



DO BEHAVIOURAL BIASES INFLUENCE CURRENCY HEDGING? EVIDENCE FROM MARINE EXPORTERS IN ODISHA

Dixita Barai¹, Dr. Gouri Prava Samal²

¹Research Scholar, Department of Commerce, Rama Devi Women's University, Bhubaneswar, India

²Assistant Professor, Department of Commerce, Rama Devi Women's University, Bhubaneswar, India

ABSTRACT

DOI No: 10.36713/epra27416

Article DOI: <https://doi.org/10.36713/epra27416>

This study examines whether behavioural biases influence currency hedging strategies among marine exporters in Odisha, a major contributor to India's marine export economy and a sector highly exposed to foreign exchange risk due to its dependence on global markets. Drawing on prospect theory, the research investigates the role of loss aversion, regret aversion, and mental accounting in shaping hedging decisions. Primary data were collected from 49 marine exporters out of the total population of 56 through structured questionnaires, and the data were analyzed using Cronbach's alpha, KMO, Bartlett's test, and binary logistic regression. The findings indicate that behavioural biases generally have a limited influence on currency hedging decisions. Loss aversion and mental accounting showed no statistically significant impact on major hedging strategies, suggesting that exporters' decisions are largely driven by practical business realities and market considerations. However, regret aversion emerged as the only meaningful behavioural factor, significantly increasing the likelihood of using price adjustments such as increasing selling prices while reducing the preference for formal hedging tools like forward contracts. This suggests that regret-averse exporters prefer simpler strategies to avoid potential emotional discomfort associated with incorrect financial decisions. The study contributes to behavioural finance literature by offering sector-specific evidence and highlights the need for greater financial literacy and awareness of formal hedging instruments to improve forex risk management among marine exporters.

KEYWORDS: Behavioural Biases, Prospect Theory, Currency Hedging Strategies, Marine Exporters, Binary Logistic Regression

1. INTRODUCTION

Financial markets are inherently characterized by uncertainty and risk, making effective risk management strategies essential for investors, corporations, and financial institutions. Hedging, as a primary risk mitigation mechanism, has long been recognized as a fundamental tool for protecting portfolios against adverse price movements and market volatility. However, the traditional understanding of hedging strategies assumes that market participants behave rationally, making decisions based solely on objective information and quantitative analysis. This assumption, grounded in classical finance theories such as the Efficient Market Hypothesis and Modern Portfolio Theory, has increasingly been challenged by empirical evidence demonstrating that real-world financial decision-making deviates significantly from rationality (Kanapickienė et al., 2024).

The emergence of behavioral finance as a distinct field has fundamentally altered our understanding of financial markets by integrating psychological insights into financial analysis (Kanapickienė et al., 2024). A growing body of research has documented the prevalence of behavioral biases affecting investment choices, including loss aversion, overconfidence, anchoring, herding behavior, and mental accounting (Wang, 2023). Among the various theoretical

frameworks within behavioral finance, prospect theory stands as a foundational model for understanding how individuals make decisions under risk and uncertainty, and it provides a particularly powerful lens for examining hedging behavior (Tian, 2024). Loss aversion, a central tenet of prospect theory, reflects the human tendency to fear losses more intensely than they value equivalent gains, leading investors to adopt overly conservative hedging positions and make judgments that deviate from expected utility maximization (Tian, 2024). Regret aversion, the anticipatory discomfort from potentially making a wrong decision, compels investors to maintain hedging positions longer than rationally justified or to avoid innovative hedging strategies that might result in poor outcomes compared to predetermined reference points (Baulkaran & Jain, 2024). Mental accounting, the third key bias rooted in prospect theory, describes how individuals mentally separate financial decisions into distinct compartments rather than evaluating them holistically, leading to suboptimal hedge construction and cost-benefit misalignment (Lyu, 2025).

