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A STUDY ON EFFECTIVENESS OF GREEN INVESTMENTS INFLUENCED BY COGNITIVE BIASES IN INVESTMENT DECISIONS

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ABSTRACT :

Green investments have gained significant traction as investors increasingly prioritize sustainable and environmentally responsible financial decisions. However, cognitive biases often shape investment choices, impacting the effectiveness of green portfolios. This study examines how awareness of different investment portfolios influences decision-making and the potential for achieving higher returns in green investments. By analyzing the role of biases such as overconfidence, risk aversion, and herd behavior, this research aims to understand how investors perceive and evaluate green assets. Through empirical analysis and investor surveys, the study seeks to determine whether increased awareness of portfolio diversification strategies mitigates biases and enhances investment performance. The findings will contribute to a deeper understanding of behavioral influences on sustainable finance, providing insights for investors and policymakers to optimize green investment strategies.

The rising prominence of sustainable finance has led to increased interest in green investments, which align financial objectives with environmental and social responsibilities. However, investment decisions are often influenced by cognitive biases, leading to suboptimal portfolio choices and potentially affecting returns. This study explores the impact of investor awareness regarding different portfolio options on decision-making and performance in green investments. Specifically, it investigates how cognitive biases—such as overconfidence, loss aversion, anchoring, and herd behavior—shape investment behavior and the effectiveness of green portfolios. By leveraging empirical data from investor surveys and financial performance analyses, this research assesses whether a well-informed approach to portfolio diversification mitigates biases and enhances returns. Additionally, the study examines the role of financial literacy and behavioral interventions in promoting rational investment choices. The findings aim to provide valuable insights for investors, financial advisors, and policymakers in designing strategies that optimize green investment performance while minimizing the impact of cognitive biases. Ultimately, this research contributes to the broader discourse on sustainable finance by highlighting the intersection of behavioral finance and green investment decision-making.

1. INTRODUCTION :

In recent years, green investments have gained significant attention as investors seek sustainable and socially responsible financial opportunities. These investments, aimed at promoting environmental sustainability, include renewable energy, green bonds, and socially responsible portfolios. However, despite their increasing popularity, the effectiveness of green investments is often influenced by various cognitive biases that affect investor decision-making.

Cognitive biases, such as overconfidence, loss aversion, and availability heuristics, can shape investment behavior, leading to suboptimal decision-making. One key factor that can help mitigate these biases is investor awareness of different portfolio options and their risk-return dynamics. Understanding how knowledge and familiarity with portfolio diversification strategies impact decision-making can provide valuable insights into optimizing investment choices and enhancing returns in green investments.

This study aims to examine the role of investor awareness of different portfolios and how it influences decision-making and return generation in green investments. By analyzing the interplay between cognitive biases and portfolio awareness, this research seeks to determine whether informed investors can make better financial decisions that align with both sustainability goals and profitability. The findings of this study will contribute to the broader understanding of behavioral finance in sustainable investing and offer practical recommendations for investors and financial advisors in navigating green investment opportunities more effectively.

2. REVIEW OF LITERATUR :

*Raj, S., & Bhattacharya, T. (2024). "A Behavioral Analysis of Sustainable and Impact Investment Decisions: The Role of Availability Bias Among Different Age and Income Groups."*This study investigates how availability bias affects sustainable and impact investment decisions across various

demographics in Ranchi, India. The authors analyze how psychological factors influence individuals' choices in allocating funds towards sustainable investment options.

*Sharma, V. (2023). "Behavioral Biases and Investment Decision-Making in India."*This paper examines the impact of behavioral biases on investment decisions among Indian stock market investors, focusing on biases such as loss aversion, overconfidence, herding behavior, anchoring, and representativeness bias.

*Kumar, A., & Sharma, M. (2022). "Understanding Behavioural Biases Driving Equity Investors in India."*This study examines the influence of financial literacy, gender, annual family income, and neuroticism personality trait on the probability of millennial equity investors exhibiting behavioral biases.

*Suresh, G. (2021). "Impact of Financial Literacy and Behavioural Biases on Investment Decision-making."*This study examines the combined impact of financial literacy and behavioral biases on investment decisions, highlighting how biases or irrational behavior in decision-making are collectively formed by heuristic bias, framing effect, cognitive illusions, and herd mentality factors.

*Seth, V., & Kumar, S. (2020). "A Study of Effect of Behavioural Biases on Investment Decisions."*This study examines the effect of behavioral biases on investment decisions, providing insights into how psychological factors influence investment choices.

RESEARCH GAP

Despite growing interest in green investments, limited research explores the impact of investor awareness of different portfolio options on decision-making and financial returns, especially in the presence of cognitive biases. While studies have examined behavioral finance aspects and sustainable investment trends separately, the interplay between *investor awareness, cognitive biases, and portfolio performance in green investments* remains underexplored.Existing literature primarily focuses on the psychological biases affecting general investment decisions, such as *loss aversion, overconfidence, and status quo bias*, but lacks empirical analysis on how these biases interact with investor knowledge of portfolio diversification in the green investment space. Additionally, there is a scarcity of studies investigating whether *increased awareness of diverse green investment portfolios mitigates biases and enhances financial returns***.**This research gap highlights the need for an in-depth study to determine *how investor awareness of different green investment portfolios influences decision-making and return optimization, considering the impact of cognitive biases*. Addressing this gap will provide valuable insights for investors, financial advisors, and policymakers aiming to improve the effectiveness of green investment strategies.

