

Behavioral Finance Perspective on Investment Decisions: Evidence from Loss Aversion and Disposition Effect

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Abstract

The primary aim of this research is to look into the direct and indirect effects of biases on investment decisions. A quantitative research strategy was used, and data were assessed using Structural Equation Modeling-Partial Least Squares (SEM-PLS). The results suggest that loss aversion possesses strong, favourable influence on investment choices and the disposition effect. Moreover, the disposition effect serves a crucial part in investing choices. The mediation results of the study suggest that the disposition effect partially associates loss aversion and investment decisions. The findings confirm the premises of prospect theory and reveal that the investors' fear of losses drives biased investing behavior. This research provides useful information for the investors, financial advisers, and policy officials who want to enhance the process of making investment decisions.

Keywords: Investment Decision, Loss Aversion, Disposition Effect, PLS-SEM

1.Introduction

In traditional finance theories the investors are assumed to be rational and always make reasonable judgments. However, actual research shows that investors typically do not behave rationally because of psychological biases and cognitive limitations. Behavioral finance evolved to explain these anomalies by bringing psychological concepts to bear on financial decision making. One relevant behavioral bias is loss aversion, which is the tendency of people to perceive the pain of losses more strongly than the pleasure of gains of equal size. Individuals who are very averse to losses may not want to admit they have had a loss and may change their investing strategy to minimize psychological discomfort. Another prominent behavioral bias is the disposition effect . This describes the propensity of investors to sell winners too early and hold losers too long . Such conduct may lead to sub-optimal investment performance and poor management of the portfolio. Previous studies have examined the influence of loss aversion and the disposition effect in isolation. However, little is known about the mediating role of the disposition effect in the link between loss aversion and investment decisions. This study thus aims to evaluate the influence of loss aversion on investment decisions directly and indirectly via the disposition effect.

- ❖ To examine the influence of loss aversion on investment decisions.
- ❖ To examine the influence of loss aversion on dispositional effects.
- ❖ To examine the influence of the disposition effect on investment decisions.
- ❖ The disposition effect acts as a mediator between loss aversion and investment decisions.

2. Literature review

Behavioral biases stem from human psychology (Barber and Odean, 2013 and Gill and Bajwa, 2018.). According to Subrahmanyam, 2008, and Badola et al., 2023, investor decision-making is often shifted by behavioral biases, which results in deviation from the rational predictions presented by classical finance theories. Behavioral theories based on sociological and psychological models give interesting explanations and descriptions of abnormalities in the market, investor traits, and inefficiencies in the market (Dash and Mahakud, 2015). Understanding behavioral biases allows for a greater understanding of the psychology behind market participation. It enlightens us on the fact that we are prone to commit specific errors due to our psychology, or more accurately, our human nature. These errors cannot be disregarded since they have the potential to be highly expensive in the financial market. Choice theory frequently starts with the idea that people make decisions regardless of how options are presented. But there is convincing evidence that when customers are given the same set of options, their final decisions are influenced by what is termed the "framing effect"—how the choices are framed, favourably or unfavourably (Kahneman & Tversky, 1979). Previous research studies have demonstrated that the initial choice considered by decision-makers frequently ends up being the default option (Reutskaja et al., 2011 and Fisher & Rangel, 2014), serving as a reference point towards which all other options are assessed.

Numerous behavioral biases that affect investor's judgments have been identified by recent behavioral finance research. The notion that peoples are "boundedly rational" serves as the foundation for much of this study by Simon in 1956. In short, a human's ability to process data is constrained, which prevents them from acting in an economically rational way. Heuristics, or short cuts, that make judgments easier but forfeit the use of knowledge, are one method humans deal with our limited cognitive capability (Tversky and Kahneman 1973). We all have our own deeply ingrained biases that influence the way we see the world. While they are useful to us in our everyday lives, they may also backfire when it comes to investing. Investment behaviour is subject to biases, both cognitive and emotional. Richard Thaler, Daniel Kahneman, and Amos Tversky are three individuals who are considered fathers of behavioral finance today. An emotional bias is an action based on emotions rather than facts. It comes from instinct or intuition. Cognitive biases are the result of mistakes in statistics, information processing, or memory. We have discussed different biases that could potentially influence the investing decision-making behavior.