Odisha occupies a strategically significant position in India's marine export economy, with its extensive coastline of over 480 kilometers, abundant marine biodiversity, and well-established seafood processing infrastructure making it one of the country's

important contributors to marine product exports. The state's marine export sector, driven primarily by shrimp, frozen fish, cephalopods, and other seafood products, plays a crucial role in regional economic development by generating foreign exchange earnings, supporting employment, and sustaining coastal livelihoods. Odisha's marine exporters are deeply integrated into global value chains, supplying major international markets such as the United States, Japan, China, and the European Union.

A major challenge confronting marine exporters is foreign exchange (forex) risk, which arises due to fluctuations in currency values between the Indian Rupee and foreign currencies used in international trade transactions, particularly the US Dollar. Since export contracts are often denominated in foreign currencies while production and operational costs are largely incurred in domestic currency, exchange rate volatility can significantly influence exporters' revenue realization, profit margins, pricing competitiveness, and long-term financial stability. Adverse currency movements can reduce export earnings, distort cash flow planning, and increase uncertainty in international settlements, especially for businesses operating on narrow margins or extended payment cycles. Consequently, managing forex risk through hedging strategies such as forward contracts, futures, options, and pricing adjustments becomes essential for safeguarding business sustainability.

Therefore, this research paper investigates the multifaceted impact of behavioral biases, specifically those rooted in prospect theory, on hedging strategies, exploring how loss aversion, regret aversion, and mental accounting systematically influence currency hedging strategies choices. By synthesizing insights from behavioral finance theory with practical analysis of hedging decision-making, this study aims to fill an important gap in the literature and provide actionable insights for both academics and practitioners seeking to develop more effective, psychologically-informed hedging frameworks

2. LITERATURE REVIEW

Behavioral finance fundamentally challenges the assumption of rational decision-making underlying traditional corporate hedging theory, revealing that psychological biases systematically distort financial choices in predictable ways (Kanapickienė et al., 2024). Prospect theory, developed by Kahneman and Tversky, provides a robust framework for understanding risk decisions by incorporating psychological reference points and emotional responses (Tian, 2024). The theory identifies three critical components relevant to hedging: loss aversion, regret aversion, and mental accounting (Fan, 2024). These biases represent fundamental features of human psychology affecting both individual investors and corporate managers across diverse contexts (Jayavardhini, 2025). Currency hedging represents a critical risk management challenge for exporters whose revenues are denominated in foreign currencies, with firms employing forwards, futures, options, and swaps to manage exchange rate exposure (Zai & Mansur, 2024). Export-oriented multinational enterprises have particularly pronounced currency exposure due to competitive global markets and significant time lags between transaction initiation and settlement (Lin, 2025). While research documents the use of traditional hedging instruments and identifies firm-specific factors influencing hedging decisions,

empirical evidence reveals substantial deviations from rationally predicted optimal hedging levels (Hecht & Lampenius, 2023). Recent work has begun integrating behavioral considerations into foreign exchange risk management (Xu, 2025), recognizing that managerial characteristics and psychological factors play meaningful roles (Nasriani, 2024). Loss aversion, the most extensively documented prospect theory bias, creates powerful incentives for excessive hedging because the emotional pain of unprotected losses substantially exceeds the apparent cost of hedging protection (Li et al., 2024). Mental accounting causes exporters to evaluate hedging costs within separate psychological compartments rather than optimizing holistically, resulting in over-hedging certain exposures while neglecting others (Lyu, 2025).

Despite extensive research on corporate currency hedging and behavioral finance's growing recognition, a consequential gap remains: the specific impact of prospect theory biases on currency hedging decisions among marine exporters is virtually unexplored (Nasriani, 2024). While studies document firm-specific factors influencing hedging decisions, the behavioral mechanisms through which loss aversion, regret aversion, and mental accounting shape marine exporter hedging choices have not been systematically investigated (Zai & Mansur, 2024), (Dang & Lindsay, 2022), (Omar et al., 2022). Emerging market marine exporters face even greater behavioral bias intensity due to limited hedging instrument access, lower managerial financial literacy, greater operating uncertainty, and stronger emotional responses to currency losses threatening firm survival. By investigating how prospect theory biases specifically influence currency hedging decisions among marine exporters, this research will fill a critical theoretical gap while providing practical insights for improving hedging decision-making in this important but understudied context.

