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Research Article

A Study on Awareness of ESG Mutual Funds Among Retail Investors for Sustainable Investment

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ABSTRACT

This research investigates the awareness levels among retail investors in India concerning ESG (Environmental, Social, and Governance) mutual funds, the influence of demographic factors on this awareness, as well as the challenges associated with understanding ESG mutual funds. A quantitative research design was utilized, involving the distribution of a structured online questionnaire to 1,000 retail investors. This approach resulted in 350 responses, of which 200 complete responses were used for analysis. The survey gathered information regarding demographic attributes, degrees of awareness concerning ESG, main sources of information, and identified obstacles as perceived by respondents. The analysis of the data encompassed descriptive statistics, Chi-Square Goodness of Fit tests, and Kruskal-Wallis tests to evaluate awareness levels and the impact of demographic factors including age, education, and occupation. The findings indicated a notable degree of awareness regarding ESG mutual funds among retail investors ($\chi^2 = 61.600$, $p = 0.000$). The analysis revealed that demographic factors had a significant impact on awareness, as evidenced by the results of the Kruskal-Wallis tests, which indicated significant variations based on age ($p = 0.016$), education ($p = 0.008$), and occupation ($p = 0.000$). The main obstacles were perceived high investment risk (58.5% agree/strongly agree), difficulty in comprehending ESG criteria (49.5% agree/strongly agree), and inadequate information (66% agree/strongly agree). The findings indicate that although there is an increasing awareness of ESG mutual funds, demographic disparities and various barriers hamper wider adoption. To effectively tackle these challenges, implementing focused educational initiatives and streamlining ESG communication may significantly improve retail investor engagement and foster sustainable investment practices.

Keywords: sustainable, communication, effectively, engagement

1. INTRODUCTION

The global financial landscape has experienced a notable transformation in recent years, with sustainability becoming a primary focus for investors across the globe (Crona et al., 2021). With the growing prominence of climate change, social justice, and corporate governance issues, there is a noticeable trend among investors who are actively pursuing strategies to align their financial portfolios with their ethical and sustainability values (Martiny et al., 2024). Among the diverse sustainable investment alternatives, Environmental, Social, and Governance (ESG) mutual funds have experienced significant growth in popularity (Gupta, 2022). The funds concentrate on allocating resources to companies that fulfil particular ESG criteria, which encompass environmental sustainability, social responsibility, and robust governance practices (Yu et al., 2024; Eribo & Andradi, 2024).

Although there is an increasing interest in ESG mutual funds, the awareness and comprehension of these investment products continue to be constrained, particularly among retail investors (Tampakoudis et al., 2023). Retail investors, characterised by their self-management of funds and generally smaller investment amounts relative to institutional investors, tend to exhibit a greater aversion to risk (Kannadhasan, 2015). Additionally, they may face limitations in accessing the extensive information available regarding ESG options (Jonsdottir et al., 2022). As a result, individuals may encounter difficulties in grasping the significance of ESG investments or may exhibit reluctance to engage in such investments owing to perceived complexities or uncertainties. Institutional investors have historically led the charge in sustainable investing; however, there exists a notable deficiency in comprehending the perceptions and interactions of retail investors with ESG mutual funds, especially in emerging markets such as India (Eccles et al., 2017).

India, recognized as one of the largest and rapidly expanding economies globally, offers a distinctive opportunity to investigate the level of awareness among retail investors regarding ESG mutual funds (Jonwall et al., 2022). The expansion of the country’s retail investor base is noteworthy, as an increasing number of individuals are actively seeking to engage in the capital markets (Barber & Odean, 2013). Nonetheless, a significant challenge exists in enhancing awareness and advancing understanding of sustainable investment alternatives such as ESG mutual funds. As the number of investors in India increasingly expresses concern regarding environmental and social issues, this study utilises a quantitative approach to assess the awareness and perceptions of retail investors regarding ESG mutual funds. This understanding is vital for the advancement of sustainable investing practices (Yucel et al., 2023).

The scope of this study is to investigate the awareness levels of retail investors concerning ESG mutual funds and to analyse how demographic factors influence their comprehension and perception of these financial instruments. Furthermore, this study aims to examine the primary obstacles that hinder retail investors' comprehension of ESG mutual funds. This study aims to investigate the awareness levels, barriers, and significant influences that shape retail investor behaviour. It aims to elucidate how retail investors perceive the advantages and challenges associated with ESG mutual funds, while also evaluating the demographic variations in their awareness and adoption of sustainable investment practices. This study explores the distinct informational requirements and preferences of retail investors, thereby equipping policymakers, financial institutions, and fund managers with the knowledge necessary to effectively meet these needs and enhance ESG fund literacy.

