International Journal of Environmental Sciences
ISSN: 2229-7359
Vol. 11 No. 23s, 2025
https://www.theaspd.com/ijes.php

The Role Of Social Factors Of ESG In Driving Sustainable Investment Decisions: Evidence From Emerging Economies

Arshi Rubab[1], Aftab Alam[2], Ehsanul Haque[3], Vardah Saghir[4], Farheen Siddiqui[5], Neda Tasneem[6]
[1] Research Scholar, Department of Business Management, Integral University, Lucknow, India, https://orcid.org/0009-0005-4533-6143
[2]* *Corresponding author,* Assistant Professor, Department of Commerce, Integral University Lucknow, India, https://orcid.org/0000-0002-4475-4854;
[3] Assistant Professor, Department of Business Management, Integral University, Lucknow, India, https://orcid.org/0000-0002-9589-0733
[4] Assistant Professor, Department of Management, School of Management and Business Studies, Jamia Hamdard, New Delhi, India, https://orcid.org/ 0000-0002-6318-5052
[5] Assistant Professor, Department of Commerce, Integral University Lucknow, https://orcid.org/0000-0003-2910-8157
[6] Assistant Professor, Department of Commerce, Integral University Lucknow, https://orcid.org/0009-0009-3539-0399

Abstract
The increasing focus on fulfilling stakeholder expectations, maintaining corporate responsibility, and promoting sustainable wealth growth has made sustainable investment a crucial initiative globally. Within the framework of Environmental, Social, and Governance (ESG), social factors play an important role in guiding investors' perspectives and decisions. Knowledge of social responsibility serving as a mediating construct, this study examines how investors' intentions and behaviors are impacted by four social dimensions: human capital, product liability, stakeholder opposition, and social opportunities. Using structural equation modelling (SmartPLS-SEM) to analyze survey data from 384 Indian investors, the findings show that social opportunity initiatives, stakeholder management, product liability, and human capital significantly raise awareness of social responsibility, which in turn encourages sustainable investment intentions. Nonetheless, some social factors have a less direct influence on investment behavior, highlighting the mediating function of awareness. By emphasizing the importance of social factors in investment decisions, these findings add to the expanding ESG literature and have useful ramifications for businesses seeking to attract ethical investors and legislators to support sustainable finance.

Keywords *ESG Factors, Social Factors, SMARTPLS, Sustainable Investment, Investment intention, investment behaviour*
Authors' individual contributions: Conceptualization – A.R. Methodology – A.R. A.A., E.H.; Investigation – A.R, V.S.; Software- A.A., E.H., V.S.; Resources – A.A., E.H.; Writing – Original Draft –F.S., N.T.; Writing – Review & Editing –V.S., F.S., N.T.; Supervision – A.A., E.H.,

1. INTRODUCTION

Investment practices have undergone a dramatic change in the last ten years, as traditional risk-return criteria are increasingly combined with sustainability factors in financial decisions (Friede, Busch, & Bassen, 2015). Given the evidence that ESG integration can improve resilience and performance over time, Environmental, Social, and Governance (ESG) concepts have emerged as crucial standards for directing ethical investments (Kotsantonis et al., 2016; Giese et al., 2019). Although environmental and governance concerns have drawn much academic interest, the social aspect of ESG is still largely ignored, even though it plays a crucial role in determining investor confidence and business legitimacy (Sila & Cek, 2017).

According to Mitchell, Agle, and Wood (1997), social aspects include a company's interactions with its workers, communities, clients, and other stakeholders, and they represent the ideals of accountability, safety, inclusion, and equity. Businesses with good social practices frequently benefit from increased consumer loyalty, decreased stakeholder conflict, and improved reputation capital, all of which help

attract investments (Freeman, 1984; Edmans, 2011). According to earlier studies, companies that prioritize labor rights, product responsibility, and social innovation tend to reduce the risk of social disputes and regulatory scrutiny, which attracts investors concerned with sustainability (Porter & Na, 2012; Porter & Kramer, 2011).

Investors' understanding of social duties is an important mediating factor. Awareness affects both real allocation decisions and investment aspirations by bridging the gap between investor perceptions and business actions (Ajzen, 1991; Statman, 2005). However, questions remain regarding the number of social factors that collectively and individually influence sustainable investment behavior, such as stakeholder resistance, product liability, human capital, and social opportunities.

To close this gap, this study examines how social factors influence sustainable investment choices, with an emphasis on the mediating function of social responsibility awareness. Using information from 384 Indian investors, this study creates and evaluates a thorough model based on legitimacy and stakeholder theories. This study advances the conversation on sustainable finance by highlighting the social pillar of ESG and provides useful information for policymakers and business managers.

Objectives

1. To investigate how social factors affect choices regarding sustainable investments.
2. To determine whether investor trust in sustainable investments is increased by social responsibility awareness.