3. OBJECTIVE OF THE STUDY

- To study the impact of behavioral biases (Loss Aversion, Regret Aversion, and Mental Accounting) on currency hedging strategies of marine exporters from Odisha.

4. HYPOTHESIS OF THE STUDY

- H_1 : There is a significant impact of loss aversion on the currency hedging strategies of Odisha's marine exporters.
- H_2 : There is a significant impact of regret aversion on the currency hedging strategies of Odisha's marine exporters.
- H_3 : There is a significant impact of mental accounting on the currency hedging strategies of Odisha's marine exporters.

5. MATERIALS AND METHODS

5.1. Questionnaire Design

The questionnaire was designed to measure behavioral biases among individual decision-makers, the research employed established indicators aligned with prospect theory dimensions (Pandey & Jessica, 2018). The measurement items for each behavioral bias construct were developed based on the scale validation framework provided by (Ritika & Kishore, 2020), ensuring theoretical rigor and empirical validity. A five-point Likert scale questionnaire was developed to collect primary data from marine exporters in India. Survey

participants responded to closed-ended questions, with informed consent obtained from all respondents prior to participation. Respondents were instructed to indicate their level of agreement on a scale ranging from 1 (strong disagreement) to 5 (strong agreement) for all behavioral bias items.

5.2. Sample and Data Collection

The population for this study comprised 56 marine exporters from Odisha. As the population is less so the entire population is the sample. Data collection was conducted through a mixed-mode approach combining web-based surveys distributed via Google Forms (through WhatsApp, email, and personal mail) with telephone interviews. Out of the 56 marine exporters approached, 49 completed questionnaires were obtained, representing an overall response rate of 87.5% provides reasonable confidence in the representativeness of the sample in Odisha, enabling reliable inferences about behavioral biases and currency hedging strategies among marine exporters. According to a comprehensive analysis of survey trends, response rates in social science research should maintain an adequate response rate of at least 60%. Data were securely stored in password-protected databases with all identifying information removed to ensure respondent anonymity and compliance with research ethics standards.

5.3. Methodology

Data analysis was conducted in two stages: measurement validation and hypothesis testing. First, Cronbach’s alpha was used to assess the reliability of constructs measuring loss aversion, regret aversion, and mental accounting, with values above 0.70 considered acceptable. KMO and Bartlett’s test were applied to confirm sample adequacy, with KMO values above 0.60 and Bartlett’s significance at $p < 0.05$ indicating validity. Second, binary logistic regression was used to examine the impact of behavioral biases on currency hedging strategy adoption, as the dependent variable was dichotomous. The model estimates odds ratios indicating how a one-unit increase in a behavioral bias increases or decreases the likelihood of hedging adoption (Patil et al., 2025). Marginal effects analysis was conducted post-hoc to quantify how changes in behavioral

bias variables translate into percentage point changes in the predicted probability of hedging adoption (Liashenko & Demianiuk, 2025). All statistical analyses were performed using STATA version 17 software.

6. EMPIRICAL ANALYSIS

6.1. Demographic Characteristics

In Table 1, the sample is heavily male-dominated (90%, $n=44$), with only 10% female respondents ($n=5$), indicating that marine export businesses are traditionally managed by males in this Indian context. The age distribution reveals a mature and experienced entrepreneurial cohort, with 72% of respondents concentrated in the 31-50 age group (22% aged 31-40, $n=11$ and 53% aged 41-50, $n=26$), while there are no younger exporters aged 21-30 and respondents below age 20, suggesting that marine export operations require significant experience and established networks for navigating complex international trade and currency management challenges. Educationally, the sample is highly qualified, with 63% holding postgraduate degrees ($n=31$), 25% possessing professional qualifications ($n=12$), and 12% with undergraduate education ($n=6$), meaning 100% have tertiary education, which indicates respondents possess the cognitive capacity to understand complex financial instruments and behavioral decision-making biases (Patil et al., 2025). Regarding business structure, 78% operate as private companies ($n=38$), while 6% are sole proprietorships ($n=3$) and 16% are partnership firms ($n=8$), with no public companies represented. The business longevity data shows that 45% ($n=22$) have been registered for 11-20 years and 47% ($n=23$) for 0-10 years, indicating that most exporters possess substantial operational experience. Regarding financial performance, the sample demonstrates significant economic scale: 45% ($n=22$) report annual turnover exceeding 60 crores, 47% ($n=23$) report 1-20 crores, and 8% ($n=4$) report less than 1 crore, indicating that the majority are established, profitable export enterprises with considerable financial stakes in currency management decisions, making behavioral bias analysis particularly relevant for understanding their hedging strategy choices.