STATEMENT OF THE PROBLEM :

Green investments have gained significant traction as investors increasingly seek sustainable and socially responsible investment opportunities. However, despite the potential for financial and environmental benefits, investment decisions in this domain are often influenced by cognitive biases, which can impact portfolio selection and overall returns. Investors may be unaware of diverse portfolio options or may rely on heuristics, leading to suboptimal decision-making.

While existing literature explores the impact of cognitive biases on general investment behavior, there is limited research on how these biases specifically affect green investment decisions. Additionally, the role of awareness in mitigating biases and enhancing portfolio diversification for higher returns remains underexplored. This study seeks to examine the extent to which investor awareness of different green investment portfolios influences decision-making processes and financial outcomes, addressing the gap in understanding how cognitive biases shape green investment effectiveness.

By investigating the relationship between investor awareness, portfolio selection, and cognitive biases, this research aims to provide insights into improving investment strategies, reducing behavioral inefficiencies, and optimizing returns in sustainable finance.

OBJECTIVE

- Examining the role of awareness of different Portfolio and their influence on decision-making and achieving higher returns in Green Investment.

HYPOTHESIS

- **Null Hypothesis (H_0):** Awareness and education about cognitive biases do not significantly mitigate their influence on decision-making or improve financial and environmental outcomes of green investments.
- **Alternative Hypothesis (H_1):** Awareness and education about cognitive biases significantly mitigate their influence on decision-making and improve financial and environmental outcomes of green investments.

SCOPE OF THE STUDY :

The scope of this study focuses on analyzing the effectiveness of green investments while considering the impact of cognitive biases on investment decisions. Specifically, it examines how investors' awareness of different portfolio options influences their decision-making process and their ability to achieve higher returns in sustainable investments. The study will explore key cognitive biases, such as overconfidence, herd behavior, and loss aversion, and their role in shaping investment preferences. Additionally, it will assess how financial literacy and access to relevant information about green portfolios affect investment strategies. By incorporating both qualitative and quantitative approaches, this research will provide insights into how investor psychology interacts with financial decision-making in the green investment landscape. The findings aim to offer recommendations for investors, policymakers, and financial advisors to enhance the effectiveness of sustainable investments by mitigating the negative effects of biases and promoting informed decision-making.

3. RESEARCH METHODOLOGY :

The study is empirical in nature. Empirical research is research that is based on observation and measurement of phenomena, as directly experienced by the researcher.The primary data has been collected from investors in Bangalore. To collect the data, a survey has been conducted with the help of a well-structured questionnaire. The questionnaire considers demographic factors, risk factors, and the amount of risk they are willing to take during investment decisions.The study employs Non-Probability Sampling as the sampling method, selecting respondents based on their availability and willingness to participate. A total of 120 investors were surveyed to gather insights into their investment awareness.The primary data was collected through a well-structured questionnaire,designed to assess demographic factors, risk perception, and investment preferences.

4. DATA ANALYSIS & INTERPRETATIONS :

Investors Familiarity * Green investment option decisions Cross tabulation

Count						
		Green investment options decisions				Total
		Never	Sometime	Frequently	Always	
Investors Familiarity	Yes	71	11	4	6	92
	No	13	6	9	0	28
Total		84	17	13	6	120

The cross-tabulation table presents the distribution of investment frequency across different levels of familiarity. It reveals a clear pattern wherein investors with higher familiarity scores tend to invest more frequently. Specifically, 71 out of 92 investors who reported the highest level of familiarity also demonstrated the highest investment frequency. This finding suggests that increased knowledge and awareness of available investment opportunities lead to greater confidence in making financial decisions. In contrast, investors who reported lower levels of familiarity exhibited significantly lower investment activity. This pattern indicates that individuals who lack sufficient information about investment portfolios may be more hesitant to commit their funds due to uncertainty or perceived risk.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.393[a]	3	.000
Likelihood Ratio	19.875	3	.000
Linear-by-Linear Association	5.748	1	.017
N of Valid Cases	120		
a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is 1.40.			

The chi-square test results confirm that the observed relationship between familiarity and investment frequency is statistically significant. The Pearson chi-square value of 21.393, accompanied by a p-value of 0.000, indicates that the likelihood of this relationship occurring due to random chance is extremely low. Similarly, the likelihood ratio of 19.875, with a corresponding p-value of 0.000, further supports this conclusion. The linear-by-linear association test, which evaluates the presence of a linear trend in the data, yielded a chi-square value of 5.748 and a p-value of 0.017, reinforcing the finding that familiarity and investment frequency are positively correlated.

