

Behavioural Biases and Stock Market Price Movements: An Empirical Analysis of Investor Decision-Making in the Indian Equity Market

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Abstract: The conventional theory of finance is founded substantially upon the assumption that investors process information rationally, make utility-maximising decisions, and cause security prices to reflect available information with reasonable efficiency. Actual financial markets, however, repeatedly demonstrate patterns of investor behaviour that cannot be explained adequately through rational-choice models alone. Investors are human decision-makers whose judgments are affected by cognitive limitations, emotional responses, social influence, past experiences, reference points, and subjective perceptions of risk. Behavioural finance emerged to explain these departures from classical rationality and to examine their implications for asset prices, trading volume, volatility, market efficiency, and investment performance. The present article critically analyses the influence of behavioural biases on investment decision-making and stock-price movements with particular reference to the Indian equity market. It concentrates on overconfidence, loss aversion, disposition effect, anchoring, representativeness, availability bias, herd behaviour, confirmation bias, self-attribution, regret aversion, mental accounting, recency bias, and fear of missing out. Rather than generating artificial primary data, the article adopts an evidence-based empirical synthesis of established behavioural-finance research, Indian investor studies and official securities-market evidence. The analysis demonstrates that behavioural biases influence not merely the portfolio choices of individual investors but, when sufficiently correlated across market participants, can contribute to abnormal trading volume, momentum, reversals, price overshooting, volatility clustering and temporary departures of market prices from fundamental value. Indian evidence is particularly significant because rapid digitalisation, low-cost brokerage, mobile trading and growing retail participation have altered the composition and speed of securities-market participation. SEBI's recent evidence that a substantial majority of individual intraday and equity-derivatives traders incur losses illustrates the importance of examining the psychological processes accompanying speculative participation. The article argues that behavioural finance should not be understood as a rejection of market efficiency but as a complementary framework explaining why efficiency may vary across investors, securities, market conditions and time periods. The study concludes that investor education should move beyond conventional financial literacy toward behavioural literacy, while regulators, intermediaries and digital trading platforms should incorporate behavioural insights into investor-protection architecture.

Keywords: Behavioural Finance; Behavioural Biases; Investor Psychology; Indian Equity Market; Stock Prices; Overconfidence; Herd Behaviour; Loss Aversion; Disposition Effect; Market Sentiment; Retail Investors; Market Efficiency; Investment Decision-Making.

1. INTRODUCTION

Financial markets occupy a central position in modern economic systems because they mobilise savings, allocate capital, facilitate price discovery and enable investors to participate in the growth of productive enterprises. The effectiveness of these functions has traditionally been analysed through theories that assume rational investors, competitive markets and efficient incorporation of information into security prices. Classical and neoclassical finance therefore developed around an idealised economic agent capable of evaluating alternatives objectively, processing publicly available information without systematic psychological distortion and selecting portfolios in accordance with expected return and risk. The Efficient Market Hypothesis provided one of the most influential expressions of this tradition. Fama's formulation suggested that competitive financial markets tend to incorporate available information into prices, limiting the possibility of systematically earning abnormal risk-adjusted returns merely from already known information.

The rational-investor framework has enormous analytical value. It provides benchmark models against which securities can be priced and investment strategies assessed. Nevertheless, financial history repeatedly reveals episodes of excessive optimism, panic selling, speculative bubbles, momentum, overreaction, underreaction and unusually high trading volume that are difficult to reconcile with an interpretation of investors as perfectly rational processors of information. Even when the fundamental information available to investors is similar, individuals may interpret it differently because their decisions are influenced by prior beliefs, emotional states, social networks and psychological shortcuts. Consequently, price formation is not always an impersonal mechanical response to economic fundamentals. It can also reflect the collective psychological condition of market participants.

Behavioural finance developed at the intersection of finance, economics, psychology and decision science to examine precisely these phenomena. It does not assume that investors are irrational in every decision. Rather, it recognises that decision-making takes place under uncertainty, limited attention, incomplete information, cognitive constraints and emotional pressure. Investors therefore employ heuristics mental shortcuts that can be efficient in many circumstances but can also produce predictable errors. Tversky and Kahneman demonstrated that judgments under uncertainty are frequently affected by representativeness, availability and anchoring. Their research challenged the proposition that deviations from rationality are

merely random mistakes that disappear when aggregated across large populations. Instead, some errors are systematic and therefore potentially relevant to market outcomes.

Prospect theory subsequently provided a major theoretical foundation for behavioural finance by showing that individuals evaluate risky outcomes relative to reference points and are generally more sensitive to losses than equivalent gains. The value attached to outcomes is therefore asymmetric. Investors may become risk-averse when protecting gains but risk-seeking when attempting to avoid the realisation of losses. Such behaviour has obvious implications for portfolio management, security selection and selling decisions.

Behavioural considerations become particularly important when individual biases are correlated. A single investor's overconfidence is unlikely to influence the price of a heavily traded security. However, if large numbers of investors simultaneously extrapolate recent returns, imitate other traders, respond excessively to salient news or refuse to sell depreciating securities, the aggregate consequences can affect trading volume, liquidity and prices. Behavioural finance therefore establishes a conceptual bridge between micro-level investor psychology and macro-level market outcomes.

The Indian securities market provides a particularly valuable setting for behavioural-finance research. During the past decade, participation has been transformed by electronic know-your-customer procedures, low-cost brokerage, app-based trading, greater internet penetration and easier access to financial information. SEBI's Investor Survey 2025 describes digitalisation and low-cost investment platforms as important influences on investor access and behaviour and notes increased participation by younger and first-time investors. The survey also records a striking awareness-participation gap: approximately 49 per cent of surveyed households were aware of stocks or shares, while household participation was reported at 5.3 per cent; awareness of futures and options was substantially lower and household participation remained below one per cent.

Greater market access has substantial benefits. It promotes financial inclusion, democratises investment opportunities and reduces dependence upon traditional physical channels of financial intermediation. At the same time, frictionless digital access may increase the speed with which psychological biases become trading actions. Notifications, rapidly updating prices, social-media discussions, financial influencers, online communities, algorithmically recommended content and the ease of executing transactions can intensify attention toward

short-term market movements. The practical distinction between long-term investing and short-term speculation may consequently become blurred for inexperienced market participants.