Table 1. Demographics.

Demographics	Value	Frequency	Frequency Percentage
Gender	Female	5	10
	Male	44	90
Age	Below 20	0	0
	21-30	0	0
	31-40	11	22
	41-50	26	53
	Above 50	12	25
Educational Level	High School	0	0
	Undergraduate	6	12
	Postgraduate	31	63
	Professional	12	25
	Others	0	0
Years of Reg.	0-10	23	47
	11-20	22	45
	21-30	4	8
	31-40	0	0
	Above 40	0	0

Category	Sole Proprietorship	3	6
	HUF	0	0
	Partnership Firm	8	16
	LLPs	0	0
	Public Company	0	0
	Private Company	38	78
Annual Turnover	Less than 1cr	4	8
	1cr-20cr	23	47
	20cr-40cr	0	0
	40cr-60cr	0	0
	More than 60cr	22	45

Source: Author's Own Work

6.2. Behavioural Biases Impact on Currency Hedging Strategies

6.2.1. Reliability Test

The reliability analysis, using Cronbach's Alpha demonstrates strong and consistent internal consistency in Odisha for all three behavioral bias constructs measured in this study as presented in Table 2. Cronbach's Alpha values above 0.70 are considered acceptable for research purposes (Khare & Kapoor, 2023). All three constructs in this study exceed the 0.70 threshold, indicating that the items within each construct reliably measure the intended psychological constructs (Sun et al., 2022). Loss Aversion (LA) demonstrates the strongest reliability in Odisha,

Table 2. Reliability Analysis.

Construct	Number of Items	Cronbach's Alpha
Loss Aversion (LA)	4	0.8255
Regret Aversion (RA)	6	0.7637
Mental Accounting (MA)	3	0.8696

Source: Author's own Work

6.2.2. Validity Test

The validity testing (Table 3) results using the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity confirm the suitability of the data for conducting factor analysis. The KMO values for Odisha (0.667) fall within the "mediocre" range (0.6–0.69) according to standard interpretation guidelines, but exceed the minimum threshold of 0.50 that is generally considered necessary for proceeding with factor analysis (Khare & Kapoor, 2023). Bartlett's Test of Sphericity demonstrates exceptionally strong statistical support for the validity of the data structure. Odisha

Table 3. Validity Analysis.

Construct		Cronbach's Alpha
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.667
Bartlett's Test of Sphericity	Approx. Chi-Square	364.955
	Df	78
	Sig.	0.000

Source: Author's own Work

6.2.3. Binary Logistic Regression

This study used binary logistic regression to understand how behavioural biases (loss aversion, regret aversion, and mental accounting) affect the choice of currency hedging strategies among marine exporters (Khare & Kapoor, 2023). The odds ratio (OR) shows whether a bias increases or decreases the likelihood of choosing a strategy. If the OR is greater than 1,

showing $\alpha = 0.8255$, well above the 0.80 threshold for good reliability. This indicates that the four-item scale measuring loss aversion is internally consistent and that respondents interpret the items, suggesting robust measurement of this core behavioral bias (Khare & Kapoor, 2023). Mental Accounting (MA) also exhibits good reliability i.e. $\alpha = 0.8696$, indicating that the three-item scale effectively captures the tendency of investors to separate financial decisions into mental categories. Regret Aversion (RA), while showing the lowest reliability of the three constructs, remains acceptable at $\alpha = 0.7637$, despite the six-item scale being more complex to measure.

