ISSN: 2349-5162 | ESTD Year: 2014 | Monthly Issue



# **JOURNAL OF EMERGING TECHNOLOGIES AND** INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

# **EXAMINING HOW PSYCHOLOGICAL** VARIABLES AFFECT EVENTS SUCH AS **BUBBLES, CRASHES, AND MOMENTUM TRADING**

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#### **Abstract**

Behavioural finance bridges the gap between traditional finance and psychology, through examine how cognitive errors and emotions of humans are influence outcomes of the market like bubbles, momentum and crash trading. The behavioural finance acknowledges that psychological biases, like loss aversion, overconfidence and herd behaviour play an important role in market dynamics. A qualitative approach by using the secondary data from scholarly articles, financial reports, and books is employed to evaluate the events of the market. The research aims to explore the understanding of the psychological behaviour of investors and its implications for the efficiency of the market. Through providing insights into how the dynamic of cognitive biases are affect the outcomes of the market, this study explores the behavioural finance growing field, offering practical recommendations for policymakers, financial institutions and investors to mitigate risks that arise from the irrational behaviour of the market.

Keyword: Behavioural finance, psychological, cognitive, trading, momentum, crashes, bubble, market

#### Introduction

Financial market evolution is marked by the interval of sudden collapses and irrational exuberance through challenges to the assumption of rational behaviour of investors. Traditional finance theories like efficient marketing hypotheses suggest that the market reflects all of the available information, with prices adjusted by actions related to the actions of rational investors. Hence behavioural finance is an emerging discipline content to the cognitive biases and psychological factors impacting the movements of the market. Events like momentum, crashes and bubble trading are the consequence of collective irrationality. Through integrating insights from the existing research, this paper allows to analyse how cognitive biases are contribute to the financial anomalies and offer practical strategies for promoting efficient and stable markets.

Bubbles occur when the price of assets rises beyond the intrinsic value because of speculative enthusiasm. Crashes act for rapid deflation of the inflated price which is often driven by panic and fear. Momentum trading wherein the investors follow the recent emerging market trends is explained through behavioural finance. Psychological biases like loss aversion, herding or overconfidence can lead the investors to get deviate from rationality and create inefficiencies in the market. A useful technique for identifying these irregularities is behavioural finance, which illuminates the psychological foundations of what appear to be irrational market behaviours (Bhanu, 2023). Investors can better understand the subtleties of market movements and negotiate the complexities of a constantly shifting financial landscape by acknowledging the impact of cognitive biases, emotional reactions, and social interactions. Analysing these dynamics is critical for policymakers and individual traders seeking to mitigate market instability risk.

## **Research Aim and Objective**

#### Aim

The research aims to analyse the impact of psychological variables on financial anomalies, like bubbles, crashes, and momentum trading, within the behavioural finance framework.

# **Objectives**

- To explore the influence of cognitive biases on investor decision-making.
- To identify the role of herd behaviour in the formation of market bubbles and crashes.
- To evaluate how overconfidence and loss aversion contribute to momentum trading.
- To analyse strategies this can focus on mitigating the impact of psychological biases on financial markets.

#### **Literature Review**

As per (Padmavathy, 2024), understanding that investors frequently exhibit cognitive biases that affect their perceptions and decisions is a fundamental tenet of behavioural finance. Cognitive biases such as loss aversion, overconfidence, and anchoring bias can distort judgments and result in selling peculiarities. However, this study focuses on how comprehending the oddities of the stock market needs social dimensions consideration related to investing choices. Herd behaviour causes the investor to follow the majority without any comprehensive examination and it also results in an unjustified rise of asset value because of momentum on behalf of fundamental factors. Less-than-ideal investing decisions may arise from investors' overestimation of their abilities, heavy reliance on prior knowledge, or increased fear of losses relative to rewards. Phenomena like market crashes and bubbles have recurred throughout history and reflect volatile nature of the financial markets (Ahmad, 2023). In the financial markets, emotions play an important yet underestimated role, as these emotional extremes are contribute to the volatility of the market while presenting opportunities as well as risks for astute investors.

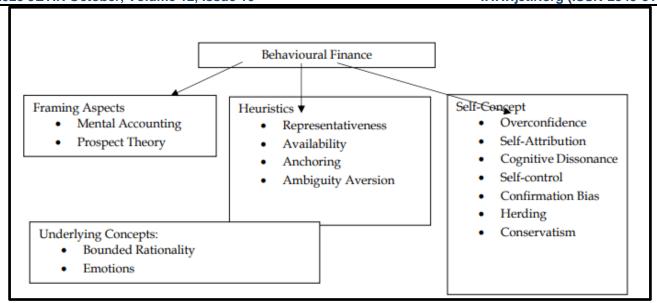


Figure 1: Classification of behavioural finance

(Source: Agrawal et al. 2024)

As mentioned by Agrawal et al. (2024), fear and greed are among some of the emotions which affect investors and magnify market anomalies. These psychological elements cause market instability by interfering with price equity and efficiency relative to fundamental values, opening the door for profits for knowledgeable traders. Other than fear and grief, hope is another strong emotional factor of the market that frequently prompts investors to hang on to the position of losing in the hopes of a recovery (Chatterjee and Nayyar, 2024). Therefore, behavioural finance is a field of finance that is essential to determining the causes of these trends as well as anticipating and averting their detrimental effects. The behavioural finance perspective's strength is that it incorporates psychology into financial decision-making models, offering a more illuminating method of comprehending markets. Thus, this blend of viewpoints not only helps to increase the precision of investment activities and market forecasts but also forms the foundation for creating and enhancing laws that govern financial markets and safeguard investors' rights.