Official Indian evidence reinforces the significance of this concern. SEBI reported in 2024 that more than seven out of ten individual intraday traders in the equity cash segment incurred losses in the period examined. In a separate updated study of the equity futures and options segment, SEBI reported that 93 per cent of individual traders incurred losses during FY2021-22 to FY2023-24 and aggregate losses exceeded ₹1.8 lakh crore over the three-year period. These statistics do not by themselves prove the presence of any specific behavioural bias. Transaction costs, market structure, information disadvantages and trading strategies also matter. Nevertheless, the combination of extensive retail participation, high trading frequency and widespread losses raises important behavioural questions concerning overconfidence, risk perception, loss chasing, self-attribution, herd behaviour and the attraction of short-horizon speculative opportunities.

Indian academic evidence likewise indicates that behavioural tendencies cannot be ignored. Prosad, Kapoor and Sengupta's study of investors in the Delhi-NCR region examined overconfidence, optimism and pessimism, herd behaviour and the disposition effect. Their evidence suggested that the incidence of biases differed according to demographic and trading characteristics, with overconfidence emerging as particularly important in their sample. Mushinada and Veluri subsequently identified relationships among investor rationality, self-attribution and overconfidence within the Indian context, while later work continued to emphasise that individual investors may exhibit behavioural biases while simultaneously adapting to changing market experiences.

An important implication follows: behavioural finance should not be interpreted merely as a catalogue of psychological mistakes. Its deeper significance lies in explaining how bounded rationality interacts with information structures, incentives, market institutions and social influence. Investors do not participate in isolation. Their decisions occur within an ecosystem comprising exchanges, brokers, analysts, investment advisers, institutional investors, financial media, online platforms, family networks and peer groups. Behavioural tendencies can therefore be amplified or moderated by the institutional environment.

The present article examines how behavioural biases affect investor decision-making and how the aggregation of such decisions may influence share-market prices in India. It adopts an analytical and evidence-based empirical approach rather than attributing every market anomaly to psychology. Particular emphasis is placed upon identifying the mechanisms through which biases can affect buying, selling, holding, portfolio concentration, trading frequency and responses to market information. The paper additionally evaluates the relationship between behavioural finance and market efficiency, examines international evidence and considers the implications for investor protection and securities-market regulation.

The central argument is that prices in well-functioning markets remain fundamentally connected to information concerning earnings, cash flows, interest rates, risk and economic expectations, but the pathway through which information becomes incorporated into prices is mediated by human behaviour. Investor psychology can alter the timing, magnitude and persistence of market responses. Behavioural finance therefore enriches rather than eliminates conventional financial analysis.

2. HISTORICAL BACKGROUND

The intellectual development of behavioural finance can be understood only in relation to the evolution of conventional financial economics. Early economic thought acknowledged the complexity of human motives, but twentieth-century economic theory increasingly relied upon formal models of rational choice. The rational economic agent became a methodological instrument through which complex market interactions could be transformed into mathematically manageable relationships. Investors were generally treated as individuals who preferred greater wealth to lesser wealth, evaluated probabilities consistently and selected portfolios according to expected utility. This analytical framework contributed greatly to the development of modern portfolio theory, capital asset pricing and theories of market equilibrium. In financial markets, rationality became particularly important because arbitrage was expected to discipline mispricing. Even if some investors behaved irrationally, sophisticated market participants would theoretically trade against them, causing prices to return toward fundamental value. Under this reasoning, individual psychology might explain personal investment mistakes without necessarily possessing systematic importance for market prices.

A major intellectual landmark was the development of the Efficient Market Hypothesis. Fama's 1970 review synthesised the emerging literature on informational efficiency and provided an influential framework for classifying market efficiency according to the information reflected in prices. Weak-form efficiency concerns information contained in historical prices; semi-strong efficiency concerns publicly available information; and strong-form formulations consider an even wider information set. The essential insight was that in competitive markets populated by profit-seeking participants, readily exploitable information should be rapidly incorporated into security prices. The theory had significant practical consequences. If publicly available information were already reflected in prices, consistently earning superior risk-adjusted returns through simple analysis would be extremely difficult. Market anomalies could arise, but their persistence would require explanation because profitable opportunities should attract arbitrage capital.

The efficient-market tradition did not necessarily require every individual to be perfectly rational. Market-level efficiency could theoretically survive individual errors if irrational decisions were independent and therefore cancelled one another, or if informed arbitrageurs corrected mispricing. Behavioural finance emerged partly by questioning these assumptions. Psychological errors may be correlated rather than independent. Moreover, arbitrage is not costless or riskless. If mispricing can persist longer than an arbitrageur can remain financially solvent, even sophisticated investors may hesitate to trade aggressively against market sentiment. Behavioural tendencies can consequently possess market-level significance.

The psychological foundation for this challenge was strengthened substantially by the work of Amos Tversky and Daniel Kahneman. Their research on judgment under uncertainty demonstrated that individuals frequently use heuristics to simplify complicated decisions. In their influential 1974 work, they identified representativeness, availability and anchoring as important mental processes that can produce systematic judgmental errors. Representativeness leads individuals to judge probabilities according to similarity with familiar patterns, even when statistical base rates deserve greater weight. Availability causes judgments to be influenced by how easily examples or events can be recalled. Anchoring causes estimates to remain excessively influenced by initial numbers or reference points even when adjustment is logically required. These concepts later became central to explanations of investment behaviour because financial decisions constantly require individuals to estimate uncertain future outcomes from incomplete information.

The development of prospect theory in 1979 represented an even more direct challenge to expected-utility descriptions of actual choice under risk. Kahneman and Tversky argued that individuals evaluate outcomes as gains and losses relative to a reference point rather than exclusively in terms of final wealth. They further demonstrated that people's responses to gains and losses are asymmetric and that the psychological effect of losses tends to exceed the effect of equivalent gains. Applied to financial markets, this framework suggests why an investor may behave differently toward a stock trading above its purchase price compared with another trading below it, even when the forward-looking economic prospects of both securities should logically determine the investment decision. The purchase price becomes a psychological reference point. Investors may quickly realise gains because doing so produces psychological satisfaction, while postponing the sale of losing positions in the hope that prices will recover and the loss will never need to be emotionally acknowledged.

By the early 1980s, financial economists were also documenting market behaviour that raised questions concerning simplistic interpretations of efficient pricing. Robert Shiller's research on stock-price volatility argued that movements in stock prices appeared too large to be justified solely by subsequent changes in dividends under the benchmark assumptions he examined. His work became influential because it shifted attention from whether individual investors make mistakes toward whether aggregate price fluctuations could sometimes reflect forces beyond changes in fundamental information. Behavioural finance subsequently offered possible psychological mechanisms through which excessive optimism, pessimism and changing investor sentiment might contribute to such fluctuations.

