades at information thresholds to build a new model of asset returns. The output derived by the model highlights volatility clustering and long-memory patterns in asset returns volatility in case where agents are informationally permitted to be away from punching a trade. The study made by Ouarda et al. [23] contributes in four ways to the literature of investors' herding. It broadens research on herding behaviour in developed markets, particularly on European markets. The review analyses herding behaviour at the firm level utilizing company data. It assesses the implications of herding behaviour on returns, volatility, and transaction volume. The study uncovers herding behaviour during the GFC in 2007-2008 and the Asian crisis, providing significant evidences of herding behaviour in downtrends coupled with high volatility and trading volume. The herding behaviour was noticed during the GFC of 2007-08 in the finance and technology sectors.

Lao et al. [19] investigates herding behaviour in the Chinese and Indian stock markets, uncovering that it exists in these two markets. They argue that the degree of herding depends upon market conditions and trading volume. In the Chinese markets investors' herding is more prominent during falling markets coupled with high trading volumes, while Indian markets experience it during up-swings. Herding behaviour is found to be more predominant during significant market movements, whatsoever, a lower degree of herding is noticed in the Indian stock market in comparison to that in the Chinese stock market.

Kyriazis [17] focuses on herding behaviour prevalent in cryptocurrency markets and compares it with that in traditional stock markets. The study explores 240 cryptocurrencies during bear and bull markets and observes enhanced herding propensities in bull markets only. The review highlights that most popular approaches to measure herding tendencies are the Cross-sectional absolute deviations (CSAD) and Cross-sectional standard deviations (CSSD). The investigation discovers that the nature of herding behaviour is different in bull and bear markets and is more obvious in positively trending markets than bear markets, and is more obvious during extreme market conditions. The researcher concludes that the findings of the study can be used as a roadmap for investment decision process in light of the modern forms of liquidity.

Economou et al. [11] investigate on the existence of herding effects in the Italian, Portuguese, Spanish, and Greek markets utilizing a 'survivor-bias-free' daily return dataset during 1998-2008. In addition, they analyse the asymmetric nature of herding behaviour with regard to trading activity, volatility and market trends. Most interestingly, they investigate on the influence of cross-sectional dispersion of return (CSDR) in one market on that in the remaining three markets. The findings of the study reveal that herding behaviour is prevalent in the Greek and the Italian markets and that behaviour shows significant differences during bear and bull markets, high and low volatility and trading volume. They also observe a significant association among the CSDR across the four markets under study.

Shapira et al. [26] have developed a model to understand the behaviour of stock markets, which can be seen as a network of investors responding to group behaviour. The model comprises of two terms: one demonstrates investors' propensity to follow others in the group and the another to assess the investors' responsiveness to the available information. The model was able to explain some key elements of the stock market including high degree of relationship between individual stocks and the index, the Epps effect, and the volatile nature of the market. The model, in addition, depicts some long-term peculiarities of market such as explosions of synchronized average correlation and the dominance of the market index.

### 3. MATERIAL AND METHODOLOGY

#### 3.1 RESEARCH DESIGN

This study employs a systematic literature review (SLR) approach to investigate herding behaviour in financial markets. The research design is specifically structured to gather, evaluate and synthesize both the existing theoretical and empirical literature connected with the peculiarity of herding behaviour in financial markets. The goal is to offer an exhaustive understanding of how herding manifests, the elements impacting it, and its effect on financial market. The review process follows an organized methodology, which incorporates characterizing clear search criteria, cautiously choosing pertinent studies, and extracting key information to provide a comprehensive understanding of manifestation of herding behaviour. This review will provide valuable insights into the theoretical underpinnings, empirical evidences, and key patterns in herding behaviour across different financial markets.

#### 3.2 DATA COLLECTION METHODS

Data collection for this literature survey was led through a comprehensive search across numerous high-influence scholastic databases, including JSTOR, Scopus, Google Scholar, and Web of Science. The search methodology zeroed in on a bunch of clear-cut catchphrases, for example, "herding behaviour," "financial markets," "market efficiency," "asset bubbles," and "investor psychology." The goal was to distinguish studies that investigate different features of herding, from its psychological triggers to its implications on market soundness and price formation.

