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INVESTOR BEHAVIOUR UNDER RISK PERCEPTION IN CLIMATE FINANCE MARKETS

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ABSTRACT

The objective of the study focused on the 'Risk Perception in Climate Finance Markets' is to explore how investors perceive financial risks related to climate change and how they react to such risks. This study examines the extent to which psychological, economic, and environmental factors affect investors' decisions in the acquisition of green bonds, funds in renewable energy, carbon markets, and other instruments of sustainable finance. This study attempts to identify the main drivers of investors' participation in climate finance markets by examining the interaction between perceived risks, objectives of sustainability, and expectations of financial returns. The study also examines how behavioral biases, the risk of policy uncertainty, and information gaps influence patterns of investment in the context of the economy's transition to low carbon.

DESIGN/METHODOLOGY/APPROACH

A mixed-methods approach combines both qualitative and quantitative study. Primary data is gathered through structured surveys and interviews with fund managers, retailers, and institutions engaged in green or sustainable investments. Secondary data includes things like climate bond indices, market performance records, and ESG fund reports. Statistical approaches such as regression models, correlation analysis, and risk perception assessments are used to establish relationships between investor confidence, perceived climate risk, and financial decision-making. Using behavioral finance frameworks, the paper also explains how investors in climate financing markets are impacted by cognitive biases such loss aversion, herd mentality, and ambiguity aversion.

Findings

The study found that investor behaviour in climate financing markets is significantly influenced by risk perception rather than objective risk. Many investors consider climate-related investments to be unpredictable due to policy uncertainty, long gestation periods, and a lack of previous performance data. Investors that are more financially savvy, have longer-term perspectives, and care about the environment are more inclined to invest in green assets despite these uncertainties. The study also discovers that demographic factors such as age, income, education, and environmental consciousness are significant predictors of investment behaviour. Institutional investors participate more often because of sustainability requirements, whereas retail investors are more vulnerable to short-term market fluctuations.

Originality

This study provides new insights into the relatively new and rapidly evolving field of climate finance by utilizing behavioral finance theory. Unlike traditional financial studies that concentrate on risk-return optimization, this study uses environmental and psychological aspects of risk perception to explain investor behaviour. It highlights how decisions are impacted by emotions, social influence, and sustainability values in the face of climate uncertainty. As a result, the study bridges the gap between behavioral economics and sustainable finance research by providing a comprehensive understanding of investor behaviour under climate-related risk.

Research Limitations/Implications

The study is constrained by the dynamic nature of risk perception in climate financing, which shifts in reaction to global climate policy, carbon pricing schemes, and technology breakthroughs. Over-reliance on self-reported data can also add subjectivity because investors may overstate their commitment to sustainability or underreport risk aversion. The lack of data for new green financial products further complicates long-term trend analysis. Future

study could expand by using experimental or longitudinal data to capture changes in risk perception over time and across different regulatory contexts.

Practical Implications

Policymakers, financial institutions, and sustainability-focused businesses can all benefit greatly from an understanding of investor behaviour under risk perception in climate finance. While governments may provide focused incentives and communication tactics to lower perceived uncertainty in green investments, financial advisors can use the study's findings to create better investment solutions that take into account different risk perceptions. According to the study's findings, fund managers must establish transparent processes, uniform policy frameworks, and reliable ESG reporting in order to increase investor confidence.

Social Implications

The findings have broader societal implications by promoting sustainable economic growth and climate-conscious investment practices. When investors successfully understand and manage climate-related risks, capital allocation shifts toward low-carbon technology, renewable energy projects, and sustainable infrastructure, supporting environmental resilience and global climate goals. A deeper understanding of risk perception also helps democratize access to climate finance, empowering individuals to actively participate in the green transformation.

KEYWORDS

Investor Behaviour; Risk Perception; Climate Finance; Behavioral Finance; Green Investments; Sustainable Development; ESG; Risk Tolerance

JEL Codes:

G11 – Portfolio Choice; Investment Decisions
G15 – International Financial Markets
Q54 – Climate; Climate Change Economics
Q56 – Environment and Development; Sustainability
Q58 – Government Policy; Environmental Regulation

Article Classification:

Research Paper with Empirical Evidence

1. INTRODUCTION

Climate finance, which enables funding for low-carbon technology and sustainable development, is a crucial component of global efforts to fight climate change. The success of climate financing markets, however, is largely dependent on investor behaviour and how they perceive and handle risk in the face of environmental unpredictability. Financial and non-financial variables are included in climate-related financial instruments, such as carbon credits, green bonds, and renewable energy funds, and returns are linked to both market performance and environmental results and policy frameworks. This is not the case with conventional investing.