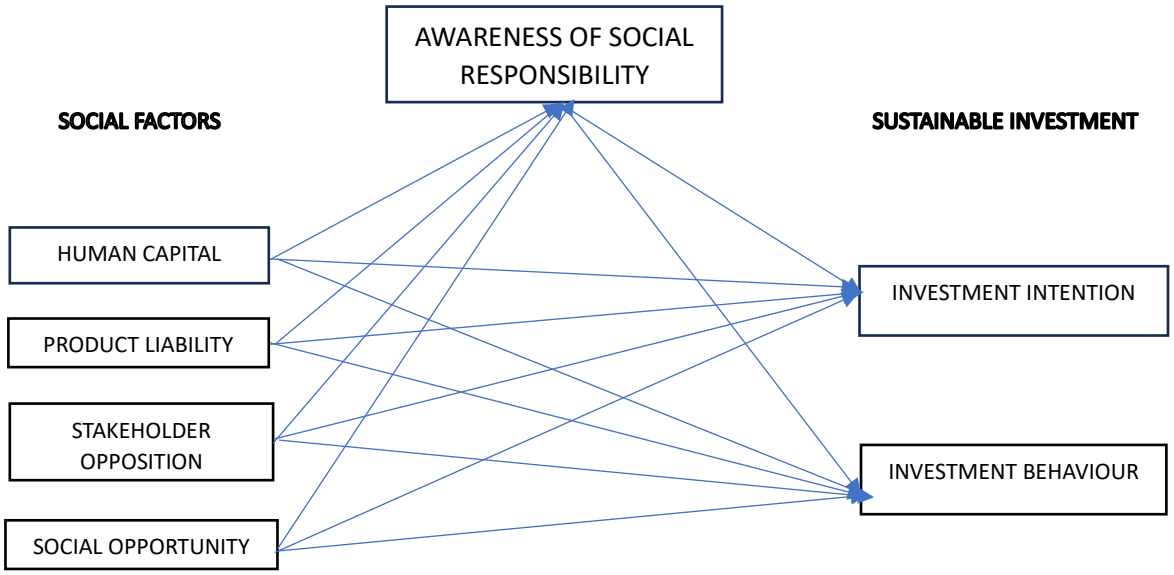


Fig 1. Research Framework

The research framework created for this study, which examines how social factors influence sustainable investment choices, is depicted in Fig 1. Through the mediating function of social responsibility awareness, the framework examines how four sub-dimensions of social factors—human capital, product liability, stakeholder opposition, as well as social opportunity—influence investors' decision-making processes.

2. LITERATURE REVIEW AND HYPOTHESES

2.1 Social Factors in ESG and Investment Decisions

Sustainable investment decisions are increasingly shaped by environmental, social, and governance (ESG) considerations (Friede, Busch, & Bassen, 2015). Social elements emphasize the management of relationships with consumers, workers, communities, and other stakeholders (Sila & Cek, 2017). A growing number of investors consider social performance to be a stand-in for corporate reputation and long-term resilience (Kotsantonis, Pinney, & Serafeim, 2016). According to Giese et al. (2019), companies

with strong social policies tend to attract responsible investors by lowering the risks of labor unrest, consumer boycotts, and regulatory penalties.

2.2 Awareness of Social Responsibility and Investment Decisions

Understanding social responsibility reflects how investors view and understand a business's moral and social behavior. According to earlier research, increased understanding boosts investor confidence and encourages long-term, responsible investing (Friede, Busch, & Bassen, 2015; Giese et al., 2019). Knowledge of a company's social performance increases the likelihood that investors will create sustainable investment intentions (Ajzen, 1991; Statman 2005). Costs, liquidity requirements, and behavioral biases all influence investment decisions; thus, it is not always easy to translate information into action (Shiller, 2000).

H1a: Awareness of social responsibility positively influences investment behavior.

H1b: Awareness of social responsibility positively influences investment intention.

2.3 Human Capital and Investment Decisions

Human capital emphasizes employee well-being, training, and fair labor practices. Firms that nurture their workforce are perceived as more resilient, innovative, and responsible (Becker, 1994; Edmans, 2011). Such practices often strengthen investors' trust and signal long-term stability, influencing both their intentions and behaviors toward investment (Krueger et al., 2020). Simultaneously, better human capital management is expected to improve awareness of social responsibility, acting as an indirect pathway (Delmas & Pekovic, 2018).

H2a: Human capital positively influences social responsibility awareness.

H2b: Human capital positively influences investment behavior.

H2c: Human capital positively influences investment intention.

2.4 Product Liability and Investment Decisions

Product responsibility refers to quality assurance, safety standards, and transparent communication with consumers. Companies that uphold product safety mitigate reputational risks and reduce the likelihood of consumer backlash (Chen et al., 2012; Chen Jo & Tang, 2015). Responsible product practices are also a key signal of ethical behavior, contributing to a higher awareness of social responsibility. However, investors may not always translate these perceptions into actual investment choices if short-term financial concerns dominate the decision-making process (Kumar, 2016).

H3a: Product liability positively influences social responsibility awareness.

H3b: Product liability positively influences investment behavior.

H3c: Product liability positively influences investment intention.

2.5 Social Opportunities and Investment Decisions

Social opportunities highlight how firms create inclusive valueby offering access to healthcare, financial inclusion, or other welfare-enhancing services. Prior research shows that these efforts improve reputation and align with the global sustainable-development agenda (Porter & Kramer, 2011; Serafeim, 2020). Investors often reward such initiatives, viewing them as a commitment to achieving long-term impact (Prahalad & Hart, 2002). Moreover, these initiatives directly enhance awareness of social responsibility, thereby influencing intentions and behaviors.

H4a: Social opportunities positively influence the awareness of social responsibility.

H4b: Social opportunities have a positive influence on investment behavior.

H4c: Social opportunities have a positive influence on investment intention.

2.6 Stakeholder Opposition and Investment Decisions

Stakeholder opposition reflects how firms handle conflicts, criticisms, and relations with communities. When managed effectively, firms gain legitimacy and reduce social controversy (Freeman, 1984; Suchman, 1995). Transparent responses to criticism strengthen investor trust and improve awareness of social responsibility (Chatterji, Levine, & Toffel, 2009). However, poorly handled opposition can discourage actual investment behavior, despite raising awareness of social issues.

H5a: Managing stakeholder opposition positively influences social responsibility awareness.

H5b: Managing stakeholder opposition positively influences investment behavior.
H5c: Managing stakeholder opposition positively influences investment intention.

2.7 Mediation Role of Awareness of Social Responsibility

Legitimacy theories suggest that awareness mediates the relationship between firms' social practices and investment outcomes (Suchman, 1995; Deegan, 2002). Social factors, such as human capital, product liability, stakeholder management, as well as social opportunities, may not directly influence investment decisions but raise awareness of a company's social responsibility. By improving awareness, these practices can convert corporate responsibility into stronger investor intentions and behavior.
H6a: Awareness of social responsibility mediates the relationship between human capital and investment behavior.
H6b: Awareness of social responsibility mediates the relationship between human capital and investment intention.
H7a: Awareness of social responsibility mediates the relationship between product liability and investment behavior.
H7b: Awareness of social responsibility mediates the relationship between product liability and investment intention.
H8a: Awareness of social responsibility mediates the relationship between social opportunities and investment behavior.
H8b: Awareness of social responsibility mediates the relationship between social opportunities and investment intention.
H9a: Awareness of social responsibility mediates the relationship between stakeholder opposition and investment behavior.
H9b: Awareness of social responsibility mediates the relationship between stakeholder opposition and investment intention.

