# BEHAVIORAL BIASES AND INVESTMENT DECISION MAKING: LEARN TO MAKE THE RIGHT CHOICES

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## ABSTRACT

*Investment decisions are prone to errors due to behavioral biases of investors. It is important to recognize the presence of these biases and take steps to reduce the risk they pose to the investment portfolio. The purpose of this paper is to provide a concise review of prevalent behavioral biases, a detailed discussion of issues brought on by these behavioural biases, and to highlight how to mitigate these biases. The researcher considered six prevalent behavioral biases affecting the decision making of investors: Overconfidence Bias, Herd Behavior, Availability Bias, Representativeness, Self-Attribution, and Loss Aversion. Financial advisors, portfolio managers, consultants, and individual investors can all gain from this article's discussion. Understanding biases can help investors avoid errors and potentially enhance economic outcomes. The study contributes to the exiting literature through the study of problems caused by behavioral biases and the significant solutions that are less studied in the literature.*

**Keywords:** *Behavioral Finance, Investment Decision Making, Behavioral Biases, Investors*

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***JEL Classification**: G11, G40, G41*

## 1. INTRODUCTION

***"No theory of the universe can be satisfactory which does not adequately account for the phenomena of life, especially in that richest form which finds expression in human personality."***

***—B. H. Streeter***

A significant portion of economic and financial theory is based on the assumption that when making economic decisions, people act perfectly rationally and take into account all available information. Tradition finance assumes that people are self-interested rational decision-makers who seek to maximize their utility under constrained circumstances (Tversky & Kahneman, 1991). They weigh their preferences against potential outcomes and assign probabilities to each possibility when presented with a range of possible actions. Humans have the capacity to make wise decisions when they are rational. However, human behavior is not solely determined by rationality. Human emotion actually has primacy over human behavior. As a result, human behavior is more the result of emotional impulses like fear, love, hate, pleasure, and pain than it is of reason.

Behavioral Finance Theories have questioned this rationality assumption. People are neither perfectly rational nor perfectly irrational; instead, they have a variety of mixed traits that are both rational and irrational, and they have varying degrees of awareness with regard to various issues. Most investors are unaware of their proclivity for error. Behavioral biases frequently undermine financial objectives of irrational investors. Establishing the fundamentals of a true financial plan requires first acknowledging and reducing biases. Investors who learn to

understand themselves better and work to correct their biases will be able to stick to a disciplined investment plan (Pompian, 2006). Understanding biases can help investors avoid errors and potentially enhance economic outcomes.

## 2. REVIEW OF LITERATURE AND CONCEPTUAL FRAMEWORK

Standard finance is the body of knowledge associated with the Miller and Modigliani's arbitrage principles, Markowitz's portfolio principles, Sharpe, Lintner, and Black's capital asset pricing theory, and Black, Scholes, and Merton's option-pricing theory. People who are rational are more concerned with normative traits than values-expressive ones, never make cognitive mistakes, have perfect self-control, are never afraid of taking risks, and never fear regret (Statman, 1999). These conventional financial theories were well-designed for rational financial decision-making. However, they were unable to provide an explanation for the stock market turbulence, irregularities (such as the January Effect) or disruptions that occasionally appear such as, bubbles (such as the Retail Internet Stock Craze of 1999), market over-reaction or under-reaction, momentum shifts, reversals, crashes (crash of 1929 and 1987), etc. This paradigm gave rise to behavioral finance in 1990s, which sought to explain these anomalies through behavioral principles (Kapoor & Prosad, 2017).

Behavioral finance is the study of psychological and sociological factors that affect how individuals, groups, and entities make financial decisions. It aims to explain the what, why, and how of finance and investing (Ricciardi & Simon, 2000). People assess the likelihood of an uncertain event by employing heuristic principles that simplify the complex tasks of assessing probabilities and predicting values. These heuristics are generally quite useful, but they can occasionally lead to severe and systematic errors or biases.