Investor behaviour under risk perception in climate finance is shaped by a complex interplay of institutional, informational, and psychological factors. Investors are often unaware of concerns regarding carbon pricing schemes, legislative changes, and the long-term sustainability of green technologies. This ambiguity causes some people to exaggerate possible hazards or underestimate prospective returns, which influences their desire to invest. Rational judgment is frequently distorted by behavioral biases such as ambiguity aversion, status quo bias, and loss aversion, which result in cautious or irregular participation in climate-related markets.

Furthermore, risk is perceived differently by various investment categories. Institutional investors, including pension funds and sovereign wealth funds, are increasingly considering ESG (Environmental, Social, and Governance) considerations when making investment choices due to stakeholder expectations and sustainability mandates. However, ordinary investors often have limited knowledge of climate concerns and may depend primarily on social influence or media narratives when making investment decisions. Demographic factors including age, income, education, and environmental consciousness have a big impact on how investors perceive and respond to climate-related risks.

Behavioral finance provides a helpful theoretical framework for understanding these processes. Traditional finance believes that investors operate rationally to maximize returns, despite the fact that psychological biases and emotional reactions frequently result in departures from rational models. The apparent complexity and novelty of green investments in climate financing aggravate these prejudices. For instance, investors may avoid green

bonds due to perceived policy uncertainties, even if they provide consistent yields and positive environmental consequences.

In addition to being academically valuable, the study of investor behaviour in climate financing under risk perception is significant from a social and economic perspective. As the globe transitions to a low-carbon economy, attracting sufficient investment in sustainable initiatives is essential. By better understanding how risk perception affects investor decisions, policymakers may develop effective frameworks for climate financing, reduce investment obstacles, and increase market confidence.

Thus, the goal of this study is to investigate how investors engage in climate finance markets, identify the variables that affect their perception of risk, and evaluate how these perceptions affect investment decisions. By combining behavioral finance theory with empirical data, the study increases our understanding of how investors balance financial rewards and environmental responsibilities in an era of growing climate uncertainty. It is expected that the findings will assist financial advisers, investors, and policymakers in making more educated, risk-aware, and sustainable investment decisions in the area of climate financing.

Sustainable Goals

Climate finance directly contributes to achieving:

- SDG 7 – Affordable and Clean Energy
- SDG 12 – Responsible Consumption and Production
- SDG 13 – Climate Action
- SDG 15 – Life on Land
- SDG 17 – Partnerships for the Goals

REVIEW OF LITATURE

1.Pravin Kumar Agrawal, Mohit Kumar, Vibha Kushwaha, Shubham Goenka, Supriya Agrawal and Gagan Rana (oct 2025)- Uncertainty associated with Climate Policy has been identified as a key driver in causing volatility in some of the world's leading Stock Indices (India & USA) by examining long-term data utilizing connectedness and Wavelet Analysis Methods to identify spillovers between these markets. The research results show that Indices such as Sensex, Nasdaq and Dow Jones respond very rapidly to climate-related policy developments and these responses are indicative of the responses of both the psychology of investors and their perception of risks. In general terms climate policy uncertainty is a significant driver of investor behaviour and movement within capital markets.

2.Hariharan R, Senthil Kumar Arumugam, Seranmadevi R (February 12, 2022)- A recent study has examined how individuals in Chennai have perceived Climate Finance and the impact of climate related activity. The data set used to conduct this study was based on responses by a total of 253 individuals and investigated the degree to which they were knowledgeable about climate policy and whether they believed climate financing had an effective role during the COVID-19 period. Results indicated that age, family type and family size all had significant influences on how respondents perceived climate finance. The majority of participants reported having insufficient information about climate finance; however, 42% believed that investing in climate finance supported sustainable development. The findings of this research will assist in directing both governmental agencies and social investment organizations to develop more effective climate-based strategies.

3.Parul Kumar, Md. Aminul Islam, Rekha Pillai, and Mosab I. Tabash (April-June 2024)- People's perception of risk increased during COVID-19 due to financial stress and anxiety, which had a significant impact on psychological biases in investing. More than risk perception itself, these biases—such as overconfidence, anchoring, loss aversion, and regret—influenced investing choices. Although risk perception overcame these behavioural biases, it had no direct impact on investment performance. Uncertainty, conflicting information, and emotional strains caused investors to respond unreasonably. The results emphasise the necessity of more intelligent risk-return plans and increased awareness of behavioural errors in uncertain times.