2. REVIEW OF LITERATURE

This section provides a comprehensive overview of the current literature concerning ESG mutual funds and the level of awareness among retail investors.

2.1 Understanding ESG Investments

Environmental, Social, and Governance (ESG) investing refers to the practice of integrating sustainability factors into investment decision-making (De Souza Barbosa et al., 2023). ESG mutual funds are structured to allocate capital to enterprises that demonstrate commendable performance regarding environmental stewardship, social responsibility, and governance standards. (Parikh et al., 2023; Eribo & Andradi, 2024). As awareness of sustainability issues grows, ESG investing has become an essential part of the global investment landscape, offering a way to align financial returns with social and environmental goals (Chen et al., 2023). ESG mutual funds offer investors a portfolio of stocks or bonds that meet specific ESG criteria, aiming to contribute positively to society while generating financial returns (Tampakoudis et al., 2023).

2.2 Retail Investor Awareness of ESG Mutual Funds

While institutional investors have traditionally been at the forefront of ESG investing, retail investors are increasingly participating in the ESG space. However, retail investor awareness and knowledge of ESG mutual funds remain underexplored (Aulia et al., 2024). Studies suggest that while retail investors are becoming more aware of the ESG concept, there is a significant knowledge gap regarding how ESG mutual funds operate. Awareness of ESG investment options is often limited by insufficient education on what ESG criteria entail, which may deter retail investors from considering them (Bocken et al., 2013). Retail investors' understanding of ESG investments is also influenced by factors such as access to information, media coverage, and financial literacy (D'Hondt et al., 2021). A survey conducted revealed that only 12% of retail investors across the U.S. reported being fully informed about ESG mutual funds, while 27% felt they lacked adequate information to make investment decisions. This gap in knowledge highlights the need for better investor education and transparency regarding ESG funds (Jonwall et al., 2022).

2.3 Impact of Demographic Factors on ESG Awareness

Research suggests that demographic factors, including age, income, education, and occupation, significantly influence an individual's level of awareness and interest in ESG mutual funds (Geetha & Ramesh, 2012). Age plays a crucial role in shaping financial preferences, with younger investors (Millennials and Gen Z) showing less interest in sustainable and socially responsible investments compared to older generations (Gnanadeepan et al., 2024). Higher-income individuals are also more likely to invest in ESG funds due to their ability to invest in specialized mutual funds that may have higher upfront costs or minimum investment amounts (Hauff & Nilsson, 2022). Educational background is another factor that affects awareness. Individuals with higher levels of education, particularly in fields like finance or economics, tend to have greater exposure to concepts of ESG investing (Chen et al., 2023). Occupation also plays a role; employed professionals or those in sectors aligned with sustainability may be more aware of ESG criteria than unemployed or retired individuals (Nugroho et al., 2024).

2.4 Barriers to ESG Investment and the Role of Trust

Despite growing awareness, significant barriers to ESG investing exist. The primary obstacles include a lack of information, perceived complexity in understanding ESG criteria, and concerns about the risk associated with ESG investments. A study highlighted that investors often struggle to navigate the complex terminology and metrics used in ESG analysis, leading to a lack of confidence in these investment options (Jonsdottir et al., 2022). Additionally, the perceived risk of ESG investments is a deterrent for many retail investors. Some argue that ESG funds may sacrifice profitability for sustainability, which could limit their appeal to more risk-averse investors (Pedersen et al., 2020). A survey revealed, 43% of respondents expressed concerns about the perceived higher risk and lower returns of ESG investments, despite growing evidence to the contrary. Investor trust is another critical factor influencing the adoption of ESG mutual funds. The perceived credibility and transparency of ESG funds are key determinants of investor participation (Pong & Man, 2024). A recent study indicates that investors exhibit a greater propensity to allocate their resources to ESG mutual funds when they possess confidence in the authenticity of the sustainability practices employed by fund managers, as opposed to merely engaging in superficial "greenwashing.". Trust in the fund's ability to generate long-term gains through ESG criteria is also vital for investor engagement (Abouarab et al., 2024).

3. OBJECTIVE OF THE STUDY

i. To assess the level of awareness among retail investors regarding ESG mutual funds.
ii. To evaluate the impact of demographic factors on retail investors' awareness and understanding of ESG mutual funds.
iii. To analyse key barriers to understanding ESG mutual funds among retail investors.