Biases in investment can be cognitive or emotional. A cognitive bias is a rule of thumb or heuristic that can result in systematic deviations from a rational standard. Making decisions based on emotions rather than facts is referred to as emotional bias (Baker & Ricciardi, 2014). Investors are influenced by a variety of behavioral biases, and for further study, we have identified the following biases that have an impact on individual investors' investment decisions: Overconfidence Bias, Herd behavior, Availability Bias, Representativeness, Self-Attribution, and Loss Aversion. Devenow & Welch (1996) defined herding as correlated individual-level behavioral patterns. Investors are herded when they make decisions based on the actions of other investors, and this influence is a first-order effect. The availability bias is the tendency for people to overestimate new information or events based on how quickly illustrative examples come to mind. Tversky & Kahneman (1973) notes that the use of availability bias causes systematic mistakes. Self-attribution bias leads people to believe that their success is the result of their innate talents and skill set, that they are solely responsible for their success, and that failure is not their fault. This overestimation leads to overconfidence bias (Kafayat, 2014). Overconfidence bias is a mental state in which a person overestimates his or her capacity to carry out a given task (Kafayat, 2014). Barber & Odean (2001) found that it effects investors' ability to make rational decisions and cause them to trade in securities with higher risk. Loss aversion is a characteristic of investor behavior in which people would rather avoid a loss than experience a similar gain. Tversky & Kahneman (1991) explains it as a reference dependent theory of consumer choice. Identifies representativeness as the propensity of investor to believe that a past record of exceptional performance by a particular company is "representative" of a general performance that the firm will continue to generate in the future. It is judgmental heuristic.

## 3. RESEARCH OBJECTIVES

The purpose of this paper is to discuss widely acknowledged behavioral biases, their implications, and to recommend strategies to mitigate their impact in financial decision making.

## 4. BEHAVIORAL BIASES AND INVESTMENT DECISION MAKING

When making investments, investors frequently experience a "roller coaster of emotions." The investment process is a psychological roller coaster with numerous biases. Numerous investor types and across the globe exhibit behavioral biases, as shown by the majority of behavioral finance papers. However, investors can only make unbiased decisions by becoming conscious of behavioral biases and actively avoiding them. Only a small number of literary works have briefly discussed the issues caused by these biases and the solutions to lessen them. This paper outlines the common behavioral biases, the problems caused by these behavioral biases and the significant solutions to mitigate them.

### 4.1 Overconfidence Bias

Overconfident investors exaggerate their own abilities and put unwarranted faith in their cognitive, intuitive, and analytical skills. They react inappropriately to public information while overreacting to private information. They might trade excessively as a result, believing they have access to information that others don't (Barber & Odean, 2001). Overconfident investors make the wrong stock selection decisions by overestimating their ability to evaluate a company. Investors with higher levels of overconfidence are more likely to employ aggressive and excessive trading tactics. Table 1 shows that increased overconfidence causes more trading and lower expected utility. Trading activity rises as a result of overconfident investors being too certain of their own judgements and not giving other data enough thought.

**Table 1:** Relationship between trading and stock returns

| Traders | Mean Monthly Turnover | Average Annual Portfolio Return |
|---|---|---|
| 20% least active traders | 0.19% | 18.50% |
| 20% most active traders | 21.49% | 11.40% |

*Source: Barber & Odean (1999, p. 50) "The Courage of Misguided Convictions" Financial Analysts Journal.*

Fighting against overconfidence bias would be made easier by reviewing one's own historical trading data and evaluating its performance. Over time, one can gradually accumulate wealth by taking advantage of dividends, investing more, and trading less. Most importantly, resist the temptation to believe that expertise and judgement one possess are superior to others' in the field. Trade less and invest more!