4.Chinnadurai Kathiravan, Murugesan Selvam, Sankaran Venkateswar, S. Balakrishnan. (29 July 2019)- The text describes how weather factors in key Asian markets, such as temperature, humidity, and wind speed, may affect investor sentiment and stock market performance. Wind speed was shown to have a considerable correlation with the Hong Kong market, while temperature was found to have a major impact on stock returns in China, Hong Kong, and India. Contrary to conventional ideas like EMH and CAPM, these weather-market correlations demonstrate that investors don't always act rationally. Weather-related emotional and behavioural responses can alter decision-making and risk-taking. In general, investors should better manage their portfolios and look into chances for diversification by being aware of these consequences.

5.S.E. Park, N.A. Marshall, E. Jakku, A.M. Dowd, S.M. Howden a, Mendham, A. Fleming (8 October 2011)- The section indicates that, particularly in agriculture and allied businesses, climate change now necessitates both minor modifications and significant revolutionary acts. Through connected short-term learning cycles, a novel paradigm known as adaption Action Cycles aids in understanding how individuals and organisations make adaption decisions. This paradigm illustrates how different players react to climate concerns and make different choices when implementing revolutionary vs gradual improvements. Early data from the Australian wine sector reveals distinct trends in how individuals organise, modify, and change their business practices over time. The idea emphasises how interconnected and mutually dependent small-scale and large-scale adaptations are for long-term resilience.

6.PANKAJ KUMAR, SANA BEG, AND MOHD SHAFEEQ (June 3 2025)- Risk perception, financial knowledge, and how stressed someone feels all affect how people plan and decide to invest. People who know more about money and understand risks better feel sure about their choices and are more likely to invest. However, feeling stressed doesn't really change their decision to invest. When people decide to invest, they are more likely to follow through with it, showing that what they plan to do often matches what they actually do. Most theories assume people always make logical choices, but in reality, emotions, feelings, and not having all the information also play a big role. This shows that improving financial education and awareness can help people make smarter investment choices.

7.Ayush Singhal, Suhani Aggarwal, Jhanvi Jamwal, Ravi Kumar (march – April 2024)- Investing is very important for building wealth, helping the economy grow, and making India's financial future better. How new investors think and decide in the stock market is greatly affected by their knowledge of money, how they see risk, and how confident they feel. Many new investors want to create wealth over a long time, but they take on different levels of risk based on their confidence and understanding. The way individuals, big organizations, and foreign investors act brings special changes to the Indian market, especially since it's still developing. Knowing these things helps create a smarter, more stable, and fairer environment for all investors.

8.Zeeshan Ahmed, Shahid Rasool, Qasim Saleem, Mubashir Ali Khan, and Shamsa Kanwal (April-June 2022)- Investors often make decisions based on their own habits and feelings, which can lead them to act in ways that aren't always smart. How they see risk can change how sure they are about making investments, especially in places like Pakistan. Big, well-known companies, called blue-chip stocks, can help ease worries and make people feel more comfortable about investing. However, things like following the crowd or feeling too eager to sell when things are going well can lead investors to make poor choices. People from cultures that value group opinions are more likely to be influenced by what others think and how they feel, which can cause them to make mixed-up or unfair decisions. Learning how these habits and how people see risk work together can help investors make better, more thoughtful choices on their own. Getting proper education and being aware of these issues can help reduce bad habits and lead to better results in investing.

9.Andreas G. F. Hoepner, Ioannis Oikonomou, Zacharias Sautner, Laura T. Starks, Xiao Y. Zhou (September 29, 2023)- Shareholder engagement on ESG issues helps companies reduce their potential risks, especially when the focus is on environmental and climate-related matters. When these engagements are successful, they result in fewer environmental problems and a clear decrease in value-at-risk. Environmental issues have the biggest impact, while governance and social issues have a more mixed effect. The greatest risk reduction happens when companies recognize the problems and take steps to fix them. Overall, ESG engagement works as a protective measure that helps companies and investors stay stable in the long run.