The review encompasses both quantitative and qualitative studies to ensure a well-rounded perspective of herding behaviour in financial markets. These include empirical studies, theoretical papers, and contextual analyses that address various aspects of herding behaviour, such as the nature, causes, effects, and components of herding behaviour. Furthermore, market elements like investor sentiment, social influence, and information cascades were investigated inside the contents of the studies under consideration.

To keep up with systemic meticulousness, studies were first separated by reviewing their abstracts keeping in view the importance of this survey. After initial screening, full-text survey was performed to ensure the selected articles offered significant insights into the understanding of herding behaviour in financial markets, with a specific focus on empirical evidences, market patterns, and theoretical deliberations of market phenomena.

#### 3.3 INCLUSION AND EXCLUSION CRITERIA

The inclusion criteria for the studies in this review were as follows:

- **Significance to Herding Behaviour:** The studies that unequivocally address herding behaviour, including its theoretical establishments, empirical perceptions, and implications for financial markets, were incorporated.
- **Types of Studies:** Both theoretical and empirical studies were incorporated to introduce an extensive perspective on the subject. The consideration of empirical investigations, review based studies, and econometric researches gave a different point of view on herding peculiarities in different financial markets.
- **Market Setting:** Studies that focused on different financial markets (e.g., equity markets, bond markets, crypto markets etc.) and investigated how herding behaviour influenced these markets were considered.
- **Quality Publications:** The studies published in peer-reviewed journals, conference proceedings, and reputable financial research reports were incorporated, ensuring the quality and reliability of the sources.

The exclusion criteria for this review were as follows:

- **Unimportant Substance:** Studies that didn't specifically address herding behaviour or were centred around inconsequential financial points were rejected.



- Non-English Language Studies: The studies published in English were considered to keep up with consistency and guarantee clearness for data understanding.
- Inadequate Methodological Completeness: Studies lacking methodological meticulousness, for example, those without clear research design, strong data analysis, or appropriate empirical evidence, were rejected to guarantee the dependability of the survey's discoveries.
- Non-Peer Reviewed Works: Dark studies, for example, non-peer-reviewed articles, assessment pieces, and non-scholarly researches, were rejected to keep up with the quality and scholastic honour of the literature review.

This systematic approach to inclusion and exclusion ensures that the review is based on high-quality, relevant studies that provide significant contributions to the understanding of herding behaviour in financial markets.

### 3.4 DATA EXTRACTION AND ANALYSIS

After settling the selection of studies, data extraction included to capture key information from each article, including objectives of the study, research methodologies, evidences, and implications of herding behaviour. A systematic methodology was utilized to classify the studies into various areas of concentration, such as psychological factors, social influences, market conditions, and operational impacts.

Quantitative studies were examined for empirical evidence of herding behaviour, for example, patterns of investor choices and asset price volatility with respect to group behaviour. Subjective studies were reviewed for acquiring insights into the psychological and social factors that drive herding behaviour, demonstrated through investor sentiment, fear, and the influence of market patterns.

An in-depth analysis considering the consistency and fluctuation of empirical evidences across studies was performed to identify the recognizable gaps in the literature in relation to the different dimensions of herding behaviour. The findings were compiled to feature the complex nature of herding in financial markets and to give a comprehensive perspective on its effects on market efficiency, asset pricing, and financial stability.

In order to make an investigation on herding behaviour in financial markets, the knowledge of proper techniques to measure degree of herding is necessary. Nonetheless, a few usually used techniques in relation to herding behaviour, particularly those tracked down in the finance and behavioural finance literature, are presented below.

### EQUATION FOR HERDING BEHAVIOUR MEASUREMENT

A typical way to estimating herding behaviour is through the herding index, which evaluates degree to which investors follow one another.

Herding Index (HI):

$$HI = \frac{\sum_{i=1}^N |\Delta P_i - \Delta M|}{\sum_{i=1}^N |\Delta P_i|} \quad [1]$$

Where:

- $\Delta P_i$  = Change in the price of asset  $i$ .
- $\Delta M$  = Average change in the price of all assets.
- $N$  = Total number of assets.