4. RESEARCH HYPOTHESIS

a. Null Hypothesis (H01): There is no significant level of awareness among retail investors regarding ESG mutual funds.

b. Null Hypothesis (H02): Demographic factors (such as age, education, and occupation) have no significant impact on retail investors' awareness of ESG mutual funds.

5. METHODOLOGY

This research employs a quantitative methodology to evaluate the awareness and perceptions of retail investors concerning ESG mutual funds. A structured questionnaire was developed and distributed online to 1,000 retail investors across India, with 350 responses received. After reviewing the responses, 200 were deemed complete and suitable for analysis. The questionnaire was designed to capture both nominal and ordinal data, covering demographic characteristics, levels of ESG awareness, primary sources of information, and perceived barriers to understanding ESG mutual funds. Likert scales were employed to measure awareness and perception levels, while categorical data was gathered for demographic variables. The use of categorical and ordinal data enabled the application of non-parametric statistical methods for analysing relationships and differences. The Chi-Square Test was employed in the analysis to assess the distribution of ESG awareness among the respondents. Kruskal-Wallis H Test was employed to assess the impact of demographic factors (such as age, income, education, and occupation) on the level of ESG awareness. Descriptive statistics, including frequencies and percentages, were used to summarize the data on awareness levels and demographic distributions. Throughout the research process, strict adherence to ethical considerations, including informed consent and participant confidentiality, was maintained.

6. RESULTS

In this section, authors present the findings on retail investors' awareness of ESG mutual funds and the influence of demographic factors such as age, education, and occupation. The results, derived from observed and expected frequencies, chi-square, and Kruskal-Wallis tests, demonstrate significant variations in awareness levels across different demographic groups, underscoring the impact of these factors on investor understanding. The authors also identify key barriers to engaging with ESG mutual funds, including a lack of information, the perceived complexity of ESG criteria, and concerns regarding investment risk. These factors play a critical role in shaping investor perceptions and highlight the challenges retail investors face in fully engaging with ESG mutual funds.

6.1 Assessment of Awareness Levels and the Impact of Demographic Factors on ESG Mutual Funds Among Retail Investors

In this section, the analysis focuses on assessing the level of awareness among retail investors regarding ESG mutual funds and evaluating how various demographic factors influence this awareness. The data presented highlights significant findings from observed and expected frequencies, chi-square tests, and Kruskal-Wallis tests. The results indicate that awareness levels of ESG mutual funds vary across different age groups, education levels, and occupations, with statistically significant differences found in all three factors. These findings emphasize the importance of demographic characteristics in shaping retail investors' awareness and understanding of ESG mutual funds, providing valuable insights for developing targeted strategies to increase engagement with these investment options.

Table 1: Result of Chi-Square Test for Awareness Level of ESG Mutual Funds Among Retail Investors

Test Statistics

	Awareness level of ESG mutual funds	Perceived importance of ESG criteria in investments	Prior investment in ESG mutual funds	Trust in ESG mutual funds for sustainable investment	Perceived potential of ESG mutual funds for long-term gains
Chi-Square	61.600[a]	22.950[a]	11.520[b]	48.650[a]	71.950[a]
df	4	4	1	4	4
Asymp. Sig.	.000	.000	.001	.000	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 40.0.
b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 100.0.
Source: compiled by author

The chi-square test conducted to assess the awareness level of ESG mutual funds among retail investors yielded a chi-square value of 61.600 with 4 degrees of freedom and a p-value of 0.000, which is less than the 0.05 significance level. As a result, the null hypothesis (H01), which posited that there is no significant level of awareness among retail investors regarding ESG mutual funds, is rejected. This indicates that there is a statistically significant awareness level among retail investors (Nugroho et al., 2024). Similarly, the chi-square results for other factors like the perceived importance of ESG criteria, prior investment in ESG mutual funds, trust in ESG mutual funds for sustainable investment, and the perceived potential of ESG mutual funds for long-term gains, all showed p-values less than 0.05, leading to the rejection of the null hypotheses for these variables as well, further confirming the significant role these factors play in shaping the awareness and perceptions of ESG mutual funds among retail investors.

