

A Study on Behavioural Biases and Market Dynamics: An Empirical Study of Overconfidence and Herding Behaviour among Equity Investors in India by Using the Structural Equation Modelling (SEM)

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Abstract

In the last few decades, the traditional notion of investor rationality has given way to more behaviourally-inspired approaches in financial theory. Now a mature field, behavioural finance has revolutionised thinking and thrown out a big challenge to conventional wisdom, as it has brought to light the effects of psychological biases on financial decision making. Of these overconfidence and herding is recognised as two key behaviours that have a significant influence on investor behaviour, especially in emerging markets like India.

In this study, the authors empirically analyse the effect of overconfidence and herding on investment decision making and market dynamics. The study is quantitative in nature as the primary data will be collected through a structured questionnaire from the Equity Investors of the selected areas in India. The results indicate that overconfidence ($\beta = 0.44$) and herding ($\beta = 0.38$) have significant positive effects on the investment decisions as revealed by the sample of 100 retail investors and SEM analysis. Construct validity was ensured by designing the measurement instrument based on validated scales from the literature in behavioural finance that was generated in the previous studies. The advantage of SEM is that it can be used to estimate both direct and indirect relationships among latent variables in the same model.

The findings show that overconfidence leads to excessive trading and risk taking, while herding behaviour leads to conformity-driven trading and risk taking. Further, the relationship between behavioural biases and the market dynamics is notably mediated by investment decision-making. The study adds to the methodological body of knowledge by using SEM to estimate both direct and indirect effects of behaviour in an integrated framework. Together, these behaviours lead to price differences, market volatility and price deviations from fundamental values. The research has a significant contribution to the behavioural finance literature as it offers empirical data on the Indian case and has practical implications on investors, policy-makers, and financial educators who want to facilitate more informed and rational investment behaviour.

Keywords: Behavioural Finance, Overconfidence bias, Herding behaviour, Investment decision-making, Structural Equation Modeling (SEM)

1. Introduction

1.1 Background of the Study

Financial theory has gone from the notion of perfect rationality to a more realistic view that features behavioural elements. Conventional finance, based on neoclassical economic theory, is based on the premise that investors are rational agents who seek to maximize their expected utility. The Modern Portfolio Theory (Markowitz, 1952) and the Efficient Market Hypothesis (Fama, 1970) are all founded on this premise.

According to the Efficient Market Hypothesis (EMH) asset prices reflect all available information (Fama, 1970). But this is in contrast with the empirical evidence from financial markets. Speculative bubbles, unanticipated market collapses and persistent anomalies contradict the idea of perfect rationality. Various market anomalies have been empirically recorded such as overreaction and underreaction of information (De Bondt and Thaler, 1985) and momentum effects of stock returns (Jegadeesh and Titman, 1993).

Such empirical findings suggest that market participants do not always behave in a completely rational manner. Instead, they are mostly influenced by mental barriers, emotionality and biases. This has led to the creation of a multi-disciplinary field, behavioural finance, which comes from the field of psychology and economics. Behavioural finance suggests that investors use heuristics and cognitive shortcuts, which may result in

systematic biases in decision-making processes (Tversky and Kahneman, 1974). The Prospect Theory (Kahneman and Tversky, 1979) is another theory that has emerged to explain the inequality in the way people assess gains and losses, and their risk averseness and risk-seeking behaviour in certain situations.

In this context, particularly significant constructs have been identified as overconfidence and herding behaviour. Investors have a tendency to overestimate their knowledge and predictive abilities (Odean, 1998; Barber and Odean, 2001) and to copy other investors, especially when they are uncertain (Bikhchandani and Sharma, 2000). Such predispositions are not just individual at the micro level; they also manifest themselves in the market dynamics that include price formation and volatility.

1.2 Context of the Study: Indian Equity Market

Over the past 20 years the Indian equity market has witnessed tremendous changes in its character and is among the liveliest markets in emerging economies. Regulatory changes, technology and greater financial inclusion have led to its growth and development. Institutions such as the Securities and Exchange Board of India (SEBI) have played an important role in enhancing transparency, safeguarding the interests of investors and ensuring the soundness of the market (SEBI Annual Report, 2022).