The mid-1980s produced two especially important contributions. De Bondt and Thaler investigated whether stock markets overreact to information. Their empirical evidence showed return patterns consistent with the possibility that securities that had performed extremely poorly could subsequently outperform securities that had previously performed extremely well. The findings were interpreted as consistent with investor overreaction and subsequent correction. The study was important not merely because it identified a market pattern but because it connected psychological evidence concerning exaggerated responses to financial-market outcomes. If investors extrapolate recent information too strongly or become excessively pessimistic about losers and excessively optimistic about winners, prices can move away from levels subsequently justified by fundamentals. Reversal then becomes possible when expectations are corrected.

During the same period, Shefrin and Statman developed the concept that became known as the disposition effect—the tendency to sell winning investments too early while holding losing investments too long. This insight linked prospect theory to observable trading behaviour. Investors often use purchase prices as reference points. Realising a gain confirms competence and creates emotional satisfaction, whereas realising a loss forces the investor to recognise that the earlier judgment was unsuccessful. Holding a losing security can postpone that psychological recognition. This tendency illustrates a wider principle of behavioural finance: economically identical outcomes may be treated differently depending upon how they are mentally framed.

The implications of behavioural finance expanded further during the 1990s through research on noise traders and limits to arbitrage. De Long, Shleifer, Summers and Waldmann developed models in which the beliefs of noise traders could affect prices and impose risks upon rational arbitrageurs. This contribution weakened the assumption that rational trading necessarily eliminates irrational price movements immediately. A security can remain mispriced if correcting the mispricing exposes arbitrageurs to substantial interim risk. The concept is especially important where sentiment can become more extreme before ultimately reversing. Rational investors may correctly identify overvaluation but still face losses if market optimism intensifies before fundamentals reassert themselves.

Behavioural research also increasingly recognised that investor biases interact. Overconfidence can cause investors to overestimate the accuracy of private information. Self-attribution can then reinforce overconfidence because profitable outcomes are interpreted as evidence of skill while unsuccessful outcomes are attributed to external events. Confirmation bias can encourage investors to search for information consistent with existing positions. Anchoring can prevent adequate revision of valuation estimates. Herd behaviour can cause investors to imitate prevailing market activity. In combination, these biases can produce reinforcing cycles. Rising prices validate optimistic beliefs, which stimulate additional buying, which produces further price increases, thereby seemingly confirming the original optimism.

During the late 1990s, behavioural finance moved from descriptive psychology toward formal asset-pricing models. Barberis, Shleifer and Vishny developed a model of investor sentiment capable of generating underreaction and overreaction from psychologically motivated belief formation. Their approach demonstrated that behavioural assumptions could be integrated into

rigorous financial models rather than remaining purely anecdotal descriptions. Daniel, Hirshleifer and Subrahmanyam similarly developed a model connecting investor overconfidence and biased self-attribution with patterns of security-market underreaction and overreaction. Hong and Stein subsequently offered a framework in which different types of traders and gradual information diffusion could generate underreaction, momentum and eventual overreaction. Collectively, these developments established behavioural finance as an important theoretical approach to understanding asset-price anomalies.

Empirical research on actual brokerage accounts further strengthened the field. Odean examined investor transactions and provided evidence concerning reluctance to realise losses. Barber and Odean later studied the investment performance of individual investors and demonstrated a relationship between high levels of trading and inferior net performance in their sample. Their analysis of more than sixty thousand brokerage households showed that heavily trading investors experienced a substantial performance penalty, providing influential evidence consistent with overconfidence-driven excessive trading. Subsequent research by Barber and Odean connected gender differences in trading frequency with overconfidence, further demonstrating how psychological characteristics can affect observable market behaviour.

The historical evolution of behavioural finance therefore reflects an important methodological transition. Earlier criticism of rational finance often consisted of identifying anomalies that standard theories could not easily explain. Behavioural finance advanced by proposing specific psychological mechanisms, constructing theoretical models and testing behavioural predictions using actual trading data. The field gradually shifted from asking whether investors are irrational toward asking which biases occur, under what conditions they become significant, how long their influence persists and whether institutional arrangements can reduce their consequences.

The development of behavioural finance in emerging markets followed a related but context-specific trajectory. Emerging markets often differ from mature markets in investor composition, institutional depth, information dissemination, financial literacy, liquidity, regulatory development and retail participation. These differences make it inappropriate to assume that behavioural effects documented in the United States or Europe will necessarily operate identically elsewhere. In India, the transition from physical share certificates and

broker-dominated trading toward dematerialisation, electronic exchanges and online brokerage dramatically altered the investment environment. The National Stock Exchange and the modernisation of trading infrastructure increased transparency, improved transaction execution and contributed to the development of a technologically advanced securities market. Dematerialisation reduced the operational difficulties historically associated with physical securities.

The next major transformation involved digital retail participation. Smartphones and inexpensive internet access changed how investors receive information and execute trades. Earlier investors might have depended upon newspapers, financial magazines, brokers or periodic company reports. Contemporary investors can receive real-time prices, corporate announcements, analyst commentary and social-media opinions within seconds. This informational abundance has not necessarily eliminated cognitive limitations. It can instead create a different form of bounded rationality: investors possess access to enormous quantities of information but limited capacity to evaluate its reliability and relevance.

Digitalisation thus alters the behavioural environment in several ways. First, it lowers transaction friction. A decision arising from excitement, fear or social influence can be converted almost immediately into a market order. Second, repeated exposure to price movements can shorten psychological investment horizons. Investors who monitor portfolios continuously may react to movements that would appear economically insignificant over a longer period. Third, social-media environments can make other investors' opinions unusually salient, potentially strengthening herd behaviour and availability bias. Fourth, gamified or highly interactive interfaces can make frequent trading psychologically engaging even where frequent transactions are not financially advantageous.

India's post-pandemic market experience intensified scholarly interest in such issues. Large numbers of individuals entered or became more active in securities markets during a period characterised by extraordinary economic uncertainty, sharp price movements, digital engagement and heightened public discussion of equities. Behavioural factors such as fear, optimism, regret, recency and social influence became particularly relevant. Indian research during this broader period examined the presence of heuristic biases and investor responses to unusual market conditions. Such studies are valuable because crises function as natural environments in which psychological tendencies may become more visible.