1.loss aversion: Tversky and Kahneman defined loss aversion in 1992 as the tendency for a person to show risk aversion toward possible gains while showing risk-seeking behavior toward high-probability losses.

2.Disposition effect: Shefrin and Statman (1985) noted that investors prefer to dispose of appreciating assets promptly while holding onto deteriorating ones for an extended period. Investors tend to favour underperformers over outperformers (Odean et al., 1998).

3.Investment decision: While behavioral finance asserts that decision of investment are heavily influenced by mental errors and emotional biases. Consequently, this study measures investment behavior by examining the deviation between an investor's objective risk capacity. Biases distort the perception regarding probability and outcome, leading investors to embrace risk exposures that do not align with their actual financial goals.

We propose the following hypothesis and conceptual model in fig 1

H1: The loss aversion influences investment decisions.

H2: The influence of loss aversion on disposition effects.

H3: The influence of the disposition effect on investment decisions.

H4: The disposition effect acts as a mediator between loss aversion and investment decisions.

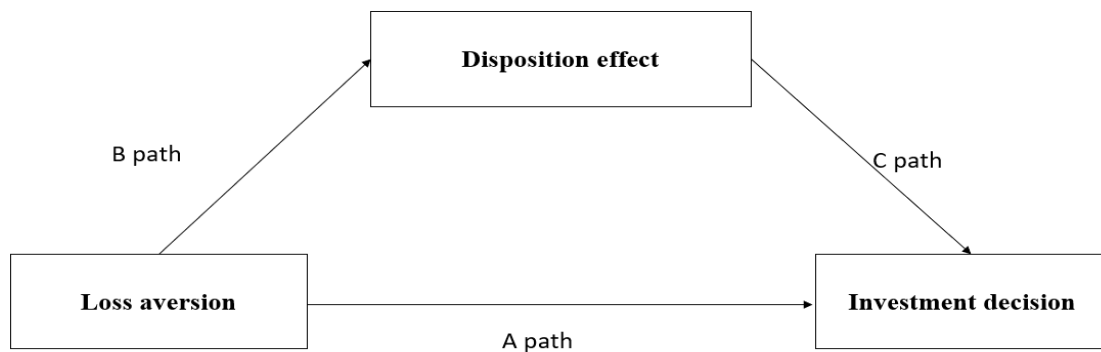


Fig:1 Conceptual model

3.Research Methodology

Research Design

The quantitative research approach is using an explanatory approach to investigate the association between dispositional effects, loss aversion, and investment decisions. A broad range of research is being conducted to figure out what sort of behavioral biases are displayed by retail decisions of investment (Baker et al., 2019, and Chun and Ming, 2009). The survey has three main subsections. The initial survey is designed to gather demographic details concerning the investors. The second set of inquiries is related to behavioral biases. It has three items for loss aversion and three items for the disposition effect. The third part discusses the participants' investment decision. The items make use of a Likert scale of 5 points, with 1 being strongly disagree and 5 being strongly agree. Harmon's one-factor test is a popular way to discover common method bias (CMB). Our results exhibit that one element accounted for just 24.20% of the total variance, which is much lower than the standard threshold. The present research concentrates on Indian retail investors. The survey was carried out in Jammu and Kashmir. Structured questionnaires had been circulated online (through email) as well as in person to existing investors at different brokerage locations from 20 January 2026 to 10 May 2026. This research included 345 investors selected through non-probability purposive sampling. Earlier research efforts have utilized purposive sampling (Combrink and Lew, 2020; Bashir and Mehta,2025 and Bashir and Mehta,2026). G*Power 3.1.9.7 has been used for calculating the sample size (Erdfelder et al., 2009and Hair (2016), effect size of 0.15 and a test power of 0.95 with two predictors. 107 samples are required, and we have a sample size of 345, which is appropriate for the current research.