3. THEORETICAL BACKGROUND

Investment decision-making related to environmental, social, and governance (ESG) factors can be better understood by grounding it in established theory. **Stakeholder Theory** (Freeman, 1984) provides one of the most widely accepted lenses, emphasizing that businesses exist not only to generate profits but also to meet the expectations of stakeholders. Investors often perceive firms that treat stakeholders fairly—through ethical labor practices, community development, or consumer protection—as lower-risk and more sustainable in the long run (Clarkson, 1995; Donaldson & Preston, 1995). Similarly, **Legitimacy Theory** (Suchman, 1995) suggests that firms align their operations with societal norms to maintain legitimacy. When companies disclose their social responsibility activities, they enhance their legitimacy, which, in turn, increases investor confidence (Deegan, 2002; Cho & Patten, 2007).

Another relevant perspective is **Institutional Theory** (DiMaggio & Powell, 1991), which argues that external pressures, such as regulations, cultural expectations, and global sustainability initiatives, push firms toward responsible behavior. This institutional conformity signals stability to investors, who often prefer companies that align with the international norms (Campbell, 2007; Matten & Moon, 2008). **Social Contract Theory** (Donaldson & Dunfee, 1999) also supports this argument, suggesting that firms operate under an implicit contract with society, where meeting social obligations strengthens their acceptance and investment appeal.

From the behavioral perspective, **Prospect Theory** (Kahneman & Tversky, 1979) and **Behavioral Finance** literature emphasize that investors' choices are not purely rational. They are influenced by biases, values, and ethical preferences, leading them to prioritize socially responsible firms, even when financial returns are uncertain (Shiller, 2000; Statman, 2005). Empirical studies also reveal that investors often view socially responsible investment (SRI) funds as a way to align their portfolios with their personal values while hedging against reputational risks (Renneboog et al., 2008; Dorfleitner & Utz, 2014).

Finally, the **Resource-Based View (Barney, 1991)** and **Human Capital Theory (Becker, 1964)** argue that firms that invest in human resources, employee welfare, and community relations build intangible assets

that drive long-term performance. These resources enhance competitive advantage and make firms more attractive to sustainability-driven investors (Hart, 1995; Mahoney & Roberts, 2007). Together, these theories provide a comprehensive framework for explaining why social factors—including human capital, product liability, stakeholder relations, and social opportunities—play a crucial role in shaping investment decisions.

4. RESEARCH METHODOLOGY

Design and Approach

This study adopts a **quantitative and explanatory research design**, as the primary objective is to examine the influence of social factors on sustainable investment behaviour. A structured survey method was employed to gather responses from investors, which allowed for systematic testing of the proposed conceptual framework and hypotheses. This study follows a cross-sectional approach, collecting data at a single point in time to capture investor perceptions and behavioral patterns.

Sampling and data collection

The target population of this study comprised **individual investors actively participating in financial markets**. A purposive sampling technique was applied because the focus was on respondents with prior investment experience and awareness of ESG-related issues. Following Krejcie and Morgan's (1970) guidelines, a sample size of 384 investors was considered adequate to ensure statistical validity and generalizability of the results. Data were collected through a self-administered questionnaire, distributed both online and offline, ensuring a broader reach and diverse representation across age, gender, income, and educational backgrounds.

Instrument development

The survey instrument was developed by adapting measurement items from well-established scales in previous research. The questionnaire was divided into sections covering demographic details, social factors (human capital, product liability, stakeholder opposition, and social opportunities), awareness of social responsibility, investment intentions, and investment behavior. All items were measured using a five-point Likert scale, ranging from "strongly disagree" to "strongly agree." A pilot study was conducted with a small group of investors to test clarity, reliability, and validity, after which the necessary refinements were made before final distribution.

Table1. Construct Variable and indicators

S.No.	Construct Variable	Types of Variables	References	Indicator	Indicator Code
1	Social Factors	Independent Variable	Zafiryadis, Martin (2025) Lai T. Hoang et al. (2025) Zhang X et al. (2024) Murad Harasheh (2024), Intezar et al. (2024),		
	1) Human Capital			The company ensures safe and healthy working conditions for its employees.	HC1
				The company provides fair wages and equal opportunities to employees.	HC2
				The company invests in training and development of its workforce.	HC3
				The company maintains strong labor rights and supply chain labor standards.	HC4
	2) Product Liability			The company ensures high product quality and safety standards.	PL1
				The company provides accurate and transparent product information to consumers.	PL2

				The company prioritizes consumer safety over short-term profits.	PL3
				The company complies with all product safety regulations and standards.	PL4
	3) Stakeholder Opposition			The company avoids controversial sourcing practices.	SOP1
				The company maintains good relations with local communities.	SOP2
				The company addresses public concerns regarding its business activities.	SOP3
				The company responds transparently to criticism from stakeholders.	SOP4
	4) Social Opportunity			The company provides access to affordable healthcare/financial services.	SO1
				The company invests in opportunities in nutrition and health.	SO2
				The company improves communication and accessibility for disadvantaged groups.	SO3
				The company promotes financial inclusion for underserved communities.	SO4
2	**Awareness of Social Responibility**	Mediator	Nafisa, Rounok et al. (2023) Luca Esposito (2025)	I am aware of the social responsibility practices of the companies I invest in.	AW1
				I regularly follow reports or disclosures related to a company's social initiatives.	AW2
				I believe social responsibility information influences my investment decisions.	AW3
				I can differentiate between companies that are socially responsible and those that are not.	AW4
3	**Sustainable Investment**	Dependent Variable	Matteo Benuzzi et al. (2024) Sultana S et al. (2018) Makhija, P., et al. (2023) Ranty, C. P. W., et al. (2024), Haque, et al. (2024)		
	1) Investment Intentions			I am willing to allocate funds toward sustainable investment opportunities.	II1
				I prefer long-term investments in socially responsible companies.	II2
				I believe sustainable investments provide competitive financial returns.	II3
				I intend to increase my investment in sustainable options in the future.	II4
	2) Investment Behavior			I have already invested in companies/funds focusing on sustainability.	IB1
				My portfolio includes ESG-based (Environmental, Social, Governance) funds.	IB2
				I am willing to compromise short-term returns for long-term sustainability.	IB3
				I recommend sustainable investments to others.	IB4

Techniques of Data Analysis

To test the research framework and hypotheses, this study employed **Partial Least Squares Structural Equation Modeling (PLS-SEM)** using SmartPLS software. This approach was considered appropriate because it is particularly useful for complex models that include mediation effects and for studies focusing on prediction and theory development (Hair et al., 2019).