Table: 2 Result of Kruskal-Wallis Test for Awareness Level of ESG Mutual Funds Across Age Groups

Test Statistics

	Awareness level of ESG mutual funds
Chi-Square	10.335
df	3
Asymp. Sig.	.016

a. Kruskal Wallis Test
b. Grouping Variable: Age of respondent
Source: compiled by author

The Kruskal-Wallis test was employed to investigate the presence of statistically significant differences in the awareness levels of ESG mutual funds among various age groups. The analysis yielded a Chi-Square value of 10.335, accompanied by 3 degrees of freedom and an asymptotic significance level (p-value) of 0.016. Given that the p-value is below the conventional significance threshold of 0.05, we proceed to reject the null hypothesis. This outcome suggests a significant disparity in the awareness levels of ESG mutual funds across different age groups, indicating that age may serve as a determinant in the awareness of ESG mutual funds among the surveyed individuals.

Table: 3 Result of Kruskal-Wallis Test for Awareness Level of ESG Mutual Funds by Education Level

Test Statistics

	Awareness level of ESG mutual funds
Chi-Square	11.869
df	3
Asymp. Sig.	.008

a. Kruskal Wallis Test

b. Grouping Variable: Education level of respondent
Source: compiled by author

The Kruskal-Wallis test was performed to assess the differences in awareness levels of ESG mutual funds among respondents with differing educational backgrounds. The test produced a Chi-Square value of 11.869 with 3 degrees of freedom and a p-value of 0.008. Since the p-value is less than the significance threshold of 0.05, the null hypothesis is rejected. This indicates that education level has a statistically significant impact on ESG mutual fund awareness. Respondents with different educational backgrounds exhibit varying levels of awareness, suggesting that higher educational attainment may contribute to better understanding and familiarity with ESG mutual funds.

Table: 4 Result of Kruskal-Wallis Test for Awareness Level of ESG Mutual Funds by Occupation

Test Statistics

	Awareness level of ESG mutual funds
Chi-Square	175.663
df	4
Asymp. Sig.	.000

a. Kruskal Wallis Test

b. Grouping Variable: Occupation of respondent
Source: compiled by author

The Kruskal-Wallis test was conducted to examine the influence of occupation on awareness levels of ESG mutual funds. The test resulted in a Chi-Square value of 175.663 with 4 degrees of freedom and a p-value of 0.000. As the p-value is well below the 0.05 significance threshold, the null hypothesis is rejected. This indicates that occupation significantly impacts awareness levels of ESG mutual funds. The findings suggest substantial variation in awareness across different occupational groups, highlighting that certain professions may be more familiar with ESG mutual funds than others, possibly due to differences in exposure or access to financial information.

Table:5 Summary of Kruskal-Wallis Test Results for ESG Mutual Fund Awareness by Demographic Factors

Test Variable	Grouping Variable	Chi-Square	df	Asymp. Sig.

Awareness Level of ESG Mutual Funds	Age	10.335	3	0.016
	Education Level	11.869	3	0.008
	Occupation	175.663	4	0.000