The high rate of growth in the participation of retail investors is a characteristic feature of the modern Indian equity market. The entry barriers have been greatly reduced by the large-scale use of digital trading platforms as well as mobile applications, meaning that a larger portion of the populace can now engage in equity markets. As per the information shared by the National Stock Exchange of India, the number of investors who registered has seen a significant rise, particularly during the pandemic times (NSE, 2023 Investor Base Report).

The growth in this sector provides greater financial inclusion but also raises the risk of markets facing behaviourally induced inefficiencies. Retail investors usually have different financial literacy, experience, and access to the quality information. Many of them are from unofficial sources such as social media, financial influencers and peer groups, which do not always provide accurate and impartial information.

Unlike the developed market, the domestic equity market is highly dependent on individual investors, the developed market is controlled by the institutional investors (SEBI, 2022; NSE, 2023). Sentiment, speculation and group decision-making, therefore, are generally responsible for the behaviour of the market. Particularly, behavioural biases like overconfidence and herding are applicable in this scenario.

The effect of overconfidence bias can increase trading activities and risk miscalibration, and the herding effect can cause decisions to be made in order to conform to other traders, both of which can impair price discovery mechanisms. In contrast, herd behaviour has a socializing effect, pushing investors to follow the crowd without analysing the situation. Such preferences can serve to create a misalignment of prices, price volatility, and price dislocation of the underlying values.

1.3 Statement of the Problem

The main assumption of the classical financial theories is that investors are rational and markets are indeed efficient in the sense that they use all the information available (Fama, 1970). Nonetheless, there are continuing empirical anomalies and market behaviour which point otherwise. Rationality may be aberrated by psychological biases that cause investors to make suboptimal decisions and market inefficiency.

But the surge in retail investors has intensified these worries in India. Greater access to financial markets is good, but it also sparks a number of questions about the quality of the investments. In particular, retail investors may not have the expertise to make decisions and be influenced by heuristics or social cues.

In fact, one of the most significant biases that can influence investor behaviour is overconfidence, and herding behaviour is another one. To correct excessive trading and poor portfolio performance caused by overconfidence, and collective misjudgements and market inefficiencies caused by herding, both of which are associated with these behaviours (Barber & Odean, 2001; Bikhchandani & Sharma, 2000), respectively.

Although there has been an increasing number of publications examining these biases, most of them have focused on just one bias at a time. The combined effects of these and how they impact on market dynamics is under-researched. In addition, the literature on the impact of behavioural bias on market dynamics through the mediation of investment decision making is still under-researched in emerging markets. This gap requires an integrated empirical study with advanced analytical method for capturing complex interrelationships of behaviour that would be required in the study.

1.4 Research Objectives and Hypotheses

Behavioural constructs need to be investigated using a well-structured set of research questions and a theoretically important set of hypotheses in a framework of Structural Equation Modelling (SEM). In recent years, investor behaviour has become increasingly intricate, especially with regard to the behavioural biases that affect market performance, so the present study uses a systematic approach to recognise, measure and examine the impact of the most important behavioural biases.

The formulation of objectives and hypotheses is guided by established literature in behavioural finance, particularly studies examining overconfidence (Barber & Odean, 2001; Odean, 1998) and herding behaviour (Bikhchandani & Sharma, 2000), as well as theoretical insights from noise trader models (De Long et al., 1990).

1.4.1 Research Objectives

The study is designed to address the following specific objectives:

1. **To examine the extent of overconfidence bias among equity investors in India.**
The aim of this objective is to know how investors feel about their own knowledge, analytical skills, and predicting market movements.
2. **To examine the herding behaviour among investors.**
It will determine the extent to which investors are dependent on the activities and views of other people instead of making decisions on their own.
3. **To determine how the overconfidence bias affects the investment decision-making process.**
This goal assesses the hypothesis that overconfidence results in more trading, more risk-taking and possibly less optimal decisions.
4. **To assess the effect of the way people are herded on investment choices.**
It examines whether imitation and social influence significantly shape investor choices.
5. **To explore the impact of investment decision making on market dynamics.**
This encompasses the insight into how the personal decisions, taken together, lead to volatility, price fluctuation and market inefficiencies.
6. **To study the mediating role of investment decision making.**
This objective is especially important, in that it delves into the indirect effects of behavioural biases on the market through investor behaviour.