This equation estimates the degree to which change in individual asset price deviate from the general market pattern, demonstrating herding behaviour when the price is higher.

### EQUATION FOR HERDING BEHAVIOUR THROUGH CROSS-CORRELATION

This method utilizes cross-correlation of returns or trading volumes to identify herding, as it frequently prompts corresponding price/volume developments.

Cross-Correlation of Returns:

$$Corr(R_i, R_j) = \frac{\sum_{t=1}^T (R_i(t) - \bar{R}_i) \cdot (R_j(t) - \bar{R}_j)}{\sum_{t=1}^T (R_i(t) - \bar{R}_i)^2 \cdot \sum_{t=1}^T (R_j(t) - \bar{R}_j)^2} \quad [2]$$

Where:

- $R_i(t)$  = Return of asset  $i$  at time  $t$ .
- $\bar{R}_i$  = Mean return of asset  $i$ .

- $T$  = Total time periods.
- $R_j(t)$ ,  $R_j$  = Same variables for asset  $j$ .

This cross-correlation estimates how the ex-post returns of various assets move together, which can be an indication of herding when relationships are high.

### EQUATION FOR HERDING BEHAVIOUR THROUGH CUMULATIVE ABNORMAL RETURNS (CAR)

The cumulative abnormal returns technique is used to recognize market over-pricing and herding behaviour by estimating the deviation of asset returns from expected returns.

Cumulative Abnormal Returns (CAR):

$$CAR_t = \sum_{i=1}^t (R_i - E(R_i)) \quad [3]$$

Where:

- $R_i$  = Actual return of asset  $i$  at time  $t$ .
- $E(R_i)$  = Expected return (based on the market model, e.g., CAPM).
- $t$  = Time period.

This method accumulates the difference between actual and expected returns and that can be used to predict the unusual movement in security price that might brought about by crowd.

### EQUATION FOR MARKET IMPACT OF HERDING – VOLATILITY CLUSTERING

Herding frequently contributes to increased market volatility, which can be displayed using volatility clustering. The most popularly used volatility clustering model is the Generalised Autoregressive Conditional Heteroskedasticity (GARCH).

GARCH(1,1) Model for Volatility:

$$\sigma_t^2 = \alpha_0 + \alpha_1 \epsilon_{t-1}^2 + \beta_1 \sigma_{t-1}^2 \quad [4]$$

Where:

- $\sigma_t^2$  = Conditional variance (volatility) at time  $t$ .
- $\epsilon_{t-1}$  = Residual error from the previous time period.
- $\alpha_0, \alpha_1, \beta_1$  = Parameters to be estimated.

This model helps catch volatility clustering that frequently emerges due to herding behaviour, where times of high volatility are followed by more high volatility.

### EQUATION FOR HERDING BEHAVIOUR DETECTION THROUGH THE HURST EXPONENT

The Hurst Exponent ( $H$ ) can be used to identify long-term memory in financial time series. It considers the autocorrelations and the rate at which they decrease as the lag of value increases. The Hurst Exponent is applicable in understanding market patterns influenced by herding behaviour.

Hurst Exponent ( $H$ ):

$$R / S = (N / T)^H \quad [5]$$

Where:

- $R$  = Range of the data
- $S$  = Standard deviation of the data
- $N$  = Number of data points
- $T$  = Time period
- $H$  = Hurst exponent (typically between 0 and 1)

A value of  $H$  more than 0.5 indicates the time series to be persistent with an increase in value is most likely to be followed by short-term increase and vice-versa demonstrating herding behaviour in financial markets, while  $H$  less than 0.5 is an indication of anti-persistent behaviour of a time series with a stronger tendency to revert to its long-term mean values that might indicate non-herding climate.

### EQUATION FOR AGENT-BASED MODELS (ABM) FOR HERDING SIMULATION

In an agent-based model, individual agents observe specific rules, and the aggregate behaviour might show herding effects.