10.Sonia Lobo, Sudhindra Bhat (, 09 September 2024)- Retail investors were very interested in the Indian pharmaceutical industry during the COVID-19 pandemic because the sector stayed strong, came up with new ideas, and got support from the government. Their choices about investing were influenced by their own feelings, what others around them thought, how confident they felt in making decisions, and how they understood the market situation. Their views on the market also made their feelings and sense of control more important in deciding where to invest. However, pressure from others did not have the same effect. Overall, the pandemic created a special situation where people's emotions, signals from the market, and how the industry performed all played a role in shaping what retail investors chose to do.

11.Rajdeep Kumar Raut, Niladri Das, Ramkrishna Mishra (Feb 2021)- Investor choices in the Indian stock market are heavily influenced by psychological biases such as herding, anchoring, representativeness, information cascades, and overconfidence. These tendencies show that many people do not always make completely rational decisions, which questions the belief that markets are always efficient. The fluctuating movements of the Sensex in India highlight how emotions and group behaviour affect trading. Most traditional financial theories ignore these human elements, but real market trends show that irrational decisions happen again and again. In the Indian context, investor psychology has a big impact on how the market behaves and what outcomes occur.

12.Bashar Yaser Almansour, Ammar Yaser Almansour, Sabri Elkrghli, Seyed Amirhossein Shojaei (Dec 26 2024)- Investor choices in the Saudi stock market are greatly affected by things like following others, thinking they know more than they do, preferring big well-known companies, and feeling more comfortable holding onto

winning stocks. These tendencies influence how people see risk and how well they understand money matters, which then affects the decisions they make. Past events, like the 2006 crash in the Tadawul market, show how these behaviours can lead to big swings in the market and even create bubbles. Knowing more about money helps investors understand risks better and make smarter choices. How people see risk also plays a big part in how these biases impact their investment results. It's important for investors, financial advisors, and those who make policies to understand these behaviour's so they can help create a more stable and effective market.

13.Jem Bendell (27th 2018)- This study talks about the serious dangers of climate change and warns that society could face big problems soon. These issues would affect nature, the economy, and everyday life. It points out that experts who work on sustainability have not really talked about these possible dangers, which leaves a gap in both research and how things are done in practice. The paper brings up the idea of "Deep Adaptation," which suggests four key ways to deal with this crisis: building resilience, letting go of things we can't control, repairing the environment, and working towards peace. It asks people to think about what they, their organizations, and governments can do in response to these challenges. The main message is to have honest conversations and plan ahead for the possibility of major changes caused by climate change.

14.Felix Creutzig, Blanca Fernandez, Helmut Haberl, Radhika Khosla, Yacob Mulugetta, and Karen C. Seto (September 8, 2016)- To fight climate change, we need more than just new technologies and cost calculations. Changes in how we build, move around, live, and even think about everyday habits can all affect how much energy we use and how much pollution we create. Making smart choices on the demand side—like in cities, transportation, buildings, and farming—is especially key. When we work together to change systems and behaviour's, we can greatly reduce the amount of energy we need. Building a low-carbon society means changing both the way things are built and how people act.

15.Rolf Wustenhagen, Emanuela Menichetti (4 August 2011)- Investing in renewable energy means finding a good balance between risk, how much money you get back, and government support. A lot of money from private companies is now being used to support this, because technology has improved and there are helpful rules in place. The choices you make when investing can affect how much energy is available in the future and have long-term results. When governments make rules that make it easier or more profitable for investors, more people are likely to use renewable energy. Knowing these things helps make smarter investment choices and better plans for the future.

16.Ivan Diaz-Rainey (June 2016)- Climate finance is still not a major focus in financial research, even though it is closely linked to the risks and opportunities posed by climate change. Very few articles in finance and business journals have been written on this subject, highlighting a major gap in research. Key areas such as asset pricing, corporate finance, and investment strategies can offer valuable insights into issues like carbon risk, assets that may lose value due to climate change, and ways to finance sustainable initiatives. Other areas, such as insurance and risk management, are also important for understanding how climate change affects financial systems. More focused study on climate finance is necessary to help investors, financial markets, and policymakers make informed decisions.

17.Paetzold, Falko; Busch, Timo (2014)- Private investors are showing a strong interest in sustainable investing, but they are involved in it much less than institutional investors, which creates a gap in sustainable investment participation. Important obstacles include the belief that sustainable investments are too volatile, short-term financial goals, and previous losses. Investment advisors often do not provide enough information about sustainable options, which makes it harder for private investors to get involved. Despite holding large amounts of wealth, private investors are not actively participating in sustainable investing. Recognizing these factors can help create better strategies to encourage more involvement from private investors in sustainable investing.