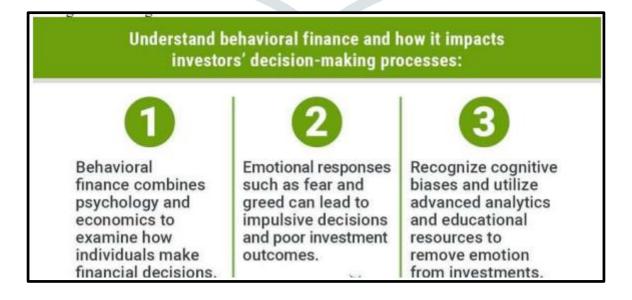


Figure 2: Behavioural finance and its impact on the decision-making process of investors

(Source: Madhuri and Shankar, 2024)

Psychological elements like overconfidence, anchoring, herd mentality, loss aversion, etc, can cause deviations and drive market anomalies from the expected patterns of finance, like market crashes, stock bubbles, or momentum trading that gets tough for traditional finance to explain. For example, during market exuberance or panic, the investors may make decisions which defy the rational expectations and lead towards extreme volatility (Madhuri and Shankar, 2024). However, the study on the digital platform reveals that algorithmic models and high-frequency trading can easily explore these types of biases through contributing to market volatility and manipulations. This emerging landscape of digitalise availability suggests that the behavioural finance is continuously adopted to explore the psychological complexities of investors within the digitised and information-saturated environment.

# Methodology

The following research is a study that intends to investigate and collect information from existing research and data accessible regarding the subject. The following research focused on collecting the information through the application of secondary data collection methods for the collection of qualitative data. Secondary data comes from published sources, which means that someone else has already collected the data for a different purpose and can use it for other research objectives (Taherdoost, 2021). The data hence collected includes information from published reports, academic articles, books, financial reports, credible web-based resources and research studies from accessible and available sources for information. The development of the following research is done in association with the research objectives that intend to investigate "psychological variables affect on trading events such as bubbles, crashes, and momentum" concerning the influences of the former on the latter.

The data collection executed a purposive sampling for the accumulation of search-based data collection procedure as a means for the selection and integration of research information about the study. While data collection techniques aid in the planning of sound research, they do not always ensure the project's overall success (Taherdoost, 2021). The collected data was evaluated and further investigated to evaluate the effect of psychological variables on trading events. This is followed by data analysis of the secondary data related to this specific study subject. The results section displays the examined empirical data that had been gathered and evaluated hence using secondary data collection and analysis procedures under the focus of an exploratory research design.

# **Discussion**

The interplay between financial and psychological decision-making has keen implications for market efficiency and stability. Bubbles are focused on driving the speculative behaviour which often starts with positive trends in the market and fundamental innovation dynamics. Hence, herd behaviour for amplifies the demand, and excitement building and pushes the price to unsustainable levels. Cognitive biases like overoptimism and confirmation bias are exacerbate this trend, as the investors are seek for information that reinforces their belief in the rise of price. There are also different occasions when the psychological factors and their fundamentals work together and give a great advantage to the investors (East and Wright, 2024).

Trading based on the influences of psychological dynamics can lead towards capital misallocation and increase the prices of swings. The Housing Bubble of 2008 revealed how the dynamic of collective irrationality for destabilised economies (Madaan, 2023). In contrast, of which market crashes follow the tipping point where loss and fear aversion dominate the investor psychology and lead to liquidity crises and mass sell-offs.

Momentum trading reflects another facet of behavioural finance. Momentum trading in foreign exchange, commodity markets and equity crypto currencies gives fertile ground for strategies related to momentum (Tzouvanas et al. 2020). Overconfidence drives the traders to believe in the ability to predict the trends of the future, while anchoring bias, where the investors generally rely heavily on the current performance and sustain the strategies related to the momentum trading dynamic. Investors often overestimate their capacity to forecast market trends or determine stock values. Excessive trading brought on by overconfidence can hurt returns because of poor timing and transaction costs (Tomar and Chauhan, 2020). According to research, overconfident investors are more likely to take chances and frequently underestimate the possibility of losses. Momentum effects continue in both commodity and equity markets, challenging the market efficiency notion. However, the dynamic related to behavioural biases are generally introduces the risk factors. When the momentum trades are reversed, investors are face some significant losses, which highlight the psychological influences nature.

Market crashes, price bubbles and the persistent existence of anomalies are reveal behavioural finance influences on financial markets. Investor education and financial regulations are among the critical tools which help in mitigate psychological biases impact. Behavioural insights help in implementing policy interventions, like circuit breakers to curb panic selling at the time of crashes. Encouraging a long-term investment strategy can prevent short-termism align with the momentum trading dynamic. Understanding behind market behaviour psychological drivers helps in enabling better practices of risk management and informed investment strategies. Price falls are caused by the investor's cognitive biases like overconfidence or partiality and herd biases. However such biases can also lead to cognitive biases for securities mispricing the investor may expect much in returns from the stock market fall until it rationally uses some of the certain deviations of behaviour (Sabouri and Ebrahimi, 2022). Behavioural finance seeks to influence the psychological processes of decision-making.

## Conclusion

Behavioural finance are offers a powerful framework to analyse the influences of psychological variables in shaping the financial markets. Through evaluating the roles of cognitive biases in momentum, bubbles and crash trading, this study explores traditional finance model limitations. The cognitive errors, like herd behaviour and overconfidence, drive outcomes of the irrational market, leading to systemic and inefficient risks. However, insights from the dynamic of behavioural finance present opportunities for effective investment strategies of market and market regulation. The market anomalies are explored irregularities or deviations in financial market behaviour which contradict assumptions and predictions of theories of traditional finance market like efficient marketing hypotheses.

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