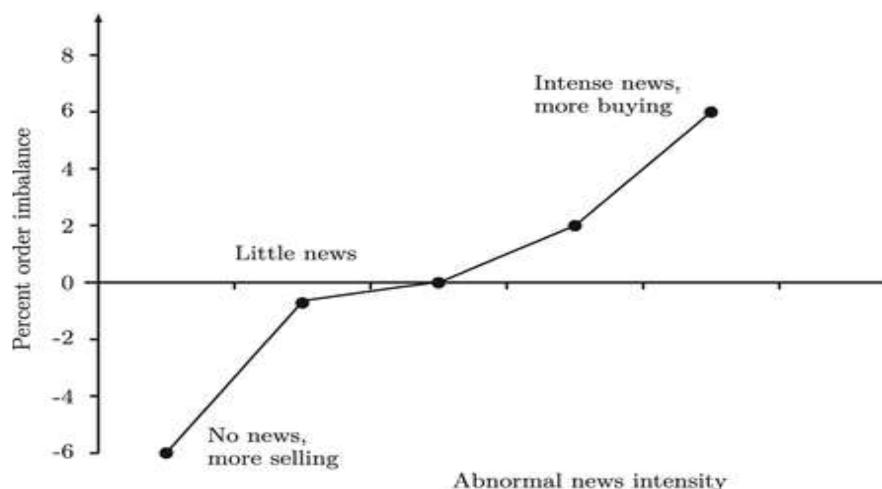
### 4.2 Representativeness Bias

Representativeness is a judgmental heuristic using which individuals make predictions based on similarity of objects or events. Here, a decision or conclusion is reached quickly without analyzing the available factual information. An obvious example of representativeness bias is when people only consider a stock's recent performance when investing in it (Kahneman & Tversky, 1973). It doesn't necessarily follow that a company's recent five years of rapid growth will continue indefinitely into the future. Another instance of this representative bias is when investors presumptively believe that good companies make good investments. That isn't always the case, though.

Checking to see if someone is drawing on historical data and applying it to current investment strategy is one way to spot representativeness bias. To combat this bias, judgements should be supported by data rather than similarity. It will also be helpful to look at each situation from a different angle and weigh various factors logically.

### 4.3 Availability Bias

Availability bias, also known as recency bias allows people to make decision based on recently available information about an event without considering their probabilities. Retrievability, categorization, narrow range of experience, and resonance are the most prevalent availability biases (Schulmerich et al., 2015). The ease with which an outcome can be imagined has an impact on the investor. Availability bias leads to the phenomenon like, panic selling, bubble buying, etc. Choosing a Life Insurance policy or mutual funds based on the most popular advertising, concentrating on a select few investments, investing in the businesses where one works, etc. are instances of availability bias.




*Source: (Pompian, 2006, p. 100)*

**Figure 1.1** Order Imbalance as a Function of News Intensity

When there are too many buy or sell orders for a certain security, order imbalances occur. Figure 1.1 shows the effect of availability bias in stock trading. People with availability bias frequently base their decisions on information that is accessible or easily recalled. Thus a stock which is more advertised is more likely to be purchased and vice versa.

Rather than relying on easily accessible information and short-term solutions, availability bias can be avoided by conducting research. Investors should develop an investment strategy and stick to it, regardless of short-term market volatility. Make a plan for how and when to rebalance the portfolio and review the allocation accordingly.

### 4.4 Self-Attribution Bias

Self-attribution bias is the tendency for people to blame their failures on outside factors like bad luck while attributing their successes to their own personal traits. It may lead to long-term failures and short-term skill deficiencies in people. Investors who have a self-attribution bias tend to take too much risk and trade excessively thinking that they are superior to others and that all of their success is due to their own abilities. This over confidence leads to underperformance.

Keeping track of investments and important decisions helps in overcoming self-serving bias. Have an honest assessment of own investment abilities and maintain market awareness. Learn from weaknesses, accept them, and work to overcome them. Invest more time in “outcome evaluation”. Both favorable and unfavorable outcomes must be treated impartially. Evaluating positive and negative outcomes and admitting and correcting past mistakes aids in the management of self-attribution bias.

### 4.5 Herding Bias

Herding refers to the propensity of investors to imitate what other investors are doing (Bikhchandani & Sharma, 2000). Herding can be intentional or spurious. The former refers to the intentional imitation of others whereas the latter refers to investors having access to a similar informational environment and making decisions accordingly. Intentional herding contributes towards unstable markets. Herding causes speculative bubbles in financial markets where stock prices diverge from their intrinsic value due to similar choices. The "Dotcom Bubble," in which investors purchased financially dubious business models because everyone else was doing so, is one of the most egregious examples of herd mentality in the investment world.