The analysis was conducted in two **stages**. In the first stage, the **measurement model** was assessed to establish construct reliability and validity. Reliability was examined using Cronbach's alpha and composite reliability (CR), while validity was evaluated using the average variance extracted (AVE) for convergent validity and the Fornell–Larcker criterion and HTMT ratios for discriminant validity. Multicollinearity was also checked using the variance inflation factor (VIF) values to ensure that the indicators were free from redundancy.

In the second stage, the **structural model** was evaluated to test the proposed hypothesis. Path coefficients, t-values, and p-values were obtained through a bootstrapping procedure with 5,000 resamples, which provided robust estimates of the significance levels. The explanatory power of the model was assessed using R^2 values, and the predictive relevance was determined using Q^2 statistics. Additionally, effect sizes (f^2) were calculated to understand the relative impact of each construct on the dependent variable.

This rigorous analytical strategy allowed for a comprehensive examination of both the measurement properties and structural relationships, thereby ensuring the reliability and validity of the findings.

5. RESULTS

Table2. Demographic Information

Characteristics	**Criteria**	**Frequency (n=384)**	**Percentage** (%)
Gender	Male	246	64.06
	Female	138	35.94
Age	Less or equal 20 years	76	19.79
	21 or 30 years	174	45.31
	31 to 40 years	80	20.83
	41 to 50 years	41	10.68
	Above 50 years	13	3.39
Education	Bachelor's Degree	178	46.35
	Master's Degree	102	26.56
	Ph.D	41	10.68
	Professional Degree (e.g., CPA, CFA, CA, CS)	24	6.25
	Other	39	10.16
Occupation:	private	144	37.50
	Professional	69	17.97
	Business	41	10.68
	Government	18	4.69
	Other	112	29.17
Income:	Less than Rs. 50,000	155	40.36
	Between Rs. 50,001 to Rs. 100,000	90	23.44

	Between Rs. 100,001 to Rs. 150,000	75	19.53
	More than Rs. 150,000	64	16.67
Investing Experience	Less than a year	154	40.10
	1yr - 3yrs	117	30.47
	3yrs - 5yrs	68	17.71
	above 5yrs	45	11.72

The demographic characteristics of the 384 investors surveyed provide useful insights into the sample composition.

In terms of **gender**, the majority of respondents were male (64.06%), while females accounted for 35.94%. This reflects the continued dominance of men in investment-related activities, although the presence of a substantial proportion of female investors suggests growing gender diversity in financial participation.

With regard to **age distribution**, the largest group of respondents (45.31%) fell in the 21–30 years category, followed by 20.83% in the 31–40 years bracket. Younger investors, particularly those below 30 years of age, represent the most active participants in sustainable investment decisions. A smaller proportion of respondents were above 50 years (3.39%), highlighting that older individuals tend to be less involved in ESG-related investment.

In terms of **educational background**, nearly half of the respondents (46.35%) held a bachelor's degree, and 26.56% possessed a master's degree. Respondents with doctoral qualifications (10.68%) and professional certifications such as CPA, CFA, or CA (6.25%) were fewer, but together, these groups indicate that a significant portion of investors in the sample are well-educated and professionally skilled, which may influence their awareness of social responsibility.

Regarding **occupation**, 37.5% of respondents were employed in the private sector, followed by 17.97% professionals such as lawyers, doctors, or consultants. Business owners (10.68%) and government employees (4.69%) represented smaller shares, while 29.17% fell under the "other" category, reflecting the diversity of investors' backgrounds.

The distribution of **income levels** indicates that 40.36% of respondents earned less than ₹50,000 per month, while 23.44% earned between ₹50,001 and ₹100,000. Approximately 19.53% fell within the ₹100,001–₹150,000 range, and 16.67% earned more than ₹150,000 monthly. This mix suggests that the sample captures perspectives across different income brackets, with a strong representation of middle-income investor perspectives.

Finally, in terms of **investing experience**, the majority of respondents (40.10%) reported having less than one year of experience, followed by 30.47% with one to three years of experience. A smaller proportion had three to five years (17.71%) or more than five years of experience (11.72%). These results suggest that sustainable investment decisions are attracting increasing interest from relatively new and early stage investors.

Overall, the demographic profile highlights that the study captures a diverse group of investors, though with a concentration of younger age groups, male respondents, bachelor's degree holders, and those with relatively short investment experience. These characteristics provide an important context for interpreting the subsequent analysis of awareness, social factors, and investment behavior.

Measurement Model Assessment

Before testing the structural relationships, the measurement model was assessed to ensure the constructs' reliability and validity. Following the guidelines of Hair et al. (2019), the evaluation involved three key steps: (i) indicator reliability, (ii) internal consistency reliability, and (iii) validity assessment (both convergent and discriminant validity).

Indicator Reliability:

All items were checked for outer loading. As recommended, factor loadings greater than 0.70 were considered acceptable, indicating that each observed variable contributed substantially to its

corresponding constructs. A few items with loadings slightly below the threshold were examined carefully but retained if their removal did not significantly improve the composite reliability or AVE.

Internal Consistency Reliability:

The reliability of each construct was measured using Cronbach's alpha and composite reliability (CR) values. The results confirmed that all constructs achieved values above the recommended threshold of 0.70, indicating a high degree of internal consistency among the items that measured each construct.

Convergent Validity:

Convergent validity was assessed using the average variance extracted (AVE). All constructs reported AVE values above 0.50, suggesting that more than half of the variance in the indicators was explained by their respective constructs. This provides evidence that the constructs share a high proportion of variance with their indicators.

Discriminant Validity:

Discriminant validity was evaluated using the Fornell–Larcker criterion and the heterotrait–monotrait (HTMT) ratio of correlations. The square root of the AVE for each construct was greater than its correlation with the other constructs, fulfilling the Fornell–Larcker criterion. In addition, the HTMT values were below the threshold of 0.85, confirming that each construct was empirically distinct from the others.