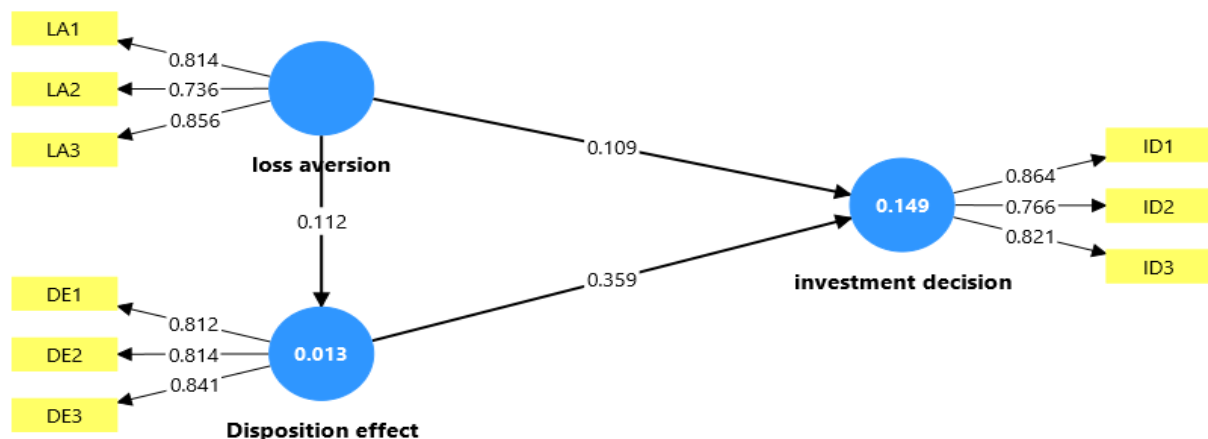


Fig:2 Graphical output

Table 1 :Outer loadings

	Disposition effect	loss aversion	<i>investment decision</i>
DE1	0.812		
DE2	0.814		
DE3	0.841		
LAB1		0.814	
LAB2		0.736	
LAB3		0.856	
ID1			0.864
ID2			0.766
ID3			0.821

Note: DE→ Disposition effect, LAB→Loss aversion bias, ID→ Investment decision

Table 2: Overview of Reliability and Validity

	Cranach's alpha	CR (rho_a)	CR (rho_a)	AVE
Disposition effect	0.769	0.794	0.862	0.676
investment decision	0.752	0.756	0.858	0.669
loss aversion	0.734	0.775	0.845	0.645

Note: CA- Cranach's alpha, CR(rho_a)and (rho_a)- Composite reliability ,AVE- Average variance extracted

Table4:HTMT

	Disposition effect	investment decision	loss aversion
Disposition effect			
investment decision	0.460		
loss aversion	0.141	0.190	

Table 5:Fornell Larcker criterion

	Disposition effect	investment decision	loss aversion
Disposition effect	0.822		
investment decision	0.371	0.818	
loss aversion	0.112	0.149	0.803

Table 6: Cross loading

	Disposition effect	loss aversion	investment decision
DE1	0.812	0.040	0.260
DE2	0.814	0.116	0.374
DE3	0.841	0.108	0.248
LAB1	0.124	0.814	0.099
LAB2	0.058	0.736	0.076
LAB3	0.080	0.856	0.164
ID1	0.264	0.111	0.864
ID2	0.281	0.165	0.766
ID3	0.352	0.092	0.821

Table 3:VIF

	VIF
DE1	2.206
DE2	1.266
DE3	2.325
ID1	1.997
ID2	1.449
ID3	1.571
LAB1	1.434
LAB2	1.466
LAB3	1.455

Note:VIF-variance of inflation

4.Results

Measurement model

The loading of the factor was assessed, and the generally accepted rule of thumb is that of all the items in the construct, required factors have a loading of 0.70 or more. The outer loading for each item is between 0.60 and 0.97, an appropriate number by Hair et al. (2013). The factor load values of all the components are more than the specified cut-off value of 0.70, indicating acceptable reliability. The results from the assessment of factor loading in Table 1, reliability and validity in Table 2, and VIF are presented in Table 3, while Figure 2 provides an illustrated model of the latent constructs in the outer model. In evaluating the reliability, we focus on CA and CR values surpassing the required limit of 0.70 by Hair et al. (2006). To evaluate convergent validity, we employ AVE, which, as pointed out by Hair et al. (2011), should be a minimum of 0.50 or higher. The construct demonstrates more than the threshold of variance observed among all. Cross-loading assesses the discriminant validity in Table 6. Tables 4 and 5 display the HTMT and the Fornell and Larsen criterion. These tests make the

discriminant validity even stronger, as shown in the tables. As seen in Table 3 below, the VIF in current research is beneath 3, showing no multicollinearity.