The Indian empirical literature had already begun identifying behavioural tendencies before the recent surge in digital participation. Prosad, Kapoor and Sengupta's 2015 study of the Delhi-NCR region systematically evaluated several important biases. Their survey concluded that behavioural biases varied according to investor demographic and trading characteristics and identified overconfidence as an especially prominent influence within their sample. This finding has major implications because overconfidence is theoretically associated with high turnover, concentrated portfolios, excessive belief in private information and insufficient appreciation of uncertainty.

Mushinada and Veluri later investigated self-attribution and overconfidence among Indian investors and provided evidence supporting the relevance of behavioural explanations within the Indian market. Importantly, later evidence also suggested that investors may adapt following losses or changing market conditions. This observation complicates any simplistic division between rational and irrational investors. Human decision-making can be both biased and adaptive. Investors may learn from losses, but learning itself can be imperfect. Some investors become more disciplined after adverse outcomes; others may increase risk in an effort to recover losses.

Research on herd behaviour in India provides another example of the need for contextual interpretation. Ansari and Ansari examined BSE-500 data covering 2007–2018 and found no general evidence of conventional herding across all market states; instead, they reported negative herding or movement away from consensus in important parts of the analysis, while identifying some evidence associated with particular liquidity and sentiment conditions. These findings are important because they demonstrate that behavioural finance should not begin with the assumption that a particular bias must always be present. Market behaviour must be empirically tested. The absence of conventional herding under certain conditions is itself a meaningful finding and may indicate heterogeneity among market participants.

The rise of derivatives participation has added another historical dimension to behavioural research in India. Derivatives are legitimate financial instruments serving important hedging, price-discovery and risk-management functions. Yet leveraged short-horizon trading can also magnify the consequences of mistaken probability assessments, overconfidence and loss chasing. SEBI's 2024 findings concerning individual traders provide important contextual evidence: the regulator reported widespread losses among individual equity-derivatives traders

during FY2021-22 to FY2023-24. Similarly, SEBI found that more than seven out of ten individual intraday traders in the equity cash segment incurred losses in the study period. These findings should not automatically be interpreted as proof of irrationality. Informed participants can lose money, and rational risk-taking can produce adverse outcomes. Nevertheless, persistent participation in activities where loss rates are exceptionally high warrants investigation of expectations, risk perception and behavioural motivations.

The historical development of behavioural finance has therefore moved through several stages. The first stage established rationality and market efficiency as essential benchmarks. The second stage introduced psychological evidence showing systematic deviations from expected utility and statistical reasoning. The third connected these biases to investment behaviour and market anomalies. The fourth developed formal behavioural asset-pricing models and empirical tests using actual investor transactions. The fifth, now increasingly important, examines behaviour within technology-mediated financial ecosystems where information, trading and social influence operate at unprecedented speed.

The Indian market represents this contemporary stage particularly well. It combines sophisticated market infrastructure with substantial heterogeneity in investor experience, income, financial literacy and risk tolerance. New investors interact with highly sophisticated institutional participants and algorithmic traders in the same marketplace. Information arrives rapidly, but the ability to interpret it remains uneven. Such conditions do not necessarily make markets inefficient; rather, they create a complex interaction between informed arbitrage, institutional capital, retail sentiment and behavioural trading.

Accordingly, the historical lesson of behavioural finance is not that investors are permanently irrational or that market prices are always wrong. The more defensible conclusion is that rationality is bounded, arbitrage has limits and psychological factors can influence both individual welfare and market dynamics. Price efficiency should consequently be treated as an empirical characteristic that may vary across securities, periods and institutional environments rather than an absolute condition existing identically at every moment. Behavioural finance provides the analytical tools necessary to examine those variations.

3. CONCEPTUAL AND THEORETICAL FRAMEWORK

Behavioural finance rests upon the proposition that economic choices are made by individuals whose cognitive and emotional capacities are limited. Three broad theoretical foundations are particularly relevant: bounded rationality, heuristic decision-making and prospect theory.

Bounded rationality recognises that investors cannot process every piece of relevant financial information. A modern investor deciding whether to purchase an equity security may theoretically consider financial statements, valuation multiples, industry conditions, interest rates, inflation, exchange rates, corporate governance, competitor behaviour, technological change and global economic developments. Complete analysis is impossible within practical time and cognitive constraints. Investors therefore simplify.

Heuristics perform this simplifying function. They can be useful because they reduce complex problems into manageable judgments. Difficulties emerge when a heuristic is applied inappropriately. An investor may conclude that a company is attractive simply because its product is popular, that a recently appreciating stock will continue to rise, or that a well-known company must necessarily constitute a good investment irrespective of valuation. Such judgments substitute easily available impressions for the more difficult task of estimating future risk-adjusted cash flows.

Prospect theory adds the emotional and reference-dependent dimension. Investors do not merely ask what a security will be worth; they often compare its current price with what they paid for it. This creates psychologically separate domains of gain and loss. Loss aversion can make the investor reluctant to close a losing position even when new information indicates deterioration in fundamental value.

The behavioural approach also relies upon the limits-to-arbitrage principle. Psychological biases would have limited relevance for aggregate prices if sophisticated investors could always eliminate mispricing immediately. In practice, however, arbitrage can involve fundamental risk, timing risk, financing constraints, short-selling restrictions and uncertainty concerning when mispricing will correct. Noise traders can therefore influence prices for meaningful periods.

4. MAJOR BEHAVIOURAL BIASES AFFECTING INVESTMENT DECISIONS

4.1 Overconfidence Bias

Overconfidence refers to excessive belief in one's knowledge, analytical ability or capacity to predict market outcomes. An overconfident investor underestimates uncertainty and overestimates the precision of personal information.

In the stock market, overconfidence can manifest through excessive trading, insufficient diversification and concentrated exposure to securities about which the investor feels particularly knowledgeable. Investors experiencing a few successful trades may conclude that profits resulted primarily from superior skill rather than favourable market conditions. This perception encourages greater risk-taking.

Overconfidence can influence stock prices when large numbers of investors respond strongly to subjective signals. Trading volume may increase beyond what changes in fundamental information would otherwise justify. Barber and Odean's influential evidence demonstrated that frequent trading can impose a substantial performance penalty upon individual investors, providing an important empirical link between excessive confidence, turnover and investor welfare.

Indian evidence supports the relevance of this bias. Prosad et al. identified overconfidence as particularly important within their Delhi-NCR sample, while Mushinada and Veluri documented relationships involving self-attribution and overconfidence among Indian investors.

4.2 Loss Aversion

Loss aversion describes the tendency for losses to generate greater psychological impact than equivalent gains. Investors therefore devote disproportionate attention to avoiding loss.

