

Extended Abstract

A Study on Behavioral Biases in Irrational Investment Decisions and Wealth Loss Among Victims of Real Estate Fraud in India

India's real estate sector is among the fastest growing in the world. It is expected to grow significantly, potentially reaching US\$5-7 trillion by 2047 and possibly exceeding US\$10 trillion. Purchasing a house is a significant lifelong investment that is essential for wealth accumulation. This also contributes to substantial value appreciation and generates recurring income, such as rental payments. The sector's high returns attract fraud, resulting in substantial financial losses. Real estate investment requires more extensive research and caution compared to other investment options. Greater financial literacy reduces the risk of being scammed, but psychological factors still play a significant role in investor decisions. The literature on behavioral bias in real estate began in 1987 and has gained popularity in recent years. Real estate investment exhibits susceptibility to behavioral biases, distinguishing it from other investment types in aspects such as liquidity, transparency, and regional diversity. There is a well-established link between behavioral bias and irrationality, yet further connections remain unexplored. In the context of real estate and wealth creation, a significant gap exists, as lack of connection between behavioral bias, irrationality, and actual wealth loss. Additionally, there is a lack of studies focusing on the victim mindset or psychological bias responsible irrational outcomes. The urgency of policy is evident, as India's RERA has tackled approximately 147,000 complaints.

Given the above gap, the current study has several objectives. First, examine the effect of behavioral bias on the irrationality of real estate investments by focusing on a specific sample of fraud victims. Second, to investigate how competencies such as mindfulness and financial literacy affect decision-making in real estate investments. Third, to introduce Real Estate Wealth Hazard (REWH) through this study as an outcome of irrational investment, which is the actual wealth loss experienced by victims of real estate fraud. Fourth, know that among all the biases, the most influential bias is within all the groups. Finally, identifying which type of behavioral bias group, among cognitive, emotional, or social, is dominant for the irrational mindset of real estate fraud victims.

This study utilizes two frameworks: Dual-System Theory and Bounded Rationality. The first framework is based on Dual-System Theory, which consists of two cognitive systems. System 1 involves fast, associative thinking and relies on shortcuts, including Behavioral biases. In

contrast, System 2 is characterized by slow, deliberative reasoning and encompasses skills such as financial literacy and mindfulness. The second framework focuses on Bounded Rationality, emphasizing the environmental, informational, and computational constraints decision-makers face. These constraints relate to outcomes, particularly concerning the hazards associated with real estate wealth. Thus, bounded rationality includes all behavioural biases, irrational investment, and experiences of wealth loss.

The model includes the main Behavioral biases and competency skills that influence Irrational Investment Decisions in Real Estate (IIDRE). IIDRE is also connected to a new concept introduced in this study called Real Estate Wealth Hazard (REWH). The Behavioral biases are divided into three broad categories: cognitive, emotional, and social. Cognitive biases consist of availability, self-attribution, hindsight, recency, ambiguity aversion, and anchoring and adjustment. Emotional biases include endowment, self-control, optimism, and overconfidence. Social biases encompass herd behaviour and the fear of missing out. Competency skills such as financial literacy and mindfulness are also part of the model. All these factors are linked to IIDRE and are analyzed to identify which ones emerge as significant predictors within the overall framework.

A well-structured questionnaire of 5-points Likert scale was used to sample in urban cities in India, including person visits and online surveys of both registered and non-registered victims. Participants were found through government real estate offices, law companies, the Housing Ombudsman, social media groups, and personal connections. sample size of 423 for this study meets all adequacy requirements. It was ensured that all the data is collected for research purposes only and with full consent. As a symmetric modelling approach for data analysis, the variance-based disjoint two-stage partial least squares-structural equation modelling (PLS-SEM) was utilized to evaluate the model's reliability, validity, predictive capability, and the proposed relationships. Furthermore, artificial neural network (ANN) analysis was conducted to identify non-linear relationships, validate the robustness of the model, and assess the relative significance of key predictors.

The results suggest that all behavioral biases across all groups are significant with IIDRE. Competence skills include financial literacy, which has a significant but negative impact, and mindfulness, which has no significant impact. The overall model exhibits strong predictive power for IIDRS and moderate predictive power for REWH. The most influential bias is

overconfident bias. The average group ranking suggests that Emotional bias is the most influential, followed by social bias and Cognitive bias.