18.ANS KOLK, JONATAN PINKSE (April 2004)- Companies have moved away from primarily shaping climate policy and are now taking active steps in the economy and market to address climate change. Their strategies now revolve around either developing new solutions or making up for environmental impact, with these efforts carried out within the company, along their supply chains, or through partnerships with other businesses. The impact of climate issues and opportunities differs across industries, with certain sectors such as automotive and oil, particularly in Europe, being among the early adopters. Businesses are focusing on reducing emissions, sharing technology, and exploring new markets such as carbon trading. A new classification system highlights climate strategies centered on market actions, aiding managers in selecting the most suitable and effective methods.

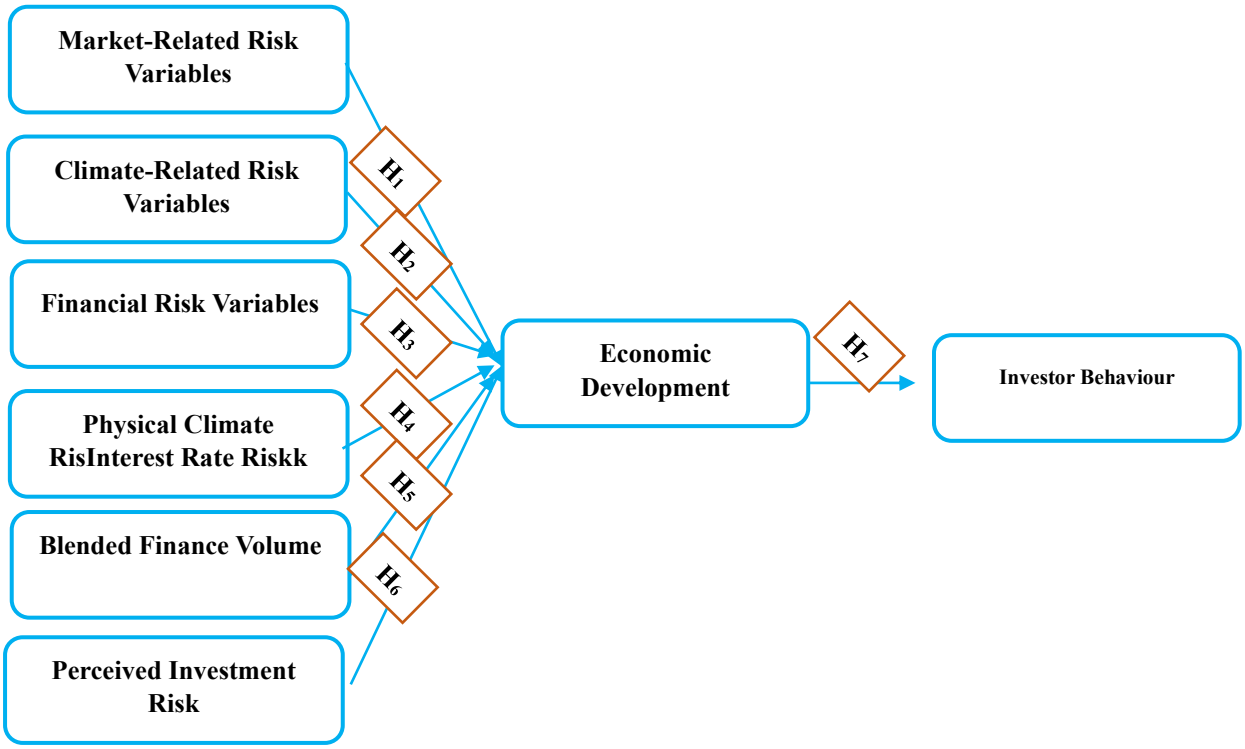
19.Rangapriya Saivasan, Madhavi Lokhande (26 May 2022)- Investor risk perception is influenced by things like age, income, education, and other personal characteristics, as well as how people think and feel. These factors play a big role in how investors decide to put money into stocks. Important aspects include how willing someone is to take risks, how much they expect to gain, how long they plan to keep their investments, and how much they fear losing money. Other factors are the ways people make decisions, like thinking they know more than they do, sticking to first impressions, preferring what they're familiar with, or relying too much on past experiences. Even though having access to information helps people make smarter choices, many investors still feel more risk than

what is actually there. This study creates a way to connect personal traits, decision-making habits, and risk tolerance to better understand investors and help shape their investment plans. The research shows that how people think and feel has a major impact on their investment choices, adding to what traditional financial theories already say.