1.4.2 Hypotheses Development

Despite extensive literature, limited studies have examined the combined influence of overconfidence and herding behaviour within an integrated SEM framework, particularly in emerging markets such as India. Based on the theoretical and empirical literature, the following hypotheses are proposed:

Overconfidence and Investment Decisions

Overconfidence bias leads investors to overestimate their knowledge and underestimate risks. As documented by Barber and Odean (2001), such investors tend to trade more frequently, often to their disadvantage. Drawing on the theoretical and empirical foundations discussed above, the following hypotheses are formulated to empirically test the proposed relationships.

H1: *There is a positive strong influence of overconfidence bias on investment decision-making among equity investors.*

Herding Behaviour and Investment

The herding behaviour has the tendency of following others, especially in unpredictable markets. This action decreases the dependency on the personal information and amplifies conformity (Bikhchandani and Sharma, 2000).

H2: *The effect of herding on the investment decision making process among equity investors is significant and it is positive.*

Investment Decisions and Market Dynamics

When aggregated, investment choices affect market performance in terms of price changes and fundamental value deviations (De Long et al., 1990).

H3: *Investment decision-making has a significant effect on market dynamics in the Indian equity market.*

Indirect Effects of Overconfidence

The overconfidence not only influences the individual decision-making, but it also has an impact on the market outcomes in terms of trading behaviour and risk-taking patterns.

H4: *Market dynamics because of investment decision-making are significantly influenced by overconfidence bias indirectly.*

Herding Effects on the Indirect Effects

Herding is also a cause of coordinated trading behaviour, which can enhance markets and volatility.

H5: *Herding is an important indirect influence on the market dynamics via investment decision-making.*

2. Literature Review

2.1 Theoretical Foundations of Behavioural Finance

Behavioural finance is a new paradigm that challenges the traditional financial theory. The classical models, especially the theory of efficient market hypothesis (Efficient Market Hypothesis, 1970), are based on the premise that investors are rational, markets are efficient, and prices incorporate all of the information available. However, the assumptions, based on empirical data, remain inconsistent, and this is a limitation.

The idea of bounded rationality, presented by Simon (1955), that people are limited in their information, cognitive processing and time was one of the earliest challenges to this paradigm. People do not always optimize, they tend to “satisfice” and use a simplified decision rule.

Expanding on this, Kahneman and Tversky (1979) have shown the way individuals assess outcomes as relative to a reference point, rather than as absolute utilities. For the investors Losses are felt more strongly than gains, creating loss aversion. This insight radically changed the way risk behaviour is viewed in financial settings.

Additional works by Tversky and Kahneman (1974) put forward the heuristics and biases framework which identified patterns of decision-making. The investors employ characteristic mental shortcuts, such as representativeness, availability and anchoring. As complex decisions become easier to make, these heuristics can lead to predictable biases in as much as they do so.

In financial markets, these biases are manifested in clear observable patterns. The noise trader theory of De Long et al., (1990) reminds us of these irrational investors with sentiment, who can have an outsized effect on asset prices that is hard to be corrected rationally. Shleifer and Vishny (1997) do similarly propose that the limits to arbitrage create a market environment in which rational traders cannot fully unravel mispricing, which leaves room for behavioural biases to remain.

Giving a broader context, overconfidence and herding behaviour are recognized as two main processes linking the psychology of the individual to the performance of a market. Overconfidence can be attributed to self-attribution and illusion of control, and over herding can be attributed to informational cascades and social conformity (Bikhchandani et al., 1992). As a whole, these biases offer a comprehensive account of market anomalies.

2.2 Overconfidence Bias

One of the most common and influential behavioural biases in financial decision making is overconfidence. It indicates the overconfidence of a person in his/her knowledge, forecasting skills and dominance of the outcomes (Odean, 1998).

There are several dimensions of overconfidence that are identified in the literature. Moore and Healy (2008) differentiate between overestimation, over precision and over placement. The combination of these dimensions affects the perceptions of investors on their capabilities in comparison to reality.

The results of overconfidence are always evident in empirical evidence. Odean (1998) discovered that investors that hold higher information about the information they have are more likely to trade more, which can lessen their net returns. Barber and Odean (2001) also established that overtrading because of overconfidence results in underperformance.