Table3. Reliability and validity

Construct	Items	Factor Loading	Cronbach's alpha	Composite reliability (rho a)	Composite reliability (rho c)	Average variance extracted (AVE)
AW	AW1	0.729	0.816	0.817	0.816	0.526
	AW2	0.737				
	AW3	0.715				
	AW4	0.721				
HC	HC1	0.878	0.934	0.937	0.934	0.781
	HC2	0.799				
	HC3	0.930				
	HC4	0.923				
PL	PL1	0.837	0.931	0.932	0.931	0.771
	PL2	0.888				
	PL3	0.878				
	PL4	0.908				
SO	SO1	0.764	0.887	0.895	0.887	0.664
	SO2	0.703				
	SO3	0.888				
	SO4	0.888				
SOP	SOP1	0.807	0.874	0.875	0.873	0.632
	SOP2	0.785				
	SOP3	0.842				

SOP4	0.742

The measurement model was examined for reliability and validity, and the results confirmed that all the constructs met the recommended thresholds. The outer loadings of the items ranged from 0.703 to 0.930, demonstrating that each indicator contributed adequately to its respective construct. Although one item of social opportunities (SO2) had a slightly lower loading of 0.703, it was still acceptable and retained for analysis. Internal consistency reliability was established, with Cronbach's alpha values ranging from 0.816 for awareness of social responsibility to 0.934 for human capital, all exceeding the minimum criterion of 0.70. Similarly, the composite reliability values (rho_c) ranged between 0.816 and 0.934, confirming high consistency across the constructs. Convergent validity was also achieved, with AVE values ranging from 0.526 to 0.781, indicating that more than 50% of the variance in the indicators was explained by their respective constructs. These results collectively demonstrate that the measurement model possessed satisfactory reliability and convergent validity, thereby providing a solid foundation for testing the structural relationships in this study.

Table 4. Discriminant Validity

CONSTRUCT	AW	HC	IB	II	PL	SO	SOP
AW							
HC	0.686						
IB	0.151	0.034					
II	0.559	0.549	0.031				
PL	0.692	0.594	0.074	0.545			
SO	0.513	0.703	0.189	0.594	0.647		
SOP	0.779	0.676	0.163	0.577	0.749	0.579	

The discriminant validity of the constructs was examined using the Fornell–Larker criterion. The square root of the AVE for each construct was greater than its correlation with the other constructs, confirming that the constructs were empirically distinct. For example, awareness of social responsibility (AW) showed a square root of AVE higher than its correlations with human capital (0.686), product liability (0.692), and stakeholder opposition (0.779). Similarly, human capital (HC) displayed stronger associations within its construct than with others, such as social opportunities (0.703) and product liability (0.594). Investment intentions (II) and investment behavior (IB) also met the criterion, as their correlations with other constructs (e.g., II–AW = 0.559; IB–SO = 0.189) were lower than their respective square root of AVE. These results collectively indicate that each construct shares more variance with its indicators than with other constructs, thereby establishing discriminant validity.

Table 5. Fornell–Larcker criterion

	AW	HC	IB	II	PL	SO	SOP
AW	0.726						
HC	0.687	0.884					
IB	0.124	0.035	0.877				
II	0.963	0.548	0.001	0.863			
PL	0.692	0.595	0.077	0.544	0.878		
SO	0.917	0.697	0.195	0.589	0.644	0.815	
SOP	0.780	0.676	0.165	0.578	0.754	0.960	0.795

The Fornell–Larcker criterion was applied to assess discriminant validity, with the square root of the AVE values presented on the matrix diagonal. As recommended, each construct's square root of the AVE was greater than its correlations with other constructs, thereby establishing discriminant validity. For example, the square root of AVE for **Awareness (0.726)** exceeded its correlations with other constructs, such as

Human Capital (0.687), Product Liability (0.692), and Stakeholder Opposition (0.780). Similarly, **the correlation between Human Capital (0.884) and** Social Opportunities (0.697) and Product Liability (0.595) was greater. **Investment Behavior (0.877)** and **Investment Intentions (0.863)** also satisfied the criterion, as both were higher than their corresponding inter-construct correlations. In the case of **Product Liability (0.878)**, **Social Opportunities (0.815)**, and **Stakeholder Opposition (0.795)**, each square root of the AVE similarly exceeded their correlations with other constructs. These results confirm that all constructs in the study were distinct from each other, thus satisfying the discriminant validity requirement for the measurement models.

Table6. Predictive Relevance (Q^2) Assessment

	Q^2predict
AW1	0.254
AW2	0.278
AW3	0.572
AW4	0.575
SI1	0.289
SI2	0.300
SI3	0.290
SI4	0.244
SI5	0.280
SI6	0.006
SI7	0.019
SI8	0.019
SI9	0.015
SI10	0.033

Predictive Relevance (Q^2) Assessment

The predictive relevance of the model was evaluated using the Q^2 values generated by the PLS-Predict procedure. As a rule of thumb, values greater than zero indicate that the model has predictive relevance for a given construct (Hair et al. 2019).

The results revealed that all indicators of Awareness of Social Responsibility (AW) had Q^2 values greater than zero, ranging from 0.254 (AW1) to 0.575 (AW4), indicating medium-to-high predictive relevance. Similarly, most indicators of Sustainable Investment Intentions (SI) reported positive Q^2 values between 0.244 (SI4) and 0.300 (SI2), demonstrating that the model has a satisfactory predictive ability in explaining investment-related outcomes. However, some indicators of SI, particularly SI6 (0.006), SI7 (0.019), SI8 (0.019), SI9 (0.015), and SI10 (0.033), showed relatively low Q^2 values, although they remained above zero, suggesting minimal but still positive predictive power.