Loss aversion can influence portfolio decisions in contradictory ways. Investors may initially avoid risky equities because they fear capital loss. Once invested, however, they may become unwilling to sell depreciated securities because realising the loss causes psychological discomfort. Consequently, loss aversion can generate excessive conservatism before investment and excessive risk tolerance after losses occur.

When investors collectively refuse to realise losses, selling pressure may be delayed. Conversely, during severe market downturns, increasing fear can eventually generate abrupt liquidation, amplifying price declines.

4.3 Disposition Effect

The disposition effect is the tendency to realise profitable investments prematurely while retaining losing positions for too long. Shefrin and Statman formally connected this pattern with prospect theory and psychological accounting.

Suppose Investor A purchases a share for ₹500 and it rises to ₹600. The investor may sell to secure the satisfaction of a realised gain. If the same share falls to ₹400, the investor may refuse to sell because doing so transforms a paper loss into a realised loss. The economically relevant question—whether ₹400 is an attractive price given future prospects—is displaced by the psychologically salient purchase price of ₹500.

At market level, the disposition effect can influence trading volume and the speed at which information becomes reflected in prices.

4.4 Herd Behaviour

Herd behaviour occurs when investors imitate the decisions of others rather than relying primarily upon independent analysis. Herding can be informationally rational under certain circumstances. If an investor reasonably believes that other participants possess superior information, observing their actions can provide useful signals. Behaviour becomes problematic when imitation occurs without sufficient evaluation of fundamentals.

Rising prices can become self-reinforcing. Investors observe others buying, interpret the price increase as evidence of positive information, and enter the market. Their purchases create additional price increases, attracting still more buyers. A similar mechanism can accelerate market declines.

Indian evidence, however, is nuanced. Ansari and Ansari's BSE-500 analysis did not find conventional herding universally across market states and instead identified substantial evidence of negative herding, with more limited evidence appearing in particular liquidity and sentiment conditions. This illustrates why empirical testing is preferable to simply assuming that emerging-market investors always herd.

4.5 Anchoring Bias

Anchoring occurs when judgments are disproportionately influenced by an initial value or reference point. In equity markets, investors may anchor to purchase price, historical high, 52-week high, analyst target, IPO price or an index milestone.

An investor who purchases a share at ₹1,000 may continue to view ₹1,000 as its "correct" value even after fundamental circumstances materially change. If the stock falls to ₹700, the investor may perceive it automatically as cheap because it trades below the anchor, despite the possibility that revised fundamentals justify an even lower valuation. Anchoring can slow price adjustment to new information and contribute to underreaction.

4.6 Representativeness Bias

Representativeness encourages investors to infer future performance from superficial resemblance to past patterns. A company that has reported several quarters of strong earnings may be classified mentally as a "winner", causing investors to extrapolate recent growth too far into the future.

The bias can contribute to overvaluation of fashionable industries and undervaluation of temporarily unpopular sectors. It is closely connected to extrapolation and excessive interpretation of short histories.

4.7 Availability Bias

Availability bias causes investors to assign excessive importance to information that is recent, memorable or frequently encountered. Dramatic market crashes, highly publicised IPOs, social-media discussions and sensational corporate news can therefore disproportionately influence perceived probabilities.

A stock constantly discussed online may appear more important or attractive simply because it is cognitively available. Less prominent securities may receive inadequate attention even where their fundamentals are stronger.

4.8 Confirmation Bias

Investors affected by confirmation bias preferentially seek and interpret information that supports existing beliefs. A shareholder who is strongly optimistic about a company may follow commentators with similar views while dismissing critical analysis as uninformed.

Confirmation bias is dangerous because financial markets require continuous updating of beliefs. An investment thesis that cannot be falsified becomes increasingly disconnected from objective analysis.

4.9 Self-Attribution Bias

Self-attribution causes individuals to credit successful outcomes to personal skill while blaming failures on external circumstances. In rising markets, investors may interpret portfolio appreciation as evidence of exceptional ability even when broad market conditions account for much of the return.

This process strengthens overconfidence. Success increases confidence and generates greater trading; unsuccessful outcomes are discounted as temporary or externally caused.

4.10 Regret Aversion

Regret aversion reflects the desire to avoid emotional discomfort arising from a decision that later appears incorrect. Investors may therefore avoid selling losing securities, avoid purchasing unfamiliar securities or follow popular investment choices because making the same mistake as everyone else feels psychologically less painful than making an independent mistake.

Regret aversion can indirectly strengthen herding.

4.11 Mental Accounting

Mental accounting causes individuals to divide wealth into separate psychological categories rather than treating the portfolio as an integrated whole. An investor may classify dividend income as spendable while treating capital gains as untouchable, or may take aggressive risks with recent trading profits while remaining excessively conservative with salary savings.

Portfolio optimisation requires evaluating total wealth, objectives and risk exposure collectively. Mental segmentation may lead to inconsistent asset allocation.

4.12 Recency Bias

Recency bias gives disproportionate weight to recent events. After a prolonged bull market, investors may expect high returns to continue indefinitely. Following a market crash, they may become excessively pessimistic.

Recency can therefore contribute to momentum during rising markets and excessive caution following major declines.

4.13 Fear of Missing Out

Fear of missing out, or FOMO, has become increasingly relevant in digitally connected markets. When investors observe rapidly appreciating securities and public accounts of others' profits, the fear of being excluded from potential gains can overcome normal valuation discipline.

FOMO combines social comparison, herd behaviour, regret aversion and recency bias. It can be especially powerful where investment information spreads instantaneously through social platforms.

5. RESEARCH OBJECTIVES

The principal objectives of the study are:

1. To examine the major cognitive and emotional biases affecting investment decisions of equity-market participants.
2. To analyse the mechanisms through which behavioural biases can influence trading volume, market volatility and stock-price movements.
3. To evaluate empirical evidence concerning behavioural tendencies among Indian investors.
4. To examine the relationship between behavioural finance and the Efficient Market Hypothesis.
5. To compare Indian investor behaviour with relevant international behavioural-finance evidence.

6. To identify regulatory, educational and technological measures capable of reducing financially harmful behavioural decisions.

6. RESEARCH QUESTIONS AND HYPOTHESES

The study is guided by the following research questions:

- **RQ1:** To what extent do behavioural biases influence investment decision-making in the Indian equity market?
- **RQ2:** Which behavioural biases are most strongly associated with excessive trading, delayed loss realisation and trend-following?
- **RQ3:** Can correlated behavioural decisions contribute to temporary departures of stock prices from fundamental value?
- **RQ4:** Does increasing digital retail participation strengthen or weaken behavioural influences?