Daniel, Hirshleifer and Subrahmanyam (1998) give further insights when they associate overconfidence with mispricing. The overconfident investors are likely to over-re action to the privy information and under-reaction to the public signalling, which adds to the momentum and the reversal effects.

In emerging markets these impacts of overconfidence might be even stronger because of low financial literacy and the use of less formal information sources. Short-term success could lead investors to become overly confident, which can entice them to make risky investments. Recent research also suggests that overconfidence is related to market sentiment, increasing speculative trading activity in emerging markets (Barberis et al., 2018).

2.3 Herding Behaviour

Herding behaviour is the tendency of investors to follow the behaviour of others instead of basing their behaviour on their own information or analysis. This is especially common in the setting that is associated with uncertainty and information asymmetry.

Herding is theoretically based on the informational cascades (Bikhchandani et al., 1992), where the actions of other people are emulated by others, as they think that they have better information. This eventually results in a scenario of disregard of the private information and collective behaviour prevails.

Empirical research gives solid findings on herding in the financial markets. The study conducted by Christie and Huang (1995) revealed that more herding is evident in times when the market is stressful and Chang et al. (2000) noted that herding is more intense in emerging markets.

The increasing power of digital platforms and social media is a reinforcement of herding behaviour in the Indian context. Investors are getting increasingly exposed to the opinion of the crowd, which can influence their decision. This usually leads to coordinated trade patterns, which has a role to play in price volatility (Banerjee, 1992; Bikhchandani et al., 1992).

Herding can have important implications for market stability. It can cause asset bubbles when markets are in a bull market and it can intensify declines when the market is in a bear market. Therefore, herding behaviour is an important factor influence market dynamics.

2.4 Behavioural Biases and Market Dynamics

Behavioural biases have an impact on both individual decisions and market-level results. De Long et al. (1990) suggest that irrational investors can have continuing impacts on asset prices. These effects combined with the effect of limits to arbitrage (Shleifer & Vishny, 1997) cause continued deviations from fundamental values.

The tendency to become overconfident and trade more and more leads to volatility and the tendency to herd leads to synchronized behaviour. These two generate feedback loops which amplify market movements. This is especially true in developing economies where there is significant retail presence.

Importantly, the connection between behavioural biases and market dynamics is moderated by investment decision making. Individual decisions, with some biases, add up to determine market outcomes. This demonstrates the need to consider these interrelationships in an integrated perspective. The following hypotheses H3, H4 and H5 are formulated based on this theoretical linkage. Based on this theoretical linkage, three hypotheses (H3, H4, and H5) are formulated.

3. Research Methodology

The design of the present study is quantitative and explanatory in order to study the effect of behavioural biases to investment decision-making and market dynamics. Constructs like overconfidence and herding behaviour have latent and psychological components, thus this study uses Structural Equation Modelling (SEM) which is capable of estimating measurement and structural relationship simultaneously (Hair et al., 2019).

3.1 Research Design

The study design is a cross-sectional survey that involves the investor's behaviour at one particular time. This method is suitable for analysing behaviour constructs and their direct consequences on decision making processes.

3.2 Data Collection and Sample Profile

Structured questionnaire was used to collect primary data from the retail equity investors from selected areas of India. N = 100 valid responses were obtained after screening for completeness and consistency. The selected sample size (n = 100) is adequate for SEM analysis, especially according to the assumptions of PLS-SEM which suggest that the minimum sample size should be 10 times the maximum number of paths between the structural variables (Hair et al., 2019). Convenience sampling technique was used as not all participants could be reached, in generalizability this sampling technique is limited but it is commonly used in exploratory analysis in behavioural finance studies.

The sample having a diverse investor base:

- **Age Group:** Majority between 20–30 years (47.52%), followed by 30–40 years (38.61%), indicating a strong concentration of young investors
- **Gender:** 70.30% male and 28.71% female
- **Education:** Highly educated sample with 38.61% Postgraduates and 38.61% MPhil/PhD holders, followed by 19.80% graduates
- **Investment Experience:**
 - Less than 1 year: 40.59%
 - 1–3 years: 34.65%
 - 3–5 years: 8.91%
 - More than 5 years: 14.85%

This distribution indicates that the sample is predominantly composed of young, highly educated, and relatively less-experienced investors, thereby providing a relevant, though not fully representative, profile of active retail participants in the Indian equity market.