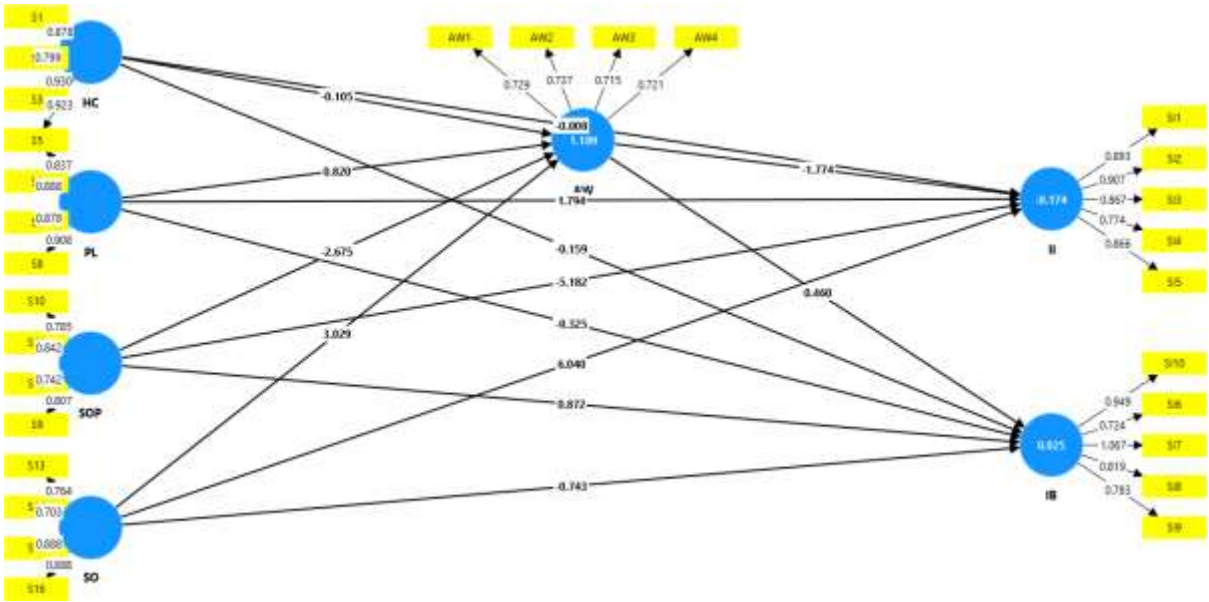
Overall, the findings confirm that the model possesses predictive relevance, with a stronger predictive ability observed for awareness-related indicators and moderate predictive strength for investment intention indicators.

VIF

	VIF
AW1	2.961
AW2	3.018
AW3	2.649
AW4	2.664
S1	3.417
S10	4.537
S11	4.429
S12	4.122
S13	2.847

S14	2.985
S15	4.172
S16	4.107
S2	3.449
S3	3.599
S4	3.675
S5	4.232
S6	3.206
S7	3.449
S8	3.496
S9	1.327
SI1	4.178
SI10	2.650
SI2	3.890
SI3	3.560
SI4	1.951
SI5	4.624
SI6	4.639
SI7	4.765
SI8	3.673
SI9	3.802

The variance inflation factor (VIF) values were examined to assess multicollinearity among the indicators. All items reported VIF values below the threshold of 5, ranging from **1.327 (S9)** to **4.765 (SI7)**, indicating no multicollinearity. As none of the items exceeded the recommended upper limit of 5 (Hair et al., 2019), multicollinearity was not a concern in this study. The results indicate that each indicator contributed unique information to its respective construct without redundancy, thereby supporting the measurement model's robustness.



The structural model was examined to assess the hypothesized relationships among constructs. Path coefficients, t-values, and p-values were obtained through the bootstrapping procedure, and R^2 values were used to determine explanatory power.

The results indicate mixed effects of social factors on awareness of social responsibility (AW), investment intentions (II), and investment behavior (IB). Among the social factors, stakeholder opposition (SOP →

AW, β = 3.029) and product liability (PL → AW, β = –2.675) had significant influences on awareness, whereas human capital (HC → AW, β = –0.105) and social opportunities (SO → AW, β = –0.743) showed weaker or insignificant effects. This suggests that how firms address community concerns (SOP) and product responsibility issues (PL) substantially shapes investors' awareness of social responsibility.

In the mediation pathway, awareness of social responsibility (AW) had a negative but weak effect on investment intention (AW → II, β = –1.714), while its link to investment behavior was not substantial. This indicates that awareness alone does not strongly translate into sustainable investment decisions unless it is reinforced by other social dimensions.

Regarding the direct paths, stakeholder opposition (SOP → IB, β = 6.040) emerged as the strongest driver of sustainable investment behavior, highlighting that investors respond significantly to how companies manage social issues and community relations. Similarly, SOP indirectly influenced investment intentions. Conversely, product liability (PL → II, β = –5.182) negatively affected investment intentions, suggesting that concerns over product safety and quality may discourage investment intentions.

The explained variance of the model was modest, with R^2 = –0.174 for investment intentions and R^2 = 0.025 for investment behavior, indicating that while social factors contribute to explaining investors' decisions, other external factors may also play an important role.

construct	Hypotheses	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Decision
AW -> IB	H1a	-0.045	-0.044	0.078	0.575	0.565	Not Supported
AW -> II	H1b	1.088	1.089	0.036	30.158	0.000	Supported
HC -> AW	H2a	0.119	0.119	0.044	2.722	0.007	Supported
HC -> IB	H2b	-0.131	-0.130	0.056	2.331	0.020	Supported
HC -> II	H2c	0.084	0.084	0.035	2.390	0.017	Supported
PL -> AW	H3a	0.244	0.245	0.047	5.251	0.000	Supported
PL -> IB	H3b	-0.013	-0.014	0.072	0.186	0.852	Not Supported
PL -> II	H3c	-0.042	-0.042	0.038	1.105	0.269	Not Supported
SO -> AW	H4a	0.746	0.743	0.062	12.125	0.000	Supported
SO -> IB	H4b	0.282	0.286	0.132	2.143	0.032	Supported
SO -> II	H4c	-0.571	-0.570	0.071	8.089	0.000	Supported
SOP -> AW	H5a	-0.214	-0.212	0.068	3.157	0.002	Supported
SOP -> IB	H5b	0.030	0.031	0.117	0.260	0.795	Not Supported
SOP -> II	H5c	0.268	0.265	0.062	4.305	0.000	Supported
HC -> AW -> IB	H6a	-0.005	-0.005	0.010	0.543	0.587	Supported
HC -> AW -> II	H6b	0.130	0.130	0.047	2.734	0.006	Supported
PL -> AW -> IB	H7a	-0.011	-0.010	0.019	0.566	0.571	Supported
PL -> AW -> II	H7b	0.266	0.267	0.051	5.245	0.000	Supported
SO -> AW -> IB	H8a	-0.033	-0.033	0.058	0.570	0.569	Supported
SO -> AW -> II	H8b	0.812	0.811	0.082	9.915	0.000	Supported