Herding Model in ABM (Example):

$$\text{Change in Agent's Behaviour} = \beta * (\text{Influence from Neighbours}) + \epsilon \quad [6]$$

Where:

- $\beta$  = Sensitivity of the agent to neighbour's actions
- $\epsilon$  = Random noise to simulate market uncertainty
- Neighbours' Influence = Average behaviour or decision from agents within a certain proximity or interaction distance

This model captures the change in agent's behaviour caused by the behaviour of other agents leading to herding behaviour.

## EQUATION FOR HERDING DETECTION THROUGH VARIANCE RATIO TEST

This test focuses at the change of returns over various periods to identify deviations from randomness.

Variance Ratio Test:

$$VR(k) = \frac{Var(X_t, k)}{k \cdot Var(X_t, 1)} \quad [7]$$

Where:

- $VR(k)$  = Variance ratio over  $k$ -period.
- $X_t$  = Asset return at time  $t$ .
- $k$  = Time horizon.
- $Var(X_t, k)$  = Variance of returns over  $k$ -period.

If  $VR(k) < 1$ , it might indicate herding or group behaviour, where returns show lower difference than expected one under the random walk framework.

These techniques and models can be integrated into any proposed approach for breaking down herding behaviour in financial markets. They provide a combination of empirical tools and theoretical frameworks for recognizing, evaluating, and understanding herding elements in financial markets.

## 4. RESULTS AND DISCUSSION

This thorough survey investigates herding behaviour in financial markets, zeroing in on its definition, theoretical establishments, empirical evidence, influencing factors, and its extensive implications on market outcomes. The review gives a nuanced understanding of how crowd investor behaviour shapes market outcomes, offering significant pieces of information for scholars, policymakers, and subject matter experts.

### DEFINING HERDING BEHAVIOUR IN FINANCIAL MARKETS:

Herding behaviour in financial markets refers to the phenomenon where investors imitate the actions of others, often disregarding their own information or analysis. The literature highlights that herding behaviour is characterized by individuals making investment decisions based on the actions of the majority rather than on their independent judgment. It manifests in various forms, including price bubbles and market crashes, where the collective actions of investors drive prices away from their fundamental values. Theoretical frameworks emphasize that herding can be driven by psychological factors, including fear of missing out (FOMO) and social influence. These frameworks distinguish herding from other market phenomena like random walk theory, which posits that price changes are independent and unpredictable.

### THEORETICAL MODELS EXPLAINING HERDING BEHAVIOUR:

Several theoretical models have been developed to explain herding behaviour in financial markets. The traditional economic models, such as those by Bikhchandani and Sharma, highlight informational cascades, where investors follow the crowd because they believe others have better information. Behavioural finance models, including those proposed by Akerlof and Shiller, suggest that psychological biases and social pressures drive investors to herd. For example, the concept of "social proof" implies that individuals often assume that the actions of others reflect the correct decision, leading them to follow the majority. These models collectively illustrate that herding behaviour can lead to market inefficiencies, as investors may overlook fundamental values in favour of prevailing trends.

### EMPIRICAL EVIDENCE OF HERDING BEHAVIOUR:

Empirical studies provide substantial evidence of herding behaviour in financial markets. The market events, such as the



dot-com bubble and the 2008 financial crisis, demonstrate how investor herding can amplify market volatility and contribute to asset price distortions. Quantitative analyses reveal patterns where trading volumes and price movements exhibit herding tendencies, particularly during periods of market stress. For instance, research by Lakonishok, Shleifer, and Vishny has shown that stock returns often deviate from their fundamentals during herding episodes, indicating that collective behaviour can lead to significant mispricing. Historical data further supports these findings, with numerous instances where market prices surged or plummeted due to widespread investor herding.

### **FACTORS INFLUENCING HERDING BEHAVIOUR:**

Several interrelated factors contribute to herding behaviour among investors:

- **Psychological Drivers:** Apprehensions about missing a great opportunity, risk aversion, and the inclination for social conformity frequently propel investors to line up with group behaviour, even to the detriment of individual judgment.
- **Social Influences:** The visibility of others' activities, enhanced by media inclusion and market sentiment, paves the way for enhanced herding propensities.
- **Financial Circumstances:** Market sentiment, information unevenness, and liquidity requirements altogether influence the probability and power of herding behaviour. For example, during market booms, positive sentiment can encourage more investors to join the trend, while in downturns, fear and uncertainty can drive a rush to exit positions.
- **Institutional Variables:** The work of institutional investors, for example, common assets and mutual funds, in driving herding behaviour is common. Studies demonstrate that institutional herding frequently enhances market volatility, especially in light of macroeconomic occasions.