3.3 Measurement of Variables

All constructs are treated as latent constructs, measured by multi-item scales adapted from the literature:

- **Overconfidence Bias (OC):** Based on Barber and Odean (2001) and Odean (1998)
- **Herding Behaviour (HB):** Adapted from Bikhchandani and Sharma (2000)
- **Investment Decision-Making (ID):** Reflecting trading frequency, risk-taking, and responsiveness
- **Market Dynamics (MD):** Capturing perceived volatility and price deviations

All items were rated on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Five items were used for each of the constructs. Multiple items scales increase measurement reliability and minimize random measurement error.

3.4 Analytical Technique

The data was analysed by SEM (AMOS/SmartPLS) in two steps:

1. **Measurement Model (CFA)**
2. **Structural Model (Hypothesis Testing)**

This can be used for the validation of constructs and for testing the relationships between constructs at the same time. Bootstrapping (5000 resamples) was used to assess path significance. Bias-corrected confidence intervals were also examined for mediation effects. The maximum likelihood estimation was used for model estimation.

4. Data Analysis and Results

4.1 Descriptive Statistics

Prior to further analysis, the data set was checked for normality, missing values, and outliers. After screening there were no obvious missing data or outliers that affected the data set. The normality test value showed that the average skewness value was -0.545 and the kurtosis value was -0.260, which were within the range of acceptable values: ± 2 . The results indicate that the data meet the assumptions of normality required for SEM estimation.

4.2 Measurement Model Evaluation (CFA)

4.2.1 Reliability and Convergent Validity

The reliability and convergent validity are presented in Table 1. The Cronbach's alpha and composite reliability (CR) values of the constructs are all high and above the recommended value of 0.70 (Hair et al., 2019), indicating good internal consistency and reliability. All the factor loadings are greater than 0.60, which is acceptable for reliability of items. Moreover, the Average Variance Extracted (AVE) of each construct is greater than 0.50, which indicates good convergent validity. The results validate the robustness of the measurement model, and lessen concerns about construct validity. The results report good psychometric properties for the constructs allowing further structural analysis.

The general measurement model shows that it is reliable and valid and can be used for further analysis of the structural model.

Table 1: Reliability and Convergent Validity of Constructs

Construct	Items	Factor Loadings	Cronbach's α	CR	AVE
Overconfidence	5	0.67–0.84	0.83	0.88	0.59

Herding Behaviour	5	0.65–0.82	0.81	0.86	0.56
Investment Decisions	5	0.68–0.85	0.85	0.89	0.61
Market Dynamics	5	0.69–0.87	0.86	0.90	0.64

Note: OC = Overconfidence, HB = Herding Behaviour, ID = Investment Decisions, MD = Market Dynamics. CR = Composite Reliability; AVE = Average Variance Extracted.

4.2.2 Discriminant Validity

Table 2 presents the results of the discriminant validity tests. The Fornell-Larcker criterion was used to determine the discriminant validity and the square root of AVE was compared with the inter-construct correlation. The results suggest that for most constructs the square root of AVE is larger or almost as big as the corresponding inter-construct correlation.

But for some constructs, such as Herding Behaviour and Overconfidence, the correlation is almost the same as their respective $\sqrt{\text{AVE}}$ values, suggesting moderate overlap between constructs. However, the diagonal elements still are the highest for each row and column, indicating that each construct has acceptable discriminant validity.

In addition, the Heterotrait-Monotrait (HTMT) ratios were under the recommended cut-off of 0.85, lending further support for construct distinctiveness (Henseler et al., 2015).

Table 2: Discriminant Validity test using the Fornell-Larcker Criteria

Construct	OC	HB	ID	MD
OC	0.77			
HB	0.75	0.75		
ID	0.71	0.73	0.78	
MD	0.62	0.68	0.75	0.80

Note: Diagonal value represents the square root of Average Variance Extracted ($\sqrt{\text{AVE}}$).

4.3 Model Fit Indices

Multiple goodness-of-fit indices (Table 3) were used to assess the overall model fit. The results show that a good fit has been achieved between the model and observed data. The ratio of the chi-square to the number of degrees of freedom, or χ^2/df , is within an acceptable range of 2.18, which is much less than 3, suggesting an acceptable fit. Both Comparative Fit Index (CFI = 0.94) and Tucker-Lewis Index (TLI = 0.92) are above 0.90, which indicates a good incremental fit of the model.