Herding impairs our capacity for wise decision-making. Following the herd seldom results in large-scale gains. Before pursuing any trend, do through homework. By conducting independent research, coming to their own conclusions, and taking calculated risks, individuals can avoid herding. To take advantage of a market inefficiency, follow Warren Buffett's advice (one of the world’s most successful investors) and buy when others are fearful and sell when they are confident (Parker, 2022).

### 4.6 Loss Aversion

Loss aversion bias also known as regret aversion, was developed by Kahneman & Tversky (1979). It is the propensity for people to prefer avoiding losses over achieving comparable gains. Even when there is no chance of recovering lost profits, loss aversion keeps people from selling unprofitable investments. They prefer to hold onto their positions in known investments. Additionally, it encourages people to put their money into safe, low-yielding bank accounts rather than riskier investments like stocks, which could provide much higher returns. Even if a stock has the potential to increase in value over the long term, people who are loss averse will sell it when its price has slightly risen in order to make a small profit. They may take on too much risk by hanging onto failing businesses and an unbalanced portfolio. This happens as a result of people prioritizing loss avoidance over achieving gains.

Loss aversion can be beaten by planning for the worst before making a decision, keeping emotions out of investments, and acting long-term. Define unchanging trading rules. Like, closing out position, if a stock trade loses a certain proportion of its value. Set a trailing stop so that gains will be locked in if the trade loses a certain amount of gains if the stock rises above the level. Don't trade on emotions!

Investors can eliminate emotion from investing by becoming aware of common behavioural biases and creating a strategic investment plan specific to them. This aids in decision-making and increases the likelihood that an investment will succeed. A lot of investors make emotional decisions when choosing investments due to the influence of behavioural finance biases. By being conscious of these biases, one can avoid them and can make more rational financial decisions.

## 5. CONTRIBUTIONS, SUGGESTIONS AND CONCLUSION

The field of behavioural finance examines people's actual financial behaviour and focuses on the cognitive and emotional aspects of finance. The paper provides a concise review of prevalent behavioral biases, a detailed discussion of issues brought on by these behavioural biases, and recommend ways to mitigate these biases. The article's discussion of how to deal with biases in investment decisions is helpful for financial advisors, portfolio managers, consultants, and individual investors alike.

***Individual investors*** can learn to control their emotions and biases by carefully examining their behavior patterns. The first step in mitigating behavioral biases is acknowledging their existence. Considering influence of biases aids in rational reevaluation of the investment choice. Identify investment objectives and stay within the planned asset class, risk tolerance and allocation. This helps individual investors in creating their own portfolios and achieving long-term monetary objectives.

***Financial advisors and portfolio managers*** can better understand and manage their clients' emotions, goals, and motivations with the aid of behavioral finance. Understanding the factors that influence their clients' decision-making can have a big impact on the investments they can suggest. This can be made possible by identifying the objectives and constraints of each individual investor such as Expected return, risk appetite, liquidity and marketability requirements, time horizon, tax considerations, and so on. In addition to helping them create a suitable portfolio and better manage client expectations, this enables them to reduce their clients' capacity for making impulsive, short-term emotional decisions. This improves the professionalism and success of the client-advisor relationship.

For every investor, it is important to recognize the presence of these biases and take steps to reduce the risk they pose to the investment portfolio. This aids in creating a solid financial plan and achieving investment goals. It is impossible to completely eliminate emotional biases from making financial decisions. However, their impact can be lessen by being more conscious of how emotions affect the investment decisions and making crucial financial decisions only while being cool-headed and logical.

There are some limitations related to the current study, like there are with other research studies. One limit relates to the number of behavioral biases considered for study. The article studied only six prominent behavioral biases. The expansion of the study to a greater variety of behavioural biases is one of the future directions of research that can make theoretical and practical contributions to the field.

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