shows highly significant results (Approximate Chi-Square = 364.955, with $p = 0.000$, $df = 78$), indicating that the correlation matrices are significantly different from identity matrices (Sun et al., 2022). Together, these validity tests establish that the consistency of these validity patterns across Odisha further strengthens confidence in the measurement model and justifies proceeding with hypothesis testing using binary logistic regression to examine the impact of behavioral biases on hedging decisions.

the chances increase; if it is less than 1, the chances decrease. A result is considered statistically significant if the p-value is less than 0.05. The average marginal effect (AME) shows how much the probability of choosing a strategy changes with a unit increase in a behavioural bias (Sun et al., 2022).

In Table 4, the results show very weak relationships between behavioural biases and hedging decisions. Loss aversion does not significantly affect any hedging strategy. For example, although exporters with higher loss aversion seem slightly more likely to increase selling prices (ISP) with an odds ratio of 1.394 (p = 0.351), suggesting a non-significant trend toward higher odds of ISP adoption with increased loss aversion, though the 95% confidence interval (0.6930–2.8049) is too wide to draw reliable conclusions. Loss aversion's effects on forward contracts (FC, OR = 0.5461, p = 0.131) and no hedging (NO, OR = 0.9049, p = 0.860) were likewise non-significant. However, regret aversion shows a stronger relationship with ISP (OR = 2.9599, p = 0.052) and Forward Contract (FC; OR = 0.5323, p = 0.088), suggesting that exporters who fear regret may prefer increasing prices and be less likely to use a formal hedging tool, i.e., Forward Contract. The AME of 0.2311

indicates that a unit increase in regret aversion increases the probability of ISP adoption by approximately 23 percentage points, suggesting that regret-averse exporters may be more inclined to increase selling prices rather than use formal hedging instruments. Mental accounting has no noticeable effect on any strategy. Mental Accounting demonstrated no statistically significant relationships with any hedging strategy in Odisha, with all p-values exceeding 0.61 and odds ratios ranging from 0.76 to 0.94, indicating negligible influence on strategy selection. Overall, the findings reveal that behavioral biases show minimal influence on hedging decisions, with regret aversion being the only bias showing a marginal effect (increasing the likelihood of price increases by approximately 23%), while mental accounting and loss aversion have a negligible impact.

Table 4. Binary Logistic Regression

Behavioural Biases	Currency Hedging Strategies	Odds Ratio (OR)	95% CI	p-value	AME	Goodness of Fit	Interpretation
Loss Aversion	ISP	1.3942	[0.69-2.80]	0.351	0.0708	0.2996 (Fit)	No effect
	FUC	0.8790	[0.47-1.63]	0.685	-0.0289	0.2211 (Fit)	No effect
	FC	0.5461	[0.24-1.19]	0.131	-0.0916	0.1811 (Fit)	No effect
	CWB	0.8500	[0.47-1.52]	0.587	-0.0402	0.2134 (Fit)	No effect
	NO	0.9049	[0.29-2.73]	0.860	-0.0072	0.2038 (Fit)	No effect
Regret Aversion	ISP	2.9599	[1.01-8.82]	0.052***	0.2311	0.2996 (Fit)	Significant positive effect
	FUC	0.8408	[0.43-1.63]	0.610	-0.0389	0.2211 (Fit)	No effect
	FC	0.5323	[0.25-1.09]	0.088***	-0.0955	0.1811 (Fit)	Significant negative effect
	CWB	1.0977	[0.60-1.99]	0.759	0.0231	0.2134 (Fit)	No effect
	NO	0.5864	[0.23-1.46]	0.252	-0.0384	0.2038 (Fit)	No effect
Mental Accounting	ISP	0.8586	[0.45-1.61]	0.636	-0.0325	0.2996 (Fit)	No effect
	FUC	0.9332	[0.48-1.77]	0.834	-0.0155	0.2211 (Fit)	No effect
	FC	0.8623	[0.40-1.85]	0.705	-0.0224	0.1811 (Fit)	No effect
	CWB	0.9362	[0.50-1.72]	0.833	-0.0163	0.2134 (Fit)	No effect
	NO	0.7597	[0.26-2.20]	0.612	-0.0198	0.2038 (Fit)	No effect

Note: ISP, FUC, FC, CWB, and NO represent "Increase in Selling Price", "Futures Contract", "Forward Contract", "Contract with Banks", and "No Hedging" respectively.