For a future primary empirical extension, the following hypotheses may be tested:

- **H1:** Overconfidence has a significant positive relationship with individual investors' trading frequency.
- **H2:** Herd behaviour has a significant relationship with investors' tendency to purchase securities following recent price appreciation.
- **H3:** Loss aversion has a significant positive relationship with investors' reluctance to sell loss-making securities.
- **H4:** Anchoring significantly influences investors' assessment of the fair value of securities.
- **H5:** Financial literacy and investment experience significantly moderate the relationship between behavioural biases and investment decisions.

7. RESEARCH METHODOLOGY

The present article adopts a **descriptive, analytical and evidence-based empirical synthesis**. It does not claim to report new questionnaire responses because no primary dataset has been

supplied. Such a distinction is methodologically necessary to prevent fabricated empirical findings.

The study draws upon three categories of evidence. First, foundational behavioural-finance literature is used to establish the theoretical relationship between investor psychology and market outcomes. Second, empirical research concerning Indian investors is examined to identify the behavioural tendencies documented within the domestic market. Third, official SEBI evidence is used to provide contemporary context regarding household participation, intraday trading and derivatives outcomes.

The dependent dimensions considered conceptually include investment decision, trading frequency, willingness to realise losses, portfolio concentration, response to recent market movements and reliance upon social information. Principal explanatory constructs include overconfidence, loss aversion, herding, anchoring, representativeness, availability, self-attribution, disposition effect and recency bias.

A future primary study could employ a structured questionnaire using a five-point Likert scale and collect responses from active retail investors across major regions of India. Reliability could be assessed through Cronbach's alpha and composite reliability. Exploratory and confirmatory factor analysis could validate behavioural constructs, while multiple regression or structural equation modelling could test relationships among behavioural biases, risk perception and investment decisions.

For market-level investigation, behavioural indicators can also be combined with stock-market data. Herding may be examined through cross-sectional return dispersion; overreaction may be tested through winner-loser portfolio reversals; sentiment may be related to turnover, volatility and abnormal returns; and the disposition effect may be examined using account-level transaction records. Such methodologies enable behavioural finance to move beyond self-reported attitudes toward observable market behaviour.

8. EMPIRICAL ANALYSIS OF INVESTOR DECISION-MAKING IN THE INDIAN EQUITY MARKET

The available evidence indicates that investor behaviour in India cannot be described adequately through a single rational-versus-irrational classification. The market contains heterogeneous participants with different information sets, experience levels, financial

objectives and psychological characteristics. Institutional investors, professional traders, long-term households, first-time investors and speculative derivatives traders interact within the same system.

One of the strongest empirical observations concerns overconfidence. Prosad et al.'s survey of Indian investors reported that biases varied with demographic and trading characteristics and found overconfidence particularly influential in their sample. Mushinada and Veluri similarly examined rationality, self-attribution and overconfidence among Indian investors. The convergence of these findings is theoretically meaningful. In digital markets where transaction costs are low and trade execution requires seconds, overconfidence can translate rapidly into turnover.

Trading outcomes reported by SEBI provide an important contextual test of whether active retail participation necessarily produces successful investment outcomes. SEBI's intraday study found that more than seven out of ten individual intraday traders in the equity cash segment incurred losses. Even more strikingly, the regulator's updated derivatives study reported losses for 93 per cent of individual equity F&O traders over FY2021-22 to FY2023-24. These figures should not be interpreted as direct estimates of overconfidence. Nevertheless, they reveal a gap between widespread participation in high-frequency or leveraged trading and the financial outcomes realised by many individuals.

Behavioural finance offers several possible explanations for persistence in such trading. Overconfidence may lead participants to believe that their probability of success is higher than that of the average trader. Self-attribution may reinforce confidence following occasional profits. Availability bias makes successful trades more memorable than numerous small losses. Loss aversion may convert investment into loss-recovery trading, whereby an investor takes additional risks to return to an earlier reference point. Variable reinforcement—occasional substantial profits among frequent losses—may further sustain speculative participation.

India's growing financial digitalisation also has important behavioural consequences. SEBI's Investor Survey 2025 identifies digital onboarding, low-cost platforms and app-based investing as important contributors to wider securities-market access. The survey also indicates that younger and first-time investors have become an increasingly important

component of the digital investment environment. This development is beneficial from the perspective of financial inclusion, yet it increases the importance of behavioural design.

Behavioural Biases and Stock-Price Movements

For individual psychology to affect market prices, biased decisions must be sufficiently correlated or concentrated. Several mechanisms are possible.

- **First, excessive trading and short-term demand pressure:** Overconfident investors can increase turnover by repeatedly acting upon information they believe is underappreciated by the market. If buying is concentrated in recently successful or highly visible securities, temporary upward price pressure can occur.
- **Second, trend reinforcement:** Representativeness and recency cause investors to extrapolate recent performance. Rising prices become interpreted as evidence of continuing superior prospects. Additional buying sustains momentum.
- **Third, information cascades:** Herding can cause individuals to ignore private judgments and follow observable market activity. Price changes then convey not merely fundamental information but information about other investors' behaviour.
- **Fourth, delayed correction:** Anchoring and confirmation bias cause investors to revise beliefs slowly. Negative information may therefore be incorporated gradually into prices, generating underreaction.
- **Fifth, eventual overreaction:** Once cumulative evidence becomes difficult to ignore, sentiment may reverse sharply. Investors who previously underreacted can become excessively pessimistic, producing overshooting.
- **Sixth, resistance to loss realisation:** The disposition effect may reduce willingness to sell securities below purchase price. Conversely, investors may sell winners quickly, producing asymmetric selling behaviour.

The relationship between behavioural biases and prices is therefore dynamic rather than linear. The same bias can generate different effects depending upon the market state.

9. BEHAVIOURAL BIASES, MARKET SENTIMENT AND VOLATILITY

Market sentiment represents the aggregate optimism or pessimism of investors toward securities or the market generally. Sentiment is influenced by fundamentals but need not correspond perfectly with them.

During strongly rising markets, positive sentiment can interact with overconfidence and representativeness. Investors observe appreciation, interpret it as confirmation of favourable expectations and increase exposure. Higher prices validate confidence, creating a feedback mechanism. During declining markets, loss aversion may initially delay selling, but persistent losses can eventually generate fear and capitulation.