Moreover, the Root Mean Square Error of Approximation (RMSEA = 0.054) is not exceeding the accepted value of 0.08, which indicates good approximation of the model to the population covariance matrix. The chi square statistic is sensitive to sample size but the ratio of chi square to the degrees of freedom in the model is more reliable.

The results presented in these indices overall indicate good to satisfactory model fit of the proposed structural model, which serves as an indicator of its appropriateness for subsequent hypothesis testing and structural analysis.

Table 3: Model Fit Indices for the Structural Model

Fit Index	Recommended Value	Model Value
χ^2/df	≤ 3	2.18
CFI	≥ 0.90	0.94
TLI	≥ 0.90	0.92
RMSEA	≤ 0.08	0.054

Note: Recommended threshold values based on Hair et al. (2019).

4.4 Structural Model and Hypothesis Testing

The results are quite strong evidence to support both hypotheses, H1: cognitive bias (overconfidence) has significant impact on investment decision and H2: social bias (herding) has significant impact, and the impact of cognitive bias (overconfidence) is comparatively strong (Table 4). The results indicate that cognitive bias has a stronger impact than social bias (overconfidence: $\beta = 0.44$; herding: $\beta = 0.38$). In addition, investment decisions have a strong impact on the market, suggesting that the behaviour of individual investors can cause volatility and price changes in the market. The results of bootstrapping (5000 resamples) further support the statistical significance of indirect effects at the 1% level, thus further substantiating the mediating role of investment decision-making. The findings taken together support the theoretical framework suggested, and underscore the importance of behavioural factors in determining market outcomes.

The mediation analysis also shows that the investment decision is an important transmission channel between behavioural biases (overconfidence and herd effect) and the overall market result. It is a good illustration of the indirect effect of psychological factors on the market by way of decision-making processes.

Table 4: Structural Path Estimates and Hypothesis Testing Results

Hypothesis	Path	β	t-value	p-value	Result
H1	OC $\rightarrow$ ID	0.44	5.62	<0.001	Supported
H2	HB $\rightarrow$ ID	0.38	4.91	<0.001	Supported
H3	ID $\rightarrow$ MD	0.53	6.34	<0.001	Supported
H4	OC $\rightarrow$ MD (Indirect)	0.23	—	<0.01	Supported
H5	HB $\rightarrow$ MD (Indirect)	0.20	—	<0.01	Supported

Note: Indirect effects significance assessed using bootstrapping (5000 resamples).

4.5 Key Findings

- When investors are over confident, they are more likely to be trading and taking risks in their investments.
- The importance of herd behaviour for investment decisions suggests that investors' behaviour is affected by social interactions and sentiment of the market.
- Investment decisions serve as a mediating mechanism that passes the impact of behavioural biases (overconfidence and herding) to the market.
- Behavioural biases have an indirect impact on market dynamics, which can lead to price fluctuations and market movements due to the aggregated behaviour of investors.

5. Discussion of Findings

The observations made in the present study support the main hypotheses of the behavioural finance theory, making the case that investor behaviour is not solely the product of economic calculations, but a systematic effect of psychological bias. The study provides a more comprehensive picture on how individual-level biases influence market outcomes by analyzing the joint impact of overconfidence and herding behaviour in a single Structural Equation Modeling (SEM) framework.

From the above results, it is concluded that the overconfidence bias has a significant positive effect on the investment decision making, which shows that investors who feel knowledgeable and skilled are more likely to take an active and risky investment decision. This is in line with the previously published research of Barber and Odean (2001), which shows that the overconfident investors are also more likely to overtrade, and that such overtrades can be detrimental to their performance. Likewise, Odean (1998) points out that these investors are mistakenly more certain of their private information, which results in less optimal decisions. The present study validates the findings and confirms that these behavioural tendencies are not exclusive to the developed markets, but are equally applicable in the Indian context with the rising participation of retail markets these impacts would be magnified.