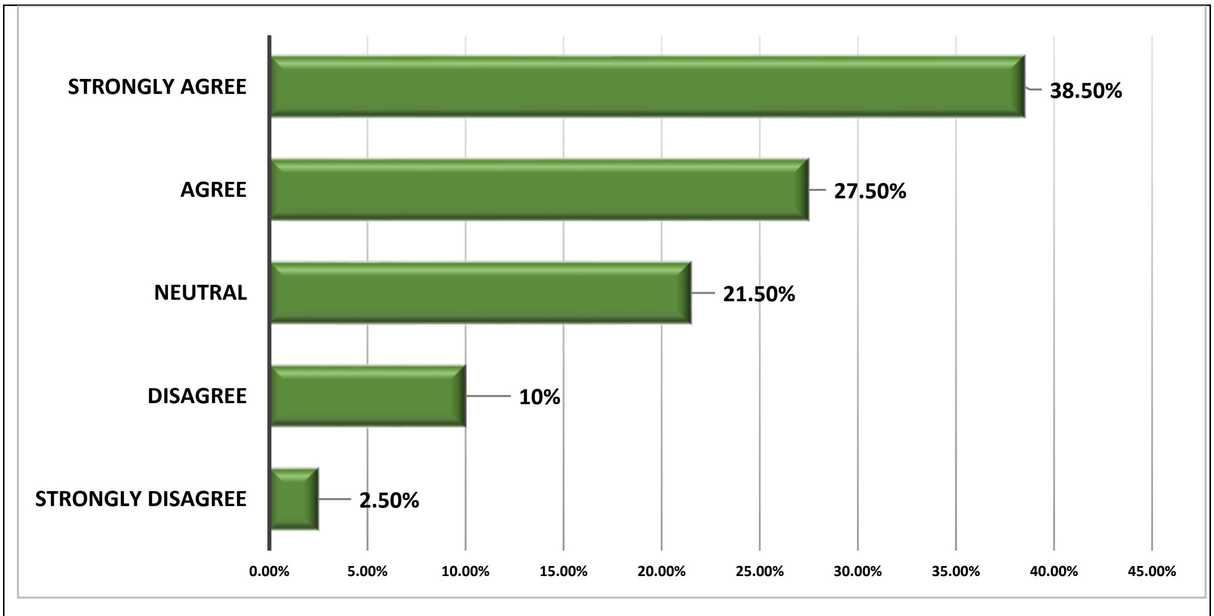
Source: compiled by author

The results of the Kruskal-Wallis tests indicate significant differences in the awareness of ESG mutual funds across the demographic groups. The p-values for Age (0.016), Education Level (0.008), and Occupation (0.000) are all below the 0.05 significance threshold, leading us to reject the null hypothesis in all three cases. This suggests that demographic factors such as age, education, and occupation have a statistically significant impact on awareness of ESG mutual funds. These factors should therefore be taken into account when designing strategies aimed at increasing awareness and engagement with ESG investment options.

6.2 Key Barriers to Understanding ESG Mutual Funds Among Retail Investors

In this section, the analysis focuses on identifying and understanding the key barriers that retail investors face when it comes to ESG mutual funds. The data presented highlights three major obstacles: a lack of information, perceived complexity of ESG criteria, and the perception of risk associated with these investments. A significant proportion of respondents indicate that insufficient information and complexity in understanding ESG criteria are notable challenges, while many also view ESG mutual funds as high-risk. These barriers contribute to the reluctance or hesitation of retail investors in fully engaging with and investing in ESG mutual funds.

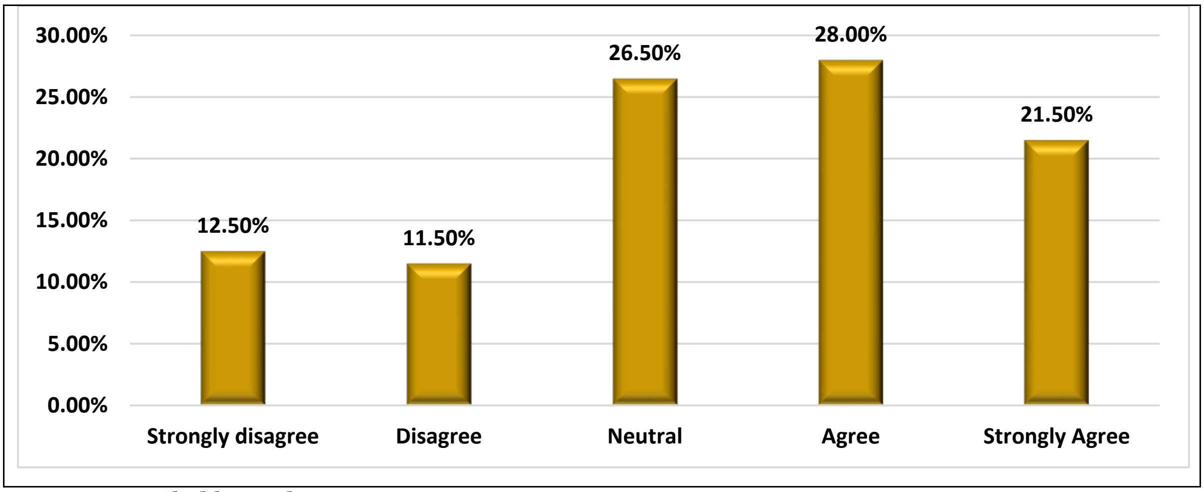
Figure 1: Perceived Barrier Due to Lack of Information on ESG Investments



Source: compiled by author

The data highlights key barriers that retail investors face in understanding ESG mutual funds. A major challenge appears to be the perceived lack of information, with 66% of respondents agreeing or strongly agreeing that insufficient information is a significant barrier. Additionally, the perceived complexity of ESG criteria is another obstacle, with over half of respondents finding ESG criteria complex or difficult to understand. Finally, the perception of high risk associated with ESG investments is a notable concern, with 58.5% of respondents agreeing or strongly agreeing that they view these investments as risky. Together, these factors—lack of information, complexity, and risk perception—emerge as the primary barriers preventing retail investors from fully understanding and engaging with ESG mutual funds.