This mechanism helps explain why behavioural finance is often especially relevant during periods of extreme market movement. Calm markets provide limited emotional stimulus. Rapid price changes, crises, unexpected policy decisions and speculative booms increase uncertainty and emotional intensity.

Volatility itself can produce behavioural responses. Rising volatility increases attention, which attracts speculative participation. Frequent monitoring can shorten investors' horizons. Short horizons then encourage additional trading, potentially contributing further to volatility. Behaviour and market conditions can therefore become mutually reinforcing.

10. BEHAVIOURAL FINANCE AND THE EFFICIENT MARKET HYPOTHESIS

Behavioural finance is frequently presented as a direct contradiction of market efficiency. This characterisation is unnecessarily simplistic. The two frameworks answer somewhat different questions.

The Efficient Market Hypothesis provides a benchmark concerning the incorporation of information into prices. Behavioural finance examines how actual human decision-makers interpret information and whether systematic psychological tendencies can influence price adjustment.

Fama's framework remains essential because competitive markets do contain powerful corrective mechanisms. Mispricing creates opportunities for sophisticated investors, institutional trading and arbitrage. Behavioural finance does not imply that psychological biases can move every security price indefinitely.

The more realistic question is whether arbitrage is sufficiently strong and immediate to eliminate behavioural effects. Behavioural models emphasise that arbitrage involves risk. A security perceived as overvalued can become even more overvalued before correcting. Short selling can be costly. Fundamental value itself is uncertain. Professional fund managers may face performance evaluation over periods shorter than the time necessary for correction.

Consequently, efficiency may be understood as a spectrum rather than an absolute state. Some highly liquid securities with substantial analyst coverage may incorporate information rapidly. Smaller or sentiment-driven securities may exhibit slower price discovery. During market crises or speculative episodes, behavioural effects may temporarily become stronger.

The Indian evidence on herding illustrates this complexity. Ansari and Ansari did not find universal conventional herding in their BSE-500 analysis and reported evidence consistent with negative herding across many conditions, with more specific evidence under certain liquidity and sentiment states. Behavioural theories therefore generate hypotheses to be tested rather than predetermined conclusions that investors must always behave irrationally.

11. INTERNATIONAL PERSPECTIVES

Behavioural finance has developed through evidence collected from numerous financial markets, although much of the foundational research originated in the United States. The international literature is important for India because it allows researchers to distinguish potentially universal psychological tendencies from market-specific institutional effects.

- **United States:** The United States has provided some of the most influential evidence concerning investor behaviour. De Bondt and Thaler's investigation of winner and loser portfolios documented return reversals consistent with market overreaction. Shefrin and Statman's work formally developed the disposition effect. Barber and Odean subsequently used brokerage-account data to demonstrate that investors who traded most aggressively experienced inferior net performance, consistent with theories of overconfidence.
- The American evidence demonstrates the value of transaction-level datasets. Survey responses indicate what investors believe they do; brokerage records reveal what they actually do. Future Indian research would benefit substantially from anonymised account-level datasets permitting similar analyses.

- **European Markets:** European behavioural-finance research has generally reinforced the proposition that psychological effects are not unique to one national environment. Disposition effects, sentiment, momentum and herd behaviour have been examined across numerous European exchanges. However, differences in investor composition, institutional ownership, disclosure regimes and market microstructure can influence the strength of behavioural effects.
- One important lesson from developed European markets is that sophisticated market infrastructure does not eliminate psychology. Technology can improve information availability while investors continue to differ in how they process that information.
- **Asian Markets:** Asian financial markets provide particularly relevant comparisons for India because many combine rapid economic development with substantial household participation and strong social networks. Behavioural patterns in several Asian markets have been studied in relation to herding, momentum, speculative trading and sentiment.

Cultural and institutional factors may influence how biases appear. Where investment decisions are frequently discussed within families, social groups or online communities, social influence may become especially significant. However, researchers should avoid stereotyping national investor populations. Differences within countries can be greater than average differences between them.

- **Emerging Markets:** Emerging markets are often considered particularly suitable for behavioural analysis because of differences in information efficiency, investor sophistication, liquidity and institutional development. Yet the label "emerging market" should not automatically imply irrationality. India's major exchanges possess advanced electronic trading infrastructure and sophisticated institutional participants.
- The more important issue is heterogeneity. Emerging markets may simultaneously contain technologically sophisticated institutions and relatively inexperienced retail participants. Behavioural influences can therefore vary substantially across investor categories.

Comparative Significance for India

Three international lessons are particularly important for India.

First, behavioural biases are not uniquely Indian. Overconfidence, loss aversion and disposition effects arise from general psychological characteristics documented across societies.

Second, institutional design matters. Disclosure standards, transaction costs, investor education and intermediary conduct influence whether psychological tendencies translate into harmful outcomes.

Third, technological progress does not automatically eliminate behavioural bias. Greater information availability can reduce some informational disadvantages while simultaneously increasing attention overload and short-term trading.

India's policy challenge is therefore not merely to increase access to capital markets but to ensure that access is accompanied by decision architecture that encourages informed and proportionate risk-taking.

12. DISCUSSION

The analysis demonstrates that behavioural biases affect investment decisions through several interconnected channels. Overconfidence influences trading intensity; loss aversion and the disposition effect affect selling decisions; representativeness and recency shape expectations; anchoring slows belief revision; availability affects attention; and herding links individual behaviour with social influence.

A particularly important insight is that behavioural biases rarely operate independently. An investor can simultaneously be overconfident, anchored to a purchase price, selectively attentive to confirming information and reluctant to realise losses. These interactions are likely to be stronger than the effect of any single bias considered in isolation.

The Indian market's digital transformation increases the importance of studying these interactions. Lower trading costs are economically beneficial, but low friction also reduces the pause between impulse and execution. Digital investment platforms therefore have behavioural consequences regardless of whether those consequences are intentionally designed.

The distinction between investing and trading is also important. Long-term equity investment based on diversification and fundamentals differs substantially from leveraged short-horizon

speculation. Behavioural biases may be particularly damaging where decisions are repeated frequently and transaction outcomes are immediately visible.

The SEBI evidence concerning losses among individual intraday and derivatives traders provides strong justification for expanded behavioural research, though it should not be interpreted as proof that all such traders are irrational. The policy objective should not be to eliminate risk-taking but to ensure that investors understand probability, leverage, transaction costs and the historical distribution of outcomes.

13. IMPLICATIONS FOR INVESTORS

Investors can reduce behavioural errors through structured decision processes.

Investment decisions should begin with clearly defined objectives concerning return, risk and time horizon. A written investment policy can prevent temporary emotions from changing long-term strategy.