Structured model

The structural model was assessed using the bootstrapping process in PLS-SEM to study the relevance of the predicted association among loss aversion, disposition effect, and investment choice. The path coefficients (β), t-statistics, and p-values were used to measure the importance of the correlations. Results reveal loss aversion has a favourable and statistically significant influence on investment choice ($\beta = 0.109, t = 2.700, p = 0.007$). The link is significant, as the p-value is less than 0.05 and the t-value is more than the crucial value of 1.96, therefore confirming H1. Results also demonstrate that loss aversion has a substantial impact on the disposition effect ($\beta = 0.112, t = 2.572, p = 0.010$), which provides support for H2. The investment choice was most affected by the disposition effect of all the connections studied ($\beta = 0.359, t = 9.916, p < 0.001$). Thus, H3 is supported. The mediating function of dispositional affect was assessed using bootstrapping methodology. The findings show that loss aversion has a substantial indirect influence on investment choice via disposition effect ($\beta = 0.040, t = 2.442, p = 0.015$). The indirect impact is statistically significant, so the disposition effect plays as a mediator in the link between loss aversion and investment choice. Further, the direct impact of loss aversion on investment choice remains substantial ($\beta = 0.109, p = 0.007$) even after including the mediator. Therefore, the mediation is classified as partial mediation.

5. Discussion and Conclusion

H1: The positive coefficient indicates that investors with higher loss aversion are more influenced by future loss worries while investing. This study reveals that investor behavior is still influenced by loss anxiety, but not alone. Prospect theory predicts that losses hurt more than equivalent rewards. Thus, investors may pick cautious investments that decrease risk rather than boost expected earnings. H2: The positive correlation shows disposition bias is more common among loss-sensitive investors. For instance, they hold onto losing assets too long and sell profitable ones too soon. Recognition of losses causes psychological distress. Investor’s dread selling lost assets because it transforms a financial loss into a real loss. Thus, they prolong selling failed assets in hopes of a price recovery. This suggests that loss aversion drives the disposition effect psychologically. Early behavioral finance research also suggests that loss aversion drives investors' tendency to retain losing assets. H3: The path coefficient of 0.359 implies a moderate positive disposition effect-investment decision relationship. The exceptionally high t-value (9.916) implies a strong relationship. The findings imply that investors' tendency to sell victories too early and retain losers too long affects their investment decisions. This tendency may cause investors to make emotional, rather than objective, market decisions. Thus, the disposition effect predicts investment decisions better than loss aversion. Loss aversion affects investing, but disposition bias is more obvious. The disposition effect seems to be one of the most common behavioral biases affecting investing decision-making in current studies. H4: Loss aversion improves disposition bias, which affects investing decisions. Therefore, loss aversion affects investment decisions in complex ways. The disposition effect is one mode of action. The mediation results further suggest that disposition effect serves as a psychological mechanism through which loss aversion influences investment decisions. Overall, the study provides strong support for Prospect Theory by demonstrating that investors' fear of losses affects their investment behavior both directly and indirectly through behavioral biases represents a partial mediation. The research indicates that other factors influence investment choices, as it explains only a small portion of the variation. Future research may improve its explanatory power by including characteristics such as overconfidence, herding behavior, financial literacy, risk tolerance, and market emotion.

Table 7: Coefficient

	O	M	Stdev	T	P values
H1: loss aversion -> investment decision	0.109	0.113	0.040	2.700	0.007
H2: loss aversion -> Disposition effect	0.112	0.119	0.044	2.572	0.010
H3: Disposition effect -> investment decision	0.359	0.361	0.036	9.916	0.000

Note: Original sample-o, Sample mean-M, Standard deviation-Stdev

Table 8: Specific indirect model

	O	SM	Stdev	T	P values
H4: loss aversion -> Disposition effect -> investment decision	0.040	0.043	0.016	2.442	0.015

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