### **IMPLICATIONS OF HERDING BEHAVIOUR ON FINANCIAL MARKETS:**

Herding behaviour profoundly affects financial market outcomes, with implications that extend beyond immediate asset price movements:

- **Market Inefficiencies:** By pushing prices from intrinsic values, herding behaviour disturbs efficient market functioning, inciting asset misallocation.
- **Asset Bubbles and Crashes:** Total over-energy or craze among investors regularly achieves price bubbles, followed by startling market reviews, as seen during major financial crises.
- **Expanded Volatility:** Herding intensifies price volatility, disrupting market strength and expanding risk for investors.
- **Reduced Investor Welfare:** Mispricing and volatility driven by herding behaviour can undermine investor welfare by creating environments where returns are driven by collective behaviour than by fundamental analysis.
- **Greater Financial Impact:** The debilitating impacts of herding on the greater economy include influence on assets allocation, market efficiency and money related matters in the economy.

### **SYNTHESIS AND FUTURE DIRECTIONS:**

While a significant progress has been made in understanding herding behaviour, there is a lot to uncover its drawn effects and in isolating among rational and irrational herding. Future explorations could focus on making models to recognize herding phenomenon using movements in market data and computer-based intelligence. Additionally, researching the remedies in lightening the opposing effects of herding could offer valuable inputs for further developing market security.

Herding behaviour has a diverse characteristic with huge implications for financial markets. By consolidating theoretical frameworks and empirical evidences, this review includes the prerequisite for ongoing assessment concerning its drivers, signs, and results to energize more grounded and successful markets.

## **5. CONCLUSION**

The examination of herding behaviour in financial markets features its critical influence on market dynamics, investment decisions, and overall financial relentlessness. Through an organized study of theoretical frameworks, empirical evidences, and influencing factors, this article gives a complete understanding of herding behaviour and its implications. Firstly, herding behaviour is recognized as an obvious idiosyncrasy where investors centre around group behaviours

over independent analysis, often driven by psychological biases and social components. Deviating from random market fluctuations, herding is depicted by conscious patterns of mimicry influenced by factors, for instance, fear of missing out (FOMO), social affirmation, and the yearning for social conformity. Theoretical models by Keynes, Bikhchandani, Sharma, and Akerlof highlight frameworks, for instance, informational cascades and psychological biases, offering fundamental pieces of information into the drivers of herding. These frameworks underline the importance of understanding the drivers behind herding behaviour to properly address its effects on market efficiency.

Second, the empirical evidence generously endorses the presence and results of herding in financial markets. Context oriented examination of major historical financial events, similar to the dot-com bubble and the 2008 financial crisis, typify how herding heightens market volatility and prompts asset mispricing. Quantitative assessments uncover the patterns in trading volumes and price movements consistent with herding tendencies, particularly during periods of market stress. These evidences confirm that collective behaviour among investors can result in market inefficiencies, where assets prices deviate from their fundamental values due to the influence of widespread herding tendencies.

Third, the components driving herding behaviour are multifaceted, including psychological, social, and financial factors. Psychological drivers include yearning for social conformity and the avoidance of individual responsibility, while social variables involve the visibility of others' actions and media influence. Financial drivers, including market sentiment and information availability, further compound the likelihood of herding. By understanding these drivers, market participants might recognise the conditions under which herding is more likely to occur and its potential consequences. Finally, the impact of herding behaviour on financial markets is expansive, leading to market inefficiencies, mispricing of assets, and increased volatility. The tendency for investors to drive prices beyond their fundamental values can create asset bubbles, which are followed by abrupt market corrections when collective behaviour shifts. The destabilizing effects of herding can undermine market efficiency and increase risk for investors. By recognizing the implications of herding, investors, policymakers and market regulators can develop strategies to ease the troublesome consequences of herding and enhance market stability.

## CONFLICT OF INTERESTS

None.

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