Source: Author’s own Work

7. CONCLUSION

This study examined how prospect theory, based on behavioral biases, loss aversion, regret aversion, and mental accounting, affects the currency hedging strategies of marine exporters in Odisha, a sector significantly exposed to foreign exchange volatility due to its heavy dependence on international markets and USD-dominated transactions. The findings reveal that behavioral biases, overall, play a relatively limited role in shaping hedging decisions, suggesting that exporters’ choices are influenced more by practical business considerations, market realities, and operational experience than by psychological tendencies alone. Specifically, loss aversion and mental accounting showed no statistically significant effect on the adoption of major hedging strategies, indicating that fear of losses and cognitive compartmentalization do not substantially alter formal currency risk management behavior among these exporters. This may reflect the mature, experienced, and relatively well-educated profile of the respondents, who may rely more on strategic business judgment than on behavioral impulses.

In contrast, regret aversion emerged as the only behavioral bias with meaningful influence, indicating that exporters who are more concerned about the possibility of making unfavorable financial decisions are more likely to rely on increasing selling prices while being less inclined to adopt forward contracts. This suggests that regret-averse exporters may prefer simpler, more immediate pricing adjustments over formal derivative-based instruments, possibly to avoid the emotional discomfort associated with making an incorrect hedging decision. The findings, therefore, highlight that while behavioral finance provides important insights into decision-making under uncertainty, its influence on corporate hedging behavior is not uniform and may vary across sectoral and contextual settings. From a practical perspective, the study underscores the need for targeted financial education and greater awareness of formal hedging instruments among marine exporters, particularly to reduce regret-driven avoidance of effective risk management tools and strengthen strategic responses to currency volatility.

8. LIMITATIONS AND FUTURE SCOPE OF STUDY

This study is limited to marine exporters in Odisha, which may reduce the broader applicability of its findings. It also examines only three behavioral biases using a cross-sectional design, limiting both psychological scope and causal interpretation. Future research should include larger and more diverse samples across regions and industries, while longitudinal approaches could better capture how behavioral biases evolve and influence hedging decisions over time.