The study also reveals that herding behaviour has a significant impact on investment decisions, suggesting that investors tend to follow the crowd, especially when markets are volatile. This is consistent with the theoretical model of informational cascades by Bikhchandani, Hirshleifer and Welch (1992), in which people replace their private information with the information they see around them. This is also confirmed by empirical evidence presented by Chang, Cheng and Khorana (2000), especially in emerging markets where information asymmetry is more prevalent. Based on the results obtained from the present study, it is found that the Indian equity market also has similar characteristics and customers' trading behaviour is influenced by peer behaviour, market sentiment, and channels of digital information. These results are in line with those of Barber and Odean (2001) and applicable to emerging markets. The results also suggest that behavioural biases have a synergistic effect, meaning that they tend to reinforce each other's effects on market inefficiencies.

The study also has a significant contribution to make in that it establishes investment decision-making as a significant mediating mechanism between behavioural biases and the dynamics of the market. Findings suggest that these decisions could be driven by overconfidence and herding and collectively have a greater impact on market-level effects, like price volatility and market movement, than individual behaviour. This result is similar to the predictions of noise trader models (De Long et al., 1990) that irrational trading behaviour can have long lasting effects on asset prices, particularly in the low arbitrage capacity case (Shleifer & Vishny, 1997).

Importantly, there seems to be a reinforcing feedback loop between overconfidence and herding behaviour. When investors are too confident about their informational advantage, they might begin trading, and when herding investors follow the trend emerging, they increase the trades. This interaction can lead to a more pronounced response of the market, resulting in higher price fluctuations both upward and downward. This is especially true of the Indian market, where the speed of information flow is accelerated by digital technologies and social media, pushing collective behaviour.

The conclusions also underscore the context dependency of emerging markets. There are several differences between the Indian equity market and its counterparts in developed markets, such as retail investors' share, financial illiteracy, and the presence of informational asymmetry. All this puts a setting that is conducive to the presence of behavioural biases having a greater influence on the results of the market. Consequently, prices do not necessarily move in line with fundamental values but rather by sentiment and herd behaviour.

Theoretically, the study supports the Efficient Market Hypothesis (EMH) limitations that markets are not always efficient because of the existence of behavioural biases over time. It simultaneously enriches the field of behavioural finance by consolidating a number of biases within a unified analysis and by testing the effect of these biases in an emerging market environment. The study has some limitations such as small sample size and

cross-sectional design. This study adds to the behavioural finance literature by providing empirical evidence to demonstrate a multi-bias interaction framework in an emerging market environment.

6. Policy Implications

This study has several important implications at various levels.

Theoretical Implications:

The study adds to the existing behavioural finance literature by combining the concepts of overconfidence and herd behaviour under an integrated framework of SEM. It introduces investment decision making as an intermediate step, providing a finer-grained picture of the influence of individual biases on market-level results, especially in emerging markets.

Practical Implications:

Investors should be aware of and control behavioural biases as these results illustrate. Excessive trading can be caused by overconfidence, and dependence on market sentiment instead of analysis can occur because of herding. By following best practices and evidence-based decision-making process, long-term performance can be enhanced.

Policy Implications:

The results indicate that regulatory authorities like the Securities and Exchange Board of India must enhance the investor education programs and make information more transparent. Policy measures which account for the behaviour of traders can be used to reduce the irrational trading and improve market stability.

10. Conclusion

The aim of the present study was to investigate the effect of behavioural biases namely overconfidence and herding behaviour on the investment decision making and the market dynamics in the Indian equity market. The study uses Structural Equation Modelling to thoroughly examine direct and indirect relationships between these constructs.

The results are clear: Behavioural biases are a strong influence on investor decisions and thus on market outcomes. When investors are too confident, they trade more and take more risks; when they follow the herd, they trade in line with the herd. When taken together, these behaviours erode the market's stability, causing market pricing to differ from fundamentals.

The study emphasizes the need to acknowledge psychological aspects in financial analysis, especially in emerging markets where the impact of behavioural factors is stronger. It questions the rational model assumption and highlights the importance of behavioural finance in the empirical investigation of the behaviour of the real-life market.

The results are especially notable in the Indian stock market. Retail investors' involvement in the markets, combined with the recent technological developments, has led to a situation where behavioural biases can have significant influence on market behaviour. It is therefore critical to correct these biases to be more efficient in the market and stable in the long run. Longitudinal designs and larger sample sizes could be used in future research to improve the generalizability and study dynamic behavioural effects as a function of time. Overall, the study highlights the importance of incorporating behavioural aspects into financial theory and policy to improve market efficiency and investor welfare.

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