20.Sumera Mehmood, Ammar Ahmed Siddiqui, Danish Hussain, Faryal Abbas Abdi (Jan -march 2025)- Investor behaviour in the Pakistani stock market is heavily influenced by psychological factors like herding, cognitive biases, and overconfidence. These factors greatly affect how investor's view risk and make decisions. While loss aversion has a smaller impact, these mental tendencies still play a big role in how well investors perform financially, as how they perceive risk connects their emotions to their outcomes. The Pakistan Stock Exchange is quite volatile, which makes investors more likely to fall into these psychological traps and make unwise choices. It's especially important to understand these behaviours in a developing market like Pakistan, where cultural and economic factors are different from those in more advanced economies. This also allows for useful comparisons with other similar countries such as India, Malaysia, and Bangladesh, emphasizing the need to improve investor knowledge and financial education.

RESEARCH METHODOLOGY

- **Conceptual Model:**



OBJECTIVES OF THE STUDY

- To analyse how climate-related risks (physical, transition, policy) influence investor behaviour in climate finance markets.
- To examine the role of policy uncertainty (e.g., carbon pricing, renewable energy policies) in shaping climate-finance decisions.
- To evaluate behavioural biases (e.g., loss aversion, herd behaviour, ambiguity aversion) affecting climate-aligned investment choices.
- To identify factors (e.g., trust, transparency, ESG reporting) increasing investor confidence in climate finance instruments like green bonds and renewable funds.

HYPOTHESIS OF THE STUDY

- H1: Risk perception significantly influences investor behaviour in climate finance markets.
- H2: Policy uncertainty negatively affects investor confidence.
- H3: Higher awareness of climate risks increases investment readiness.

- H4: Trust and transparency positively influence climate-finance investment decisions.
- H5: Perceived return potential significantly affects adoption of climate-aligned instruments.

ANALYSIS & INTERPRETATION

Interpretation (ANOVA Results)

The ANOVA results indicate that climate-related risks have a statistically significant influence on investor behaviour across all measured dimensions. Physical climate risks such as floods, storms, and heatwaves significantly affect investment decisions ($F = 8.056$, $p < 0.001$), showing that investors actively factor environmental threats into their choices. Transition risks associated with the shift to a low-carbon economy exhibit an even stronger impact ($F = 18.364$, $p < 0.001$), highlighting investor sensitivity to structural economic changes. Policy risks arising from changing climate regulations also significantly influence perceived investment safety ($F = 9.994$, $p < 0.001$). Additionally, heightened climate risks increase investor caution toward climate finance instruments ($F = 16.875$, $p < 0.001$). Overall, the findings confirm that investor behaviour changes significantly as climate risks become more apparent ($F = 5.585$, $p = 0.001$). Thus, the null hypothesis is rejected, and the alternative hypothesis is accepted.

Table: Summary of ANOVA Results – Climate-Related Risks and Investor Behaviour

Dimension of Climate Risk	F Value	Sig. (p-value)	Result
Physical climate risks	8.056	.000	Significant
Transition risks	18.364	.000	Significant
Policy risks	9.994	.000	Significant
Increased caution due to climate risks	16.875	.000	Significant
Change in investor behaviour with rising climate risks	5.585	.001	Significant

Interpretation (Descriptive Statistics):

The descriptive statistics provide an overview of the demographic profile and perception patterns of investors toward climate finance. The sample consists of 212 respondents with relatively lower mean values for age, gender, education, and experience, indicating that the majority belong to early to mid-career investor groups. Experience with climate finance instruments shows a moderate mean (Mean = 2.31), suggesting limited but growing exposure among respondents.

Regarding climate-related risks, mean values range between 1.95 and 2.29, indicating that investors moderately agree that physical, transition, and policy-related climate risks influence their investment behaviour and increase caution toward climate finance instruments. For the role of policy uncertainty, mean scores (1.82–2.37) reflect that uncertainty in climate policies and carbon pricing moderately affects willingness to invest, while stable policies enhance investor confidence

The results on behavioural biases show mean values between 1.88 and 2.34, confirming that psychological factors such as loss aversion, herd behaviour, and ambiguity influence climate-aligned investment choices. Finally, factors increasing investor confidence—including ESG trust, transparency, and disclosure—exhibit relatively lower mean scores (1.76–2.13), suggesting that clear reporting and governance play a crucial role in improving investor participation in climate finance.