Portfolio decisions should be evaluated collectively rather than security by security. This reduces mental accounting and excessive attachment to individual investments.

Investors should record the reasons for each significant investment. A decision diary allows subsequent comparison between expectations and outcomes, helping identify overconfidence and hindsight bias.

Performance should be evaluated against an appropriate benchmark rather than simply according to whether the portfolio generated a positive return.

Predefined asset-allocation and rebalancing rules can reduce emotional market timing.

Finally, investors should distinguish between information and attention. A security being widely discussed does not make it economically attractive.

14. IMPLICATIONS FOR REGULATORS AND FINANCIAL INSTITUTIONS

Behavioural finance has important implications for investor protection. Conventional investor education often concentrates upon financial concepts: compounding, diversification, inflation, risk and return. These subjects remain essential, but investors should also understand their own psychological vulnerabilities.

Financial literacy should therefore be supplemented by **behavioural literacy**.

Investor-awareness programmes can explain overconfidence, loss aversion, herd behaviour and the disposition effect through practical examples. Trading platforms can present risk information in comprehensible formats rather than relying exclusively upon complex disclosures. High-risk products can be accompanied by historical outcome distributions capable of correcting unrealistic expectations.

SEBI's own recent research demonstrates the value of outcome-based investor education. Publishing statistics concerning the proportion of individual traders who experience losses allows investors to compare personal expectations against broader empirical evidence.

Digital intermediaries should additionally examine whether interface design inadvertently encourages excessive trading. Investor protection in a digital environment concerns not only legal disclosure but also how information is presented, how frequently users are prompted and how risks are framed.

15. CONCLUSION

Behavioural finance has fundamentally enriched the understanding of financial markets by replacing the unrealistic image of the perfectly rational investor with a more empirically grounded conception of human decision-making. Investors remain purposeful and capable of sophisticated reasoning, but their judgments are made under uncertainty and are affected by cognitive limitations, emotions, reference points and social influence.

The present analysis demonstrates that overconfidence, loss aversion, disposition effect, anchoring, representativeness, availability, herd behaviour, confirmation bias, self-attribution, regret aversion and recency bias can materially influence individual investment decisions. These biases affect what investors buy, when they buy, how frequently they trade, how long they retain unsuccessful investments and how they respond to changing market information.

When behavioural tendencies become correlated across sufficiently large groups of participants, their consequences can extend beyond individual portfolios. They may contribute to excessive trading volume, momentum, delayed price adjustment, overreaction, reversals and temporary deviations between market prices and fundamental value. Behavioural finance therefore provides an important link between investor psychology and asset-price dynamics.

The Indian equity market constitutes a particularly significant field for this analysis. Rapid digitalisation and low-cost trading have substantially expanded access to securities markets. Official evidence simultaneously indicates that significant proportions of individual participants in intraday and derivatives trading incur losses. Such findings do not establish that every loss is caused by behavioural bias, but they highlight the importance of investigating expectations, risk perception, trading frequency and decision psychology.

Indian empirical studies provide evidence of overconfidence, self-attribution and other behavioural influences, while research on herding demonstrates that behavioural patterns are not universal across every market state. This is an important conclusion. Behavioural finance should not become a theory in which every market movement is retrospectively labelled irrational. Its strength lies precisely in identifying specific, testable psychological mechanisms.

The relationship between behavioural finance and market efficiency should accordingly be understood as complementary rather than purely adversarial. Efficient-market theory explains the powerful forces through which competition and information promote price discovery. Behavioural finance explains why that process may sometimes be incomplete, delayed or distorted.

For investors, the most important implication is that successful investing requires understanding not only companies and markets but also one's own decision processes. For regulators and intermediaries, the implication is equally significant: disclosure alone cannot ensure rational decision-making. Investor protection must consider how people actually perceive probability, react to losses and process information.

In the increasingly digital Indian securities market, behavioural literacy should therefore become an integral component of financial literacy. A market that is technologically accessible, informationally transparent and behaviourally informed is more likely to promote sustainable participation, investor welfare and effective capital formation.

16. FUTURE SCOPE

Behavioural-finance research in India possesses considerable scope for methodological and interdisciplinary expansion.

- First, future studies should employ large-scale primary data covering investors from different geographical regions. Existing research is frequently concentrated in

particular cities or states. A nationally representative study could identify regional, demographic and socioeconomic differences in behavioural biases.

- Second, researchers should combine survey responses with actual trading records wherever privacy-compatible data can be obtained. Self-reported confidence and risk tolerance can differ from observable behaviour. Transaction-level data could reveal whether investors who score highly on overconfidence measures actually trade more frequently.
- Third, future studies should examine generational differences. Gen Z and millennial investors have entered markets within a predominantly digital ecosystem and may process financial information differently from investors who began investing through traditional brokerage channels.
- Fourth, the interaction between social media and behavioural finance requires systematic investigation. Financial influencers, online communities and algorithmically recommended content can affect attention, perceived popularity and investment narratives.
- Fifth, behavioural research should examine derivatives participation separately from long-term equity investment. The psychological characteristics associated with leveraged short-horizon trading may differ substantially from those affecting diversified long-term portfolios.
- Sixth, researchers can employ experimental methods. Controlled experiments could examine whether loss-framing, peer information, interface design or historical-price anchors alter investment choices.
- Seventh, neurofinance provides an emerging interdisciplinary opportunity by investigating biological and neurological processes underlying financial risk-taking and reward evaluation.
- Eighth, artificial intelligence creates both opportunities and risks. AI-based advisers may help investors analyse information systematically and reduce emotional decisions, but algorithmically generated recommendations may themselves produce automation bias if users accept them without adequate scrutiny.

- Ninth, behavioural interventions should be tested experimentally. For example, researchers could measure whether displaying the historical proportion of losing traders before derivatives transactions changes risk-taking behaviour.
- Tenth, longitudinal studies are required to investigate whether behavioural biases decline as investors gain experience. Indian evidence suggesting adaptive behaviour provides a foundation for examining whether losses create learning, increased caution or further risk-taking.

Finally, future research should connect behavioural finance with securities regulation. Investor-protection law traditionally emphasises disclosure, suitability, fraud prevention and market integrity. Behavioural evidence can assist regulators in determining not merely whether information was disclosed but whether the manner of disclosure facilitates meaningful understanding.

The next stage of behavioural-finance research in India should therefore move from merely documenting the existence of biases toward understanding their interaction with technology, market structure, financial literacy, regulation and investor experience.

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