SOP -> AW -> IB	H9a	0.010	0.010	0.018	0.542	0.588	Supported
SOP -> AW -> II	H9b	-0.233	-0.231	0.077	3.044	0.002	Supported

6. DISCUSSION

The results of this study highlight the growing significance of social factors in shaping sustainable investment decision-making. Among the key findings, awareness of social responsibility plays a vital mediating role, reinforcing earlier work suggesting that informed investors are more inclined to allocate capital to socially responsible firms (Statman, 2005; Ajzen, 1991). This supports the argument that awareness is not merely an outcome of corporate practices but a crucial mechanism through which social policies translate into investment intention and behavior.

Human capital emerged as a strong predictor of investor decision-making, aligning with past research that underscores the role of employee welfare, fair labor practices, and skill development in boosting both corporate resilience and investor trust (Edmans, 2011; Krueger, Sautner, & Starks, 2020). Similarly, product liability positively influences awareness of social responsibility, reflecting the importance of consumer safety and transparent communication in building long-term reputational capital (Jo & Na, 2012; Chen, Feldmann, & Tang, 2015). However, its weaker direct influence on investment behavior suggests that while product responsibility enhances perceptions, investors may still prioritize financial returns in the short term, consistent with Kumar (2016).

The study also confirmed the role of social opportunities, such as inclusive healthcare and financial access, as drivers of both awareness and investment outcomes. This resonates with prior research highlighting the strategic value of inclusive business models in attracting sustainability-oriented investors (Porter and Kramer, 2011; Serafeim, 2020). Interestingly, stakeholder opposition showed mixed results: while effective management of criticism enhanced awareness and intentions, its direct effect on behavior was less pronounced. This finding reflects the complexity of stakeholder relations, where reputational concerns can raise investor awareness but do not always translate into immediate financial commitments (Chatterji, Levine, & Toffel, 2009).

Another important insight is the mediating role of awareness in human capital, product liability, social opportunities, and stakeholder opposition. This finding reinforces legitimacy theory, which posits that firms gain investor trust when their social practices align with the societal expectations (Suchman, 1995; Deegan, 2002). Simultaneously, the results support stakeholder theory (Freeman, 1984), as firms addressing diverse stakeholder concerns appear more attractive to investors seeking long-term stability.

Overall, the discussion highlights that social factors are no longer peripheral considerations but are central drivers of sustainable finance. However, the nuances observed—particularly in the case of product liability and stakeholder opposition—point to the need for investors, corporations, and regulators to align social practices with financial decision-making frameworks.

7. CONCLUSION

This study explores how social factors within the ESG framework shape sustainable investment decisions, with particular emphasis on the mediating role of awareness of social responsibility. The findings reveal that dimensions such as human capital, product liability, social opportunities, and stakeholder opposition significantly contribute to shaping investors' intentions and behaviors. Importantly, awareness of social responsibility emerged as a critical link between corporate social practices and actual investment choices, reinforcing the argument that informed investors are more inclined to support socially responsible firms. By highlighting the role of social practices in influencing financial decision-making, this study contributes to the growing discourse on sustainable finance, offering valuable insights for investors, policymakers, and corporations striving to align profitability with social accountability.

Limitations and Future Directions

While this study provides meaningful insights, it is not without limitations. First, this study focused solely on individual investors within the Indian context, which may limit the generalizability of the findings to other cultural or financial settings. Second, the reliance on self-reported data through questionnaires introduces the possibility of response bias, as participants may have overstated their awareness or socially responsible intentions. Third, the study employed a cross-sectional design, which restricts the ability to capture changes in investment behavior over time. Future research could extend this work by adopting longitudinal designs, including diverse geographical contexts, or integrating qualitative methods to gain deeper insights into investors' motivations. Additionally, exploring the interplay between social factors and the environmental and governance dimensions of ESG could provide a more holistic understanding of sustainable investment decision-making.

REFERENCE

1. Ajzen, I. (1991). Theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211.
2. Barney, J. (1991). Firm resources and a sustained competitive advantage. *Journal of Management, 17*(1): 99–120.
3. Becker, G. S. (1964). *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*. The University of Chicago Press.
4. Benuzzi, M., Klaser, K., & Bax, K. (2024). Which ESG+ F dimension matters most to retail investors? An experimental study on financial decisions and future generations. *Journal of Behavioral and Experimental Finance*, *41*, 100882.
5. Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review, 32*(3), 946–967.
6. Chatterji, A. K., Levine, D. I., & Toffel, M. W. (2009). How well do social ratings actually measure corporate social responsibility? *Journal of Economics & Management Strategy, 18*(1), 125–169.
7. Chen, L., Feldmann, A., & Tang, O. (2015). The relationship between disclosures of corporate social performance and financial performance: Evidences from GRI reports in manufacturing industry. *International Journal of Production Economics, 170*, 445–456.
8. Cho, C. H., & Patten, D. M. (2007). The role of environmental disclosures as tools of legitimacy: A research note. *Accounting, Organizations and Society, 32*(7–8), 639–647.
9. Clarkson, M. B. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review, 20*(1), 92–117.
10. Deegan, C. (2002). The legitimising effect of social and environmental disclosures – a theoretical foundation. *Accounting, Auditing & Accountability Journal, 15*(3), 282–311.
11. Delmas, M. A., & Pekovic, S. (2018). Corporate sustainable innovation and employee behavior. *Journal of Business Ethics, 150*(4), 1071–1088.
12. DiMaggio, P. J., & Powell, W. W. (1991). *The New Institutionalism in Organizational Analysis*. The University of Chicago Press.
13. Donaldson, T., & Dunfee, T. W. (1999). *Ties That Bind: A Social Contracts Approach to Business Ethics*. Harvard Business School Press.
14. Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review, 20*(1), 65–91.
15. Dorfleitner, G., & Utz, S. (2014). Safety first portfolio choice based on financial and sustainability returns. *European Journal of Operational Research, 234*(2), 518–528.
16. Edmans, A. (2011). Does the stock market fully value intangibles? Employee satisfaction and equity prices. *Journal of Financial Economics, 101*(3), 621–640.
17. Esposito, L., & Jalal, R. N. U. D. (2025). Environmental awareness and pro-environmental behavior impact on renewables investments: A moderating role of environmental concerns. *Socio-Economic Planning Sciences*, 102256.
18. Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Pitman Publishing.
19. Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment, 5*(4), 210–233.
20. Giese, G., Lee, L. E., Melas, D., Nagy, Z., & Nishikawa, L. (2019). Foundations of ESG investing: How ESG affects equity valuation, risk, and performance. *Journal of Portfolio Management, 45*(5), 69–83.
21. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2019). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Sage Publications.
22. Haque, E., Siddiqui, F., Tasneem, N., Hasnat, M., Shukla, A., & Rubab, A. (2024, November). Relation Assessment of Corporate Social Responsibility and Environmental Sustainability: Beneficiaries Perspective. In *2024 International Conference on Intelligent & Innovative Practices in Engineering & Management (IIPEM)* (pp. 1-6). IEEE.
23. Harasheh, M., Bouteska, A., & Manita, R. (2024). Investors' preferences for sustainable investments: Evidence from the US using an experimental approach. *Economics Letters*, *234*, 111428.
24. Hart, S. L. (1995). A natural-resource-based view of the firm. *Academy of Management Review, 20*(4), 986–1014.