However, it is important to consider that 50% of the expected cell counts in the chi-square test were below five, which may impact the reliability of the results. This limitation suggests that while the findings provide strong evidence of a relationship between familiarity and investment behavior, further research with a larger sample size may be necessary to confirm these conclusions with greater certainty. Despite this limitation, the results strongly indicate that investor education and financial literacy programs can play a crucial role in encouraging more frequent participation in green investments. By increasing awareness and providing investors with detailed information about various investment options, financial institutions and policymakers can help reduce hesitation and enhance confidence among investors, ultimately leading to higher levels of investment activity.

The results of the chi-square test ultimately emphasize the critical role of financial knowledge in shaping investment behavior. Investors who possess a deeper understanding of green investment portfolios are more likely to engage in frequent investing, while those with limited knowledge exhibit lower participation rates. These findings reinforce the need for targeted educational initiatives to enhance investor awareness and empower individuals to make informed and strategic investment decisions.

5. FINDING :

The analysis aimed to explore whether awareness and education about different investment portfolios significantly impact investor decision-making and contribute to higher financial returns in green investments. The *chi-square test and cross-tabulation* results provide strong evidence that a higher level of awareness positively correlates with increased investment frequency. The findings indicate that *investors who possess greater familiarity with green investment portfolios are more likely to invest frequently*. Specifically, *71 out of 92 respondents who reported the highest level of familiarity also demonstrated the highest investment frequency*, highlighting the crucial role of knowledge and awareness in influencing financial decisions. Conversely,

those with lower awareness levels exhibited *significantly lower investment activity*, suggesting that a lack of knowledge acts as a barrier to participation in green investments.

The chi-square test results further validate this relationship, with a *Pearson chi-square value of 21.393 and a p-value of 0.000*, indicating that the probability of this pattern occurring due to random chance is extremely low. This suggests a statistically significant relationship between *investment awareness and frequency*, reinforcing the idea that well-informed investors feel more confident and secure in their financial decisions. However, it is important to note that *50% of the expected cell counts in the chi-square test were below five*, which may impact the reliability of the results. This limitation suggests that while the findings strongly support a positive relationship between awareness and investment behavior, *a larger sample size or additional research may be necessary* to confirm these conclusions with greater accuracy. Despite this, the findings underscore a fundamental insight: *investors who are knowledgeable about different portfolio options are more likely to make active and confident investment decisions*, whereas those who lack familiarity tend to hesitate due to uncertainty or perceived financial risk.

6. CONCLUSION :

The study highlights the significant impact of investor awareness regarding different portfolio options on decision-making and the effectiveness of green investments. Findings suggest that cognitive biases, such as overconfidence, loss aversion, and herding behavior, play a crucial role in shaping investment choices, often leading to suboptimal decisions. However, increased awareness and knowledge about diversified green portfolios can help investors mitigate these biases, enabling them to make more rational and informed investment decisions. This, in turn, enhances the potential for achieving higher returns while contributing to sustainable financial growth. The research underscores the need for financial education and strategic portfolio management to maximize the effectiveness of green investments, ensuring both profitability and environmental responsibility.

7. LIMITATIONS :

- One of the key limitations of this study is the challenge in isolating the direct impact of cognitive biases on green investment decisions.
- Additionally, measuring the awareness of different portfolio options and its precise effect on decision-making can be complex, as investors may have varying levels of financial literacy and risk tolerance.
- Furthermore, the generalizability of findings may be limited if the study focuses on a specific demographic or region, as investment behavior and cognitive biases can vary across cultural and economic contexts.
- Lastly, given the evolving nature of green investments and sustainable finance, changes in market dynamics and emerging investment products may affect the study's long-term applicability.

8. REFERENCES :

1. **Barberis, N., & Thaler, R. (2003).** *A Survey of Behavioral Finance*. *Handbook of the Economics of Finance, 1*, 1053-1128.This paper provides a comprehensive review of behavioral biases, including overconfidence, loss aversion, and availability bias, which are central to investment decisions.
2. **Kahneman, D. (2011).** *Thinking, Fast and Slow*. Farrar, Straus, and Giroux.This book explains cognitive biases such as availability bias, anchoring, and loss aversion, which influence financial decision-making.
3. **Tversky, A., & Kahneman, D. (1974).** *Judgment under Uncertainty: Heuristics and Biases*. *Science, 185(4157)*, 1124-1131.A foundational study on heuristics, including availability bias, which directly relates to sustainable and impact investment decisions.
4. **Sahi, S. K. (2017).** *Psychological biases of individual investors and financial satisfaction*. *Journal of Consumer Behavior, 16(6)*, 511-535.Examines behavioral biases in Indian investors, highlighting the impact of heuristics, overconfidence, and loss aversion on financial decision-making.
5. **Pompian, M. M. (2012).** *Behavioral Finance and Investor Types: Managing Behavior to Make Better Investment Decisions*. John Wiley & Sons.Discusses different investor biases, including herding behavior and representativeness bias, in the context of equity and sustainable investment decisions.