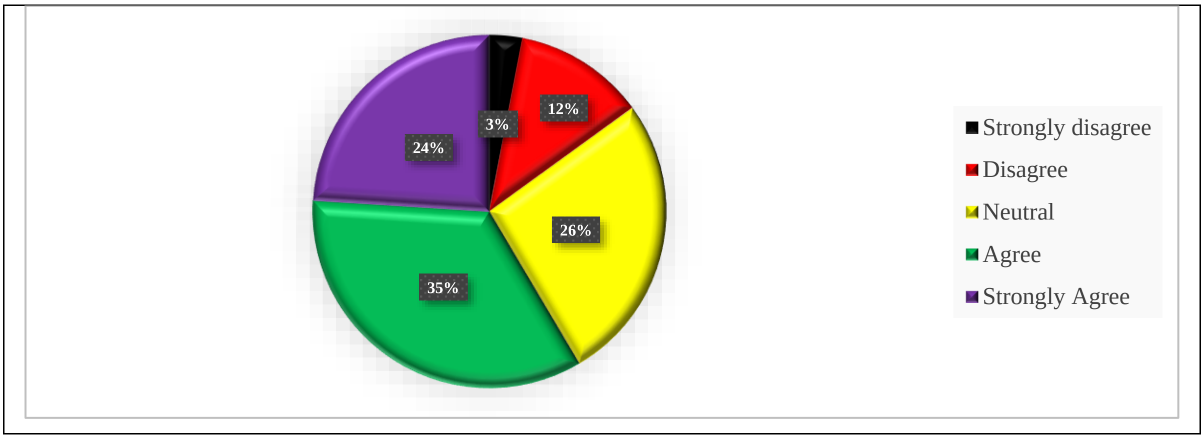
Figure 2: Perceived Complexity in Understanding ESG Criteria Among Retail Investors



Source: compiled by author

The data reveals that while a significant portion of retail investors (49.5%) agree or strongly agree that understanding ESG criteria is complex, there is also a notable portion (24%) who disagree or strongly disagree, suggesting that not all investors find ESG criteria difficult to comprehend. Around 26.5% remain neutral, indicating some uncertainty or ambivalence. This highlights that while complexity is a key barrier for many investors, there is a diverse range of perceptions regarding the ease or difficulty of understanding ESG criteria among retail investors.

Figure 3: Perception of Risk in ESG Investments Among Respondents



Source: compiled by author

The data indicates that a significant number of retail investors (58.5%) perceive ESG mutual funds as high-risk, with 34.5% agreeing and 24% strongly agreeing. A smaller proportion (15%) disagree or strongly disagree, while 26.5% remain neutral on the matter. This suggests that the perception of risk is a key barrier for many retail investors, potentially influencing their reluctance to invest in ESG mutual funds. The mixed responses also reflect a level of uncertainty or variation in how different investors assess the risk associated with these funds.

7. CONCLUSION

This study aimed to assess retail investors' awareness of ESG (Environmental, Social, and Governance) mutual funds, the influence of demographic factors on their awareness, and the key barriers hindering greater adoption of these sustainable investment options. The findings indicate that while a significant proportion of retail investors are aware of ESG mutual funds, awareness levels vary significantly across demographic groups. A Chi-Square test for the overall awareness level yielded a significant result ($\chi^2 = 61.600$, $p = 0.000$), rejecting the null hypothesis and indicating a notable level of awareness among investors. Furthermore, demographic factors such as age, education, and occupation were found to have a significant impact on ESG awareness, with the Kruskal-Wallis tests revealing significant differences in awareness across different age groups ($p = 0.016$), education levels ($p = 0.008$), and occupations ($p = 0.000$). The study also identified key barriers to greater engagement with ESG mutual funds. A lack of information was the most frequently cited challenge, with 66% of respondents agreeing or strongly agreeing that insufficient information was a significant barrier. Complexity in understanding ESG criteria was another major hurdle, with 49.5% of respondents acknowledging the difficulty in grasping these criteria. Lastly, 58.5% of respondents expressed concerns about the high risk associated with ESG mutual funds, reinforcing the notion that perceived financial risk is a deterrent for many retail investors. These findings suggest that while awareness of ESG mutual funds is growing, there are still significant gaps, particularly among certain demographic groups. The barriers of information scarcity, complexity, and risk perception must be addressed to foster wider participation in ESG investing.

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