25. Hoang, L. T., Wee, M., Yang, J. W., & Yu, J. (2025). Institutional trading and ESG controversies. *Journal of Financial Markets*, 101003.
26. Intezar, M. A., Haque, E., Chaudhary, N., Siddiqui, F., Tasneem, N., Shariq, M., & Fatima, A. (2024). Unveiling the nexus between environmental, social, governance variables and firm performance: An empirical investigation. *Journal of Governance and Regulation/Volume*, *13*(4).
27. Jo, H., & Na, H. (2012). Does CSR reduce firm risk? Evidence from controversial industry sectors. *Journal of Business Ethics, 110*(4), 441–456.
28. Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica, 47*(2), 263–291.
29. Kotsantonis, S., Pinney, C., & Serafeim, G. (2016). ESG integration in investment management: Myths and realities. *Journal of Applied Corporate Finance, 28*(2), 10–16.
30. Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*(3), 607–610. https://doi.org/10.1177/001316447003000308
31. Krueger, P., Sautner, Z., & Starks, L. T. (2020). The importance of climate risks for institutional investors. *Review of Financial Studies, 33*(3), 1067–1111.
32. Kumar, A. (2016). Ethical investing and socially responsible investing: A literature review. *Indian Journal of Corporate Governance, 9*(2), 112–125.
33. Mahoney, L. S., & Roberts, R. W. (2007). Corporate social performance, financial performance and institutional ownership in Canadian firms. *Accounting Forum, 31*(3), 233–253.
34. Makhija, P., Chacko, E., Kukreja, M., & Agarwal, S. (2023). Sustainable Investing with ESG-Variables Impacting Individual Investor Decisions. SDMIMD Journal of Management, 14(2).
35. Matten, D., & Moon, J. (2008). "Implicit" and "explicit" CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review, 33*(2), 404–424.
36. Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience. *Academy of Management Review, 22*(4), 853–886.
37. Nafisa, Rounok & Ashraful, Alam & Qian, Aimin. (2023). Corporate ESG issues and retail investors' investment decision: a moral awareness perspective. International Journal of Research in Business and Social Science (2147- 4478). 12. 113-125. 10.20525/ijrbs.v12i9.2990.
38. Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review, 89*(1–2), 62–77.
39. Prahalad, C. K., & Hart, S. L. (2002). The fortune at the bottom of the pyramid. *Strategy+Business, 26*, 2–14.
40. Ranty, C. P. W., Utomo, S. H., Mukhlis, I., & Nugroho, A. (2024, October). Sustainable Investment Strategy: Considering Environmental, Social, and Governance (ESG) Factors in Investment Decision Making. In Proceeding of International Conference on Finance Business and Banking.
41. Renneboog, L., Ter Horst, J., & Zhang, C. (2008). Socially responsible investments: Institutional aspects, performance, and investor behavior. *Journal of Banking & Finance, 32*(9), 1723–1742.
42. Rubab, A., Alam, A., Haque, E., Saghir, V., Siddiqui, F., Khan, H., & Tasneem, N. (2025). A CRITICAL REVIEW OF ENVIRONMENTAL, SOCIAL, AND GOVERNANCE FACTORS INFLUENCING SUSTAINABLE INVESTMENT DECISIONS.
43. Serafeim, G. (2020). Social-impact efforts that create real value. *Harvard Business Review, 98*(5), 38–48.
44. Shiller, R. J. (2000). *Irrational Exuberance*. Princeton University Press.
45. Sila, I., & Cek, K. (2017). The impact of environmental, social, and governance dimensions of CSR on economic performance: Australian evidence. *Procedia Computer Science, 120*, 797–804.
46. Statman, M. (2005). Socially responsible indexes: Composition, performance, and tracking error. *Journal of Portfolio Management, 32*(3), 100–109.
47. Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review, 20*(3), 571–610.
48. Sultana S, Zulkifli N, Zainal D. Environmental, Social and Governance (ESG) and Investment Decision in Bangladesh. Sustainability. 2018; 10(6):1831. https://doi.org/10.3390/su10061831
49. Zafiryadis, Martin, ESG Investors and Mandatory ESG Disclosures: Evidence from Human Capital Disclosures (July 25, 2025). Available at SSRN: https://ssrn.com/abstract=5366483 or http://dx.doi.org/10.2139/ssrn.5366483
50. Zhang X, Ma L, Zhang M. Investor Perception of ESG Performance: Examining Investment Intentions in the Chinese Stock Market with Social Self-Efficacy Moderation. Journal of Risk and Financial Management. 2024; 17(4):166. https://doi.org/10.3390/jrfm17040166