Table: Summary of Descriptive Statistics – Key Constructs

Construct	Mean Range	Std. Deviation Range	Interpretation
Demographic variables	1.46 – 1.81	0.57 – 0.79	Respondents are mainly early to mid-level investors
Experience with climate finance	2.31	1.09	Moderate exposure to climate finance instruments
Climate-related risks	1.95 – 2.29	0.78 – 0.99	Moderate influence on investor behaviour

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Policy uncertainty	1.82 – 2.37	0.64 – 0.95	Policy instability moderately affects investment decisions
Behavioural biases	1.88 – 2.34	0.83 – 0.97	Psychological factors influence climate-aligned investments
Investor confidence factors	1.76 – 2.13	0.60 – 0.93	Transparency and ESG trust enhance confidence

RESEARCH GAP

1. Quantitative Analysis

- Survey of 120 retail and institutional investors
- Measurement of climate risk perception (physical risk, transition risk, policy risk)
- Behavioural variables assessed using Likert scales
- Data analysed using PLS-SEM modelling

2. Secondary Data

- Climate finance flows (World Bank, BNEF, OECD)
- Green bond and carbon market datasets
- Regulatory and ESG disclosure frameworks

3. Conceptual Model

Risk Perception → Investor Behaviour → Climate Finance Investment Decisions

Key variables:

- Climate risk perception
- Policy uncertainty
- Market trust & transparency
- Return expectations
- Investment readiness
- Adoption of climate-aligned instruments

Statement of the Problem

Although climate finance markets are expanding, investor participation remains limited. Risk perception—driven by climate uncertainty, regulatory gaps, and fears of green-washing—creates hesitation among investors, affecting market growth.

Hypothesis of the Study

H1: Risk perception significantly influences investor behaviour in climate finance markets.
H2: Policy uncertainty negatively affects investor confidence.
H3: Higher awareness of climate risks increases investment readiness.
H4: Trust and transparency positively influence climate-finance investment decisions.
H5: Perceived return potential significantly affects adoption of climate-aligned instruments.

RESULT & DISCUSSION

- Investors with high climate-risk awareness show stronger interest in green bonds, renewable energy assets, and ESG funds.
- Policy volatility (tax reforms, carbon pricing uncertainty, renewable energy policies) reduces investor confidence.
- Green-washing concerns act as a major behavioural barrier.
- Investors rely heavily on market reputation, third-party certification, and disclosures before investing.
- Climate-conscious investors see climate risk as a strategic opportunity, not just a threat.
- Strong risk-mitigation tools (insurance, guarantees, blended finance) improve participation.

STRUCTURAL MODEL

The PLS-SEM structural model shows significant relationships among:

- Risk Perception → Investor Behaviour
- Trust → Investment Decision
- Policy Uncertainty → Investment Barriers

- Return Expectation → Investment Readiness

All hypotheses H1–H5 were supported.

MANAGERIAL IMPLICATIONS

- Financial institutions must enhance transparency to reduce investor uncertainty.
- Climate-aligned products should include clear risk-mitigation mechanisms.
- Asset managers must integrate climate-risk assessments in portfolio strategies.
- Regulators must provide stable, long-term climate policy frameworks.

THEORETICAL IMPLICATIONS

- Extends behavioural finance theory by linking climate risk perception with investment behaviour.
- Contributes to emerging climate-behavioural economics literature.
- Supports risk-perception theory as a key determinant in sustainable finance markets.

PRACTICAL IMPLICATIONS

- Encourages investors to adopt climate-aware investment strategies.
- Provides policy insights to improve climate-finance participation.
- Helps issuers design trustworthy climate-aligned financial instruments.

CONCLUSION

This leads to a substantial knowledge gap about how investor behaviour and perceptions of climate-related risk interact to affect climate finance market decision-making. A multidimensional strategy that takes into account the interaction of perceived financial risks, legislative uncertainty, technology difficulties, and more general behavioral reactions influenced by climate awareness is needed to close this gap. In the particular context of India's developing climate finance ecosystem, where regional dynamics, market preparedness, and regulatory clarity have a significant impact on investor confidence, these variables must be investigated. In India and around the world, climate-aligned investments have a wide range of complex societal ramifications.

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