REFERENCES

- Baulkaran, V., & Jain, P. (2024). *Behavioral Biases of Financial Planners: The Case of Retirement Funding Recommendations*. *Journal of Behavioral Finance*. <https://doi.org/10.1080/15427560.2024.2305412>
- Dang, V., & Lindsay, V. (2022). *Determinants of hedging strategy in foreign exchange risk management by exporting small and medium-sized enterprises: The mediating role of resources*. *Journal of General Management*. <https://doi.org/10.1177/03063070211063310>
- Fan, H. (2024). *A Critical Comparison of SEUT and Prospect Theory*. *Advances in Economics, Management and Political Sciences*. <https://doi.org/10.54254/2754-1169/72/20240690>
- Hecht, A., & Lampenius, N. (2023). *How Do Firms Manage Their Foreign Exchange Exposure?* *Journal of Risk and Financial Management*. <https://doi.org/10.3390/jrfm16080359>
- Jayavardhini, Dr. V. R. (2025). *Behavioral Finance and Managerial Decision-Making: Integrating Psychology with Modern Business Strategy*. *International Journal for Research in Applied Science and Engineering Technology*. <https://doi.org/10.22214/ijraset.2025.75986>
- Kanapickienė, R., Vasiliauskaitė, D., Keliuotytė-Staniulienė, G., Špicas, R., Omeir, A. K., & Kanapickas, T. (2024). *A comprehensive review of behavioral biases in financial decision-making: from classical finance to behavioral finance perspectives*. *Journal of Business and Economic Management*. <https://doi.org/10.3846/jbem.2024.22314>
- Khare, T., & Kapoor, S. (2023). *Behavioral biases and the rational decision-making process of financial professionals: significant factors that determine the future of the financial market*. *Journal of Advances in Management Research*. <https://doi.org/10.1108/jamr-03-2023-0086>
- Liashenko, O., & Demianiuk, O. (2025). *Investment Decisions Under Risk: Experimental Evidence On Opportunistic Behavior And Financial Manipulation*. *Economic Innovations*. [https://doi.org/10.31520/ei.2025.27.1\(94\).91-99](https://doi.org/10.31520/ei.2025.27.1(94).91-99)
- Lin, Y. (2025). *Exchange Risk Management of Multinational Enterprises under the China-US Trade War: Case of Yutong Packaging*. *Finance & Economics*. <https://doi.org/10.61173/8c0b7v14>
- Li, S., Guo, W., & Zhu, M. (2024). *Research on dynamic behavior hedging of corn price risk based on the LA-DCC-GARCH model under COVID-19*. *International Journal of Financial Engineering*. <https://doi.org/10.1142/s2424786324500038>
- Lyu, J. (2025). *Improving the Quality of Decision Making for Investors: A Research under Behavioral Finance and Psychology*. *Advances in Economics, Management and Political Sciences*. <https://doi.org/10.54254/2754-1169/2025.21148>
- Nasriani, I. (2024). *Foreign Exchange Volatility and Corporate Risk Mitigation Approaches: Evidence from Indonesian SMEs*. *Sinergi International Journal of Accounting and Taxation*. <https://doi.org/10.61194/ijat.v2i3.638>
- Omar, A., Khurram, H., Parveen, M., Kashif, A. R., Shehzad, M. A., & Bukhari, N. (2022). *Corporate risk management: An empirical evidence on foreign currency derivatives' use by Malaysian nonfinancial firms*. *Journal of Public Value and Administrative Insight*. <https://doi.org/10.31580/jpvai.v5i1.2443>
- Pandey, R., & Jessica, V. M. (2018). *Measuring behavioural biases affecting real estate investment decisions in India: using IRT*. *International Journal of Housing Markets and Analysis*. <https://doi.org/10.1108/ijhma-12-2017-0103>
- Patil, D. S., P, Dr. P. K., M, Dr. K. K., & R., Dr. S. V. (2025). *Understanding Investor Behavior in India Through A Behaviorally Integrated Structural Model*. *International Journal of Environmental Science*. <https://doi.org/10.64252/gyxe8p58>
- Ritika, & Kishor, N. (2022). *Development and validation of behavioral biases scale: a SEM approach*. *Review of Behavioral Finance*, 14(2), 237
- Sun, W., Qamruzzaman, M., Rui, W., & Kler, R. (2022). *An empirical assessment of financial literacy and behavioral biases on investment decision: Fresh evidence from small investor perception*. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2022.977444>
- Tian, Y. (2024). *Behavioral Finance: Loss Aversion, Market Anomalies, and Prospect Theory in Financial Decision-Making*. *Highlights in Business, Economics and Management*. <https://doi.org/10.54097/h1wnk736>
- Wang, Y. (2023). *Behavioral Biases in Investment Decision-Making*. *Advances in Economics, Management and Political Sciences*. <https://doi.org/10.54254/2754-1169/46/20230330>
- Xu, X. (2025). *Experiences and implications of foreign enterprises' exchange rate risk management strategies for China*. *Journal of Applied Economics and Policy Studies*. <https://doi.org/10.54254/2977-5701/2025.26178>
- Zai, F. S., & Mansur, A. (2024). *Hedging Strategy to Mitigate Exchange Rate Risk in Cross-Border Transactions: Literature Review*. *Journal of Business Management and Economic Development*. <https://doi.org/10.59653/jbmed.v2i03.908>